INTEGRATION OF TRADITIONAL HEALING PRACTICES INTO MODERN HEALTH CARE SYSTEM: A QUALITATIVE STUDY IN SIKKIM

Thesis submitted to Jawaharlal Nehru University for the award of the degree of

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Declaration and Certificate

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DECLARATION

I declare that the thesis entitled "**INTEGRATION OF TRADITIONAL HEALING PRACTICES INTO MODERN HEALTH CARE SYSTEM: A QUALITATIVE STUDY IN SIKKIM**" is being submitted by me in partial fulfilment of the requirements of the award of the degree of **DOCTOR of PHILOSOPHY** of Jawaharlal Nehru University. This thesis has not been submitted for the award of any other degree of this university or any other university and is my original work.

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CERTIFICATE

We recommend that the thesis be placed before the examiners for evaluation and consideration of the award of Degree of Doctor of Philosophy.

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Tshering Lepcha

Jawaharlal Nehru University

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Acronyms

ABS	Access and Benefit Sharing
AIIMS	All India Institute of Medical Sciences
ASHA	Accredited Social Health Activists
Atree	Ashoka Trust for Research in Ecology and the Environment
AYUSH	Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy
BAMS	Bachelor of Ayurveda Medicine and Surgery
BHMS	Bachelor of Homeopathic Medicine and Surgery
BMC	Biodiversity Management Committee
BPL	Below Poverty Level
BSI	Botanical Survey of India
BUMS	Bachelor of Unani Medicine and Science
CBOs	Community Based Organisations
CD	Compact Disc
CHCs	Community Health Centres
CM	Chief Minister
CMO	Chief Medical Officer
CSMCH	Centre for Social Medicine and Community Health
CT scan	Computed Tomography Scan
DBT	Department of Bio-Technology
DHs	District Hospitals
DHS	Director of Health Services
FRLHT	Foundation for Revitalisation of Local Health Traditions
GOI	Government of India
HIV/AIDS	Human Immunodeficiency virus, acquired immunodeficiency syndrome
HRDD	Human Resource Development Department
IBSD	Institute of Bioresources and Sustainable Development
ICAR	Indian Council of Agriculture Research
ICDS	Integrated Child Development Scheme
ICIMOD	International Centre for Integrated Mountain Development
IEC	Information Education and Communication
IGNO	Indira Gandhi national Open University
JNU	Jawaharlal Nehru University
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
LPG	Liquefied petroleum gas (cylinder)
MoEF&CC)	Ministry of Environment, Forest & Climate Change
MLA	Member of Legislative Assembly
MPC	Medicinal Plant Conservation
M.Phil	Master of Philosophy
MPHW	Multi-Purpose Health Worker
MRI	Magnetic Resonance Imaging
NEIFM	North Eastern Institute of Folk Medicine

NFHS	National Family Health Survey
NGOs	Non-Governmental Organisations
NHM	National Health Mission
NTFP	Non Timber Forest Product
NUHM	National Urban Health Mission
OBC	Other Backward Class
OPD	Out Patient Department
PBR	People Biodiversity Register
PHC	Primary Heath Centre
PHE	Public Health Engineering (PHE) Department
PhD	Doctor of Philosophy
PHSC	Primary Health Sub Centre
PIL	Public Interest Litigation
PMGYS	Pradhan Mantri Gram Sadak Yojana
QCI	Quality Council of India
RAP	Restricted Area Permit
RARI	Ayurvedic Regional Research Institute
RCH	Reproductive and Child Health
RGNF	Rajiv Gandhi National Fellowship
RTI	Reproductive Tract Infection
SC	Schedule Caste
SDG	Sustainable Development Goal
SDO	Sub Divisional Officer
SMPB	State Medicinal Plant Board
ST	Schedule Tribe
STI	Sexually Transmitted Infection
STNM (Hospital)	Sir Thodup Namgyal Memorial Hospital
SU	Sikkim University
TMI	The Mountain Institute
TRI	Tribal Research Institute
TV	Television
USA	United States of America
UTI	Urinary Tract Infection
VHAS	Voluntary Health Association of Sikkim
WHO	World Health Organisation

Dedicated to…

My beloved Mother, Workers of Missionaries of Charity and all the Healers of Sikkim

Chapter I

Introduction

1.1 Background

Access to health care services is a fundamental human right of the population to utilise during the time of need. Good health is an essential requirement to live a successful and wealthy life. It is the basic need which play a vital role in acquiring achievements in day to day life. In early days people used to live a healthy living as the environment was pollution free. However, there was an occurrence of endemic diseases in communities like cholera, smallpox, tuberculosis, measles, and many others. The health institution was less in number, and its utilisation was less. Gradually the process of civilisation and urbanisation came to its way, which brought changes in every individual in the societies. Similarly, the transaction took place from agrarian society to feudal society, and then slowly it transforms into the growth of industrialised nation. After that, the rapid growth of science and technology came to its existence. Numbers of innovations and free marketing started in every field. The cultural assimilation took place, and the societies got influenced by developed or western countries.

Traditionally, India had many systems in place for treatment and healing. Both codified and non-codified systems of medicine. Ayurveda, Yoga and Naturopathy, Unani, Siddha, Homeopathy with the name of AYUSH existed for centuries along with very many non-codified healing systems in the community like bonesetters, pulse readers, poison healers, shamans, magicians, spiritual and faith healers. The following paragraphs will focus on the emergence of biomedicine and the sidelining of these indigenous healing systems.

1.1.1 Western Medicine and Traditional Healers

The biomedical model of medicines started in the west, and gradually it has spread to other countries in the worldwide. In nineteenth centuries it shows the significant discoveries in the field of medical sciences and technology. The significant changes took place in the

health sectors reforms. People started getting an education in the medical institution. The establishment of a highly equipped hospital started functioning in various parts of the country. There were discoveries of new forms of medicine like quinine, antibiotics, etc. which were more significant achievements of biomedicine to eradicate various endemic diseases. The advanced technologies like X-ray machines, CT scan, MRI, etc. came in the markets. The hospital started installing those advanced technologies to provide quality care to the people in need — various laboratories initiated with advanced machines to detect all forms of illnesses. New types of drugs and medicines started getting supply in the markets. The biomedicine gained universal acceptance and has been endorsed as the official health care system by all the countries (Dalal, 2016).

The beginning of colonialism in the 19th century brought western medicines to South Asian countries. In India, the biomedical model of medicine got introduced by the East India company. The health care services were only available for the British soldiers and officers. The biomedical practices used to be carried out by the British doctors, Indian upper caste, an elite group of people in British India. The already existent domestic traditional system of medicine regarded as inferior in the presence of western medicine. The old age medical heritage of Indian system of medicine was slowly sidelined by western medicine. The state patronage of biomedicine further decreased the usage of indigenous medicine in society. The biomedicine started showing more significant impact by providing an immediate effect on successful results. Before introducing biomedicine in India, there was the existence of Ayurveda, Unani, Naturopathy, home-based remedies, folk healing practices, traditional birth attendants for providing health care services. Later due to the dominance of biomedicine and its expeditious nature of the treatment, the utility of traditional healing practices was marginalised. One of the advantages of biomedicine is the immediate effect of biomedicine, which attracts people more towards it.

Even before the traditional medical knowledge got codified into the recognised texts of Ayurveda, there was abundant heterogeneity of healing practices in India. Healing is practiced by people from all levels of society who live and work in intimate relation with their environment. They range from home remedies related to nutrition and treatment for minor illnesses to more sophisticated procedures such as midwifery, bone setting, and

treatment of snakebites and mental disorders. All these areas of traditional practices have their particular folklore that preserved and transmitted such knowledge from generation to generation. Some healing practices were considered to be sacred and were associated with rituals that helped safeguard them. It is interesting to note that in folk traditions, there is considerable overlap between healing plants and sacred plants, and certain healing plants were recognised.

The traditional healing systems practiced from the ancient time, they are culture-bound, region-specific, ethnic community specific, eco-system specific providing the health care services to the community people during the time of illness, which has a vibrant living tradition in this contemporary period (Shankar, 2007). This has been practised before the discovery and development of scientific medicine like pharmaceuticals drugs and doctor's surgery. These traditional healing practices are used by various community people in this modern time (Bannerman, Burton, & Chen, 1983; Subba, 2008). This traditional medicines are used synonymously like unorthodox, indigenous, alternative, folk medicine, ethnomedicine, local health tradition, non-codified system, fringe and unofficial medicine and healing (Bannerman, Burton, & Chen, 1983; Foster 1976; Unnikrishnan and Hariramamurthi 2012). The traditional healing practices based on their world-view is an account of being healthy and wellbeing related to the mental, social, spiritual, physical, and ecological dimensions. The initial conception is to maintain an optimum balance of health within the individual and between the society, and the whole world (Kakar 1982).

In the present time, the unequal distribution of health care services and resources are seen among the general population. The provision of highly functional health care facilities is mostly located in urban cities and towns. Both public and private health institutions in urban areas are well equipped with advanced technologies. Therefore, doctors are likely to stay in urban areas. Private health care services mostly cater to the small group of the population, who has the power to utilise their money to get the services. In many developing countries, advanced health care services are limited to a particular section of the community. There is a lack of human resources in public health care facilities, poor infrastructure, lack of medicine and drugs, equipment, etc. The urban and rural poor communities are not able to access and afford these facilities because of their poor socio-

economic condition, inadequate transportation, poor infrastructure, health centre are far from the villages, and the health facilities are inaccessible during the time of monsoon season.

1.1.2 Sikkim

In the context of Sikkim, it is a small state which was incorporated in 1975 in India. Before 1975 the State was under the king's rule. The State has seven to eight lakhs population. The major communities are Nepali, Bhutia, and Lepcha. Every community has its own beliefs and practices which are close to nature and the ecosystem. The understanding of health and illnesses by the communities are both natural and supernatural causes. During diseases, they carry out rituals/puja. They also use home remedial items, seek help from faith-based healers, herbalist, bonesetters, snake bite healers, jaundice healers, etc. Sikkim has more than 500 faith-based healers, both male and female. The study conducted by Sikkim medicinal plant board in the year 2009 which shows that there are 29 traditional healers or the folk practitioners. They use a variety of medicinal plants and their properties, animal products, and some minerals for the treatment. They catered services not only to the rural population, but they are available in the periphery of Gangtok the capital of Sikkim.

1.1.3 Community Health Workers

In India, Sokhey committee reports that the concept of community health workers started in the year 1970s and 1980s. The primary purpose was to train the youths of villages. The community health workers used to act as a bridge between the community and the health institutions. They had a tie-up with medical personnel to identify the health care issues among the community people and refer them to health care institutions. According to Srivastava Committee's Report of the Group on Medical Education and Manpower Support (Government of India, 1974), recommend by identifying the skills and practices of traditional healers in the community as "local paraprofessional" who can treat the patients in the community having the minor/simple illness. Traditional medical practitioners and birth attendants are found in most societies. They are often part of the local community, culture, and traditions, and continue to have a high social standing in many places, exerting considerable influence on local health practices.

During that period, many international organisations training for the Midwives and dais for safe motherhood practices indoor to prevent maternal and infant mortality rate in developing countries. Similarly, it gradually started in India, but it has stopped in the year 1996 (Sadgopal, 2009). Later due to biomedical and political hegemony, the schemes are gradually put to its sidelines.

1.1.4 Integration

The term integration is vague but not too old. It has come to its existence after the Alma Ata Declaration, 1978. This mainly declares on the inclusion of all forms of healing in the health system. There was an integrative approach where comprehensive primary healthcare has to be achieved. It instructs the member countries to make health module, which includes community participation, equal distributions, multi-sectoral method, preventive measures, usages of cost-effective technologies to achieve the primary healthcare services (WHO, 1978, p. 63).

With the support of the formal health system, these indigenous practitioners can become essential allies in organising efforts to improve the health of the community. Some communities may select them as community health workers. It is, therefore well worthwhile exploring the possibilities of engaging them in primary health care and training them accordingly.

In the year 2005, the NRHM was formed, and emphasised on the strength of the AYUSH and the LHTs policy document says, "mainstreaming of AYUSH and revitalisation of LHTs" to meet the primary healthcare. But the problem arises from most of the AYUSH documents focused only on herbal medicine and drugs, and the herbal garden in the PHCs. But the report did not discuss the traditional healing practices in the conventional health system. The literature shows that the Indian system of medicine has already been integrated into the official health system which is later known as the AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha, and Homeopathy), then Sowa-Rigpa added in the system. It has the separate ministry of AYUSH which runs all these health systems. But the official health policies sideline the heterogeneous practices of the traditional practitioners and provided importance only to the AYUSH system (Mishra, et.al., 2018).

The nation-state level studies are carried out in eighteen states where it was found more than 80% of households using local health tradition from home-based therapy to community health services provided by the traditional practitioners (Priya and Swetha, 2010). The traditional healers and their practices are getting recognition, but it's not fully integrated into the health care system. The Foundation for Revitalisation of Local Health Traditions (FRLHT) Bangalore, in collaboration with Quality Council of India (QCI) started the training program and certification for the traditional health care practitioners. This is a good step which motivates the traditional healers in improving their skills and capacity practices. This will help in health cadre in the community to provide better health care. The government of India also established a North Eastern Institute of Folk Medicine (NEIFM) under the Ministry of AYUSH in Pasighat, Arunachal Pradesh.

The works of literature show in India that there are not many pieces of research done on the integration of traditional healers and their practices, but still they are looking forward, which takes more time. Integration cannot take place over a single night which takes research, collaborative work with the biomedicine, medical education that understands the traditional healing practices, need to see the importance of healer's role in the primary health care and also need to understand the pluralistic health care system. The integration has been taken place in other counties like South-African counties, Asian countries like Vietnam, Korea, China, Nepal, etc. In those countries, the integration has taken place in human resources, knowledge and practices in the health system. They are included in various programmes like HIV/AIDS and tuberculosis, Child health care, Malaria, Diarrhoea, etc., and provide them formal and informal training on multiple diseases, diagnosis of illness and treatment, orientation to simple technologies, etc.

Diversity of health care practices by the traditional practitioners can be seen by analysing the large number of the population who are attracted towards the utilisation of traditional healing practices. The study deals with the process and possibilities of integration of traditional healing practices in the state of Sikkim. Integration of healers has a broad and enormous scope as well as challenges in the health care system. The integration of traditional healers, their knowledge and practices in the healthcare system in Sikkim is an important subject to understand. There is a vast scope for integration of the traditional healing practices though in a small state. There are many ways in which healers can be

encouraged. They can be given excellent support by the government, monthly honorarium for the healers and support to start herbal gardens. North East Institute of folk medicine can validate their knowledge. Seeing the cultural belief of community, the government can give importance to the healers partially by including them in various health programmes. After observing the initiatives of state government, the comprehensive integration of traditional healing practices would be possible in Sikkim.

1.1.5 Concepts and Terminologies

1.1.5.1 Traditional Healing Practices

In this study, the term 'Traditional Healing Practices' is taken to signify what Dunn (1976) calls the local medical system. It implies those medical systems which are practised by local practitioners and are in the non-codified form. This, in contrast with the regional forms of medicine, which are 'scholarly' in nature, as compared to the 'non-scholarly' quality of local medicine (Dunn, 1976). Leslie (1976) also attributes the same characteristics to systems of medication called 'little traditions'- those whose traditionalism is informed by the prevailing local conditions. Drawing from Robert Redfield's analysis of the little and great traditions, modern biomedical knowledge is informed by many practices that are constituent of the little traditions of the local populations. Though these local forms of knowledge are not away from any interaction with other systems of medicine, they are mostly restricted to the local area. In India, the traditional or indigenous systems of medicine are called non-codified, those that are transmitted orally. There are no institutions that provide regimented education and training in these systems of medicine. To quote Dunn (1976), 'traditional use of (local) remedies evolved through countless trials and errors; in short, through human experimentation' (Dunn 1976, p.136). Some scholars have also synonymously used the words 'traditional healing systems', 'ethnomedicine,' 'indigenous healing practices,' 'folk medicine,' 'local health practices,' 'local health traditions.' However, in the context of this study, only the term 'traditional healing practices' will be taken to signify medicine systems that are based on the above characteristics (Bannerman, Burton, & Chen, 1983).

1.1.5.2 Modern Health care System

It refers to biomedical knowledge or a system of healthcare based on "western medicine" or "biomedicine" which is commonly known in India as "allopathic medicine" or "English medicine" or "doctor ka dava" (literally: doctor's medicine). In this study, the meaning of modern medical care is similar to Dunn's (1976) and Leslie's (1976) definition of cosmopolitan medicine, which is 'worldwide rather than limited or provincial in scope or bearing; involving persons in all or many parts of the world.' (Dunn 1976, p.135). This is a scholarly, codified, uniform set of practices, which are transmitted through professional training, in educational institutions. This is also the state approved medicine; even though the Indian Government has policies for alternative systems of medicine, they are a recent phenomenon, and most of the state-sponsored hospitals still provide biomedical services.

The study has used the terms biomedicine and modern medicine interchangeably and its practitioners as biomedical practitioners.

1.1.5.3 Traditional Practitioners

The category of traditional practitioners is a fluid one, which comprises of a set of individuals following traditional healing systems, as described above. This includes bone setters, traditional birth attendants, herbalists, shamans, spiritual healers, and diviners. For the purpose of practical applications of the study, the researcher uses the definition given by the African Expert Group in 1976: "a traditional healer is a person who is recognized by the community in which he lives as competent to provide health care by using vegetable, animal, and mineral substances and specific other methods. These are based on the social, cultural, and religious background as well as on the knowledge, attitude and beliefs that are prevalent in the community regarding physical, mental and social well-being and the causation of disease and disability" (WHO, 2002, pp.1-2).

In Sikkim, each ethnic and tribal community has its traditional healers. The Nepali community calls them *dhami, jhakris, joghis*. Among the Rai and Subba communities, the traditional healers are known as *phedongpa*, *bijwas*, *mompas*. The Lepchas, which is a tribal community, call the traditional healers *bonngthing* (male healers) and *pudhin* (female healers). Apart from these practitioners, there are also herbalists, bone setters, lamas (monks in Buddhist monasteries), and older women (who mostly provide pre-natal and

post-natal assistance), who also fall into the ambit of traditional healing practitioners. In Sikkim, traditional practitioners use a mantra, medicinal plants and herbs, and animal products for the treatment of the patients.

The study deploys the term traditional practitioners such as traditional healers and Baidhyas interchangeably.

1.1.5.4 Integration

The term 'integration' has been defined in different manners in the policies of medicine was characterized by Stepan (1983) as a system 'in which there is official promotion of the integration of two or more systems within a single recognized service; integrated training of health practitioners is the official policy'. Integration, in this paper, means the various ways by certain aspects of traditional healing practices are assimilated into the mainstream modern medical practice. The point is to explore the processes by which this interaction takes place, the slow recognition of these non-modern medical systems, and the final steps in which the integration takes place. In the specific case of Sikkim, the state health care system has yet to assimilate fully the services of traditional healers such as bone-setters, traditional birth attendants and herbalists, whose practice is an essential part of healthcare for a large section of the population.

1.1.5.5 Challenges

The process of integration, as explained above, does not stem from a smooth interaction. Any kind of contact between traditional healing systems and modern medical care is subject to many complications. Integration entails challenges, both from the part of the standardized health care and traditional health providers. Prejudice, lack of actual and formal evidence, and the over-arching dominance of biomedicine contribute to a few of the challenges. The perceptions and scepticism of the local healers towards the biomedical establishment is another point of contention. Apart from just the providers, the understanding and the attitudes of the patients also define the course of the integration, especially as their health-seeking behaviour changes with the changes in policies and access to various kinds of medicine.

In the twenty-first century, traditional medicine does not exist without any contact with modern medicine. Due to the over-arching dominance of biomedicine, it is impossible for local forms of medicine to remain in its pure and original form, without the influence that comes with contact and interaction with this form of medicine. However, this often means how some aspects of traditional healing practices are integrated into the scientific community. This integration is not a smooth one, as it is filled with a lot of challenges, which has to overcome first to achieve integration where both systems of medicine can co-exist peacefully.

1.2 Statement of the Problem

Health, as a whole, is the physical fitness of a body. In recent trends, people are more aware of keeping themselves fit and free of getting illnesses. Several products and technologies have come up in the markets to keep oneself healthy. Being in a developing country, it is not affordable by all, and it is not accessible to every corner of the country. Still, there are marginalised community and the people who are underprivileged to get such facilities. Being aware of the availability of health care institutions on the ground level, they are still struggling to get the health care facilities. There are the availability of health care institutions but lack of service providers, suppliers of medicines, and advanced technologies which draw them back from going to the health institutions during illness.

On the other hand, some traditional healers actively take part in healing the people in primary health care. Those traditional healers have knowledge and skills in practising traditional healing practices. Their contribution to healing in primary health care plays an important role, but they are never recognised and rewarded fully. The scholars and experts have mainly raised the question of the integration of traditional healing practices in the health care system. By seeing their skills and practices and active participation in the primary health care, they raise the questions on advantages, challenges and possibilities and outcome of integration. The question that arises in the mind, as to why those traditional healers are not integrated into the health care system? How can they be integrated into the health care system? What are the other aspects that can be integrated like healer, practices, and knowledge? What would be the impact of integration?

The present time treatment is mainly based on advanced technology. Now at the current situation as we see global health, diseases like communicable, non-communicable, vector-borne diseases, etc., are rising very high. The biomedical health care services have become more expensive where rural communities, marginalised group, tribal population are still not able to assess the health care services. However, pocket expenditure goes high due to the higher cost in health care services as we see that India has a multiple health care system, but the budget is allotted for only bio-medical health care system. So to prevent illness and to promote optimum health, there should be constant awareness and knowledge among the people at all levels. People should protect their health preventive and promotive resources so that it can be sustained not only for the present situation, but it can continue for the future. Even the literature also shows that more than eighty per cent of the rural population seek their treatment from traditional health practitioners (Priya, and Shweta, 2010).

However, research also points out that the division between modern and traditional healing has no clear distinction as discussed in the work of Naraindas and Sax, which was presented in the conference theme "Scientification and Scientism in the Humanities" organized by Centre for the Study of Social Systems, Jawaharlal Nehru University, New Delhi 25th-26th November 2015. The use of gadgets in what passes off as healing practices is highlighted. Traditional healing practices are articulated through modern technology, including laser beams and digital technology, which are used as a part of the treatment. This is what Naraindas calls "technosacramentalism". How technology is used to call upon healing is similar to magical rites in various cultures, and thus, even because of this, there can never be an absolute division between what constitutes science and what constitutes religion or magic (Nariandas, 2015). Sax's work in Bradford focuses on the 'cupping' out of djinns from individuals' bodies. Even for this, technology is used, which focuses on the actual performance of rites, and what is articulated as exorcism (Sax, 2015).

Most of the traditional and faith healers are in the age group of 50-90 years of age. This will make a significant loss for the community in the coming generation. The Government of Sikkim has introduced *Samajik Sewa Bhatta* schemes for the traditional practitioners who are appreciated. In practice, many traditional faith healers are not aware of it. Only a few healers were aware of this scheme. Government of Sikkim started various schemes, but nobody was there to make them aware of these incentives. The government officials

and the health institutions were not taking the initiative to address these issues (Lepcha, 2018). Day by day, these old age traditional knowledge and medical heritage are slowly vanishing from our community. So there is a need for more research and also to integrate this healing practices in the state health care services.

Integration cannot take place in a short period. It needs more time to understand the possibilities of integration by doing research. Civil societies, community-based organisation, NGOs are working together for the integration of traditional healers in the communities. These organisations are supporting the healers in providing training. By identifying their skills and practices, the traditional healers are given recognition. For integration, there is a need for documentation of traditional healing practices. The home remedial treatments and the medicinal plants are rarely documented academically in research journals and articles. There is ample presence of traditional knowledge and practices in rural communities which require in-depth researches to document so that it would serve as a means to make understand the sophisticated practices of traditional knowledge. Therefore, documentation is the necessity as it would help not only future scholars to learn new ideas but also the common masses to accept the complex process of traditional practices for the coming generations. Thus, it will help in developing traditional practices in a more sustainable way, which is the way forward.

1.3 The rationale of the Study

To explore the integration of traditional healing practices into modern health care in the state of Sikkim. When we go through the existing literature, one can find that there has been a limited amount of work done on the above subject. Integration cannot be understood solely from a unique perspective, but one needs to explore it from a wider angle. In the global scenario, particularly in the African and Asian Countries, the traditional healing practices and the practitioners are incorporated in the national health services. Integration is done by upgrading the existing knowledge of traditional practitioners like herbalist, bonesetters, traditional birth attendant, and many others.

In India, we need to understand that the codified system of Traditional medicines are Ayurveda, Yoga, Unani, Siddha, Homeopathy, and Sowa-Rigpa. All these traditional medicines are integrated within the framework of the Indian Health System. However, the

debate over the integration of traditional healing systems into the dominant biomedical or the professional health system in India continues. There has been a large number of studies on traditional healing practices from a sociological, epidemiological, and psychiatric perspective. The data and information are also available with the respective studies, but they have not touched upon the integration of these practices and practitioners into modern medical health care.

One of the objectives of the study is to explore the processes of integration of traditional healing practices in the health system by the State government. The available literature also talks about the integration of traditional healing practices into the modern medical health care such as herbal garden in sub-centres, primary health centres, and household and also usage of home remedies in household level. Institutions like the Foundation for Revitalization of Local Health Tradition (FRLHT, Bangalore) who are working in the area of local health traditions have contributed significantly. They are organising conferences for the healers and provide certificates to those healers like bonesetters, jaundice healers, snakebite healers, herbalist, etc. The expertise in the area is thoroughly scrutinised and validated by the expert committee, after which only the certificates are issued to them. These types of initiatives are primarily boosting the relevance of traditional healing practice and practitioners in the modern day. In the states of Kerala, Andhra Pradesh, Tamil Nadu, Karnataka, Rajasthan, Ladakh, Himachal Pradesh, North East States (Manipur and Arunachal Pradesh), the state governments and the NGOs support and promote the traditional practitioners by giving them incentives.

In understanding the integration of traditional healing practices into modern health care in the state of Sikkim, we need to look at the various initiatives on the part of the state government and as well as explore the socio-cultural background of the healers. In examining the socio-cultural and ecological context of the state, we can see that even though modernisation is prominent in the region the presence of rich traditional medical heritage among the different ethnic and tribal communities is still preserved and practised till date. Sikkim is a repository of rich flora and fauna; we can find a large number of medicinal plants and aromatic plants. It is also rich in a biodiversity hotspot in the Asian continent. In today's era of globalisation and climate change, where states are relying much

on the use of pesticide and increasing the volume of agricultural products, Sikkim in this context is declared as an organic state by the Indian government.

The State governments provide incentives to traditional practitioners, traditional birth attendant, local folk musicians artisans though it's "*Samajik Saewa Bhatta*" in which an amount of Rs.600 is offered to them. However, it has been shown that traditional practitioners are not at all aware of these schemes of the government (Lepcha, 2018). The proposed study would thus explore over the government scheme itself, in which it would like to explore over the prerequisites that are needed to avail these benefits. The motive behind giving the incentives would also be studied in detail.

During the researcher's M.Phil study and as well as other studies conducted by different scholars suggests a pattern of the resort where the patient first seeks treatment form the traditional practitioners, and then they go to the hospitals, which is then reciprocated. In urban settings, also a similar pattern as in the rural setting was found in my study. The study focused on the diagnostic methods and treatment methods adopted by the traditional practitioners as mentioned in the above paragraphs about the initiatives by the other state governments in integrating the traditional practices. However, the undergoing research over the state of Sikkim, would be contribute to the process of integration in Sikkim.

1.4 The motivation of the Researcher

The researcher grew up in the Himalayan region and has seen the traditional healers and their healing practices in the villages. Growing up in the vicinity of nature spending most of the childhood days in the villages of Darjeeling, gave him the opportunities to witness traditional healing practices in various aspects of his village. There were limited resources where there were no proper roads for transportation, no proper health facilities, no electricity for lighting. As ethnic communities in the hilly region, each community used to practice their traditional healing and they have their own traditional healers.

In every function in the community and *rites de passage*, such as the marriage, death ceremonies, blessings of houses, before construction of houses, during childbirth, traditional rituals, festivals, times of sickness, cultivation, etc., the community people used to consult the healers like *jhakri*, *Bongthing*, *bijuwa*, *lama*, etc. Any circumstances that

emanates in the villages, people used to ask the healers to get the proper decision. Healers were the key person to decide as they were the older people in the communities as well as their family. When people get sick, they seek treatment to form the traditional practitioner like herbalist, bonesetter, etc.

Those days the traditions of having joint families were a common phenomenon, and for every function and rituals, were celebrated by the entire family together. The villagers have their traditional houses built of mud, wooden, bamboo, etc. People used to light the lamp with kerosene oil for lighting. They have a television but used to operate with the battery. The researcher has observed that every individual and community people carry traditional knowledge in every aspect like agriculture, farming, producing bio-fuel electricity, mill the flour, making sugar, oil, etc.

Gradually, as time started to look progressively towards development more seriously than other elements, families got separated into extended and nuclear family. The number of houses increased than the past, and the capacity of landholdings decreased. People became aware of education and started going out for their studies. Roads were built, through Pradhan Mantri Gram Sadak Yojana (PMGSY) and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) for easy transportation and the health care facilities were available for the treatment of village people. Every corner of the villages started getting developed in transportation and the health care facilities. On the other side, due to gradual changes in society, the traditional systems started to fade away. The traditional knowledge holders were given less importance due to the quick effects of the biomedicine.

A place so deeply rooted in the age-old traditions of Indignity and traditional medical heritage such as traditional healing practices and oral traditions. This deeply rooted traditions of the place always fascinated and questioned rose in the mind of the researcher, as to how in the world, which is so much obsessed by science and technology, remains on the ethos of the past old civilisation. This drives the motivation of the researcher an area where things remain mysterious. That is the basic reason why the study in the medical heritage of India on traditional healing practices of the Himalayan region were taken up by him.

We all have questions of curiosity, to know about things that surround us, to unravel the mysteries that happen around us and this requires opportunities and dedications. The Centre of Social Medicine and Community Health, JNU gave such an opportunity where the exposure on the subjects like Application of Anthropology during the course work and presenting series of papers on traditional practices in the journal club presentation helped in moulding my interest towards the subject. The curiosity which had ignited long time back slowly got its way while reading the anthropological literature on traditional healing and practices.

The opportunity to attend the workshops on traditional medicine in campus and outside the campus and in the year 2013, in May, attending several meetings with experts working on traditional medicine in Bangalore (FRLHT) enlightened the researcher more about medicinal herbarium, herbal garden, a laboratory where medicinal plants were tested for the research studies and was explained about the various research on traditional medicine. He also got the guidance and motivation to work on traditional medicine.

Fortunately, meeting the experts in Chennai and traditional practitioners in the district of Vellore where while staying for three days it could be observed that the patients were coming to their centres from morning till evening. While conversing with them they were happy to know about the researcher's work, they advised and encouraged him for further studies. It was not only one-time meeting with the healers, but a constant contact with them helped the researchers go deep into taking account of information. After that also, the researcher continued meeting them often during the workshop in JNU, 6th World Ayurveda Congress (Healer Meet) in the year 2015, Pragati Maidan, and India Habitat Centre 2017. The previous study during the M.Phil dissertation, the fieldwork was carried out in Dzongu, North Sikkim on traditional healing practices, health beliefs, perception of health and illness. In the same year, a hundred household survey was carried on in Gangtok town on 'Urban health-seeking behaviour on local health tradition' where the researcher got an opportunity to meet doctors, healers, and households members. Through this survey, a clear picture of health perception and health behaviour of the urban population was carved out and also got more insight regarding traditional healing practices.

In the process of being developed we have come very far from our traditional practices. Apart from few places where they have preserved it and conserved it, the traditional knowledge is vanishing. Similarly, the researcher was not well acquainted with the practices and beliefs of his own Lepcha community until he witnessed it at his study area and came to know more about the cultures, traditions, and the rituals of the Lepcha community. The essence of conducting a research is not to treat the their informants as an element of seeking information and treat them as information box but constant contact would be helpful in observing and acquiring knowledge more appropriately. The researcher got an opportunity to attended the festivals of Lepcha that would be held for a week where they sang and dance in the Lepcha language. It was the time when the whole community people would come together and celebrate their festival with joy and happiness.

Unfortunately, the words of development do not always fulfil what it promises to achieve and it's hard to understand to whom does it actually favour. The process of development sometimes brings stories of melancholy, it was sad to hear about the landslide, which happened on 13 August, 2016 in Dzongu, North Sikkim which was the researcher's study area for MPhil. There were almost twenty houses in the village which submerged under water due to a massive landslide. When in the same year the researcher went to visit the place again in the month of October with his friend, it was very painful to hear and see the site underwater where the fieldwork for M.Phil was conducted. The entire community people were mourning of the significant loss of their ancestral land and heritage.

It was another heartbreaking news to hear about the death of four out of ten healers whom the researcher had interviewed, including both male and female, during the MPhil fieldwork. Amongst them one was female, one was old age healer, one was sick, and the last one was young practitioner traditional healer. Hence it was realised how important it is to record and document the traditional healers, their knowledge about the many things like medicinal plants, health problems and seasons. The whole traditional healing knowledge will be lost, when it goes away by these healers after their death. This boosted and motivated the researcher to keep records and documents about the traditional healing knowledge.

During the time of PhD, the researcher attended healers' meet and seminars to have a deeper insight and better understanding on the subject. The time gets tough on us when we start to move towards our goal and especially the initial stages are tougher. In the beginning it was very difficult since the departments did not have the proper data in written form. The researcher did not have any contacts of healers, the permission letter was also received very late which took a year to get permission to conduct a study in Sikkim. The monsoon starts early in the state from April to September and the rainy season is the worst time to travel in Sikkim due to heavy rainfall and landslide.

Challenges were never enough, from the conditions of the road to the accommodation , the network of the roads were not very smooth due to which the distance to reach one healer to the other was very far, which almost took an entire day. However, kindness still exists in this modern world in different forms. The healers were kind enough to provide with food and accommodation during fieldwork. After knowing the area of research interest, they were happy and advised the researcher. They were willing to share the information. They also taught the researcher about the various medicinal plants and usage for the treatment, but to gain their trust is not easy and most important part is to safeguard their trust. The healers made arrangements for the researcher to conduct the interview with their patients. To be accepted in the that atmosphere and in their family was the moments that would be cherished, and would always teach the essence of being kind.

1.5 The organisation of the Study

The thesis mainly contains ten chapters. Chapter I deals with an introduction, statement of the problem, concepts of terminology rationale of the study, the motivation of the researcher, and organisation go the thesis. Chapter II includes a review of the literature. This chapter reviews the traditional healing practices, classification of the medical systems, etiology of health and illness, policies and documents, health seeking behavior and studies in Sikkim. Chapter III is about conceptualization and research methodology. Chapter IV is about the demographic profile of the state. Chapter V deals with the profile of traditional practitioners. Chapter VI diversity of traditional healing practices of Sikkim. Chapter VII processes of traditional healing practices, roles, and responsibilities. Chapter VIII tries to understand the perceptions and experiences of biomedical practitioners and traditional

practitioners. Chapter IX looks at the process of integration, mainstream, and challenges. Chapter X represents the summery discussion and key findings and policy implication of the research study, and highlighted some issues and concerns for further research, followed by, References, Annexures, Interview Schedules, fieldwork Photos, etc.

Chapter 2

An Overview of Integration of Traditional Healing Practices into Modern Health Care System

This chapter explores the overview of the integration of traditional healing practices. The literature draws from various secondary sources like books, journals, articles, newspaper, etc. It overviews the critical concepts of traditional medicine, traditional healing practices, the idea of health and disease, classification of the health care system, health-seeking behavior, medical pluralism, policies and documents, possibilities of integration, and last part in studies done in Sikkim.

Health is the basic human right of every citizen of the country; the internal and external growth of the person is not possible without good health. Health is essential to lead a quality and successful life, beyond being a personal responsibility. To promote good health is a national and international responsibility to cater the need of 'Health for All'. The Right to Health is recognized in various international and national level covenants and statutes. Article 25 of the Universal Declaration of Human Rights states: 'Everyone has the right to a standard of living fit for the health of himself and of his family, including medical care' (CESCR, 2000). In India, Right to Health is a part of Right to Life enshrined under Article 21 and has been described in this way in several rulings of the Supreme Court of India. This means 'health' is essentially the primary responsibility of the states to secure primary health care in a socially fair and equitable environment.

According to the Indian constitution, the subject of 'health' comes under the purview of the State Governments. They are responsible for maintaining and bettering the health of the people who live under its jurisdiction. The main policy framework and support is enumerated by the Central Government, while the States devise their models of accomplishing the Central Government's health-related goals (Swarnkar, 2007). Health is too often seen as a concept that applies only to physical well-being or the absence of disease; however, the most widely accepted definition of health published by WHO states

that, “Health is a state of complete physical, mental and social well-being and not merely the absence of diseases and infirmity” (WHO, 1978). Qadeer (2011) criticizes the definition of WHO, he says that it has focused on the ideal rather than the actual, it assumes the notion of an absolute, i.e., the ‘complete well-being’ of an individual, rather than examine the relationship of individuals in the social environment (Qadeer 2011). According to Qadeer, “Health is a dynamic concept embracing biological and social dimensions of the well-being of a person which evolved and determined by the perceptions of a group or community which differs from community to community’’. Health can be seen as a means towards further objectives such as economic competitiveness or decreased public expenditure (Palfrey 2000).

Every individual, group or community comes with immense knowledge about the medicinal plants and their properties to use in various health needs. Based on the human suffering from the illness, every individual, group, community-developed their healing system and practices (Banerji, 1989; Kleinman, 1988). The healing practices are also shifting from spiritual or medico-religious healing to rational therapeutic practices within the time framework. In most of the tribal and rural villages, the illness treated with home remedies and traditional village healers. If it does not heal in the first and second line of treatment, the people seek care from biomedical practitioners in the health institution. The community and specialized healers often use more than thousands of plant and animal products for the treatment therapy. The knowledge passed on from generation to generation through their family practices or by word of mouth. The healers used different types of treatment methods such as pulse diagnosis, the examination of urine, poison treatment, bone setting practices, and many more (Shankar et.al., 2007). The recent development of more technology and the biomedical system has little effect on traditional medicine and its practices (Dalal, 2007).

There are various literatures, articles, reports; studies have supported the utilization of traditional healing system. Traditional medicines are considered as an alternative medicine all over the world. The utilization of traditional medicines are not only existed in the developing countries, but it is also accepted, and practiced by all the industrialized and the develop countries. The people are now going to the root level of utilizing the traditional

medicines that used to be practiced in the ancient days. Now the side effect of modern medicines are more, and it is challenging for the patient those who have chronic illnesses. Therefore, people are accepting and utilizing more traditional medicine. Thus, the demand for traditional medicine or the traditional healing system has become high. In the south-Africa, the government has supported the integration of both biomedicine and traditional medicine in the health care system as there is a shortage of biomedical practitioners. In 1998, there was a meeting held in the Heath minters of Commonwealth countries. The main agenda of the meeting was to reform the health sectors where the review was done in policymaking and the integration of traditional medicine and complementary and alternative medicine (Bodeker, 2007).

2.1 Traditional Medicine and Practitioners

The traditional medical knowledge and practices have a history, which is connected to the genesis of human civilization. The WHO define traditional medicine as; "sum a total of the knowledge, skill, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness" (WHO, 2002, p. 1). The documents also emphasizes upon home-based treatment, herbal medicine, animal products, minerals, spiritual therapies, and community knowledge on health and healing care provided by various traditional practitioners during the time of illness.

There are over 60,000 village bone -setters, 60,000 herbal medicine practitioners who are specialized with treating diseases such as jaundice, paralytic conditions, children's diseases, eye diseases, poison healing, dentistry and around 700,000 midwives in India. They are the respected people in the community and their healing practices are recognized but they are not certified institutionally. Their healing practices are cost-effective and are successful in treating the patients in the community all over India. They are known as barefoot doctors in *Nattu Baidhyas*. They conduct 80 percent deliveries, treat 40 percent of broken bones and 50 percent of snake bites, scorpion and dog bites. They also provide therapeutic treatment of vital points in complicated cases (Sankar, 2007).

The AYUSH system or the codified, professionalised, instutionalised, text based, trained system has integrated and incorporated in the Indian official health system. But there are diverse and heterogeneous traditional or folk healing practitioner in the community providing health services to the large number of population in primary healthcare in rural and semi-urban areas. The official documents accept this tradition as Local health traditions. This Local Health Traditions has larger areas of practices from home-based therapy, folk healing practitioners, herbalist, traditional birth attendants, traditional bonesetter and many other practices in the tribal and rural villages in India.

2.2 Etiology of Disease, Health and Illness

The concepts of health and disease differ from individual to individual, group to group and community to community. It has also different meaning in different geographical phenomena. For instance, in one community understanding of health is not as same as in the other community. The non-western understanding of health and illness primarily governed by the culture and religious beliefs in the local cosmologies. The modern medicine includes theories and practices. On the other hand, the traditional healing system do not have only theories, but they are truly practices based on the experience and experiment in the community.

Foster (1976) says in his paper that many Latin American villages believe that the medicine has less importance of health and illness of the population. They believe that the health and illness mostly governed by the God and it comes from the God. According to Foster (1976), there are two basic principle of disease etiologies, personalistic and naturalistic in the context of non-western medical systems. He explains not only the concepts of disease causalities, but he also explains that the personalistic medical system which influenced by the active purposeful intervention of an agent or human (witch and sorcerer), nonhuman (ghost, an ancestor, an evil spirit), or supernatural (a deity or other very powerful being). The naturalistic medical system explain illness and disease caused by the natural forces, causes of hot, cold , heat, wind, which affects the biological imbalances in the human body. In the Indian Ayurveda concept of dross and the Chinese concept of yin and yang.

Clements (1932), briefly discussed the concepts of disease and healing. He explained five basic concepts of causes of diseases, namely, soccer, breach of taboo, object intrusion,

spirit intrusion, and sole loss (Clements, 1932, p. 185). Hippocrates explains about the good health that are the outcome of balance between four humors in the body and the harmony between body and the environment. He also said the illness is due to the imbalance of a body.

Young (1976) describes the system into two types 'externalizing' and 'internalizing' systems. He illustrates the internalizing system is the physiological changes that begins internally when the patients get illnesses and starts to show the signs and symptoms unless the patients get healed from the illnesses. The healing of patients depends upon the effective treatment of the healers that allows the patients to achieve the physiological equilibrium in their body system. In externalizing system, it describes the illnesses of the patients that are due to the certain reason where the illness arises outside the body that force the patient to acquire medical treatment (Young 1976).

Murdock (1980) categorizes the theory of illness into two sub types (i) natural causation, (ii) supernatural causation. The natural causation describes about the illness due to physiological changes experiences by the patient in certain conditions that has been evolving reasonably in the medical science is a theory which is precisely and specifically accepted. It also also implicit under several categories that explains about 'infection stresses, 'organic deterioration', and 'accident'. The supernatural causation described as mystical situations in various parts where the author explains about the reason of illness as due to uncertain situation, threating conditions, impurity and supernatural vengeance. He generally deals with the reason of illnesses that are linked with the sorcery, exorcism, witchcraft. There are animistic causes that represent the reason associated to evil possess, soul loss, and spirit aggression (Murdock, 1980).

In Ayurveda, it consists of three forces that are responsible for balancing the body like *vata, pita* and *kapha.* It says all these forces helps the body to remain healthy and in balance for longer period (Kurup, 2002). The system of Unani considered that the illness of the body is due to the imbalance of humors or disturbance of their harmony (Khaleefathullah, 2002). As per the Chinese medicine, good health depends on the maintenance of balance between *yin* and *yang* within the body and between human being and the circumstances.

The person gets diseases due to imbalance and disturbance of *yin* and *yang*. Yin and yang are considered as the fundamental principles that are responsible for keeping the body healthy. It also accountable for the changes in physiology, pathology, diagnosis and treatment of the diseases (Dong and Zhang, 2002). The various forms of traditional treatment are based on the perception of different parts or the constituents of the body that are viewed as an organic and emphasis balanced relationship between them.

2.3 Classifications of the Health Care System

There are ample studies which have been carried out by the anthropologists. They have explained and written their classifications on the health care system. Kleinman (1980) elaborated the most comprehensive theory of medical systems and he called it as a healthcare system in his book '*Patients and Healers in the Context of Culture'*. He wrote that 'The health care system includes people's beliefs and patterns of behavior. Those beliefs and behaviors are governed by cultural rules' (Kleinman, 1980, p. 26).

Kleinman (1978) has classified the medical system into three sectors, which is overlapping one over the other. There are popular sector, the folk sector, and the professional sector. The first category which is popular sector encompasses healing from within, family, community, and social networking. He remarks that a wide-range of healing takes place through self, family, and community. There is also a form of self-healing or self-cure, where illness is managed by consuming a proper diet, taking enough rest, maintaining good hygiene, ensuring proper sanitation, and enhancing a clean environment. In almost every culture, an illness is initially identified and primarily treated in the popular sector. About 70 to 90 percent of diseases are completely managed within this sector in both Western and non-Western societies (Kleinman, 1978).

Folk sector explains about the non-professional practitioners or specialist. These practitioners comprise of herbalists, bonesetters, midwives, shamans, magicians, and mediums. Folk sector describes these practitioners/healers who practice healing informally having the semi-legal status or illegal forms in the society. The professional sector comprises both professional scientific ("western" or "cosmopolitan") and professional trained indigenous healing system (example Chinese, Ayurvedic, Unani, Homeopathy,

Acupuncture, chiropractic). Both the system has legal status in society. This system is based on the empirical, theoretical framework in the official health system (Kleinman, 1978, pp. 67-68). Leslie (1976) in Asian Medical system has categorized medical tradition in two forms "little tradition and great tradition." He has emphasized, "great tradition" that includes Ayurveda, Unani, Chinese medicine and had integrated urban popular and folk medicine and healers like shamans, herbalists, bone-setters, midwives, snake bite healers, surgeons, etc.

Dunn (1976) has classified the medical system into three categories based on geographical and cultural settings; Local medical systems, Regional medical systems and Cosmopolitan medical system. The local medical system consists of primitive, folk, and indigenous. It includes traditional practices in the local or community level. All the non-certified, non-scholarly and untrained healers are included in this system. The regional medical system consists of a scholarly and largely certified system of Ayurveda, Unani, Chinese, etc. The cosmopolitan medical system is a universal medical system. This system is known to be in various other terms as modern medicine, scientific, western medicine. Dunn (1976) disagreed with the different names of modern medicine, experimental, western medicine and considered using the term cosmopolitan as multiple other terms could mislead; he argued that the local and regional system would be a scientific and modern, and the western medicine are not bound to the western region. At present, the regional medical system, for example, Ayurveda, Chinese medicine, etc. are not restricted to the regional countries. The regional medical system spreads in the industrialized countries as well and vice versa the western medicine covers every corner in the world.

According to Shankar, there are two types of traditions, (i) codified tradition, that has large number of recorded items and the biomedical practices are based on medicine and surgery (ii) oral traditions or folk medicine. The oral and the folk medicine are practices based on the experiment and the year of practices that is existed on ecosystem and in ethnic groups. The oral tradition has been passed down from generations and it also took place due to civilization of human kind. It is available all over India. The use of herbal plants, animal products, metal and minerals are used in the oral traditions (Shankar, 1997).

The greater concern for the traditional medical knowledge is of losing or disappearing the traditional system of healing and knowledge of it. The main challenge for traditional medical system is not only to protect the bio- resources from theft and deceit but it is on protecting the culture from being destroyed.

2.4 Traditional Healing Practices

In India, large number of studied conducted in the cultural setting on disease etiology, cultural beliefs and practices, diagnosis and therapeutic methods, health seeking behavior and medical pluralism have been done with different communities by the anthropologist like Khare (1963), Hasan (1967), Madan (1969), Kakar (1982), and Henry (1977).

The traditional healing practices has captured the attention of many scholars for many decades. The academic researchers are mostly interested in cultural, social and medicinal anthropologist. The missionaries and anthropologist have resurfaced in the late 1950s. The traditional healing practices is a diversity of medical practices, cultural practices, traditional knowledge and social organization (Joshi, 2004, p. 403). The system of medicine, knowledge of herbs, ritualistic practices, explanatory models, amulets and charms, humoral ideology, bonesetters, midwives and myriad other ecologically meaningful and culturally approbate ideas beliefs, practice and personnel. The headlining knowledge aid a diffusion and assimilation of healing cultures (Banerji, 1981). The traditional healers also have physiotherapeutic knowledge used in the treatment of fractures, sprains, spasms, childbirth, and gynecology (Lambert, 2012; Sadgopal, 2009). Laurent Pordié (2007) in his article compiled a wide range of folk healing practices of India, which was published in the special issue on the ethnography of healing' in the journal of *Indian Anthropologist* (Pordié, 2007).

The elderly man and women and the healers were having the vast knowledge of traditional healing in the community. These people in the community have knowledge and understanding of herbal plants, animal products and minerals for treating different types of illnesses. Each family knows about home remedial treatments for more than 30 common illnesses. The healers do the services of healing for the community people and also receives the kind if provided during treatment and use the amount for their livelihood. The

traditional practitioners mostly provide free services in the community. The oral and folk traditions are not only existed in the community but they also serve the people to get better health in living their life free from any types of illnesses (Shankar, 2002; Unnikrishnan and Hariramamurthi 2012).

The old age traditions and the utilization of home remedial items are getting disappeared due to urbanization and nuclear family where elderly people in the family were considered having deeper knowledge on traditional and home remedial treatments. People are now getting more exposure to biomedical system and biomedical drugs. The knowledge of medicinal herbs and the use of various parts of medicinal plants are getting disappeared. Years back the people were close to the traditional healing system before the arrival of biomedicines. However, even today there are tribal people in the villages and many in the developing countries have continued the traditional healing system (Chandra, 2001, p.138).

It is believed that every country has the old age wisdom of traditional healing practices that are formed and presented in different ways. In India, some of the traditional healing system is documented and preserved like Ayurveda, the Muslim system of Unani, traditional Chinese medicine (Priya, 2013; Sujatha, & Abraham, 2009). However, there are many countries who merely practices traditional healing and passed down from generations to generation orally without any documentation. Traditional healing system was the only means of old age practices that were existed before the arrival of modern medicine. The modern medicine includes theory and practices (Murray and Rubel, 1992).

The healing practices in the ancient times were carried by the neighbors using herbal plants and other folk remedies. There were tribal specialists who used to treat the intractable cases in the community by using herbal remedies cauterization, divination and exorcism (Kakar, 1982). The traditional healers were highly respected and used to hold the social power in the community. The traditional healing practices are still alive and in practices in recent time, mostly seen in the tribal areas. At present time, the traditional healing practices are carried out in the hybrid form that combines with various quasi allopathy or complementary biomedicine. In recent years, there are companies and the forest officials are trying to extract the knowledge from the traditional practitioners, but they generally do not share

their knowledge and practices of traditional healing and the use of medicinal plants that can be a greater concern (Hardiman, 2007).

Joshi (2004) expressed that the anthropological writings on traditional healers mainly focused on the shamans and their psychological therapeutic role in the community. The other form of traditional healers are ignored or did not get much attention in the eyes of anthropologists. The shamans understanding of diseases and illnesses is different than the other traditional healers in society at large. Both the healers have different etiology of diseases, methods, and practices in their setting. In this paper, he has conducted the study in the district of Dehradun, Uttaranchal among the Jaunsari healers. The author revealed that the Jaunsari not only rely upon the shamans for health care, apart from this there are other types of the healer in the community, who equally play a vital role in the community providing health services to the people.

The author has categories in five different categories, 1) Baman- Astrologer, priest, and healer, 2) Mali-Diviner and Shaman, 3) Jariyara- Pulse Specialist and herbalist, 4) Female specialist-Midwife, masseur and gynaecologist. 5) Doctor- Non-traditional healer (Joshi, 2004, p. 203).

The Jaunsari identify causes of illness from both natural and supernatural causes. The author further explained the therapeutic role and responsibilities of different healers' in the villages. In Jaunsar, there is a prevalence of multiple therapeutic modes and a medically pluralist setting.

Marroit, (1955) done the study in 1950-1952 staying in Kishan Garhi village, Aligarh District in Utter Pradesh. He has done the anthropological study of village social organization. He described the village life, kinship, perception, and many other aspects of village social life. In the villages, people were suffering from many health problems. The most prevalent health problems were like, dysentery, cholera, smallpox, tuberculosis, typhoid, gonorrhea, malaria was taking the lives of village people. He tried to spread western medicine and try to make people accept the new style of western medicine in rural social organization. The acceptance of the biomedical system and the health care-seeking

behavior of the village people have more toward the traditional methods of treatment for the diseases. Western medicine has no place in the village health priority: western medicine and the technologies ignored by the village people. But the presence of indigenous or folk medicine is everywhere in the villages of north India. The village people perceive biomedical practitioners and the system as an outsider or the alien in nature in the village health care practices. He has also highlighted the doctor-patient relationship in the village setting. Most of the villagers seek treatment to form the indigenous practitioners for every single health problems. Many indigenous healers were found in the villages were, priests, exorcists, magician, secular physicians, and few of them were using techniques like bonesetter, charm-sellers, copper, surgeon, and thorn-puller. These traditional practitioners occupy the higher and lower position in the village hierarchy of caste and class social organisation. "Western medicines are best, but doctors never cure anybody" (Marriot, 1955, p. 239).

Morris Carstairs (1955) conducted the study in 1950 and 1951 two villages, namely Sujarupa and Dilwara located remote areas in Udaipur districts in Northern India. The author was familiar with the villages because his father was a missionary, and he grew up in that place. He explained the village life, health culture, community beliefs, and practices of the villages. While conducting the studies, Carstairs writes, "I realised that one could scarcely expect village people to change their whole cosmology simply to accord with the outlook of a western-trained doctor. Scientific knowledge seems likely to be disseminated throughout India as education becomes widespread, and the products of western technology become a part of everyone's environment—but one cannot afford auto wait for this to happen. In the immediate future, it devolves upon those who are introducing western techniques in public health and medicine to study how best they can adapt the roles of a doctor, the pharmacist, and the public hygienist to fit into the existing cultural expectations. In the process, they must take consent to assume the mantle of the priest or the magician. This does not mean, of course, but simply that they will accept the inevitable fact their techniques of healing will be accepted "irrationality," as indeed they are not the most part in the West" (Carstairs, 1955 p. 133). This argument makes us clear about the perception of people towards the traditional health care system as illogical/irrational vis-a-vis to the

western concept of the health system which seems to more dominant in most of the parts of society than the traditional concept of health care system.

Banerji shares the concept of health culture where he describes communities a component of its overall culture, which responds to a variety of social economic, political and technological forces. He has explained certain cultural meaning of health problems;

A. Various systems of medicine, home remedies and non-professional sources form the cumulative health practices that are assimilated by the community as its social legacy.
B. Health practices are getting dispersion from outside.
C. Health practices are receiving from outside by energetic determination.
D. The people at current generation are showing cultural revolutions in order to deal more effectively with the predominant health issues (Banerji, 1973, p. 2261).

Hasan (1967) conducted the study on cultural dimensions of health practices in the north Indian village in 1959-1960. The research was published in a form of a book entitled "The Cultural Frontier of Health in Village India." The study explored about the village life, sanitation of the village, personal hygiene, health practices, concept of health and illness, food habits, drinking habits, taboos, doctor-patient relationship, healer-patient relationship, traditional healing practices of the village people, utilization of village health institutions, etc. The study mainly highlights the customs, health beliefs, and health practices are interlinked with the health and disease of the village life. This connection also depicts the people health-seeking behavior to avail the treatment facilities. The author reported the negative and positive factors of the cultural beliefs of health practices among the village people (Hasan, 1967).

Khare (1963) also did the anthropological study on folk-medicine in north Indian villages in India. He also highlights the pluralistic health care practices of the people, using both traditional and modern medicine (Khare, 1963). There are other anthropological studies done my Oscar Lewis in the village Rani Kera, Delhi.

In Surat District of Gujarat, 59 healers were surveyed in the study; it was reported that there is more faith-based healer than the folk healers. There are specific illnesses where people depend on the local healers irrespective of caste and class. The role of traditional

healers is multiple in the communities such as 'treatment provider' 'diagnosticians' 'social advisor' and 'modern counselor' (Prasad, 2007, p. 24). The author also highlights the unequal power relation between the different health system and from the 'provider' and 'receiver' in the context of medical pluralism. The author argues that the institutionalized medical systems became restricted, and general masses were excluded from the health services (Prasad, 2007).

The author in his book "Shamans, Mystics and Doctors: A Psychological Inquiry into India and its Healing Tradition", generally discovers the Indian Cultural traditions where the patients with mental illness and various other health problems of women's is cured thorough phyco-social healing practices. He also said, that the healing practices done in different places such as temples, shrines, daragha and many other. The study was conducted in the northern states of India where different types of healing practitioners were identified like (*vaids, hakim, swamis, gurus, maharajas, mataji, bhagat, lamas* and many others). The therapy was provided verbally, practical through mantras, worshipping God or creator, ancestral spirits, nature etc. mystical practices and the concept of illnesses are compared with the western system of Physiotherapy and the healing system of Indian context. The practices and the understanding of various illnesses and its causes, in the Indian cultural practices are explains through shamans and baba (Kakar, 1982). The author also explains about the *pir* (wise elder) who treats patients with mental illnesses. It was found the *babas* questioning the vision of a woman, man, child, snake or monkey or any other wild animals in patient's dream. The illnesses of the patients will be examined according to their reply where the problem is caused by the *balas (*evil spirits) (Kakar, 1982).

Singh and Madhavan (2015) review paper on '*traditional vs. non-traditional healing for minor and major morbidities in India: uses, cost and quality comparisons*' found that the usages of traditional healing is more in the rural areas comparing to urban areas, mainly for short term minor illnesses. The minor cases for which the traditional healing is used are cataract, leprosy, asthma, polio, paralysis, epilepsy, mental illnesses etc. However, when it comes to major illnesses, the usage of non-traditional healing is more. It was also found that the traditional healing practices is more affordable and the use of traditional healing

practices highly among the poor educated and poor household in the rural areas (Singh and Madhavan, 2015).

Priya and Shweta (2010) in their macro level studies, "status and role of AYUSH and Local Health Traditions under the National Rural Health Mission" it was reported that 14 out of 18 states, 80-100 percent of the households utilize the Local health traditions. It has mostly used by the poorest regions having the poor health care services in the public and private health sectors. more than 70 percent of the exit interview reported that the use of home remedies in various health problems. The usage of LHTs in both acute and chronic conditions in the early stage of health problems. The reason behind the utilization of LHTs, is because of the inaccessible, unaffordable modern health care services in the community. 'Effective', 'cheap', 'easily available', 'easy to use' and 'no side effects' were the commonly cited reasons why the LHT were found useful (p. XXIV). It was also reported that more that 70 percent of home remedies used for diarrheal disease, anemia and diabetes, as well as in convalescence and maternal and child health (MCH) conditions, were validated across the states. Fifty five percent of the biomedical doctors suggest home remedies for the patients. some of the states the ASHAs has a good knowledge about the medicinal plants and home remedies. they also suggest home remedies in the community (Priya and Shweta, 2010).

Albert and Porter (2015) in their article questioning the utilization of AYUSH system of medicine in the state of Meghalaya. The author has argued that the implementation of AYUSH in the north east states like Meghalaya is a 'forced pluralism'. The locally practiced tribal medicine is not getting much attention in the health policy and the system. They have also reported that the high awareness and utilization of the tribal medicine by the people and healers of Meghalaya compare to the AYUSH system of medicine in the healthcare services. The authors further suggested that the contextualising the health policy through engagement of tribal healers in the policy and healthcare system providing proper capacity building, training, referral system, documentation and research for strengthening the tribal knowledge and practices for the policy framework. The state support must provide the tribal system of medicine in the north east states of India. Considering the

community acceptance of tribal medicine and their practices to make more comprehensive manner.

The study reveals about the connection of ecosystem to the tribal communities and their practices of healing in the rural people. The study was conducted among three villages of Konda Reddi Tribes, Andhra Pradesh southern states of India. The study shows the closeness of community people with the ecosystem for their survival. The community people were underprivileged to get accessible modern health care facilities, road and transportation. Because of hasty growth and development, alteration in forest policies have restricted the community people to gather forests products like tubers, fruits, medicinal plants and herbs, flowers, and restricted them from hunting and gathering. The community people were identified having livestock like goat, cow, hen, small plot of land for their cultivation. It also shows communities were fully dependent on ecosystem. It reveals that ecosystem is the means of their survival in all means of their social life, health and medicine, religious belief, economy etc. in Konda Reddi Tribes' (Reddy, 2004, p, 277)

Levers (2006), the author analyzed the five articles and found the universal roots of traditional medicine. These indigenous healing systems include the following principle : "(1) mind, body, and spirit are all interconnected; (2) healing is based on harmony and balance; (3) healing is a sacred process; (4) healing is a personal meaning-making process; (5) there is a connection between the person seeking healing and the healer; (6) healing involves multiple interactive processes; (7) wellness represents harmony; (8) illness represents a disruption of natural balance; (9) there is an active relationship between the physical and spirit world; and (10) the healer remains an important medical resource and cultural intermediary" (Levers, 2006 p. 485).

Ehrenreich and English (1973) specified women having the source of knowledge. According to the authors women were considered as healers as they have the ideas and information of home remedial treatments. They know about the massage therapy and to abort the child in the community with home remedies. The knowledge and the information used to be shared with the neighbors and their daughters. The women used to be called as wise women in the community. They were known to be doctors with licensed in the

community. They were having very rich knowledge to solve the health-related issues even though they do not have degrees. The author also explains how the knowledge of women were suppressed during 14th-17th century by the upper class political class and Christian missionaries. Witch hunting was started to suppress the knowledge of women. The biomedicines still practices the traditional knowledge of medicines of these women. Male always dominate the women in the medical profession. The changes have occurred in the medical profession once the establishment took place in the Health and the feminist movement (Ehrenreich and English, 1973).

Pordie (2007) focuses the points where the folk healing practitioners are not given importance in the Indian medical system whereas the other codified AYUSH system has received national appreciation and recognition and has become popular in the healing system. The author explains about the folk healing practices and the traditional medical practitioners like herbalist, religious therapies, spiritual healer, traditional birth attendants, bone setter, snake bites healers, and tribal medicines. The important role of the healer and their practices are largely portraying in this paper. It also depicts the 'presence of religious and its normative dimension on the practices of medicine', and 'importance of healing in group identity' (Pordie, 2007, pp. 1-12).

Shankar, et al (2012) have done the study in two states of northeast Assam and Arunachal Pradesh among the Missing community. The survey was conducted in Lakhimpur and Dhemaji districts of Assam and East Saint district of Arunachal Pradesh. The northeastern states of India are affluent in traditional healing practices and herbal medicine for treating various health and illness. Majority of the Indian tribal population found in northeastern states. Every tribal community practice different types of traditional healing practices. The study mainly focused on plants used for the treatment of various health problems. The fifty-five medicinal plants and herbs were found using seeds, fruits leaf, stem, barks, etc. for daily health purpose. The community living near the river are most prone to malaria and water-borne diseases. The other health problems were found jaundice and female maturation problem among the communities. To meet the healthcare needs, they developed traditional healing practices to save from various diseases. The diversity of healing

practitioners found from the study are like herbalists, diviners, faith healers, traditional birth attendants, veterinary specialist, and bonesetter.

The other study elucidates the roles and responsibilities of the traditional practitioners and their practices in healing and medical pluralism. The study was carried out by Prasad, in South Gujarat. He debated of not having access of health care facilities both physically and financially in large number of rural population. He focuses about the reality that the poor and the rural population have not received any institutional health care facilities. The healers and the herbalists in South Gujarat were found to be active and playing the vital role in the community. Also shows about Inter-religious, inter-caste communication or bonding relationship among the healers, patients, families as well as community irrespective of caste discrimination. Both Hindu and the Muslim healers treat all caste and class of population. The community people have perception and believes of getting effective treatment from the healers in the community especially during the illnesses that are caused by the supernatural powers (Prasad, 2007).

2.5 Health seeking Behavior

The biomedical model of health system understands the health-seeking behaviour because of the lack of awareness of the disease and mostly emphasis on health education to control the complication in the health programme. But the health-seeking behavior or care-seeking has many aspects to explore and understand outside the biomedicine. Every individual, group, and community understand health and illness differently in their social setting and the region. The notion of health and disease is not only caused by the biological imbalances, but there are other contributing factors like accessibility, availability, affordability of health services, environmental factor, political and economic factor, etc (Banerji, 1981). Evens and Lambert (1997) study on health-seeking behaviour of the female sex workers of Calcutta found that cultural belief of the illness (Evens and Lambert, 1997) .

Baru (2005) said the health-seeking behavior of the patients depends on many elements of disease causation, health service institution, and the ‘felt need’ of the people and the community. Health seeking behavior depends on the seriousness of the disease. The patients first do the self-help care using home remedies, if severe then seek the treatment

from the traditional healer and more serious will seek treatment from the hospital. Many rural and tribal community home-based therapy is the first line of treatment, and the hospital will be the last option (Jegede, 2002). The community people tend first to try the available services provided by the traditional village healers. If the treatment is failed through the traditional healing process, then only prefer the biomedicine. Sometime there will be a delay from the patient and community to see medicine from the hospital during such practices.

Hardiman and Raje (2000) said if some disease and illness occur in the family and the community more than one or more than two days, the tribal people seek the first line of treatment from the village 'bhagat' or faith-based healer. The bhagat has a diverse knowledge of the disease, usage of plant medicine, and animal products for the healing practices. While preparation of medicine, the healer do rituals for asking blessing from God. The bhagat has not only worked for treating the patients, but he has a significant role to perform priestly rites, village, and household guardian spirits (Hardiman and Raje, 2000). The illness and health-seeking behavior among the hill tribal population of Bangladesh shows that because of the poor accessibility of the health care services, many of the tribal population are deprived of the not getting primary healthcare services. Their healthcare-seeking behavior of tribal population found that significant position goes traditional healing practitioners in the community, quality treatment and communication can cost high due to out of pocket expenditure, gender, age, and education played the vital role for division making to choose healthcare, and difference of perception among the tribal population concerning their health knowledge, awareness and treatment-seeking behavior. The good healthcare services are only limited in the plains area population (Rahman, et al. 2012). The antenatal and postnatal care-seeking behavior among the Garo community in Bangladesh show that higher in number compare to the mainstream people. The healthcare service available in the community does not impact the seeking behavior of the community unless and until there is a need of awareness of using health services, resources, infrastructure, etc. (Islam, et.al., 2009). Calnan and Johnson (1985) pointed out the relationship between the 'social structure' and 'health beliefs' about the health-seeking of the people. The occupational social class, concepts of health and vulnerability to disease,

which is associated with health behavior and risk-taking behavior (Calnan and Johnson, 1985).

The study conducted by Sato in Ghana reveals that the availability, affordability, adequacy and accessibility of the herbal remedies and the role of traditional practitioners are highly accepted by the community people. The people are satisfied with the treatment of traditional practitioners and they seek treatment from the traditional practitioners whenever they require. Traditional practitioners believe to have better understanding about the causes of illnesses and they provide cost-effective as compared to the western biomedicine. It was found that community people seeking various treatment resources during the time of illnesses. The community people seek help from the traditional practitioners whenever they get sick. After that they go to the biomedical practitioners and finally they come back to the traditional practitioners (Sato, 2012).

2.6 Medical pluralism

In the recent time policymakers and scholars from a various academic discipline like anthropology, sociology, public health, physiology, botany, etc. showing more importance on medical pluralism and the possible integration of the traditional medicine and biomedicine in the official health policy in the state.

The concept of medical pluralism in the health care of the people were the centered interest fields of anthropologist working on health, illness, healing methods and practices, food habits, treatment seeking behavior in the developing countries. It mainly focused on the "co-existence of multiple system of medicine" "diversity of healing practices" "pattern of resort" "layperson's perception of medicine" which were common later phase of twentieth century. The literature also shows that the area of medical pluralism continues to grow in the 1970 and 1980s in the field of anthropology, sociology and social sciences (Lambert, 1992; Durkin-Longley, 1984; Leslie, 1980; Minocha, 1980; Nichter, 1980).

2.7 Integration of Traditional Medicine and Modern Health care System

The term integration is described and well defined in its various forms depending on the study area where dissimilar, altered, different and diverse groups are brought together in

identical or relation to work in unification and in association. Thus, the groups come together and function. Similarly, there are different representations or models of integrations can be seen in the health care system.

The traditional healing practices and the traditional practitioners are widely integrated in the official health care services in many countries such as, South Africa, China, Vietnam, Sri Lanka and many others. They have included diverse traditional practitioners/healers like diviners, herbalists, faith healers, bonesetters and traditional birth attendants etc. apart from the government initiatives; there are more than hundred organizations are providing license for the traditional practitioners. The role of the traditional practitioners are immense in the primary health care services in the community. The biomedical practitioners also expressed positive note toward the traditional practices and willing to collaborate with them. Many countries have overtaken policy development in demand of integration of traditional healing and mainstreaming into health care system (Bodeker, 2001).

From the time of promotion of traditional medicine by WHO in 1978 in the developing countries, the interest of integrating traditional medicine into a national health care system are increasing. Chi (1994) argued that the polices are more likely to be on coexistence rather than integration of traditional healing systems. This paper suggested that the integration should be at the local level to get the effective integration of traditional medicine into modern health care system. It can be integrated by providing training to both biomedicine and the traditional practitioners. It would be benefited for the poor countries by successful integration of health care system by facilitating more efficient use of domestic medical resources and improving self-sufficiency in health development. It is not benefited to the local and the community people but also benefit to the industrialized nations. The inclusive medical system helps to enlarge the available of medical resources rather than having unified medical system (Chi, 1994).

The contemporary time, there is a high demand of Traditional Medicine and Complementary and Alternative Medicine (TM/CAM) all over the world. The utilization of this medicine is not only in the developing world, but it shows that half of the industrialized or the developed countries are using this medicine in various health

problems. The life expectancy is going high, and the morbidity is also increasing day by day. To cope up with the chronic illness many people turning back to the traditional medicine. The side effects of scientific drugs also one reason for utilizing traditional medicine. Literature also tells about the high demand for herbal products as a supplement in the industrialized countries. The developed countries who use some form of Traditional medicine and Complementary and Alternative (Bodeker, 2001).

The integration of traditional medicine into biomedical health care is taking place in their ways accepted by their countries in health official system. In some countries, the integration took place under one health system run by the same legislation and funded by the government. In other counties, its function as a separate independent department like India. The integration of traditional medicine into biomedical healthcare system defined as: "the organization and management of health services so that traditional medicine and biomedical health-care services are offered comprehensive healthcare to the people in many ways that achieve the desired results, are safe, sustainable and provide value for money" (WHO, 2013) .

Medicine (T/CA) are United States, 42%; Australia, 48%; France, 49%, Canada, 70%), and developing countries (China, 40%; Chile, 71%; Colombia, 40%; up to 80% in African countries) (Bodeker and Kronenberg, 2002; WHO, 2002). The other developing countries, Vietnam, India, Korea, etc. also use traditional medicine. The traditional medicine gaining popularity are increasing day by day in many of the countries. Conventional Western bio-medicine is increasingly regarded as expensive, inaccessible, depersonalized and not completely effective, especially for those patients with chronic diseases.

According to Bodeker (2001), there are two types of integration: (i) encompasses a common system of education and practice for TCAM and allopathic practitioners, (i) consists of different systems parallel and distinct but governs them through similar structures. It is stated that integration involves politico- cultural, epistemological and systemic features and accepts all probable that are responsible for co-operations. Also encounter various conflicts that comes throughout the process of integration (Sheikh and Nambiar 2011).

There is a history of relationship between modern and traditional medicine which is categorized into four wider forms: (i) Monopolistic situation, incorporates rights of biomedical doctors to practice medicine solely, (ii) A tolerant situation, includes the traditional practitioners are permitted to practice unofficially as per their capacity even though they are not provided recognition, (iii) A Parallel or dual health care model, includes both modern and traditional where both has separate patterns of functioning in the national health care system, (iv) An integrated model, deals with modern and the traditional that are integrated at the level of medicinal education and practice e.g. Vietnam, china (Bannerman, Burton & Chen,1983).

Krah, et al. (2018) highlights the challenges and opportunities of integration of traditional healing practices into the health care system. The authors did the qualitative study among the traditional healers, biomedical professionals, and patients in rural northern Ghana to find the possibilities of integration of traditional healing practices. They have reported five challenges which have emerged from the field is that: lack of understanding traditional medicine, discrimination, high turnover of biomedical staffs, declining interest in healing practices as a profession, and equipment scarcity. Apart from the challenges, the authors have suggested an opportunity of integration which exists in the field area, including the extensive infrastructure of traditional medicine, the openness of traditional practitioners to collaborate with biomedical professional, and traditional healers as a grassroots health workers. The authors have also gave the recommendation for the possibilities of integration of traditional healing practices and the traditional healer knowledge and practice in the health care system as a process documentation of healers and their practices, identifying healers, promote bast safety and efficacious practices, recognition and appreciation of healers through institute, provide formal and informal training, provide simple equipments, awareness among the biomedical professionals and promote traditional healing practices through communication campaigns among the general population. To achieve this target, the most important aspects is too systematic integration through proper co-ordination and collaborative work between the traditional healers and biomedical professionals (Krah, et.al., 2018).

Viney et al. (2014) they have carried out a study in Pacific island nation of Vanuatu on the integration of traditional healers in the national tuberculosis program. They mainly focused on the healers who treat the lung diseases and tuberculosis and their willingness to collaborate with the national programme for tuberculosis in Vanuatu. They have done the mixed methods of qualitative and quantitative analysis of the healer's knowledge, practice and attitude, etc. They took the nineteen samples of healers. They have found that out of nineteen healers, eighteen were male healers. The study shows that the nine healers were already work in the government healthcare system for various programmes. Their results show that all the healer welling to collaborate with the national TB programme, availing some incentives and without incentives. This also shows the one type of integration of healers, their knowledge and practices in the health system (Viney et.al., 2014)

Chitindingu et al. (2014) had done the study to see the integration of traditional medicine/complementary and alternative medicine in medical education in the south African medical schools. In this study, seven medical schools were interviewed. They argued that the medical schools were not aware of the government policies and legal frameworks. The dot does not respond to the policies to incorporated the TM/CAM in their medical curriculum. Many studies show that the high utilization goes traditional medicine in the African countries, but if there won't be any curriculum on traditional medicine in medical schools, than it will affect the young population (Chitindingu et.al., 2014). It is mainly seen in the areas and in amongst the patients who are suffering from chronic or long-term illnesses. The usages of TCAM is found to be more in the western societies to treat different types of illnesses. Biomedicine is not considered as an effective treatment especially for the patients with chronic illness. Biomedicines are reflected as more expensive, inaccessible, depersonalized which is not completely effective in treatment.

According to Mokgobi (2013), the mainstreaming of traditional healing system into modern medicine is to reduce the burden of biomedical system that is being carryout to provide health care services to the people. This model of integration among the traditional practitioners and biomedical practitioners supported and advocated by the minister of health in South Africa and member of Executive Committee for health in the Kwazulu-

Natal province. The integration was also experimented in AIDS hospital in the province (Mokgobi, 2013).

Hopa et al. (1998) have conducted the study on various groups of people like psychiatrists, general physician, psychologists, consumers and the traditional healers. Among the group the general physician has a doubt on the practices of traditional healers and raised many authentic questions about the integration of traditional healing practices. The other groups considered that the traditional healers are illiterate and their connections to traditional healing and their training does not depend on their reading and writing. It also explains that healers being literate is a positive thought as they can write the prescriptions of their patient rather than giving prescription verbally. The authors also found that the psychiatrists were practicing informal cooperation and they want more formal integration of traditional practitioners (Hopa, et.al., 1998)

2.8 Policies Documents on Traditional Medicine After Independence

After independence, there were many committees assembled and formed the policies regarding how the public health should be strengthened and given importance in preventive, curative, and promotive health care services to the people. To address the public health issues and to reduce mortality and morbidity, water-borne disease, infectious diseases, etc. are their primary goals and objectives. The recognition and importance are given more to modern medical science in the country (Priya and Shweta, 2010). The health infrastructure was built, the importance is given to modern medicines and modern technologies in the health services system. From that time, the Indian system of medicines or the codified system of medicines, traditional healing practices, or folk healing practices were marginalised. The Indian system of medicine receive less attention, but the folk healing knowledge and practices did not get the importance in the health policy framework. Prasad (2007) argued that after independence the biomedicine received the state patronage and occupy the dominant status in the medical system in all over the country in both private and public health sector (2007).

The Government of India nominated Bhore committee in the year 1945 to reinforce health services system in India. The Indian system of medicine, both codified and non-codified

system were sideline in the official health policy. The Bhore recommended saying that, "we are unfortunately not in a position to access the real value of these systems of medical treatment as practices today as we have been unable, with the time and opportunities at our disposal, to conduct such an investigation into this problem would justify clear-cut recommendations." However, there was a debate, and the importance is provided less to the indigenous health care system in the preventive and public health care system. It was also considered that the indigenous system of medicine is not proficient for the treatment as obstetrics, gynecology, advanced surgery, and other specialisation, etc. The decision was left to the provincial government to formulate the safety and efficacy of the traditional system of medicine in public healthcare services (GoI, 1946, pp.73-74). The Bhore committee had only given positive remarks on to establish a department of history of medicine in All India Medical Institute to study the indigenous system of medicine to investigate the contribution of medical knowledge. The free utilisation of the services of a person trained in indigenous systems for promoting public health and medical relief in India' (Udupa Committee, 1958, p. 3).

After that, in 1946, the committee was formed under the chairmanship of Lt. R.N Chopra who was appointed by the government of India which went into the matter thoroughly and made far-reaching recommendations. The report was published in 1948. The suggestion was an integrated approach to medical education in the field of Western medicine and Indian systems of medicine. Chopra Committee in the year 1949 stated that "the central and provincial government should decide that modern scientific medicine should continue to be that development of the national health services in the country." After the committee recommendation, the central government decided in the matter of recommendations. "integration of different systems of medicine on the lines contemplated by the chakra committee is impracticable, as the theories and principle of modern medicine are very different from the theories and principles enunciated by Ayurveda, Unani and other indigenous medicine. The evolution of an integrated system will be possible only after the methods of modern scientific research have been applied to the principles and practice of Ayurveda, and Unani and it has been ascertained what is of proven merit and value in these systems" (Chopra Committee, 1948, p. 5). The committee has mentioned the saying of famous Dr. Sigerist that the old medical traditions can be honestly reconciled with our

principles instead of rejecting them in a body as useless and outdated. There is something at the back of any system of medicine, its usage or custom that has held its own for generations.

The Government of India passed a resolution by the Central Council of Health and formed Deve Committee in the year 1955 headed by Shri. D.T. Dave to study and report on the question of establishing standards in respect of education and regulation of the practice of indigenous systems of medicine. The Dave committee first considered the question of regulation of the practice of Indigenous systems of medicine and their recommendations. In short, they are as follows;

I. "Institutionally qualified persons and traditional vaids and hakim with fifteen years of practice should be on the respective state resisters;

II. There should be board in each state to control the practitioners of indigenous systems and also to regulate academic teachings;

III. The privileges given to registered practitioners of indigenous systems of medicine should be equal to those of the modern medical practitioners" (Dave, 1955: cited in Udupa Committee, 1958, p. 7).

Sokhey Committee Report (GoI, 1948) recommended that "of late however indigenous science and practice of medicine have been receiving increasing attention from official quarters. If medical advice and treatment to the mass of the people are to be provided on the necessary scale-free of charge, the National Plan will have to bring the indigenous Vaidya, Hakim or Dai into line with the more elaborately or pretentiously trained physician or surgeon, gynecologist or obstetrician (GoI, 1948, p.16). The committee gave the recommendations; "It is a matter of extreme importance that this question should be properly solved; otherwise, it is likely to impede terribly the development of scientific medicine in the country. To us, the best way out of the difficulty seems to be that in the selection of young men for training as a health worker, all young vaids and hakim who are otherwise suitable as intelligent young men, should be taken up, given training wit the other as health workers and employed as such. Somewhat older men but none above 35 years of age, should be similarly selected and given as intensified training for two years at the

especial Divisional Training Centres. Thus, most of the practitioners of indigenous systems will be immediately absorbed trained and usefully employed" (GoI, 1948, p. 22)

Shrivastava, J.B (1976) in his report on "Health services and medical Education - A programme for immediate Action" or Shrivastava Report given some of the pressing problems and need of medical education support human resources. The report suggested that it need to "create bands of para-professional and semi-professional health workers from the community itself to provide simple promotive, preventive, and curative health services which are needed by the community. They will include Dias, family planning workers, the person who could provide simple curative services, and persons trained in promotional and preventive health activities, including the control of infectious diseases. It all encouraged the elderly women in the household, indigenous medicine for the health workers" (Shrivastava, 1975, p.40).

Sokhey and Shrivastava suggested a more positive outlook in the traditional health care system and the inclusion of village youths as a professional or semi-professional health worker in the community.

2.8 Post-2000 Period

After 2000, the local health traditions of folk healing practices started gaining attention in the health policy document and policy framework. It was in 2002, National Policy on Indian Systems of Medicine & Homeopathy (2002 policy document) has taken up the stand for the revitalization of local health traditions. The report stated that to revitalize local health traditions into following words, "In addition to the documented knowledge, indigenous traditional medical knowledge available with the individuals, communities, tribals have not been fully tapped, documented and validated. The providers of such knowledge have not been given due acknowledgment, financial benefit, and support to patent their knowledge". It has started the 'revitalization of folk health traditions related to birth attendants, herbal healers, bone setters, Visha healers, etc., would figure in the agenda of the ISM sector to be selectively identified, reinforced, validated and then propagated for use in a wider community' (GoI, 2002, p.14).

After that, in 2005 National Rural Health Mission (NRHM) lead to the "mainstreaming of AYUSH and revitalization of local health traditions" (GoI, 2005) to strengthen the primary healthcare services. In the umbrella of AYUSH, the local health traditions started gaining importance. The AYUSH also started gaining recognition and receiving funds, collocation of AYUSH practitioners in heath institutions., and the drugs of AYUSH medical system integrated with the modern health care system. The Indian system of medicines and homeopathy was allocated with the separate ministry, which is usually referred to as the Ministry of AYUSH. The AYUSH It was in that process, Yoga also got recognition in both the national and international places in June 2015.

The NRHM strategy says that' Mainstreaming AYUSH and Revitalizing Local Health Traditions' but in NHSRC (2009) documents clearly shows that many of the states did not have the proper planning and initiatives for the LHTs in their state programme implementation plans (PIPs). The document largely emphasize on integration or herbal products and plants. The heterogeneity of traditional healing practitioners and healers were sidelined (Mishra, et.al., 2018).

The recent National Health Policy 2017 talks about the certification of traditional health care practitioners. It also seeks 'to strengthen steps for farming of herbal plants, develops mechanisms for certification of 'prior knowledge' of traditional community health care providers and engaging them in the conservation and generation of the raw materials required, as well as creating opportunities for enhancing their skills are part of this policy' (Ministry of Health and Family Welfare, GoI, 2017, p. 15).

The Government of India also took the initiative under the '11th five-year plan set up the North Eastern Institute of Folk Medicine (NEIFM), at Pasighat to revitalize local health traditions in northeast India. It was mainly established to strengthen the traditional health practices for the benefit of the nation with special attention towards North-East India. The main motto behind the establishment of this institute was to focus on local health traditions and traditional medicine prevailing in Northeastern India, which has not yet been documented properly'. It has actively developed the folk healing traditions of North East India, namely Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland,

Sikkim, and Tripura (NEIFM, 2009, p 3). It has also been established ‘to systematic and comprehensive documentation, presentation and validation of the folk medicine as well as traditions and culture of different tribes of this region. For this reason, this institution decided during the task force meeting to organize regional and state-level training workshops in various parts of north eastern states.

2.9 Integration of Traditional Healing Practices in Indian Context

This section mainly talks about the integration of traditional/indigenous medicines into the official health system. At present, the concept of integration of traditional medicine spreading all over the world. In India, we can see the integration of Indian system of medicine or AYUSH into the conventional healthcare system. The traditional codified medical system, like AYUSH, has already integrated and regulated in the health system. The AYUSH is running separately, and it has collocated in all the health institutions. The community-based health care practitioners were sidelined from the mainstream official healthcare policies and documents. These traditional practitioners did not get much attention in policy framework due to various social, economic, and political reasons (Unnikrishnan et al., 2010).

The traditional practitioners like traditional bonesetter, traditional birth attendants, community psychiatrist, and many other practitioners did not get due attention in official health policy. Their knowledge practices are not integrated into the health system. The LHTs or the traditional healing practices not getting much attention in the official health system. Usually the policymakers and biomedical practitioners perceive ‘indigenous’ ‘traditional’ ‘Local Health Traditions’ are as ‘non- institutionalized’, ‘non-certified’, and ‘non-documented’. In order to increase the revitalisation, the local health practitioners argues there is a need of documentation of traditional health knowledge, ‘strengthening existing collective forums for social recognition, and building pedagogical institutions that promote experimental learning’ (Mishra and Nambiar, 2018).

2.9.1 Traditional Bone Setting Practice in India

There are few anthropologist and sociologist who has done a few studies on traditional bone setting practices. Unnaikrishnan et al. (2010) Said that nationally and internationally,

there is very less literature on traditional orthopedic practitioners and their practices. There are few studies on practitioners about their usage of medicinal plants. But primarily studies did not focus on their safety and efficacy methods, importance in the community and support, socio-economic condition, knowledge and practices, genealogical practice, and policy implementation. The healers are not recognized in the official health programs, nor they are acknowledged in any official policy documents (Unnaikrishnan et.al., 2010). One can see the review article published by Agarwal and Agarwal (2010) on traditional bone setting practices all over the world. Past 50 years of published literature were reviewed for this article. The article focused on three key areas of working or techniques of bonesetters and training/education issue of traditional bonesetters in developing world (Agarwal and Agarwal, 2010).

Traditional healing practices are not only limited to provide primary healthcare, but it also has a larger specialized field of practice and providing treatment for eye disease, snake and insect bites, bone setting, jaundice, and many more. But these practices did not get much attention in the eyes of policymakers of the country. The bone fractures divided into two types closed or simple fracture, and open or compound fracture, dislocation, and sprains are most common in rural and tribal communities. There are six types of dislocation and twelve types of bone fracture in the human body. “Revitalizing the existing precious science of bone setting would be a cost-effective alternative for the costly “state of the art” techniques of surgical reduction, heavy Plaster of Paris plasters and long periods of immobilization” (Radhika, 2000).

Their traditional practices include fracture and dislocation management, marma chikitsa/Varma Kalai (diagnosing through vital points of the body parts), club foot, treatment of post-polio paralysis using various methods of oil therapy and massage. The traditional bone setting practices widely in many countries like African countries, Asian countries like China and India. Traditional bone setting is famous in many south Indian states like Karela, Tamil Nadu, Andra Pradesh, Karnataka, etc. also we can see in north India like Rajasthan, Delhi, Bombay, Pune and Orissa like Kalupada, Kuleila, Athagoda, etc. many other states. Some of the famous bone setter of Puthur in Chittor district of Andhra Pradesh, Mamsapuram in Kamarajar district and Olakkade Asan in Kanyakumari

district, another center in Telungupalayam, Tamil Nadu, CVN Kalari (traditional martial arts) in Kerala. This reputed traditional bone setter runs the small hospital and clinics providing health care from both urban and rural population. Some of the bonesetters achieved the status of 'geographical indication'. They have their own healers association and closely work with one another (Panda and Rout, 2013; Radhika, 2000; Sankhar, 2007; Unnaikrishnan et. al., 2010).

There is not much literature on the integration of traditional healing practices in the official documents of health policies in India. But there are few non-governmental organization, a community-based organization who is working on this healing practices of community healers. FRLHT, Bangalore who has been working in the Local Health Traditions (LHTs) from fast two decades. They have done various studies on the importance of Copper vessel, traditional bonesetter, traditional birth attendants (Dais tradition), certification of the community healers, promoting green herbal gardens in school and primary health centre, herbal medicine for malaria, etc.

The FRLHT has done the study in two south Indian states Tamil Nadu and Karnataka between 2004 and 2007. The total of 549 healers were interviewed, and most of them were found in Thiruvananthapuram in Tamil Nadu and Shimoga in Karnataka. They have found that the heterogeneity in socio-economic status and practices. There is a healer who practices in the streets and villages, and some are well established running the 30-40 bedded hospitals (Bode and Hariramamurthi, 2014; Priya, 2013). They have also found that healers from Kanyakumari and Coimbatore were well known in their knowledge and practice. They treat complicated cases like post-polio paralysis, scoliosis, club foot, and compound fractures. The traditional orthopedic practitioners were categories in four areas of specialization- fracture management, massage therapies, *marma* practitioners, and other general practices. They treat patients' average rate of 250 to 300 patients in a month and ten patients daily. Some healers treat 200 patients per day.

The author also raised the issues and concern for the recognition and integration of traditional orthopedic practitioners in the health care system. They further argued that the continuing official neglect, fewer statistics of practitioners in the health workforce. The

country like China also has a rich medical heritage of traditional bone setting. The traditional medicine Chinese practitioners practiced the traditional bone setting. The Chinese health professionals have done clinical research on both modern and Chinese medicine on fracture bones management. They have used 147 cases in their clinic to see the effective treatment for the fracture. They argued that modern medicine also has a disadvantage for the treatment of the fracture. The results were shown and a valuable solution in the traditional system of bonesetting, which helps for the treatment of the bone fracture. The Chinese health professional took a significant move to integrate the traditional with modern methods for the treatment of the fracture (Hsien-Chih, et al. 1996). In India too, the orthopedic medical surgeon Dr. M. Natarajan of Chennai had visited many places of the bone setting center. He observed their healing methods and practices. Later, he adopted the traditional methods of bone setting in the management of fractures bone (Radhika, 2000).

Panda and Mishra (2013) done the study in one of the traditional bone setting hospital in Puttur, Andra Pradesh. Puttur Kattu is a traditional bone setting invented by the K. Kesava Raju in the year 1881. Since the fourth generation, they are practicing the traditional bone setting in the family. Every day they treat more than 200-300 patient in the hospital. Majority of the 54 percent of the patients are old population. There is no barrier to education, and even they found that the educated population also get treatment from the vaidyas. Approximately 25 percent of the patient took discharge from the hospital and continue their treatment from this bonesetter. Eighty percent of the patients perceived that the traditional treatment for the bone fracture is useful because the hospital treatment gets a longer time to heal compared to the Puttur Kattu treatment. They have also highlighted the perception of the patients fear of pain, heavy plaster, and bandages, a prolonged period of immobilization, surgery, and amputation. There are also reported of minimum complication of their treatment methods and practice catering to the patients. The traditional treatment is cost-effective, and chipper compares to hospital treatment. It is locally available. There are other two traditional bone setting hospitals which are providing in-patient and out-patient facilities in the town. One hospital has 50 beds, and the other one has 25 bedded hospital. They charge only minimal fees form the patients ranging from Rs 50 to Rs 100 (Panda and Mishra, 2013; Nandakumar and Ghosh, 2000).

In May 2013. The researcher got an opportunity from the FRLHT, Bangalore, to visit and conduct meeting with the healers in Chennai. The next day researcher took a local bus from Chennai to Vellore to meet the Vaidya Arjunan in his home-based clinic 5 kilometers from the Vellore city. As a social work student from Loyola College, Chennai, researcher somehow manages the Tamil language to communicate with the healers and the patients. Early morning there were four to five patients who came for the treatment of bone fracture and diabetics patient. A small boy at the age of 8 years accompanying by his mother had a dislocation in his tennis elbow. The researcher had just sat and observer the diagnosis and treatment methods of the bonesetter. The bonesetter pulled the boy's hand, and the boy started crying. Healer mixed egg, herbal paste, and floor and applied on the gauze and done the bandage. After 10 to 15 minutes of treatment, the healer asked the boy about the condition. The little boy having tears in his eye says feels batter (field visit 2013; Nandakumar and Ghosh, 2000). Other patients have the complaints of arm fracture and lower part of knee fracture.

The city like Delhi, every places there are a bonesetter's clinics with big boards with picture of WWF wrestles, bodybuilder and pahalwan. There are many places in Delhi where the bonesetter has clinics like in Mahipalpur near the airport, Shahdara in east Delhi, Uttam Nagar in west Delhi, etc. They provide traditional treatment for "fractures to muscle spasm to stiff shoulder." The knowledge of healing acquired from their forefathers, some of the family were wrestler or Pahalwan tradition, some migrated from Pakistan. The treatment methods are very from one practitioner to the other and their medicine. The bonesetter charges minimal fees from the patients, which they had to spent on the treatment. Healer Midda gave treatment to topmost politicians, including former Prime Minister. Some patients come regularly for the bone-related fractures. Patients come from all the age groups and educational background for the treatment. Patients come from low-cost and sort duration of bandage and treatment. There is also a question of branding them as quacks and unscientific practitioners. Still, this traditional bonesetter holds special recognition by the patients and the community (John, 2017; Sharma, 2017).

2.9.2 Traditional Childbirth Knowledge and Practices: The Practitioners

In India, the traditional childbirth knowledge and practices are not given importance in the health care system. The women traditional medical knowledge and the methods are not able to understand by the policymakers and the bureaucrats. It has less literature regarding the elderly women and Dai or the birth attendant. The elderly women in the community carry knowledge about food pattern during pregnancy, postnatal care, etc. Dais was not only known to conduct deliveries but also knowing providing care to the maternal mothers and child, massage before and after childbirth. The dais tradition never gets the attention of the scholars and researcher, nor from the medical sciences or social sciences discipline. For ages, dais prayed a pivotal role in biting care in India. At present time, they are socially and economically marginalised in the society (Soman, 2013).

Sadgopal (2013) describes how the traditional dais and their practices got vanished in the local health care level. It was identified the traditional dais having important role in child delivery in the rural population. The example of Jeeva project where Dais still practices child birth as it was found, how they were accepted in the community and it also serves as an inter-caste and religion relations (Sadgopal, 2013). The model of institutional deliver was lunched in the year 2005 by the National Rural Health Mission. It was believed that the mortality and the morbidity would be decreased if the deliveries are conducted by the trained medical professionals. Whereas the traditional method of childbirth was unnoticed where the pregnant mother feels comfort and enjoys the support from the family. In National family Health Survey, it was identified that 36.6 per cent of childbirths in the country are managed by the dais/Traditional Birth attendant (Sadgopal, 2009).

The dais or traditional birth attendants also losing their knowledge and practice now in India. India has a rich tradition of women practicing the dais tradition. This dais was providing comprehensive healthcare to the mother and child health during pregnancy. No concern and efforts had been taken to integrate their traditional birth knowledge and practice in the public health system. The public health system never recognizes and acknowledge them as a health professional. The reason behind it, they were branding as untrained practitioners, a complication for the mother and child health during the time of pre and post-natal pregnancy, unhygienic practice, etc. (Sadgopal, 2009). In a minimal

income, they provide services to the rural and urban poor communities. This dais has a source of knowledge over women's bodies, birth, and fertility. The knowledge and practices were passed on from one generation to the next only to the women members in the family. The jajmani system in the rural village where the dais was bound to work in the upper and middle-class families. There are places in North India like Rajasthan and Delhi, where dais from all the caste and religion interchangeably proving services to the people. Still, rural and urban areas the elderly women in the family provide care after the post-natal pregnancy. They are the source of home remedial therapy, massage therapy, and food practices, etc. (Mehrotra,n.d.).

The Shodhini Experience from the Tamil Nadu, where the small women organization started the concept of "women's health through self-health and traditional remedies" as an alternative for the dominant biomedical healthcare system. The main motto behind the concept of 'Self Help' methods of healthcare. The main objective of the Shodhini is;

"seek to understand traditional practitioners, and their healing methods, to document their use of medicinal plants and herbs, preparation of herbal remedies and practice of non-herbal healing practices, including some of the rituals that follow the method of healing. To help community women to take care of their bodies through a process of self-help so that women understand their own body, its rhythms as well as its power" (Shodhini, 1997, p. 352).

Their further efforts towards the alternative approach as-collection of data and information on plants and natural elements commonly used for women's health problems, training local women health workers/healers in herbal medicine using self-help and a holistic approach, field testing and validating the use of common herbs in a systematic way at the community level, in the process of working on the above three phases, developing a team of concerned women and 'barefoot gynaecologists' who will continue to sustain the work of developing alternatives in women's health care (Shodhini, 1997). Their methodology is based on self-help, through self-help group, they come together and understand their bodies to deal with cases and symptoms of health problem. The women self-help groups were formed of ten members. They worked with health workers, and later, these health workers will help in

developing women's self-help group in the village level. The women healers were included in the self-help groups (ibid, 1997). They also argued, for instance, pregnancy and childbirth, are an essential part of life and do not significantly need doctors, nurses, hospitals, and medicines (ibid).

The integration of medicinal plants and herbal products are for the attention in the policy documents. Through the AYUSH and National Plant Board started the concept of the herbal garden in school and health centres'. The very first the concept of herbal garden and green pharmacy started form the southern states of India, like Karnataka, Tamil Nadu, Karela, and Andhra Pradesh. In the southern states like Karnataka, many of the rural village health centre use herbs medicine from their garden (Unnaikrishnan et.al., 2010). The organisation like FRLHT has done enormous worked on the promotion of great herbal garden for the comprehensive healthcare in primal healthcare centres. According to Shankar (2007) Indian system of medicine, both codified and non-codified system use more than 8,000 plants species for the primary healthcare. The more number of medicinal plants used by the folk tradition followed by Ayurveda, Siddha, Unani, and Homeopathy.

The concept of the home herbal garden programme was initiated by FRLHT, Bangalore in 1998, some states of southern India, namely Karnataka, Karela, and Tamil Nadu. The programme had initiated with the help of community healers through community participation working with community-based organisations (CBOs), Non-governmental organisation (NGOs) and state forest department. The main objectives of the programme are to make aware of the traditional knowledge of medicinal plants, promote and conserve herbal garden in the rural villages to provide primary healthcare. The other objective is to train local village women as a resource person to cultivate and use of medicinal plants for the various health problem in the community. The programme further emphasizes self-help careen the primary health care among the rural population. In the year 1998-2005, the Home Herbal Garden spreads more than 6000 villages and hamlets throughout the southern states. Gradually the concept of HHR was adopted in other states like Chattisgarh, Maharastra, Andhra Pradesh, Orissa and urban areas of Karnataka. The model of HHG had integrated into the public health awareness and education programme through the primary

health centre and sub-centers in many states of southern India (Unnikrishnan and Hariramamurthi, 2007).

The outbreak of viral fever in Dahanu Taluka, in Maharastra. After that, the village Kashtakari Sangathana formed the model of Arogyasathis where the community women provided formal and informal training support to cater the healthcare in the community. The women were selected from the community based on two objectives. First, it will provide women sustainable livelihood, second is their gender role as a caregiver in the society. Through the Centre for Enquiry into Health and Allied Themes (CEHAT) women were given training on pictorial manual, basic medicine and training in diagnosis and disease prevention for an active role as a community health worker in the village. Later, this programme was spreads also over the villages and districts as a model of the health care provider. The Aorgyasathis programme is one of the models for the integration of women health worker in the healthcare system (Anand, n. d.).

The community health worker scheme was initiated by the government of India in 1977. The main purpose of the program is to train village man and women who have a sound health condition, service-oriented, and able to work in the community as voluntary work. The one health worker have to cover 1000 people own rural villages. The health worker would be nominated by the village committees in collaboration with primary health center and block development office in the village. To assist the activity in the village where health worker gets formal and informal training on preventive medicine, provided simple curative practices from both indigenous and biomedical medicine. The training provided by the health professional and receive a stipend of 200 rupees per month. The primary task of the health worker is to refer the patient to the health institution during the time of health needs (Leslie, 1989).

The Jan Jagran Vikas Samiti is formed to work in the rural management and development issue. The JAGRAN focused 103 villages in seven developments blocks namely Girva, Sarada, Salumbar, Dhariyawad, Jha dol and Gogunda of Udaipur district and Aspur block of Dungerpur district with a population of about 2.4 million people. The whole area is mainly inhabited by the tribes: Bhills, Meenas, and Garasias. JAGRAN has provided

traditional health care in the district of Udaipur in Rajasthan, and more activities are extended to other districts of Rajasthan. JJVS has established 23 traditional health centres in nine districts of Rajasthan (NHSRC, 2009).

2.10 Studies in Sikkim

Before the arrival of Britishers and their modern culture of medicine in Sikkim. Sikkim has a heterogeneous practice of traditional healing practices in the region. The system of medicine called as a 'Sikkimese Medicine' known as sowa rigpa practiced by the Tibetan monk called as Amchi or Tibetan medicine at Mentse Khan Hospital. Even today, ninety percent of the rural population rely on the traditional form of healing practices and rituals performed by bonesetter (Baidhya), herbalist (Jari Butti) village shamans (bongthing, pawo, jhakris, phandgma) etc. their knowledge and practices on different medicinal plants and herbs were highly utilise by the village community. Beliefs and practices of health and illness are primarily based on supernatural cause and effect for human suffering (Mackay, 2007; Rai, 2018). The account of H H. Risley (1894) describes the history of Sikkim, where he says that before the coming of biomedicine in Sikkim. The healing practices conducted in the monasteries by the Buddhist monks. They conduct magic rites, rituals, and charms for the well-being of the individual and the community. Other than these practices, there are enumerable number of shamans and folk healers in the villages performing various rituals and healing (Risley, 1894).

The biomedical healthcare development in Sikkim and hilly region of Darjeeling and Kalimpong started by the British missionaries. Their main objectives are to trade with Tibet and influenced their power in the Himalayan region. After the coming of British missionaries in this Himalayan region. First, they influence their western culture and medicine in some part of Darjeeling and Kalimpong. Those days, Sikkim as a Buddhist princely state and the British missionaries did not get a chance to influence their footsteps in Sikkim region. During the British expedition to reach Tibet. The health services were provided only for the British military and the Tibetan battle casualties. But they did not offer medical services to the local communities. After 1890 onwards slowly the British entered to spread biomedicine in Sikkim. Most of the medical staffs were trained in Kalimpong and slowly spread biomedicine through small dispensaries in Sikkim. The

Indian-trained medical assistant worked in the dispensaries in a small town in Gangtok. The civil dispensary that opened in Gangtok in 1896-97 must have been elementary facilities of small house and shades. The British missionaries tried very hard to influence through various meeting with the Kings and did not get a good response from the monarchy. They send their British medical officers and civil servants from Darjeeling and Kalimpong but could not get achieved to operate their Christian mission in Sikkim fully. After many decades the royal patronage was convinced and started the very first biomedical hospital in Gangtok, in the name of Sir Thutob Namgyal Memorial Hospital on 24th September 1917. Afterwards local were send to Calcutta and Patna for medical education and training (McKay, 2007).

In recent time, research and documentation on ethnomedicinal knowledge and the tribal population living in biodiversity-rich areas got high priority for the scholar, organization and pharmaceutical companies for the research and development. The literature shows that there are fewer studies done in Sikkim on traditional healing practices, integration healing practices to the modern health system, bonesetter, etc. It was found through literature that there are studies done of medicinal plants of Sikkim, Darjeeling, and eastern Himalayas (Biswas and Chopra, 1982; Gurung, 2002). The region is very rich in biodiversity resources. The utilization of these resources is very high in many tribal and rural communities. The rich knowledge of home remedies, usage of medicinal plants properties for various health problems, wild plants for food and economic livelihood, etc. The elderly man and women and the village traditional practitioners have the repository of this knowledge. Drawn from the literature, a large number of study and fund are provided for the research in medicinal plants every nook and corker of India. Why is that because they see the economic variability? Is it for the patent of the medicine? Who will get the benefit? Who knows the medicine? In Sikkim many studies conducted by the G. B Pant Institute, Regional Ayurvedic Research Institute, State Medicinal Plant Board, The Mountain Institute and many other independent scholars from Sikkim and outside. They mainly focused on the medicinal plants and its economic value in the market, but sideline the custodian of knowledge holder (traditional healers).

Badola and Pradhan (2013) explore the knowledge of limbo tribe on the usage of medicinal plants for their healthcare in the south and west districts of Sikkim. The authors reported that the 124 medicinal plants are used for 77 illness. Most of the plants have been used for stomach related problems. The plant's species are belonging from 68 families and 114 genera used by the Limboo community in Sikkim for various purposes. Some of the medicine that has found like Abies densa for the cure of asthma, bronchitis, and stomachache by the limb community. Other medicinal plants are Rubia cordifolia used for fever, stomach ache, dysentery, etc. The authors suggested that there are many more medicinal plants in Sikkim, which has not explored and need a systematic assessment of those medicinal plants for the further research and development (Badola and Pradhan, 2013).

The other study done by the same authors on the use of Sweritia chirayita as a medicine used by all the communities from four districts of Sikkim. For the study, 320 individuals were interviewed from the household between the age of 30 to 87 years belonging from five major ethnic communities of Sikkim, namely Nepalis, Limboo, Sherpa, Bhutias, and Lepcha. The above said medicine for various treatment for cough and cold, fever is commonly used by all the communities — the less usage of medicine for other common ailments like stomach ache, diarrhea, and dysentery. The 92% reported the medicine is used orally in the form of decoction. They have also highlighted the high potential of the market value of the medicine. The medicinal herbs also gradually declining in the natural habitat and losing its efficacy (Pradhan and Badola, 2015a; 2011b). The Lepchas of Dzongu, North Sikkim has a vast knowledge of ethnomedicinal plants and its species. The study reports that 118 species, belonging to 71 families and 108 genera, used by Lepcha community for curing approximately 66 ailments (Pradhan and Badola, 2008; Maity et al., 2004; Jana and Chauhan, 2000).

The similar other article reported 400 medicinal plants used for treatment in Sikkim. Among them, some of the medicinal plants are threatened or endangered, and the challenge stop gets the medicine (Rai et al. 2002). The over the use of medicinal plants and exploitation in recent time also concern for the conservation and protection for the sustainable use of the medicine. (Idrisi et.el., 2010) done the study in Rangit Valley, south

Sikkim among the three ethnic communities viz. Lepcha, Bhutia, and Nepalis. They have documented the knowledge of household, healers' practice, and skills about the usage of medicinal plants and their properties for healthcare. It was four from the study area that the communities were reported 45 plant species across 36 families, curing 20 ailments and has grouped into seven categories. The ten species of medicinal plants were used for minor ailments, like cough and cold and throat pain. The other seven species were used for the minor cut, wounds, burns, diarrhea, dysentery and respiratory disorders. The communities were also using the parts of plants like bark, seed, roots/rhizomes, leaf, and flower for health problems. Some medicinal plants were cooked and consumed for a health condition. The healers and elderly people in the community know different species of medicinal plants and their usage. The community people have to safeguard this oldie tradition of traditional knowledge about the usage of medicinal plants and their properties (Idrisi et., el., 2010).

The medicinal plants are not only restricted to healing practices. It has used as a food in many tribal and rural communities. Since the human civilization community depending on the plants and its uses for medicine and food. (Sundriyal, et. al., 2004) have reported that total of 190 wild species has the value for food. These belong to 143 genera and 78 families of plant species. The community people were using various parts of the plants for consumption as a food, including fruits, seeds, flowers, leaves, shoots, roots, and pile and pith. Some of them are eaten raw; some were boiled or baked, used as a vegetable and floor. The other paper highlights the 64 species of medicinal plants belonging to 42 families and 57 genera used by the ethnic communities of Sikkim. The usage of plants and its properties are barks, stem, fronts, tuber, leaf, fruits, root, etc., for various diseases and treatment for epilepsy, leprosy, paralysis, asthma, typhoid, diabetics, hemorrhages' during childbirth, cholera, etc. The community people also perceived that some medicine could prolong life. The authors highlighted the critical issues that medicinal plants are in danger because of the economic exploitation by the rural communities, middleman, and commercial collection. The other factors are rapid growth population and environmental and climate change, which is a threat to the biodiversity of Sikkim (Singh et.al., 2002).

According to Panda and Mishra (2010), the healing practices of Sikkim influenced by Tibetan medicine, and it has overlapped with ancient Ayurveda tradition. The sample of

48 Traditional healers from all the four districts was interviewed. In the habitat of Sikkim, 490 medicinal plants were found, and 31 medicinal plants commonly used by the traditional healers of Sikkim for various treatment like arthritis, gout, gonorrhea, fever, viral flu, asthma, cough and cold, indigestion, jaundice, bone fracture, etc. The study was carried out by Regional Ayurveda Research Institute, Sikkim with collaboration State Medicinal Plant Board in the year January 2007 to December 2008. The results were found that the only four healers were young, 17 healers more than 60 years. Thirty-nine healers were male, nine healers were female. Twenty-five healers were illiterate, five healers have beyond matriculation. Twenty-seven healers acquired knowledge from family, 11 healers from the guru, four healers learn from herbal medicine by reading books and manuscripts. Among them, the traditional bone setting practitioners are in more number comparing to other healers in the dominant traditional practice. Six traditional birth attendant, 16 healers, provide comprehensive treatment. 2 healers practice veterinary medicine, one snake bite healer. Most of the healers, about 34 people belong from Nepali community, four healers from Lepcha community, ten from Bhutia community, 33 healers learning generation 3rd, 11 healers are 2nd generation, and four healers are the first generation. In Sikkim, health traditions and folk practices are declining due to shifts in socio-economic patterns and unwilling of the younger generation to adopt folk healing as a profession (Panda and Mishra, 2010a).

There are hardly few literatures on traditional healing practices in Sikkim. After two years, the same authors have published an article in India journal of traditional medicine title on ‘some beliefs, practices, and prospects of folk healers in Sikkim.’ After interviewing 102 fold healers of Sikkim among the three communities, Lepcha, Bhutias, and Nepalis about their healing practices. The author reported that the treatment methods, beliefs, and medical ailments are more or less similar in three ethnic communities. The healers have a specific and auspicious day of collection of different medicinal plants. The declining of healing practices is a primary concern, to address this the authors suggested some critical aspects of promotion and preservation of traditional healing knowledge, recognition, and integration in the health system to provide primary healthcare in the villages and semi-urban areas of Sikkim (Panda and Mishra, 2012b).

Roy Burman (2012) conducted the study on 'Ethno-medicine among the Bhutias and Lepchas of Sikkim' in the Kabi village, North District of Sikkim. He reports that Lepcha and Bhutias have the wider concept about the illnesses and diagnosed the illnesses based on their cultural, religious, social disturbances, which leads to the health issues among the community. The study shows the common illnesses like diarrhea, dysentery, and pneumonia and the chronic disease like tuberculosis and skin disease. Both lepchas and the Bhutias were deeply rooted in their religious behaviors, 'affecting the entire lifestyle', including the 'arena of health', 'disease and cure' (Roy Burman, 2012, p. 122). They also believe in the illnesses that are caused by the supernatural causes. They follow Buddhism scripture and the Tibetan calendar where the horoscope is mentioned individually. Similarly, Bhutias and Lepchas have faith in the evil spirit, ghost and evil eye. It was also found that the practices among the Bhutias giving poison to the family members.

Bhasin (2007) conducted ethnographic study in North Sikkim among Lepchas and Bhutia where he emphasizes on the ideas of various illnesses, treatment methods and the official's health care policies. The study also deals about the existence of traditional medical knowledge which is continuing among those two ethnic groups in Sikkim. The study reveals of not having much differences among the two ethnic groups and they have their own different provincials. Their beliefs and the perceptions regarding illness are different from each other. Both groups believe in supernatural and natural causes of illnesses but have different faith healers. Their food pattern varies from each other. The prevalence of common illn**e**sses were identified like diarrhea, dysentery, worm infestations and goiter (Bhasin, 2007).

After the Alma Ata declarations 1978, various kinds of integration of traditional healing practices started with modern health care system. The study of different literatures reveals that the integration of traditional practitioners and their practices were incorporated into various programmes such as Tuberculosis, HIV/Aids, birth attendant programmes, community health workers, diarrheal programmes, mental health programmes and many others. In many countries, integration of healing practices are accepted and recognized but in India there is no such provisions for integration of traditional healing practices and their practitioners. But there are community based organization which are working for strengthening of traditional healing practices.

Chapter 3

Conceptualisation and Research Methodology

3.1 Conceptualisation

Traditional healing system is generally described in contrast to modern bio-medicine which is found on "quantification" reasoning. Or in case of integrative medicine, seen as complimentary to modern medicine. However, traditional healing systems are holistic in a sense these systems conceive health as normative, constitutive of lifestyle and ecological impulses. More so, indigenous knowledge traditions and practices such as healer-student (*guru-shishya parampara*) method differentiate the traditional healing systems from the codified systems of medicine. Therefore, the *ontology* and *epistemology* of traditional healing practices differs significantly unlike what the binary of traditional-modern suggests.

The conceptual framework of this research flows from the syncretic approach that defines integration as merging together of various systems of medicine at all the levels of health care system to form a new dynamic system. That is, integration reflects the creation of coherent and effective system across disciplinary and institutional closets.

Generally, integration of care is defined as managed care, trans-mural care, shared care or comprehensive care. However, integration goes beyond co-ordination and co-operation at policy level into the practice and assimilation and sharing of knowledge, otherwise integration translates into bio-medicalisation of traditional healing practices. Integration can have many forms and levels but the fundamental condition to have effective integration linking micro, meso and macro levels is to have functional and normative and clinical integration (Prijatelj and Rajkovic, 2009; Valentijn et.el., 2013). Clinical integration implies the extent to which health services are coordinated and shared while as functional integration refers to the convergence of spectrum of interests that support the health services. Normative integration signifies the coordination and sharing of values and vision within the system without vertically pursuing different values.

Therefore, integration must be achieved at different levels to provide continuum of care to individuals and population. It is also important to understand that integration reflects focus on biomedical, psychological and social dimensions of well being and health which is framed as person focused and population-based care. It is in this sense integration incorporates the notion that what is beneficial for individual is also beneficial for the population and vice-versa.

3.1.1 Research Questions, Purpose and Objectives

3.1.1.1 Research Questions

The research questions are as follows:

1. What are the different traditional healing practices and processes in the region and the possibilities of their integration?
2. What roles and responsibilities traditional healers share in the community?
3. What is the nature of integration of traditional healing practices into the modern health care system in Sikkim ?
4. What are the perceptions of the traditional practitioners/healers and biomedical practitioners towards their practices and integration in providing health care services?
5. What kind of possibilities and challenges emerge in integrating the traditional healing practices into modern health care system?

3.1.1.2 Research Objective

The main purpose of the study is to explore the traditional healing practices and its possibilities of integration into modern health care system in Sikkim.

3.1.1.3 Specific Objectives

1. To study the different types of traditional healing practices in the region and the possibilities of their integration.
2. To study the processes of traditional healing practices in Sikkim.
3. To study the roles and responsibilities traditional healers in the community.
4. To study the perceptions of the traditional healers and biomedical practitioners about healing system.
5. To understand challenges in integration of different healing systems.

3.2 Research Methodology

3.2.1 Research Design

As the title " integration of traditional healing practices into modern health care system" indicates, it is a qualitative research with descriptive research design. The descriptive research design has an attribute of describing the process and impact of development of system in terms of use, implementation and planning so on. More so, it is the character of contextualising the findings within the implementation environment, that is, health care organisation that makes it relevant for the above research.

Purposive sampling was done to collect data from the research area of entire universe of the study i.e., Sikkim. The qualitative research approach provided the distinct view and insights about traditional healing practices in the state of Sikkim. It also enables researcher to develop vast knowledge regarding traditional healing methods and practices, process of healing and perceptions of healers and key informants regarding their practices and skills in providing primary health care services in the state of Sikkim. As according to Mcleod (2001) "Qualitative research is a process of careful, rigorous inquiry into aspects of the social world" (p.2).

The study also explored other aspects of healing practices namely role and responsibilities, specialisation, possibilities of integration of traditional healing practices into healthcare system etc. The qualitative research tools and techniques were used in the study to get empirical data. According to Padgett (2012), the qualitative methods contain more meanings in the studies rather then amount of studies. It also provides the in-depth understanding and findings instead of getting wider range of knowledge about the study. The researcher has done the descriptive narrative study in different villages by staying and observing the healer's practices in Sikkim. Semi-structured interview schedule was deployed to seek responses of healers and key informants about their methods and practice of healing. The researcher had also maintained field diary for everyday activities during the time of visit to the study area. The healers' interview had been recorded on audio devices.

The researcher had been visiting the study area i.e., Sikkim for five years and had attended meetings, interviewed the healers, key informants, community leaders that allowed the researcher to build a good rapport with the healers and the community people. Researcher received the permit to carry out research study in Sikkim. The researcher observed the day to day practices of healers, like working in the fields, caring for animals and processing of milk products, gardening of medicinal plants, food habits, preparation of medicines, treating of patients, housing conditions, community festivals, etc.

3.2.2 Area of Study

Sikkim was ruled by king Chogyal dynasty before 1975. During those days Sikkim was like an independent country. Later, after 1975 Sikkim was incorporated as one of the states under Indian constitution. Sikkim is surrounded by international borders; China, Nepal, Bhutan, Bangladesh and West Bengal one of the states of India, which is near Sikkim. Sikkim has ethnic communities like Lepchas, Bhutia, and Nepali. The area of study included all four districts east, west, north, and south Sikkim. It was identified that the healers were scattered in the whole area of Sikkim and to get the adequate information all the four districts were selected to represent healers of the Sikkim as a whole.

3.2.3 Study Participants

The researcher had initially decided to take only one area to select the healers for the research study. The healers from one area will not provide the perspective of other communities and the background of other healers. Therefore, the study was conducted in all the four districts of Sikkim. The researcher had selected both male and female healers as per their availability. The age group of the healers was between 31 to 90 years. None of them were below the age of 30 years. The availability and profile of healer's was gathered from one healer to other or from previous interviewed healers to make successful visit and to reach them easily. The nature of the sampling technique was snowball technique to identify the participants, who were having the experience in healing practices. There was an absence of formal records of traditional healers and therefore, the social networks of the community members helped in locating the healers. The study was aimed to understand health practices, ritual ceremonies, treatment and diagnosis, the area of specialisation, and

experiences in traditional healing practices. It was intended through these nuances to understand possibilities of integration and collaboration of traditional healing practices into modern health care systems.

The researcher had interviewed forty traditional practitioners/healers from all the districts of Sikkim. Since there was no official data on the number of traditional healers, through the snow-ball technique the researcher was able to trace only forty traditional healers during the limited fieldwork period. The study had focused on the traditional practitioners to understand their healing practices. It had also focused on practitioners of different caste, ethnic and tribal communities. The background of the healers' was Chettri/ Bahun, Tamang, Lepcha, Sherpa, Gurung, Subba/Limboo, Rai, Biswakarma etc. In addition, the information and data were collected from the key informants like doctors, health workers, government officials, community heads, patients and community people. The healers were visited at their own residential places for collecting the information. Other officials were interview in hospitals and various other departments after taking the appointment (detailed profile of participants/healers will be discussed in the chapter 5).

Table 3.1: Sample of Participants

Areas of Healers	**Number of Healers**
East	20
West	16
North	3
South	1
Total	**40**

Source: Fieldwork

Thirty two key informants were interviewed to understand their perspectives on traditional healing practices, challenges and possibilities for integration in the health system. In this study, biomedical doctors, NGO workers, University professors, community leader, and bureaucrats from various departments, independent institute, and organisation were interviewed. The interview was conducted for two to three hours and it was face to face interview in their respective offices.

Table 3.2: Categorisation of Key Informants

Category	Government Organisation	Non-Governmental Organisation	Total
Administrative	13	4	17
Research Scientist	6		6
Biomedical Practitioners (service delivery)	3	1	4
Research Associate	1	1	2
Others	1	2	3
Total	24	8	32

Source: Fieldwork

3.2.4 Sources of Data Collection

The researcher's questionnaire tool was developed based on the objectives of the research study. It mainly focused on the demographic profile of the healers, healing practices, roles and responsibilities of traditional healers in the community, usage of home remedies, medicinal plants, animal products and their expectations from the state and challenges. The tools were made based on the semi-structured interview to capture the phenomena in the field and guided the researcher to explore in detail. In this study, the researcher collected information, both from primary and secondary sources. The study relied more upon the empirical research and their by primary data collected from the field-work. The researcher collected primary data through interviewing the participants, patients, and key informants.

The Primary data was collected from practitioners, key informants, and patients through an in-depth interview. Whereas, the secondary data was retrieved from the library, newspaper, journals and many other sources. Probing questions were asked during the interview to the healers and informants to get more information about the study.

3.2.5 Tools of Data Collection

The semi-structured Interview schedule was used for the data collection. Questions were divided into two different schedules one for the traditional practitioners and another for key informants based on the objectives. Interview schedules were prepared in English, but the interviews were conducted in the vernacular language, Nepali. The participants were capable of answering the questions independently. The questions were not asked from the questionnaire but many probing questions were also asked in between the interview related to their issues, which helped to get detailed information about their healing practices. The researcher has taken photographs, video clips and recorded interviews with the help of recording devices like camera, digital voice recorder etc. and interview tools were also used in collecting data.

3.2.6 Pilot Study

The pilot study was started in the month of October 2016. During this time, the researcher had spoken to the officials of Regional Ayurveda Research Institute (RARI), a scientist from Institute of Bioresources and Sustainable Development (IBSD), Botanical Survey of India (BSI), Voluntary Health Association of Sikkim (VHAS), GB Pant Institute of Himalayan Environment and Development, Sikkim Biodiversity Board, State Medicinal Plant Board (SMPB) who had informed that there are associations of healers but a conglomeration. The researcher also applied for permission from Forest Department, Government of Sikkim to conduct the research in Sikkim. Further, literature mapping of relevant scholarship available at Sikkim university and State central library was done. The researcher met with few healers, Director of Ayurveda Institute, and few resource persons also. The main aim of these meetings was to explore the areas from which the traditional healers come and to develop a rapport with the healers and health workers.

3.2.7 Fieldwork

The researcher interviewed the healers face to face at their houses by staying for two to three days with each healer to collect information. Due to lack of accommodation in healer's house the interview was done by transit system. For conducting the interview of healers in the surroundings areas of Rhenock, East Sikkim, the researcher had stayed in

one of the schools from where the visit was done everyday to the healers. By staying in Rhenock the places like Aritar, Dalapchand, Changaylakha, Rongli, Rorathang, and Chuchachen were visited. There were many interior places, which were very far to reach and in such a situation travel was done for two to three weeks at a time to cover the healers and they were asked for the accommodation in their houses. The surrounding areas of Gangtok were also visited such as Ranka, Ranipool, Rumtek, Pangtang, Singtam, Assamlingsay, Pakyong, Taraythang etc. The key informants were also interviewed by staying in Gangtok. The duration of interview was two to three hours as per the availability of the key informants. On many instances, often three to four key informants in some departments were interviewed at their offices. In order to get the detailed information about the healers the researcher had visited various departments of Sikkim. They not only provided information about the healers but also gave an idea about how to build confidentiality, so that healers can share experiences and knowledge about traditional healing. Therefore, the Sikkim Biodiversity Board, Forest Department of Sikkim had played the greater role of gatekeeper or acted as a medium through which the researcher had been able to conduct the field visit successfully.

The follow-up to collect further information was done through telephonic conversation with the healers. The healers also took pro-active part in the process of data collection as the participants took researcher to the nearby jungle to show medicinal plants, arranged meetings with the patients, and demonstrated medicinal preparations etc. Apart from the data collection, the researcher had the non-participant observation in the research field. The researcher observed the healer's diagnostic methods, treatment methods, collection of medicinal plants from the surrounding areas, preparation of medicine in a simple powder power, paste and decoction, patients coming for the treatment, healers day to day life activities etc.

The data collection was carried over three discrete periods from 2017 to 2018. First period ranged from March 2017 to June 2017. Workshops were attended and few departmental visit besides formal permission to conduct research was managed. Hospital visits were also made and informal interactions with health workers. Second period of data collection ran from September 2017 to December 2017. During this period, traditional healers' were

covered, through snowball practice, to understand traditional healing practices and their framework of integration. Local festivals and rituals along side their everyday life were also observed. Third period of data collection was completed between March 2018 to May 2018. During this period in-depth interviews and detailed understanding of traditional healing culture was attempted to unpack. Health care system of Sikkim was analysed and bureaucrats were met to know their perception about traditional healing practices and practitioners. Transcription of interviews and left-out traditional healers were met to capture nuances about traditional healing. The healers were revisited again and few officials were met also to fill gaps in data collection process and to gain new insights.

3.2.8 Data Analysis and Interpretation

The interviews were structured in narrative form after recording and transcribing them. During interviews the researcher observed and recorded non-verbal gestures such as eagerness to share knowledge, emotions, and so on to gain deeper insights about healing practices. Narrative analysis was done to interpret data. The local terms were also transcribed and translated into possible English lingua franca. The researcher used quotations and verbatim to support interpretation.

3.2.9 Ethical Consideration

The researcher sought permission from the Forest Department, Government of Sikkim to conduct the study in Sikkim. In this research, all the participants were informed about the nature and scope of the study. An informed verbal or written consent was taken from the participants, patients and key informants for the study. During the time of fieldwork, the researcher asked for permission from few purposively selected participants to take photographs, to make videos and also other recordings for the research purpose. The study followed the principle of voluntary willingness and participants were free to exit from the research anytime. The personal information is kept confidential including data that would be used for academic research only. Every participant was treated with respect and dignity. Ethical clearance was also secured from the Institutional Ethics Review Board, Jawaharlal Nehru University, New Delhi. Further, full anonymity of the research participants is maintained to address privacy and confidentiality concerns.

3.2.10 Challenges and Limitations of the Study

The research study has faced some challenges in the field and also some limitations. First, in Sikkim, the monsoon or rainy season is the most difficult time to travel from one place to the other for all people. Bad weather, continuous rains and landslides during the fieldwork sometimes created difficulties for the researcher to travel and visit from one healer to another. The research area was also diverse and broad, so to cover all the four districts within the minimum period was quite implausible. Second, because of not having the healers' information, researcher faced problems to identify healers, and then build rapport with them. The researcher had difficulty in securing accommodation while doing the fieldwork. The researcher had no adequate prior information about the healers of Sikkim before conducting the field visit. Also, it became difficult to reach the healers, as there were limited vehicles to commute. To get permission from officials such as forest officials was a major challenge in doing fieldwork. Lack of knowing the formal traditional medicine and healing practices besides having difficulty in apprehending the local pharmacopeia and translating the same was a major hurdle in carrying out research work. Further, many times healers couldn't be met simply because of not having any means to verify about their location. Such lack of a connectivity and correspondence prolonged the fieldwork.

The researcher had limited notion of integration to the knowledge, practices and human resource realm only. Also, the category of healer is restricted to the practices of bonesetters and herbalists. The pharmacopeia of traditional medicines has not been covered in the research. The researcher was not able to cover because the researcher didn't have adequate data and source to identify the heterogenous category of healers in the region.

Chapter 4

Profile of Sikkim

4.1 Background

In the 17th century, the state was under the Kingship of King Chogyal Namgyal. The process of democratization took place in 1973 and continued for a few years, and in 1975 the people have overthrown the king rules and merged as a small new state in India. Sikkim is a tiny Himalayan state in India, which is surrounded by mountains and the Himalayas. Sikkim is located on the foothills of Mount Kanchenjunga 8585 feet, the world's third highest mountain pick lies in the eastern part of Sikkim. The ethnic communities of Sikkim worship the mountain as their guardian deity, which has conceded from the time of their ancestors. Sikkim is surrounded by international borders, i.e., Tibet borders Sikkim in the north and northeast, Bhutan in the east, Nepal in the west and West Bengal in its south. It is divided into four districts, North, South, East and the West. The capital of Sikkim is Gangtok, situated in the East district.

There are three dominant ethnic communities in Sikkim, Nepalis, Bhutias and Lepchas. Sikkim is generally known as *Tsong's* word "*Sukhim*," meaning "New "or "Happy Home". Lepcha called as "*Nye-mae-el*" means paradise and Bhutia it is "*Beymul denzong*" meaning the hidden valley of Rice. Each community has interesting and impressive folk songs and dances. The people of Sikkim are simple, humble, kind hearted, and friendly. Living in the Himalayan belt and surrounded by mountains and valleys, they are bound with the nature and worshiper of nature (Lama, 2001; Basnet, 1974).

The state has the least number of 6.5 lacs populations. The Nepali ethnic communities of Sikkim comprise 75 per cent of the population. The Bhutia community consists of 16 per cent population, and the Lepchas are 9 per cent of the population. In 1978, the Lepchas, Bhutias, Sherpas and Doptapas were given the status of Scheduled Tribes. The Kami, Damai, Lohar, Majhi and Sarki have been classified as Scheduled Castes (Bhasin, 2007).

The state is prominent for its biodiversity hotspot and best known for eco-tourism. Variety of species of medicinal plants and herbs, birds, butterflies, etc. are available. It has six hundred types of orchid in the subtropical areas of Sikkim. Once H D Hooker says 'Sikkim is a land of white orchid' (Hooker, 1999). Numerous lakes, glaciers, mountain peaks and passes, and hot springs have attracted many visitors to the state. The people of Sikkim are close to nature, and there are holy and sacred lakes, mountains, sacred monasteries (lit. *gumpas*), where people used to worship and conduct rituals/puja for acquiring good health as well as for the prevent them from natural calamities like earthquake, drought and landslide. Sikkimese also believes in consuming organic and local food products to keep themselves free from illnesses and remain healthy by focusing more on organic farming, edible forest products, etc.

4.2 Cultural profile

The people of Sikkim have their own different cultures and traditions. They are very rich in their cultural heritage. Living in a diverse communities, the people are amicable and warm-hearted to one another, and they live in peace and harmony. They celebrate all the festivals together with joy, enthusiasm, and great devotion. The Hindus celebrate Dashain (Dushera), Tihar (Depawali) *Maghay Sakrathi* (*Makar Sakrant*), Buddhist community celebrates *Losar, Lochar, Saga Dawa*, Rai community celebrate *Sakhewa*, Lepchas celebrates *Naamsong*, other celebrations like *Chat Puja*, *Holi,* and so on and so forth. The people from every community involved in their social and religious gatherings with music and dance. The monks perform mask dance in the gompa or monasteries during the time of religious festival that is famous in the state. During the performance the monks cover themselves with gaily painted masks, sparkling jewels, and ceremonial swords and dance with the sounds of unambiguous drums, trumpeting horns and religious chant (Lama, 2001; Sikkim Human Development Report, 2015).

4.2.1 Caste, language, and Religion

The state is a small province where people from different caste and religion live together. There are three dominant ethnic communities in Sikkim viz. Nepali, Bhutia and Lepcha, where Bhutia is considered to be migrated from Tibet and Nepalis are considered to be

migrated from Nepal. Nepali communities are divided into two sub categories like *Tagadharis* (sacred thread wearer) and *Matwalis* (liquor drinker). While Chettri and Bahuns falls under *Tagadhari* category and Rai, Limbu, Gurung, Magar etc. belongs to *Matwali* category respectively. There are other communities like Tamang, Pradhan, Sherpa, etc. Lepchas are the indigenous group of people in Sikkim who existed from the primitive time. Bhutia, Lepcha, Tamang, Sherpa, Yalmo, Subba/Limboo belong to Schedule tribe (ST). Rai, Gurung, Pradhan belongs to OBC, and Chettri/Bahun belongs to General category etc. Bishwakarma, Kamis, damai, sharki etc. belong to Schedule Caste (SC) (Lama, 2001; Census Sikkim, 2011; Basnet, 1974). People professes different kinds of religion in Sikkim. Most of them professes Hinduism and other believes in Buddhism, followed by Christianity respectively. Few other religions which people follow in Sikkim are Islam, Jainism, etc. Before the origin of various religions in the state. the Lepcha, the original inhabitants of Sikkim used to believe and worship the soul of their ancestors. The Lepchas were also the worshippers of nature and they still worships mountains, river, streams, trees, etc. and considered them as their guardian deity (Lepcha, 2019).

4.3 Geographic profile

Sikkim is a hilly state, which lies in the Eastern Himalayas which ranges around 114 km from north to south and 64 km from east to west. It has a terraced land with an elevation ranging from 280 meters to 8585 meters. The state covers an area of 7,096 sq. Km. There are eight mountain passes which connect the Sikkim with other countries like Nepal, Bhutan, and Tibet. The people of Sikkim do the cultivation in terrace land which has 15 soil sequences and eight sub-groups. Lying in the Himalayas the state has 28 peaks, more than 80 glaciers, 227 lakes, over hundreds of rivers and streams.

4.3.1 Climate

There are five seasons namely spring, summer, monsoon, autumn and winter, that exhibits throughout the year. January is the coldest month, where the temperature drops down to 30s F, which is 0^{o}C. The warmest month is the August where its temperature reaches up to 28^{o}C. In monsoon, there will be heavy rainfall in June-July, which often causes massive landslides and flash floods. It also affects transportation facilities because NH10 is the only

roadway which connects with other places and is considered to be the lifeline of Sikkim. The state receives snowfall every year as it is in the high altitude. At present, due to various changes in climate, it was observed that the monsoon starts very early in April to September last. The heavy rain, snowfall and landslides also cause barriers to access healthcare services, mostly women and children in the state. The monsoon also affects the livelihood of the people mostly because of river floods and landslides which destroys the small bridges and it adversely affect the rural people in getting health care facilities on time. Also, people do not get food supply, and the patients are transported through bamboo baskets to get treatments in emergencies. Transit transportation is common during the rainy season in Sikkim. The common health problem during the time of monsoon season was reported that common cough and cold, fever, diarrhoea, dysentery, scabies, chickenpox etc. In the winter season, the majority of the elderly people were affected due to extreme cold as they complain of gout, joint pains etc.

4.3.2 Forest

In Sikkim, most of the land cover with mountains and the forest. The forest covers one-third of the state land. It has dense forest and rocky cliffs and ridges where agriculture and farming are not possible. According to the recent India State of Forest Report 2017, the forest area of 3344 sq. km (47.13% of the total geographical area of the state). The state's total terrestrial area of 44% is covered by alpine, scrub, and continuous snowfall (GoI, 2017).

Lying in the Himalayan region, Sikkim is very rich in biodiversity. The state has natural resources where the forest is one of the primary sources of natural resources. The total geographical area of 82.31% is under the coverage of administrative regulation of the Forest Department of Sikkim. The state lies in the tropical and sub-tropical zone. Lying in the Himalayan belt the state is very rich in a variety of natural flora and fauna. According to the various research studies, there are 400 species of flowering plants, 300 species of ferns, 11 species of oaks, eight species of tree ferns, 40 species of primulas and 20 species of bamboos. About 144 species of mammals, 600 species of birds, 400 species of butterflies and many species of reptiles are available in Sikkim. There are numbers of medicinal plants and herbs that are found throughout the state. There are some of the rare and endangered

species like Red Panda, Snow Leopard, Blue Sheep, Musk Deer, etc. More than 100 varieties of wild edible products are available in the forest like leaves, fruits, shoot, timber, stem etc. Forest is the secondary livelihood for the people of Sikkim. The community people depend on the forest for firewood, green grass for catering the animals etc. The traditional healers are more familiar and dependent on the medicinal plants and herbs in treating the patients in the community that are available in the forest (Badola and Pradhan, 2013; Pradhan and Badola, 2015; Idrisi, et.al., 2010; Singh, et.al., 2002).

4.3.3 Rivers

The river that flows right across the length of Sikkim is the Teesta river. It is a stream in its origin and originated from Lake Cholamu. River Teesta has many tributaries like Rangeet, Lhonak, Talung, and Lachung. The principal tributary is Rangeet, which is originated from the Rathong Glacier, and it meets in the border between Sikkim and West Bengal. The river later joins with the Brahmaputra in Bangladesh. The river is fed by snow melting in the mountains followed by small streams and rainwater as it flows down through valleys. In winter season the river flows clear and silently crossing valleys. However, in monsoon season the river became full with heavy rainfall and produces horror sounds that can be heard from miles away. At present, some of the river banks have pharmaceutical companies, dams and hydel projects etc. Due to the constructions of dams the rivers are getting stagnant throughout the year and it also causes more landslides during the rainy season. It is very rare to see the free-flowing rivers in Sikkim. Due to the constructions of pharmaceutical companies and hydel projects/dams, people in rural areas are getting displaced and above all it has severely affected the lives of people because of the hydel projects the soil has lost its fertility (lost it sweet water resource and cardamom plantation) and the river water is getting polluted day by day. For instance, the people in North Sikkim are mostly affected due to the constructions of dams. It has also hindered in their livelihood (Lepcha, 2018).

4.3.4 Agriculture

Sikkim is a terraced land, and people of Sikkim do terrace cultivation. The people of Sikkim practices agriculture as their primary activity. They do cultivation according to the

geographical location. The agricultural practices depend on the varying altitude and agro-climatic conditions. The total area covered for agriculture is about 15.36 per cent (Census of India, 2011). In the ancient days, people used to live their livelihood by collecting wild roots, fruits, hunting, and fishing. The land was covered with jungles and the forest. Gradually people started cleaning the forest and began cultivation and mostly slash and burn or shifting cultivation. The main crops for cultivation are maize, paddy, wheat, barley, and bucks. The state has the most significant area to produce cardamom, and it has the highest production for the state economy.

There are two tea Estates in Sikkim, one is in Kewzing, the western part, and the other one is in Temi which is situated in Southern part of Sikkim. Both the Estates covered an area of over 400 acres and produced distinct tea which has much valued for its taste and quality which gets exported outside the state. Oranges are raised in the most considerable quantity under the horticulture department. Other crops that grows in the state are vegetables like potato and squash, and fruits like pineapple, and banana. Maize is also cultivated in September to October, which needs high temperature and the right amount of rainfall. It is the staple food and uses for the preparation of poultry feed and beer. The other crop that grows in the terraced land is paddy. It grows mainly of river valleys with the help of irrigation. The people who cultivates paddy gets the water supply by small channels of water connected with the nearby rivers and streams. The crop is gown in the summer season, and as the state gets abundant rainfall, the paddy is possible to grow without channel water on unirrigated fields. Wheat and barley are grown in the winter season. For cultivation of crops and vegetables, a large number of labours and their hard work is needed.

Due to the constructions of various industries, township expansion, construction of roads, hydel projects and buildings have occupied or declined the agricultural areas in the state. Farming sometimes gets disturbed by the limited irrigation, lack of farm mechanism, and frequent occurrences of landslides, flood, an earthquake. At present, the government has given the importance in the intensive and judicious use of limited land that can help to maintain per capita land and productivity of overall production in the state.

Table 4.1: Cropping Pattern in Sikkim

Altitude	Zaid/Summer Crops	Kharif crops	Rabi crops
1	**2**	**3**	**4**
1500-3000ft	Maize, vegetables, Paddy etc.	Paddy, Maize, Millet, Soybean, Other Pulses, etc.	Wheat, barley, Buckwheat, Rice-bean, Vegetables, etc.
3000-5000ft	-	Maize, Paddy, Soyabean, Other Pulse, Finger Millet etc.	Wheat, Barley, Buckwheat, Rice-bean, Rape and Mustard
5000ft and above	-	-	-

Source: Department of Food Security & Agriculture Development

4.4 Demographic Profile

Sikkim is the smallest state in India and has very less population. According to the census of India 2011, the data shows that it has mere six lakhs and has raised by almost one lakh in the last census. The growth rate of population has considerably reduced to just above 10 %.

Table 4.2: Demographic Profile of the Population

Sl. No.	Description	2011	2001
1.	Approximate Population	6.07 Lakh	5.41 Lakh
2.	Actual population	607,688	540,851
3.	Male	321,661	288,484
4.	Female	286,027	252,367
5.	Sex ratio	889	875
6.	Child Sex ratio	944	938
7.	Total Child Population (0-6 Age)	61,077	78,195
8.	Male Population (0-6 Age)	31,418	39,842
9.	Female Population (0-6 Age)	29,659	38,353
10.	Literacy	82.20%	68.81%
11.	Male literacy	87.29%	77.38%
12.	Female Literacy	76.43%	59.63%
13.	Total Literate	449,294	318,335
14.	Male Literate	253,364	189,060
15.	Female Literate	195,930	129,275

Source- Census of India, 2011

As per the census of 2011, the population of Sikkim is 6.07 lakh where it was 5.41 lakh in 2001 census. The total population in 2011 was 607,688, where the male was 321,661, and female were 286,027. The total population in 2001 was 540851, where the male was 288484 and female were 252,367.

4.4.1 Rural/Urban Population

Around 75.03 per cent of the population lives in the village or the rural area of Sikkim. According to the census of 2011, there were 2,42,122 males and 2,13,840 females. The total number of populations in the rural areas of Sikkim is 4,55,962 (2001-2011). However, 24.97 % of the population live in urban areas. The total population lives in the urban areas were 151,726, of which males were 79,539 and females were 72,187. The urban population has increased by 153.43 per cent in the last ten years.

4.4.2 Sex ratio Rural and Urban (Male/Female)

The sex ratio as per the census of 2011 shows 889 females in 1000 male, whereas the census of 2001 shows 875 females per 1000 male. In the rural region the sex ratio in 1000 male there were 883 females, and in age 0-6 years of age, there were 952 girls in 1000 boys. Total 47,038 children live in rural areas. About 10.32 per cent of the child population forms the rural population in Sikkim. In 2011 there were 908 females per 1000 males in urban areas. There were 917 girls per 1000 boys between the age group of 0-6 years in urban areas. Total children between these group of age living in urban areas were 14,039. The total population of children between 0-6 years of age in the urban region was 9.25%.

4.4.3 Literacy of Urban and Rural (Male/Female)

The literacy rate of the people of Sikkim is in the rising trend. As per the population census in 2011, the literacy rate is 82.20 per cent. The literacy rate of the male has 87.29 per cent, and the female is 76.43 per cent. The literacy rate of 2001 shows 68.81 per cent of which male and the female were 77.38 per cent and 59.63 per cent literate respectively. In the rural area, the literacy rate of male is 85.42%, and female is 73.42%. The average literacy rate of the rural regions in Sikkim is 79.82%, and the total population in rural areas in literacy were 326,398.

4.5 Physical Geography

The state has a good socio-economic status. There are various economic resources which have maintained the socio-economic status of the state. There are Kanchenjunga National Park, mines and geology, thermal springs, electricity and power, irrigation, animal husbandry, industries, fisheries and tourism that has contributed to raising the economic status of the state.

4.5.1 Kanchenjunga National Park

It is one of the famous National parks in India and is one of the heritage site acclaimed by UNESCO. The park is named after the mount Kanchenjunga and it is the third highest mountain in India. The park covers the total area of 850sq. Km that has now expanded to 1784 to include more area under wildlife habitat. The park now occupies 25% of the total area of the state. It includes many glaciers like Zemu glacier and animals like musk, deer, Himalayan Tahr and Snow leopard that all have made their home in this park (Census of India, 2011).

4.5.2 Mines and Geology

The state can have many mines and geology that can contribute to raising the economic status of the state, but still, the more significant part of the state remains unexplored. There is a total of 24 base metal occurrences situated in Sikkim. The only functional mine producing ores in the Himalayan region is located at Rangpo, Sikkim. As per the distribution pattern, the events are shown in three concentrated clusters like (i) Eastern Sector, (ii) Central Sector, (iii) Western Sector. In the Eastern sector, the occurrences are in Rangpo, Panchekhani, and Dikchu that are located in the east of river Teesta. The occurrences in the Central area lies between river Teesta in the East and Rangeet river in the West. Many events are in Nayabazar in the Western Sector (Census off India, 2011, Lama, 2011, Sikkim Human Development Report, 2015).

4.5.3 Thermal Springs

Various hot spring is situated in different places of Sikkim. At least eight hot springs are in different areas of the state like Reshi, Borong, and Polok of South Sikkim, Yume

Samdong, Yumthang, Zee, Tarum, and Tolung. All these hot springs are famous and known for its therapeutic value. The people of Sikkim locally called hot spring as Tatopani/ Tsha-chu. The hot springs are considered as medically and socially crucial in Sikkim. Sikkimese believe and perceives that these hot spring helps to cure many illnesses like arthritis, body pain, gout, scabies, and other gastrointestinal and bowel related diseases. The temperature of the natural hot spring will be 50^{o}C. People from different places visit the hot spring and take a bath for health problems. On the other hand, the communities also perceive that in some diseases like piles, hypertension, people do not go to the hot springs as it precipitates the situation of the patients.

4.5.4 Electricity and Power

The state has first introduced the use of electricity in the year 1927 with the commissioning of the first hydel project at Ranikhola near the capital of Sikkim, Gangtok. Initially, the power sector was not given importance in Sikkim. Gradually the industrialization took place. Started constructing numbers of dams. Now with the liberalized power policy, Sikkim can look forward to developing and exploiting the potential of tremendous Hydro Power. The following are the power generating status in the state.

Table 4.3: Energy Generation in Sikkim

Sl. No.	General station (Under operation)	Installed Capacity (MW)	Gross Generation (MU)
1.	Lower Lagyap HEP	12.00 MW	24.195 MU
2.	Jali Power House (JPH)	2.00 MW	3.163 MU
3.	Rimbi Micro Hydel I	0.60 MW	0.165 MU
4.	Rimbi Stage II	1.00 MW	0.415 MU
5.	Rongnichu	2.50 MW	0.854 MU
6.	Mayongchu HEP	4.00 MW	6.589 MU
7.	Lachung Micro Hydel	0.20 MW	1.025 MU
8.	Kalez Khola HEP	2.00 MW	0.76 MU
9.	Rabomchu	3.00 MW	3.522 MU
10.	Diesel Power stations, Gangtok	4.00 MW	0.153 MU
11.	DPH, LLHP, Ranipool	1.00 MW	1.001 MU
12.	Rangit HEP	60.00 MW	30.00 MU

Source- Census of India, 2011

4.5.5 Irrigation

Sikkim is under developing stage in its irrigation system. Having rivers and springs in the state, there are minor irrigation systems. There were 154 channels which have covered the area of 2178.49 hectares in C.C.A. Following tables shows the achievement of minor irrigation as on 31st March 2002.

Table 4.4: Minor Irrigation Channel Achievement as on 31st March 2002

Sl. No.	Particulars	District				
		North	East	South	West	State
1.	No. of Channel	20.00	60.00	25.00	49.00	154.00
2.	Length of Channel (Km)	-	-	-	-	-
3.	Area Covered (C.C.A) in Hect.	210.00	508.99	327.00	1132.50	2178.49
4.	The ultimate target of Potential in Hect	Total 50,000.00Hect. in the whole of Sikkim				
5.	Potential Achieved (Hect)	Total 31,800.00 Hect				
6.	Potential Utilization up to 31-03-2002	208.04	425.00	430.00	861.50	1925.54

Source –Sikkim: A Statistical Profile 2002

4.5.6 Animal Husbandry

The climate and the temperature existing in the Himalayan region are highly favourable to produce livestock. Moreover, livestock is also passed down from generation to generations. Various types of livestock are handed over from their ancestors through generations are yaks, Sheep, pigs, Mountain goats, and poultry. Besides agriculture, the people of Sikkim also involve in raising livestock to earn supplementary incomes for them. In Sikkim, the Livestock that is available in the high altitude is Yaks, Sheep, and local goats (chengra). Others like Cows, Jersey, pig, poultry HF crossbreed goats are found in the middle and low-lying areas of Sikkim. The first official census was conducted in the year 1977-2007. The livestock enumerated in the census were cattle, buffalo, yak, sheep, pig, dog, mules, rabbit and fowl. The following table provides the overlook of livestock from the year 1977-

2007. The population of livestock has increased their number in current status except for buffalos, indigenous cattle and sheep.

Table 4.5: Livestock Population its Annual and Decadal Growth

Species of Livestock	**1977 Livestock census**	**2007(Provisional)**	**Annual Growth (in per cent)**	**Decadal Growth (in Percent)**
Crossbreed cattle	52303	91289	(+)7.45	(+) 74.53
Indigenous Cattle	90721	71852	(-)2.0	(-)20.79
Buffalo	1970	243	(-)8.76	(-)87.66
Yak	4781	6468	(+)3.5	(+)35.28
Sheep	5023	4879	(-)0.28	(-)2.8
Goat	82938	110120	(+)3.2	(+)32.77
Pig	26975	38390	(+)4.23	(+)42.31
Poultry	223262	255882	(+)1.46	(+)14.61

Source: Department of Animal Husbandry Livestock, Fisheries &Veterinary Services

4.5.7 Fisheries

The state has initiated in constructing smaller sizes of fish ponds in the villages of Sikkim. It is an important area where it has driven the additional income to improve the living standard of the people of villagers. Sikkim has freshwater streams of about and freshwater ponds and lakes of about 30 sq. Miles. There are over 15 fish farms that are established all over the state by the Fish Farmers Department Agency. Sikkim has crap farms in Gangtok, Rangpo, Rorathang, Kabi, Hee-Gyathang. The Tourt farms are established at Memenchu, Lachung, Lachen, and Yoksum. The other farm Masheer which is locally termed as Sahar farms are located at Sirwani and Baguwa. The production of fish stands at 140 tones, and the production of fish seed stands at 2.5 million.

4.5.8 Industries

Sikkim is one of the least industrial developed states comparing to other states of India. But gradually after 2006 in recent years, it was shown that the Sikkim is coming up with small and medium scales industries in the field of pharmaceuticals, chemicals, liquors, foam mattresses, food products, iron rods, etc. this all carries a small and medium enterprise. Other enterprises are coming up in the hospitality sectors like hotels and resorts, village tourism (homestays) because of the high flow of tourism in the state.

4.5.9 Tourism

Sikkim as already mentioned before has its own natural and evergreen beauty with snow mountains, sacred lakes, holy caves, hot spring, and pristine waterfalls. The state is rich in biodiversity, forest with exotic flora and fauna. The state is a small hill station but it is the holiday destination for various people around the country particularly during the summer season. Tourism is one of the sectors for providing employment and it also helps in improving economic conditions of people living in the state. The international visitors need to get the permit for Restricted Area Permit (RAP) from Sikkim Tourism offices. The RAP can be obtained from various places like New Delhi, Kolkata, Siliguri, Bagdogra Airport, Rangpo and Melli on the strength of a valid Indian Visa. The permit is issued for 30 days initially, and later it can be extended 15 days twice from Foreigners Registration Office at Gangtok and office of the Superintendent of Police in the North, West, South and East Districts. The government of Sikkim is encouraging the state's rural people about village tourism with homestay facilities.

4.6 Organic Mission

The state of Sikkim is focusing more on organic farming. The government is taking the initiative to make the state a fully organic state. The farmers of all over Sikkim are provided facilities and free supply of various seeds and plants for the cultivation. The farmers are encouraged and motivated by providing certificates in organic farming to retain/sustain organic farming in the state. The villagers and the farmers are also providing the printed brand and logos to place it in their supplies. The main objective of the organic farming of the government is to improve the soil quality and prevent water pollution. This initiative

of government not only helped to fulfil their objectives but also helped in the livelihood of the villagers. It has also received the United Nations Future Policy Award in 2018 after implementing world's best laws and policies promoting agro-ecology.

4.7 Health profile

Sikkim is trying to improve in maintaining the health status of the population but still there are dearth of many specalists working in the field of medical sciences. There are a few indicators that can be referred to know the mortality of various groups like Crude Death Rate per 1000 population decreased by 35.29%, i.e. 6.9 in 1994 to 5.1 in 2014. The Infant Mortality Rate (IMR) per 1000 live births declined by 142%, i.e. 46 in 1994 to 19 in 2014. The major causes of deaths from Communicable to Non-Communicable Diseases as per 1989-90. The state has taken the steps in the improvement in providing services complete immunization coverage, the Cure rate of Tuberculosis improved, Institutional delivery increased, Ante Natal Check Ups etc. (Government of Sikkim, 2017, p.7).

Table 4.6: State health infrastructure and the number of health institutions in Sikkim

Sl. no	Health Institution	East	West	North	South	State
1	State Referral Hospital/STNM Hospital	1	-	-	-	1
2	District Hospital	1	1	1	1	4
3	*Community Health Centre	1	-	-	1	2
4	Primary Health Centre	6	7	5	6	24
5	Primary Health Sub-Centre	48	41	18	39	146
6	District Tuberculosis Centre, Namchi	-	-	-	1	1
7	Centre Referral Hospital Manipal Tadong (pvt.)	1	-	-	-	1
8	Total	58	49	24	48	179

Source: Annual Report 2009-2010. Human Service and Family Welfare Department, Government of Sikkim.

*Remarks (1) Jorethang & Rhenock PHC is under process for up gradation to CHC

The people of Sikkim are still facing the health-related issues due to inaccessibility of better road transportation because of rocky ridges and lack of general awareness, ignorance, lack of adequate hospitals services, etc. are the disheartening features that are accountable for low birth weight babies and the Maternal Mortality Rate. Recently the state has inaugurated the multi-speciality hospital in Gangtok to provide preventive, curative and promotive health care services to the people of Sikkim. The hospital is equipped with advanced technologies to provide quality health care services. However, the people from various districts are unable to avail the services due to poor transport and connectivity of roads. The patients are still getting referred outside the state, but it is not feasible for all category of people due to poor economic conditions.

There are districts hospitals, CHCs, PHCs, Sub- Centers in all the regions of Sikkim. Most of the cases are referred to the district hospitals from PHCs and CHCs. From district hospitals, the patients are referred to the state. The larger health issues among the people of Sikkim are the heart and blood-related diseases, accidents and suicides, cancer, respiratory ailments, and tuberculosis. Many people and medical professionals feel that most health problems are due to excess alcohol consumption. Besides modern medicine, rural people are taking alternatives to traditional medicines. Majority of the people in the villages and the community are seeking treatment from the faith-based practitioners and the traditional healers (Baidhya).

Table 4.7: Hospital Bed Sanctioned strength in Sikkim

S.N.	Health Institutions	No. of bed				
		East	West	North	South	State
1	State referral hospital	300	-	-	-	300
2	District hospital	100	100	100	100	400
3	*Community health centre	30	-	-	30	60
4	Primary health centre	60	70	50	60	240
4	District tuberculosis centre, Namchi	--	---	---	60	60
5	Central referral hospital, Nanipal Tadong (Pvt.)	500	---	---	-	500
	Total	990	170	150	250	1560

* CHC – Bed strength is under process

Source: Health Care, Human Services and Family Welfare Department

All the four districts have PHCs, CHCs and the district hospital. The rural people are provided health care services by the PHCs and CHCs. Various programs are initiated and participated by the governments are tuberculosis control programs, blindness, and other diseases. There are other health concerns of the state on diarrheal conditions including cholera, hepatitis, respiratory infections of various sorts, and family- planning issues.

Table 4.8: System wise AYUSH facilities Co-located

Sl.No.	Location	Colocation of AYUSH System	No. of Patients visited
1.	District Hospital, Singtam, East Sikkim	Homoeopathy and Ayurveda	1213
2.	District Hospital, Namchi, South Sikkim	Homoeopathy	7453
3.	District Hospital, Gyalshing, West Sikkim	Homoeopathy and Amchi	2478
4.	District Hospital, Mangan, North Sikkim	Amchi	1222
5.	Jorethang CHC, South Sikkim.	Homoeopathy	1500
6.	STNM Hospital, Gangtok	Ayurveda and Amchi	9449
	TOTAL		**23,315**

Source: Health Care, Human Services and Family Welfare Department

The new STNM hospital has been shifted to a new building, which is half an hour distance from the old hospital. The new hospital is located in Sokaythang, Sichay, Gangtok. The new hospital has a separate department of AYUSH. However, in comparison with Traditional healing practices, the utilisation of the AYUSH is very less in Sikkim

4.8 Conclusion

This chapter explained about the profile of Sikkim regarding its origin and its altitude. It has discussed the geographic pattern where it is included forest, rivers, etc. It also discussed the industrial profile of the state. This chapter also featured physical geography, demographic profile, and socio-economic status. The government of Sikkim is focusing on

and initiating more on organic farming in rural areas. The people of Sikkim are still struggling to get primary health care services in the rural areas. However, the State has established the multi-speciality hospital, but it is not accessible to many rural populations due to poor transportation and road connectivity. There are various health related schemes which are passed by the state government for providing quality health care services to the people of Sikkim.

The next chapter deals with the demographic profile of the traditional health care practitioners, their age, caste, gender, marital status, religion, educational qualification, occupation, basic information about the family assets, housing condition, monthly income, etc.

Chapter 5

Profile of the Traditional Practitioner/Healers

5.1 Basic Information of the Practitioners

This chapter mainly deals with the primary information about the traditional healthcare practitioners of Sikkim. The study covers healers and their details from all the four districts of Sikkim. The names of the traditional practitioners are not disclosed as it is kept for their confidentiality. The study mainly focused on selective traditional practitioners who use only plant products, minerals, and animal products for treating their patients.

The informant Suraj, reported that the State Medicinal Plant Board, Sikkim has collected data from 29 healers in 2009. The healers are also included and interviewed in this study (Suraj, Scientific/Technical Associate, SBB). The number of participants is less, but still, show significant result and numbers of healers in Sikkim. Every healer was visited and has gathered the information with the help of questioner and semi-participant observation. As the healers resides very far and several distances away, it was not possible to return on the same day after the visit. The data is collected by staying with the family members of the practitioners.

It was found that the majority of the traditional practitioners of Sikkim belong to the upper caste in society (Bahun/Chettri). They have been practicing traditional healing practices from the time of their ancestors. Their traditional healing practices are not limited within the rural areas but also provides in the periphery of urban-town areas of Sikkim. They serve the poor in the community as a feeling of humanitarian and never demand money in return. They are the one whom the community people rely on during illnesses. They not only provide treatment to the community people but also guide in decision-making and provide moral support to them in times of need. Majority of the traditional practitioners have many years of healing experiences. They are not certified or institutionalized by any governing body of the state. They perform healing practices in their own home and provide treatment to patients by visiting their houses in emergencies requirement. They provide services to

all section of people in the community irrespective of their caste, creed, religion and class. The detailed information of the practitioners has been collected and briefly mentioned in the following sections below, their age, gender, caste, religion, marital status, educational qualification, occupation, residential address, use of mobile phone and family members of the traditional practitioners.

5.1.1 Age of the Traditional Practitioners

There are several studies carried out on traditional healing practices, traditional practitioners, health seeking behavior, health beliefs, foods, nutrition etc. nationally and internationally. Each study provides data on the decreasing number of healers in the community. In the current scenario, there is rapid growth in modern medicine and its high consumption. The immediate effect of modern medicine has drawn the people even from the rural areas for its utilization. Nowadays, people in the rural areas and the villages have the options of using modern medicine during illnesses. Therefore, the number of traditional healing practitioners are decreasing every day (Suraj Scientific/Technical Associate, SSB, Panda and Mishra, 2010).

Table 5.1: Age of the Traditional Practitioners

Age of the respondents	**Number of Healers**	**Percentage (%)**
31-50	8	20
51-70	24	60
71-90	8	20
Above 90s	Nil	--
Total	**40**	**100**

Source: Fieldwork

It was identified in Sikkim, that most of the healers were at their old age. The age of the practitioners are divided into three categories 30-50, 51-70 and 71-90. Out of the 40 healers, about 24 (60%) healers falls under the age group of 51-70, while about 8 (20%) of the healers falls under the age group of 30-50 and about 8 (20%) falls under the category

of 71-90 respectively. Among them, 34 (85%) of the healers are practicing the healing practices and 6 (15%) of them have stopped due to old age and poor health condition. The young healers falling below the age of 50 knows how to use modern gadgets like mobile phones, WhatsApp, Facebook messenger and texting messages. None of the healers were found below 30 years of age in practicing traditional healing. The community people still believe in the traditional healing system though modern medicine has brought a more significant impact on their lives.

5.1.2 Gender of Traditional Practitioners

Table 5.2: Gender of the Traditional Practitioners

Gender of the Respondents	**Number of Healers**	**Percentage (%)**
Male	38	95
Female	2	5
Total	**40**	**100**

Source: Fieldwork

Gender plays a vital role in healing practices. Out of the 40 healers about 38 (95%) of them are male and 2 (5%) of them are female. While doing field study, researcher came across with only two female practitioners. One of them was suffering from a health problem. It was recognized and observed that the healing practices were further carried forward only by the male member of the family as he would be chosen by his forefathers. It has been passed through ages that the healing practices were taught to the males while the responsibilities of the domestic chores were given to the females. Thus, our society is male dominating, and male will be a responsible person of the family who looks after the family. As per the respondent, women in the communities are not allowed and preferred to practice traditional healing practices. The collection of medicinal plants is not done only from the local surroundings but needs to go to the jungles, forest, and the mountains. Therefore, it is not accessible and desirable for the women to collect medicinal plants from jungles and

mountains and practice healing practices in the communities. Women were not sent to collect the medicinal plants as they had difficulty to walk due to slippery paths especially during the monsoon season. There are various reasons for not allowing and encouraging women to do traditional healing practices. The society thinks that the women are not suited for conducting rituals in the communities.

On the other side, we can see a few female magico-religious healers who treat some minor illnesses in the community, which has supernatural causes. In Sikkim, it is observed that almost all the elderly household or village women are having the knowledge of home remedial treatments mainly, how to take care of pre and postnatal mothers, how to treat stomach pain, weaning diets for babies after six months, etc. Thus, the division of work and various activities of the household is divided among men and women in the communities. It is also assumed that in every aspect, whether it is the magico-religious healer or herbal healer, there are dominant male healers. The healing practices reflect the nature of patriarchy and the profession dominated by males.

5.1.3 Caste of the Traditional Practitioners

Table 5.3: Caste of the Traditional Practitioners

Caste of the respondents	**Number of Healers**	**Percentage (%)**
General	20	50
OBC	7	17.5
ST	12	30
SC	1	2.5
Total	**40**	**100**

Source: Fieldwork

In Sikkim, there are various ethnic and tribal communities; among them, there are castes and sub-castes group of people. The caste variation also depends on their geographical location. The practitioners represented from the field study belonged to different castes. It was found in the study that the majority 20 (50%) of the traditional healing practitioners

belonged to General category (upper caste) i.e., Chettris and Bahuns. They were mostly residents of East Sikkim and very few in other parts of the state. Rai and Gurung belonging to OBC group were 7 (17.5%) in number. 12 (30%) practitioners belonged to (ST) group like Tamang, Lepcha, Sherpa, Subba/ Limboo (ST). There was only one (2.5%) healer/practitioner who was Bishwakarma from SC category.

The healers living together with upper and lower caste, the community people always had the feeling of oneness and unity. It was observed that the healers from the upper caste have equally provided treatment to all caste group patients in the community. The community people live together in peace and harmony without any caste discrimination. The healers from upper caste never demand money in return of providing treatment to the other lower caste people in the community. Instead, the poor are given free treatment and asked for money only if they can afford it. Both the upper and lower caste live together in harmony, supporting each other in every occasion of festivity and adversity such as festivals, ceremonies, death, natural calamities, disasters, etc.

5.1.4 Religion of the Traditional Practitioners

Table 5.4: Religion of the Traditional Practitioners

Religion of the respondents	**Number of Healers**	**Percentage (%)**
Hinduism	25	62.5
Buddhism	8	20
Yumaism	3	7.5
Christian	4	10
Total	**40**	**100**

Source: Fieldwork

In Sikkim, there are three dominant religions, such as Hinduism, Buddhism, and Christianity. The majority 25 (62.5%) of practitioners like Chettris/Bahuns, Rai, Bishwakarma belong to the Hindu religion, which perform traditional healing practices in

the community. It was found that 8 (20%) out of 40 healers are follow Buddhism. 3 (7.5%) Limboo practitioners follow Yumaism religion. They are very less in number. While some of them (10%) are converted to Christianity. All the healers have strong faith in their respective religion. They always offer prayer to their guardian deity/God before treating the patients. Very often, they visit their holy places, temples, monasteries, and church to seek blessings.

Following different religion, the healers respect each other, the community people and their patients. They attend various religious functions of the community. It was found that healers not only deliver treatment to their patients but also provide moral and spiritual support in times of difficulties and needs. The healers are not rigid and fixed to the worship of their ancestors but follow religion according to their choices and beliefs. Being in the Buddhist religion, the Lepcha community healers are nature worshippers. They worship trees, river, streams, mountains, etc. The rituals, belief and traditional healing practices have been transferred from their ancestors in the Lepcha community.

5.1.5 Marital Status of Traditional Practitioner

There is no restriction among the healers regarding their marriage. They conduct healing practices before and after marriage. It was identified that most of the healers/practitioners were married. No one was found single or unmarried healers/practitioners in the study area. They do not have restrictions on getting marriage several times. Among those healers/practitioners, one had two wives, and both were sisters from the same parents. They all live together in one house as one family. They do not opt for a divorce instead they marry several times if they desire. They mostly marry several times in case of death of the previous wife, or if she is not able to reproduce child. They respect each other in the family and never give an extra burden to their spouse. After getting married, they take responsibilities as a family head, and their spouse/wives are asked to take care of other household activities and to look after their children.

It was told that in early days people used to get married at a very young age. Majority of the healers had the age above 40 years. They have more than five children and not less than two. Many children had been married and settled, some were doing professional jobs

occupying a better socio-economic status in their society, and some were out from their homes for study purpose.

5.1.6 Educational Qualification of Traditional Practitioners

Table 5.5: Education of the Traditional Practitioners

Education of the respondents	**Number of Healers**	**Percentage (%)**
Illiterate	12	30
Primary	16	40
Secondary education	7	17.5
Higher secondary	5	12.5
Graduation	Nil	---
Total	**40**	**100**

Source: Fieldwork

Out of the 40 respondents, 16 (40%) received only primary education followed by illiterate healers 12 (30%). While some of the healers have received secondary education (17.5%) and rest of the healers have received higher secondary education (12.5%) respectively. None of the respondents have received better education.

As they have not received better quality education, they do not have many ideas about modern medicine and advanced technologies. The healers rarely use the modern medicine and advanced technologies. Those healers/practitioners who have passed the exam of the 12th standard know much about the modern medicine and advanced technologies to some extent. Thus, they have included some of the techniques in their practices of traditional healing. For example, the X-ray machines are used before treating the fracture and broken bones. They do not operate directly, but they ask their patients to do an X-ray and get the report for the treatment.

It was told that in early days the education was not given importance. Also, they used to practice traditional healing practices from an early age, which used to engage them in practicing healing all the time. Gradually people started moving out to some other places to find a job, which made them realize the importance of education. Healers do not have any formal educational qualification, but they have sent their children and grandchildren to other places to acquire quality education. It was observed in the study area that healers/practitioners having the qualification of 12 standards could read books, newspapers, magazines which kept them updated with the present scenario of Sikkim. At present, as we look at the data on the education of Sikkim, the overall literacy rate is 82.20 per cent. In which the literacy rate of male is 87.29 per cent, and the female is 76.43 per cent (Census of India, 2011).

5.1.7 Occupation of the Traditional Practitioners

Table 5.6: Occupation of the Traditional Practitioners

Occupation of the respondents	**Number of Healers**	**Percentage (%)**
Government Jobs	10	25
Farmer	21	52.5
Shop owners	2	5
Contractor	2	5
Government Retired	2	5
Floriculture Nursaries	1	2.5
Healer's Hospital	1	2.5
NGO	1	2.5
Total	**40**	**100**

Source: Fieldwork

Out of the forty respondents, most of the respondents, about 21 (52.5%) are farmers followed by Government service holders about 10 (25%) respectively. People in the villages are engaged in farming and working in the field on daily wages. Very few people used to work or hold government jobs. There were none who used to work in the private sectors. In regards to healers/practitioners, as we refer the data, it is shown that the profession of the practitioners varied from one practitioner to another. Majority of the

healers/practitioners used to work in the field. They used to cultivate cereals, pulses, and grow vegetables according to the season and geographical location. The healers/practitioners were identified, holding jobs in various departments like a forest, school, horticulture, floriculture, veterinary, etc. One of them were working in NGOs and others they had their own business of floriculture nurseries etc. Healers/practitioners in the study area do not consider their traditional healing practices as only their occupation/profession. They believe treating patients from their knowledge is to serve the poor and community people. They have accepted and believed that their knowledge of healing the patients in the community is the gift; they have received from God. The healers do not sit the whole day at home and treat the patients, but, they also do their household work and do their jobs. They manage the patients in their free times and provide prior information about the time of healers' availability for the treatment of patients. Many times, the patients get confirmed by calling the healers and fixed the time for treatment. Thus, the healers deliver traditional healing to the patients in the community. Most of the healers were found to be well established and settled in the communities. They have a good family support from their children and grandchildren who are now working and holding good positions jobs in Sikkim and outside Sikkim. Apart from that there are healers, who have a low economic condition.

5.1.8 Availability of Traditional Practitioners in Different Districts

The traditional healers/practitioners play a significant role in the community. The need for traditional healing still exists among the community people as primary health care. The people in the villages and community are aware of the availability of modern medicine and advanced technologies. However, the importance of traditional healing and its utilization has formed its place amidst the people in the community. All the four districts are covered in the research study in Sikkim. It was found out from the study area that all the four districts have a certain number of healers. The availability of traditional healers/practitioners is more in East Sikkim. There is total of 20 healers, including both male and female. There are two female healers in East Sikkim. In west Sikkim, the availability of healers/practitioners is 16, and all are male healers. From North, only three healers were available. There are 2-3 healers in South, but only one healer/practitioner was

met, and the rest were not present during the time of the visit. It was observed that the availability of healers/practitioners depend on the area and caste. The healers/practitioners mainly belong to upper caste. It was observed that, when there are the mixture of caste and culture, then there will be more prevalence of getting many healers.

5.2 Basic Information about Family Assets

During the fieldwork, various aspects of healers were identified like their living styles, housing, landholding capacity, livestock's holding, water sources, cooking fuel, electricity, mobile phones, vehicle and transportation, monthly income and other assets, etc.

5.2.1 Housing Condition

All the healers live in the villages of Sikkim. Majority of the healers have their own houses with large rooms and enough space. out of forty healers, 25 healers have pukka houses, and some were having semi pukka and kuccha houses. The healers have new houses along with their old traditional house, which were built during the time of their ancestors. Despite having pukka house, some of the healers (15) prefer to stay in their traditional house. It was observed that these healers are more emotionally attached to their ancestor home. They have traditional houses made up of half stone, and half mud and some are half stone and half wooden. out of 40 healers, seven of the healer's houses were under construction. There were also houses, which were built from the houses scheme of government of Sikkim. Very few healers had their houses in the Capital of Sikkim, Gangtok. There are few healers who have very large houses, which they have given to the renters. Two healers, among them one has grocery shops in village, second has wine shops and general stores in their houses. One healer have local incense sticks factory in his house. In villages, the houses can be seen, far from one house to the other. They all keep their houses in a decorative manner. Some of them are living together in one house as a joint family. It was reported that the healers do keep their patients in their houses for the treatment if it is available of space in their houses.

Healers have their land holding capacity. In villages, we see not only the houses, but they will be having a huge plot of land surrounding each house. They also have their land in other parts or areas of Sikkim. All the healers do farm in their land. They do cultivation

according to the season and geographical location. Some of the healers grow paddy, wheat, millet, bajra, cereals, and pulses. Some grow vegetables like beans, potato, ginger, chili, tomato, peas, cabbage, carrot, radish, beat roots, and other green leafy vegetables, etc. At present, the government of Sikkim is focusing more on making the state fully organic, and the people have started growing organic vegetables and supplies in the market. Some of the healers have herbal gardens in their land to treat their patients. Healers not only treat the patients; besides that, they do farming and cultivations in their land. The 10 (25%) of healers also hold government services. Healers/practitioners do not consider healing as their profession. They provide treatment to the patients out of their knowledge and understanding of the uses of medicinal plants. They believe that their good deeds will be remembered by the patients even after the death of the healers. In villages, there is also a system of giving land to another person in the lease for a few years and take the amount or share the items which have cultivated in the land.

5.2.2 Livestock Holding

Having livestock in every house in the villages of Sikkim is very important. They not only use the live stocks for offering sacrifices during rituals and welcoming guests by arranging good meals, but they utilize/sell whenever there are emergencies with health-related issues and in other emergencies where the money is needed. They sell some of the items from their livestock and get the treatment. They also sell the livestock for paying the fees of their children and grandchildren those who are studying. In livestock, they have hens/chicken, cow, goat, ox, pig, duck, horses, etc. Some of the healers are having more, and some are having less. Early days the villagers used to leave animals like cow, goat, and ox freely in the jungles but now it has been prohibited by the government. Due to various act such as State Biodiversity Act, 2002 and Forest Rights Act, 2006, which instruct the forest department to restrict the usage of forest land for animal grazing in Sikkim. Live stocks in the villages are used for various purposes. They are used for offering sacrifices during rituals; it is given to the healers as a gift during treatment or after the successful treatment of the patient. It is also used in a meal during festivals and the arrival of guest in their houses. If somebody is not having this livestock in their houses, then they buy it from other people in the villages. They also have a culture of taking hens while visiting a mother who

has recently given birth to a child in the villages. They use their livestock and its product as a home remedy during some minor issues like take milk with turmeric during cold and cough and for early wound healing, chicken soup for the new mother to provide energy, etc.

5.2.3.Water Resources

It is an important element for living. Nobody can live without water. We get fresh and cool water in the villages of Sikkim. We do not see the major issues on water supply in the villages. Everywhere, they have natural streams, rivers from where the villagers get water supply. They also have the government supply, some they get the water supply from Public Health Engineering (PHE) department. Also, the water supply is available by getting a connection from one house to the other. We can sometimes see the water resources in their land. The villagers use pipes and bamboos for water connections from one house to the other. Some they have the scarcity of water, but mostly we see the water remains on flow in the villages. They also get connections from one village to the other. Therefore, the water problem is not identified in the healers/ practitioner's house.

5.2.4 Cooking Fuel

In early days the ancestors used to cook food in firewood. There was no LPG gas nor the availability of other cooking facilities like stove, electric induction, etc. Even the people in urban areas used to cook food in coal. Gradually the changes have occurred in the living style of the people in the villages. The villagers started going out for working purpose and started educating their children. People started becoming aware of various aspects, for example, health, sanitation, new technologies like cell phones, TV, LPG gas, etc. They have started keeping and using LPG gas in substitute. At present they use both the LPG gas and firewood simultaneously for cooking. Mainly LPG gas is used during the arrival of guest in their houses and other emergencies. The LPG gas is not in regular use as the villagers do not have the facility of filling once it gets empty. For filling they must take the cylinder to markets which are very far that takes three to four hours to reach. The other difficulty is that they do not get the cylinder immediately when they take to refill. They have to go again after 10-15 days to get back their cylinder. In villages, the firewood is

also used for cooking the food of animals. They collect woods from the jungles, and surrounding areas of their land. Sometimes they buy from others in the village. Using coal is not common among the villagers. Even there is a scheme of receiving LPG gas, which falls under BPL categories. Almost all the healers' houses have the LPG gases and stoves for other use.

5.2.5 Electricity Facility

As per the healers and other villagers, there was no electricity facility in the villages of Sikkim 15 years back. They used an oil lamp when it gets dark in the evening. They used to prepare the lamp by pouring kerosene oil in bamboo or bottle and inserting cotton cloth leaving few inches outside the container, which needs to be lighted. They used to carry these lamps while walking from one place to the other during the night or any emergencies. Gradually people in the villages started generating solar lights from cow-dung and force of water. Earlier when there was no electricity in the villages, people used to cook and have food before it gets dark and used to go to bed early. Due to lack of electricity supply, the majority of the healers/practitioners and other villages did not have a TV in their houses for the entertainment of family. Only one or two houses used to have a black and white TV, which used to be run by acid battery. It took many years to get the electricity supply in the villages. Now every house has a supply of electricity. All the healers have electricity facilities in their houses. But due to load shedding, there will be fluctuation in some places. Still, some people use solar torch lights and solar lights at home when there is no electricity and in emergencies.

5.2.6 Cell Phones

The impact of modernization can be seen everywhere. Carrying a cell phone has become common for all. Before 10-12 years, we could hardly see people carrying cell phones in their hands. Now it has become the need for every individual. We can see both the younger and the older generation carrying various models of cell phones even though older people may not know about their operation. The older people mostly keep cell phones to dial and receive the calls. It was observed in the study area that all the healers/practitioners and villagers carry cell phones. The healers are using cell phones mainly to communicate with

others, especially their patients and relatives. The older healers do not know the various functions of cell phones use. They carry cell phones only for communication, whereas the younger healers who are educated know the various features of the cell phone. The old age healers use keypad mobile phones, and they have their own way of coding and saving contact details. Sometimes they were assisted by their children and grandchildren in saving the contact details in their phone. The young or the middle age healers who are educated and have some ideas and knowledge used android phones. They also kept themselves updated with various news and information through social media. The educated healers also take photos of the patient's treatment before and after treatment, X-ray reports, etc.

5.2.7 Vehicle

Transportation is a significant problem in the villages of Sikkim. There were no proper roadways to travel from one place to another. In communities, people mostly use public transport for travel. There are daily service vehicles, which are available only in morning time for different areas which will return by evening on the same day. There are no possibilities of getting continuous vehicle services for traveling. Majority of the healers/practitioners and other villagers use the vehicle for travel, which runs in the morning on daily basis. During emergencies, it is challenging to arrange a vehicle. In most of the villages, the construction of the road is incomplete, and due to narrow and inadequate roadways, it will be late to reach the place where people are traveling. During the rainy season, the connectivity of the roads gets disturbed due to heavy rainfall and landslide, which causes more problems to the villagers. Due to poor transportation, things are very costly to buy. Some of the healers/practitioner and villagers have their vehicle for travel and carrying goods. Poor transport is also observed in the study area during the visit to the healers where it was difficult to get the car and roads were very bad to travel.

5.2.8 Television Set

The healers/practitioners and villagers reported of not having television before 15 years. Their ancestors never watched television during their whole lifetime. There was no electricity in the villages therefore; they never bought a television in their houses. Even though there was no electricity in the villages, however few people managed to buy black

and white TV, which used to operate with acid battery. The nearby family members used to assemble for watching television if somebody had a TV in their house. Once the villagers got the supply of electricity, everyone in the villages started buying a TV. Initially, they purchased TV having Antenna where they need to turn the Antenna in different directions to get the signals. Now the choices of Led TV, discs with setup box has come, and people are using according to their preference. All the healers had a TV connected with TV disc in their houses. The healers do not regularly watch TV, but it was kept for their family members. The family members sit together and watch TV shows during their leisure time. Especially children in the family are sitting in front of the TV the whole day. The TV has brought changes in the thoughts of villagers. Villagers are now becoming more aware of health, education, sanitation, family planning, and other national and international news, etc.

5.2.9 Monthly Income

Healers do not earn by treating the patients in the villages. They do not consider healing treating patients in the village as the profession they do throughout their whole life. They believe that treating patients in the villages are serving their people in the community/villages who are unable to get the expensive treatment from the hospitals. They never demand a certain amount after treating the patients in the village. They accept whatever amount the patients give after getting treated from the healer. The healers not only treat the patients in the villages, but some of the healers hold government jobs, and many of them have their own business. They believe that their services and philanthropic gestures will be remembered by the patients, even if the healers are dead and gone. Healers who are working in the government sectors earn more than 10-15 thousand per month. Some healers worked in the forest department, horticulture department, electricity department, agriculture department, etc. The healer's income would be 1.5-2 lakhs per annum. Almost all the healers cultivate seasonal and organic vegetables and sell in the market. Some run shops and general stores. Few healers earn additional amount from the renters as their houses are given for the rent. There is also a healer who does floriculture, flower farming and sells the flowers in good amount. This is how the healers and the other villagers of Sikkim are earning to live their livelihood.

5.3 Conclusion

This chapter provided information about the demographic profile of the traditional health care practitioner. The detailed information of the healers from all the four districts of Sikkim has been captured during the visit. The information was gathered from both the healers/practitioner and family members. The above chapter explained about various demographic profiles of traditional healers like age, gender, caste, religion, marital status, educational qualification, occupation, availability of healers, and various other details of the healers. Majority of the healers were between the ages of 51 to 70 years. Among them, few have stopped practicing traditional healing due to old age and illnesses. There were other healers whose age is between 30-50 years, and they are treating the patients actively in the community. The old healers falls under 71-90 years. As the community is male dominant, most of the healers are male, and only two healers were found to be female from the east district.

The healers were found more from the upper caste which practices traditional healing in the community. Healers were identified from diverse ethnic communities like Chettris/Bhauns, Tamang, Rai, Gurung, Sherpa, Limbo, Lepcha and Bishwakarma. They are the followers of Buddhism, Hinduism, and Christianity. There is another sub-caste who follows Yumaism like Limboo/Subba. The marital status of the healers is married. One of them have married two times, and few of them were widowers. The healers do not have the education qualification. Very few have completed their 12th standard. Healers do not consider their healing practices as a profession. They provide treatment as a service to the people in the community. They practice healing the patients in their free times. Apart from healing, some healers hold government jobs in agriculture, horticulture, forest departments etc. Other healers do farming and run their business. The old age healers are retired from their government services.

There are traditional healers as well as faith-based healers in the community. The study mainly focuses on traditional healers who use medicinal plants, herbs, minerals, and animal products for treating the patients. During the visit, it was identified that almost all the traditional healers are available in all four districts of Sikkim. The availability of traditional healers is defined as per the number of castes living in the area. For example, in East

Sikkim, the mixed assimilation of caste and culture having the more number of healers. Therefore, the availability of traditional healers is more in numbers. There were a total of 20 healers, including male and female. Being male dominant, the numbers of male healers were more, and the female healers were only two. The other three districts do not have traditional female healers. In west Sikkim, 16 healers/practitioners were identified. North Sikkim has only three traditional healers/practitioners. It was determined and observed a smaller number of healers from the South district of Sikkim. It was reported of having one healers/practitioners in South Sikkim in the field area during the visit.

It was gathered not only the information of healer's demographic profile but also collected necessary information about the family and their assets. Many of their details were observed in the study area during the time of field visit. Their day to day life activities was observed. It was found that most of the Practitioners have concrete/ pakka houses. Only two practitioners had kaccha houses. Some of them have 3-4 storied buildings where they want to start a small home-based healing clinic. There were also houses which were under constructions. They also have a housing facility or house scheme passed by the state government. Some healers/practitioners have huge land holding capacity.

There were healers/practitioners having large farms and herbal gardens in their land. They cultivate seasonal crops and vegetables in their field. Sometimes they gave their property to the other person in the lease for a certain period and take the number of shares the product cultivates in the land. Other than that, it was interesting to know that all the healers/practitioners were having the livestock like a cow, goat, chicken/ hen, pig, horse, etc. in their houses. They do not have a problem in the water supply. They get fresh water from jungles connected with streams. They also have a water supply from PHE, and some of them are sharing the water connection from one house to the other. Few healers have water sources in their own land. They use firewood for cooking food in (Chula) traditional fireplace for cooking. They also have the availability of alternatives to cooking like LPG gas and stove. Some of them have taken the benefits of free supply of LPG gas from the state Government.

They all have electricity connection and sometimes use solar when they do not get power supply due to natural calamities and other emergencies. They have a television in their houses for having leisure times with the family. All the healers/practitioners carry a mobile phone to communicate with their patients, and their relatives. The old age healers used keypad phones. They only know how to receive and dial to others. They do not know the various functions of cell phones. However, on the other side, some healers are educated and not too old in the community. They use smart and android phones. They know all the functions of cell phones. Therefore, they must keep updated with various information of the state through social media.

Transportation is the major issue for the community people to travel from one place to the other. The roads are narrow and not constructed well in all the districts of Sikkim. During the rainy season, it is more difficult for the people to travel, as there is a chance of getting stuck in the middle of the way due to landslide and wash away of roads due to heavy rainfall and loses the connectivity of roads. The availability of vehicle is the other major problem among the people in the villages of Sikkim. Communities have daily service vehicles which go to different places and are available only in morning time before 10 am. Those vehicles will return in the evening. The problem was also identified during the visit to the study area where it was difficult to get a car, and most of the places the roads were in poor condition to travel.

At present, the villages of Sikkim have received electricity facilities. All the villagers, as well as the healers/practitioners, have the electrical connections. Due to the electricity facility, they have purchased various electrical items like TV, electric rice cooker, water boiler, washing machines, etc. People spend their leisure time watching TV. The healers also have a TV at their houses, and it is used by their family members, mostly their grandchildren. As we see the income of healers, it depends on their job and other areas of earnings like cultivation, farm, etc. Healers/ practitioners do not treat patients as a profession. It is a kind of services they provide to the community people in their free time.

They never demand and earn money after treating their patients. But they receive the cash if offered by the patient after getting healed from the healer's treatment. Healers who were

working in the government sectors like in the forest department, horticulture department, electricity department, agriculture department, etc. earned more than 10-15 thousand per month. Healers also make by cultivating seasonal and organic vegetables and by selling in the market. One of them have raised floriculture nurseries, and two of them have shops and do the business and few they have given their houses to renters. These are the various ways the healers earn money in different parts of Sikkim.

The next chapter deals with the diversity of traditional healing practices of Sikkim, genesis of healing, means of healing, learning practices, specialization, experience, availability and collection of medicine, herbal garden, shops in market, healers hospital and clinics, modification in healing practices, motivation of learning, record and documentation, dissemination of healing knowledge and conclusion.

Chapter 6

Diversity of Traditional Healing Practices in Sikkim

6.1 Background

Sikkim is a small state where people live in a diverse community. Every community has its own culture and traditions. People still believe in myths or supernatural causes. The healing practices in Sikkim are influenced by the Tibetan pharmacopoeia and Ayurvedic practices. In Sikkim, there are three major ethnic communities-Nepalis, Bhutias and Lepchas. Every community has its own healing practices to attend community needs. Individuals, families and communities believe in benevolent and malevolent spirits of the ancestors. They consider that the causes of illnesses are not only by the natural or biological imbalances, but they equally give importance to the supernatural causes of illness. They worship mountains, streams, land, etc. and conduct rituals for the well-being of the individuals, family and community. Their perception is that, if they do not perform the rituals, there would be health problems in the family, loss of economic prosperity, drought and natural calamities would occur in the community.

The healing practices are based on their experiences and practical knowledge, which is passed down from their ancestors. The healers do not have any institutional qualification and do not have any educational certificates. They neither know human anatomy and physiology in biomedical terms, but their practices depend on 'trial and error' methods and experimentation on animals and self. Their practices are learnt and carried out from their ancestors.

In the context of Sikkim, the health services system has come to an existence from the 1880s. Before that, the healing practices were connected with nature and the ecosystem. The communities were in union with nature and the ecosystem. Those communities were the protectors and conservators of nature and ecosystem. Still, these communities carry this legacy of protecting their mother nature. For instance, such as the Lepcha community,

every activity surrounds with nature and the ecosystem. They are nature worshippers. The communities solely depend upon nature for food, medicine and livelihood.

The healing practices are carried out by the range of traditional healers in Sikkim such as *dhami, jhakris, fadangma, yaba, baidanghi, bijwa, mongpa, gubaju, jogi, pow, bongthing, lama, Pandit*[1] (faith-based healer), herbalist, snake and insect bite healers, dog bite healers, jaundice healers, bonesetter, traditional birth attendant, etc. The healing practices are widely practised in Sikkim by this contingent of traditional healers. According to (elderly village head);

> *"those days, there was only one doctor in Sikkim, whose name was Dr. Kaji who used to practice hospital ko dabai (biomedicine). Later, the king brought the other doctor known as Dr. Giri whose sons have now become doctors and doing practices in Gangtok, Sikkim. Likewise, gradually, the patients started going to the hospital-doctors. Baidhyas have been there for many centuries. Now many of the famous Baidhyas have died, and only a few are alive"* (Elderly Village Head, 70 years).

The presence of traditional healer/practitioners and their healing practices are not limited only to the rural areas, but it was observed that they have a strong presence in the urban periphery of Gangtok the capital of Sikkim.

The healers have acquired this knowledge and skills on a transitional basis from their forefathers, and some of them learnt from their traditional masters or gurus. Mainly, traditional healing practices are done for the purpose of helping people in the community. The moral ethics of the healing practices is a social service and healthcare services for the community-people. Every healer has their understanding and way of diagnosing the patients. Some healers do physical assessment of the patients by touching and pulse reading, and some ask the symptoms and identify the signs of illness by diagnosing the patients.

There are faith-based healers, who diagnose their patients by chanting mantras on uncooked rice, grass, water, flowers, leaves etc. After diagnosing the patients, the treatment process continues as per the requirement of the patients. In critical situations, the patient is referred to hospital for further treatment by providing first aid. The Government of Sikkim

[1] These are the faith healers of Sikkim and Darjeeling

provided and organised health care facilities such as health insurance, free medicines and drugs, and free medical camps for illness treatment. Amidst such advancements in biomedicine, somewhere in the core of community people, the seeking of traditional healers and their treatment is highly appreciated. This is why the essence of a traditional healing practices still stands solid in the communities as it provides treatment to the poor and needy.

6.2 Genesis of Healing Practices in Sikkim

The people have different views regarding the existence of traditional healing practices in the various communities of Sikkim. There is no history of the genesis of healing practices in Sikkim. The traditional healing practices has come along with human civilisation. People started diagnosing various diseases in the community, and to contain such illnesses the traditional healing practices has come to its existence. Gradually people started migrating from one place to another and at the same time the various healing practices started to assimilate in their healing culture and traditions.

In early days, the traditional healing methods and practices were applied to animals. Those days the animals were taken to the forest for grazing and catering. During grazing, the animal may break their legs and shepherds used to make the bandage of bamboo and used to do the bandaging by applying traditional medicines prepared from the medicinal plants such as *Buro okhati, harchur, chirata, Chipley lahara,* and *panch amli*[2]. It used to take 22-25 days to get healed and in recovery of fractured bones in animals. Later, such healing practices were applied to humans by the shepherds. According to Mani, traditional healing practices have been transferred from Nepal, since their ancestors have come from Nepal and settled in Sikkim. Gradually the healing practices have spread all over the Sikkim. But the old healer said;

> *" I cannot define it because the healing methods can be inborn where he or she will be sent with blessings of healing knowledge in the community. In the local language, the learning of healing practices is known as Pairashi (acquiring knowledge by birth)"* (Healer, 70 years, West Sikkim).

[2] These are the local medicinal plants found in Sikkim and Darjeeling

In the Indian medical system, there are different types of healing methods, and people practice them differently. Principal Scientist shared the historical aspects of transformation of healing knowledge and practices, telling that;

> *"there was political erosion in the healing practices in Sikkim. There are socio-political issues that occurred when the healing practices came into existence. The people of Darjeeling and Sikkim could not tell the history of the origin of healing practices. Initially, the knowledge was intact, but due to socio-political influences, it had gone down. There was no single tribal community who were without the knowledge of healing practices. Now every community has changed because of the process of social change.*
>
> *The process of acculturation where the interaction between other communities led to the diffusion of knowledge due to which the tribal communities lost their identity. The healing practices were the continuation of only self and social appreciations. Knowledge of healing practices has not been carried from generation to generation. People used to think that healing practices as sole duty and not of transferring their knowledge. At present people realised the importance of traditional knowledge and practices and the important role of traditional healers in the community"* (Basant, SMPB).

He further says that;

> *It is not only the communities were lacking in their knowledge and ideas, but during the late 90s, the state was moving towards its development in science and technology. During those days, people had less understanding about the complexity regarding traditional knowledge and other fields of progress in education, health, infrastructure, research and development. But comparing to other countries such as the West, European and some of the Asian countries such as Japan were very much advance in all sectors* (Principal Scientist, SMPB).

In this context of traditional healing knowledge, a Program Manager of the organisation said,

> *"knowledge is in the mind of the people, so when there are people, there is knowledge".*

He further added that;

> *"if someone goes to another place, he or she can utilise his/her knowledge and could survive in their particular place. They also believe that their mind, knowledge and experiences flow with the movement of the body of a person. Therefore, the mind carries knowledge. It could be possible only with a human being as they have the power of reasoning and apply it in practice. It could not mean that the healing*

system has come directly to its existence. There are different types of communities where they follow different types of healing practices; that is how there is an existence of healing tradition.

To know the real presence of the healing practices, we need to go through the myths, legends, genesis, history then only we can understand how the healing system has come to its existence. In his opinion, the therapeutic method is only known as traditional healing system because there are many divisions in the ethnic communities in Sikkim; each community practices their healing system differently. The Guru Shishya relationship could be from both Nepali, Lepcha, Bhutia, Limbo communities, etc. For example, the Guru can be a Nepali, and Shishya can be from the Lepcha community" (Krishna, TMI).

There is no vernacular name for the traditional healing practices of Sikkim. The classification of healing practices into two types one is faith-based healing (lit. *Phuk phak*) and the other one is folk, or traditional healing is called (lit. *Jari butti), (Pahaday Dabai)* or Baidhya healing practices. Most of the healers reported that the healing practices of Sikkim be called Baidhya system of healing practices. In Sikkim, the healers can be categorized in four streams Faith Healers, Herbalists, Bonesetters and Traditional Birth Attendant or elderly women in childbirth care.

6.3 Means of Healing

There are three types of the media which are used by the traditional healers in the healing process and are: 1) mantras, 2) mantras and medicine and 3) medicine (medicinal plants and herbs). The research mainly focused on traditional healers namely traditional bonesetters and herbalists. Most of the healers used only medicine in treating the patient in the study area for bone fractures and other health problems. Some healers use the mantra and medicine for treating the patients and very few use only mantras for the treatment. The healers using mantra and medicine first chant mantras and provide treatment to the patients. The healer who practices only mantras will first remember their guru, ancestors and God (*dawta*), and then see *jokhana* mantras to cure the patients. There are majority of the healers who use only herbal medicines and animal products in treating the patients. The study mainly focussed on healers who use pure medicines. The researcher has not directly studied about faith-based healers, but their practices help to recognize how the patients and community perceive various illnesses.

6.4 Learning of Healing Practices

The learning of traditional healing practices differs from one healer to another healer. The healing practices also reflect about their ethnic communities and geographical location. The learning methods of healing practices pass through different media such as self-experiment and learning, learning from guru *thapnu* (lit. guru-shishya relationship), family, books, dreams, and many other ways of learning. Healing practices and the healers existed in the community from the time of community's social existence and civilisational change. The healers, before three generations, were not taught by their family members and others in the community. They used to believe that teaching to others in the family and community members may lose the effect of medicinal plants/medicine/therapeutic skills while treating the patients. In the early days, if the children in the family or community want to learn healing practices, they used to learn by hiding themselves from the healers while learning. In the section below, the researcher describes the process of learning of healing practices that took place among the people in Sikkim.

6.4.1 *Pairashi* (by Birth)

There are various ways of learning healing practices among the traditional healers in the study area. Many of them have explained about their learning and journey of healing practices in the community. Healer of 62 years age said;

> *" I work as a farmer. I started practicing the traditional healing practice from the year 1982. I did not learn the practices from others; neither got it through my dreams. My grandfather used to do traditional healing practices in the family but did not have the opportunity to learn from him as he was already dead when I was born. After the death of my grandfather, nobody in the family practiced healing methods. Even my father did not carry out the healing techniques in the family after the death of my grandfather. After many years when I grew up, I started healing practices in my own house when the family members were not getting healed from the hospital treatment during the time of illnesses. Many times, we took medicines for health problems from the hospitals, which used to heal only for few days. Later, we used to face the same health problems repeatedly. Therefore, I started preparing my own medicines and started giving treatment to my family members during the time of illnesses. Gradually I started providing treatment to the community people too"* (Santabir 62 years, East Sikkim).

Before interviewing the healer, his treatment was witnessed by one of the Christian pastor, who is the principal of the school in the same locality. The pastor was treated for the kidney

and liver problem. The healer is renowned for his successful treatment in this area. Through this healer's case we can identified that the healer as a family person seeking treatment from the hospital for the health problems in his family. Later, the healer did not get the satisfactory results from the hospital. Then he tried his own medicine for the health problem in the family.

6.4.2 Dreams

There are healers who have faith and believe in their learning of healing practices through dreams. Healer Lalit said,

> *"I started healing practices when I was 14 years old, as per the Nepali calendar. I did not learn from anyone. The practices which I have acquired, were through my dreams. I was guided by the angels who taught me the medicinal plants and their treatment for the bone fracture patients. Nowadays, I did not see an angel in my dreams, which might be because of my old age. During the initial time, it was not possible to write and keep, later at the age of 30-35, I started recording all the details. One will forget the medicinal plants and its uses if it is not written at the time of his/her dream. Therefore, I used to keep a pencil and notebook under my pillow before going to bed. I used to find the same medicinal plants, and the treatment will be exactly what was explained in my dreams. The next early morning after getting the vision of medical plants in my dream, I used to go to the jungle to collect plants which were told to me by the angel. I used to dream of places where I can get the medicinal plants* (Lalit, 83 years East Sikkim).

The healer then said 'now you (researcher) could get the dream since you (researcher) are in the age of learning, before going to bed you (researcher) have to think about the *bimar* (disease) and for that which medicinal plants are useful for the treatment and from where he can collect. It will be shown to you in your dream, but you need to have faith and interest. The knowledge is the blessings and the gift from God, and he (God) will let you know early'.

It was observed that, the healers are not comfortable to share the knowledge about their practices and skills to others. The healer has learnt a few skills from his father and rest he acquired from his dreams. The healer said;

> *"In my dream I was advised and guided how to do the treatment and heal patients with fractures in bones. The practices which I have received through the dream would not be valid if I teach it to the next person. The medicine will not work on*

the patients getting the treatment. My father used to tell me, if I see something regarding the healing in my dreams not to sleep back. Otherwise, it will be forgotten and cannot practice. My father used to do the same. My father used to note it down whenever he gets the idea in his dreams, but it was difficult for me to learn because I never understands my father's writing. The very surprising thing is that , my father also used to do the prophecy. He had even told about his time of death, which happened on his given time" (Kundan 68 years, East Sikkim).

The other healer said he learned through his dream. The methods are different than the above healer said. In the beginning, he was taught the idea regarding the treatment of patients with a combination of various medicinal plants. The old healer said;

"I have got the knowledge in the first time in my dream, I practice healing on the rooster, the bird. I have treated the leg of the rooster. Then I treated the broken leg of a goat. After that, I successfully treated the fractured leg of a cow. Lastly, I managed the leg of a horse. After treating the animal, I gained the confidence to start the treatment on humans. Thus, I started treating the fractured and broken bone cases of patients in the community. Now I have become too old to treat the patients, but in significant cases, if I am called for the treatment of patients, I am always ready to go and treat the patients" (Palzor, 90 years West Sikkim).

The son of a healer also said,

"I have never learned the healing practices from my father nor other healers in the village. I learned it through my dream. I was advised in my dream about the treatment of my patients with a bone fracture" (Palzor's son).

The above case depicts that both father and son received the knowledge of healing practices through their dreams for the treatment of bone fracture. The old healer tried his skills on animal and later gaining the confidence, he tried on humans. Still at the old age, the healer have the zeal to serve the community.

6.4.3 Learnt from Book (Old Documents)

Healers during early days were not keeping the records of their treatment. Very few used to keep the records after treating the patients. It was identified the healer from east Sikkim who has learned to heal from the book and family. The healer said;

"I have seen the book which my father used to read and treat the patients. The book has big letters written with green ink extract from the beans (vegetables). Later, the book was stolen. In that book, details of healing practices were documented such as medicinal plants and herbs, preparation of medicine, mantras, etc. I have

learned both mantra and medicine from that book, and my father. Now I have forgotten those mantras because of not practicing, and the people have started going to the hospital for their treatment. Even though I have forgotten the mantras, but I have not forgotten the usage of medicinal plants. I will never lose hope to treat the patients in emergencies" (Kalyan, 65 years, East Sikkim).

6.4.4 Learnt from Family

Majority of the healers have somehow managed to learn from their fathers, grandfathers and other relatives in the family. The healer said, *"My grandfather and father used to do the traditional healing practice. I am doing the traditional healing practice for twelve years after the death of my father. I learned the healing practices from my father"* (Prakash, 58 years, East Sikkim). *"I have learned healing practices from my grandfather and father"* (Dilip, 65 years West Sikkim). Arun Kumar, learned the healing practices from his uncle and older person in the community. His uncle used to practice and provide treatment in the community (70 years, West Sikkim).

The healer perceive that his father is his inspiration for learning the traditional healing practices. Healer learnt the skills from his father in the family. Healer said;

> *"My father was the inspiration for my learning and practicing traditional healing methods. My father used to heal the patients by blowing the air over the affected area if the part of the bone is broken or fractured. My father was a traditional healer who used to go around villages to provide treatment to his patients. During my father's time, I used to visit the patient's house as a helper of my father. I not only walked around with my father but learned about his treatment methods and gained knowledge about the healing. The healer is 64 years old, and has started traditional healing practices from 1973. He said he started conventional healing practices from treating the broken leg of sheep. The healer said after treating the sheep later, he also treated the cow. This is how he got inspired and built confidence in healing the patients in the community. Now, he is interested in teaching the younger generation. He has started teaching a few healing practices to his son"* (Ram Kumar, 48 years, West Sikkim).

Joel narrating the story that how he learned the healing practices for the treatment of epilepsy.

> *"My father used to tell stories about the healing practices and medicine for treatment of Epilepsy. My father had learned from grandfather and I had learned from my father by sitting beside him during the treatment and by seeing the medicinal plants. My father used to give treatment till his death. It was just a month*

after my father died. The patient again started to come to my house for the treatment of epilepsy, so I felt pity for patients sending without any treatment. I have seen my father giving treatment to the patients. From that point of time I realised that I have to give services to the community people based on my healing knowledge.

I always tried to ask my father about the medicine which he use, he never told me. But my mother knew more details about the medicinal plants that are used by my father for the treatment. Sometimes my mother used to say few medicinal plants to me.

One day my father was lying on a bed, I went to the jungle and brought the root of the medicinal plants. I asked, Father! Whether the root is same what is being used for the treatment of epilepsy? Father said, yes and told me to keep quite. We should not call the name of the plant. The next day my father died, but I have a great doubt whether the root is same or not for the treatment of epilepsy. Which father used to keep tying over the abdomen. After that, I applied the same medicine and procedure, what my father used to do. I used the same root believing that the root is used for the treatment. Now since my father died, I have been treating the epilepsy patient in the community" (Joel, 55 years, West Sikkim).

The above narratives portrays the inheritance of healing practices to treat the epileptic patients in the community. The family of healer's practices the treatment methods since 3rd generation.

Nanda Said:

"My father nearly worked for 30 years in the field of traditional healing practices. My grandfather had also done the traditional healing practices for almost 30-40 years. After the death of my grandfather, the healing practices or traditions were carried out by my father. He had practiced, till he died at the age of 60, and then later, after my father's death the healing practices being carried out by me in the small village of West Sikkim. I started this profession when I was 18 years old. Before the death of my father, I used to assist him, when patients come to our home for the treatment related with bone-fracture, muscle sprain, gastritis, piles and other health problems. Later after the death of my father, patient continue to come for the treatment and people were having sure about that I must have learned healing practices from my father. They have also seen me assisting my father. I was compelled to do the healing practices. Even after telling the patients that I will not be getting time for healing practices because of my floriculture nurseries business. But because of people's belief in my treatment, I did not feel good to send them without providing them services (Sanchaman, 44 years, West Sikkim).

The above-mentioned case of Sanchaman shows that how the traditional healing practices has been carried out from generation to generation. It will help us to understand about the practices that is being taken up by the father and then later it is transferred to the son. The

above scenario also proves about the number of cases that is being treated by the healers in the small community. Because of the expectations from the community people, the son is also compelled to do the heling practices even though he has the interest in some other profession.

6.4.5 Learnt from Guru and Self-Cure in the Community

It was identified in the study area about the healers who have started their healing practices through self-cure. The healer explained about the beginning of his healing practices in the community. He started healing practices from the time when he joined duty in forest department in West Sikkim, and there was a guru who used to teach him. He used to work in the department as a forest guard (*Chaprasi*). He said;

> *"When I had broken my one hand, I treated it by myself and managed to get complete healing. I was successful in my treatment methods, and people in the community were surprised by my self- treatment. After that, I started treating other people in the community. Once there was a patient whose leg was broken, the community people were informed about the need to take the patient to Algarah, one of the places of Kalimpong district in West Bengal, for the treatment. Family members were worried about their patient and requested me for treating the patient. After taking consent from the family, I started to treat the patient. First I went around the nearby jungle to collect medicinal plants for treating the patient. After my therapy, the patient got healed. The boy now takes parts in sports and plays football without any problem"* (Man Bahadur, 88 years, East Sikkim).

The researcher was told by the healer, that at present there is an inadequate of medicinal plants in the surrounding are. The healer was very old and had stopped practicing the traditional healing.

6.4.6 Local Healers and Friends

A 73 years old healer form east Sikkim said,

> *"In my family, there was no one to practice traditional healing. I have learned a few things from the old traditional healers' in the community. Those days healers and local herbalists used to visit house to house for selling their medicine. They used to bring medicine from other parts of Sikkim and from outside. I have also learned a little from my friends. After learning from them gradually, I started healing practices"* (Kamal, 73 years, East Sikkim).

The medicinal man and the herbalist come in the villages to sell the medicine such as plant properties and mineral products. The researcher also met many of these herbalists and the medicinal men who have come from Sikkim, Darjeeling, Siliguri and Nepal to sell their products. Another healer said;

> *"I started traditional healing at the age of 18 years. There was nobody to practice healing in my family. There were older people in the community who were practicing, and I have learned from them. I worked for a few years in primary school as a teacher. Later, I left my teaching and along with the household works, I have started treating patients from different parts of Sikkim as well as from outside Sikkim"* (Raj Kumar, 60 years, East Sikkim).

The healer from one of the small villages from west Sikkim shared his learning experience of healing;

> *"There was no one in my family who used to do the healing practices. I have learned the healing practices from one of the healers in my village. I started the healing practices at the age of 25 years. There was an old man who used to treat the patients in the village. The old man used to take me to the forest to collect the medicines, but he never taught me about the name of the medicinal plants and herbs and healing practices. He never showed the medicinal plants from where he collected. Later, I used to hide and see the man collecting the medicinal plants. I was interested and inspired by the dedication of the old man in treating the patient in the villages. This way I started learning about the medicinal plants and healing practices"* (Pema, 47 years, West Sikkim).

6.4.7 Training and Workshop

There are healers who have learned healing practices through training and workshop conducted in Sikkim and outside Sikkim. Budhiman expressed;

> *"I got a call from one of the people from Gazing West Sikkim. He asked me whether I am willing to learn healing practices or not. The person knew that I (healer) do the treatment by using medicinal plants. I went to Gangtok for the training and workshop, the training was held for three days conducted by the forest department. After the training, I have received the certificate. Later, I was called many times to attend the training and workshop. In training, they taught me about the medicine, collection of medicine, planting of medicines and many other rules and regulations. This is how I have gained and updated more knowledge and skills in my healing practices"* (75 years, West Sikkim).

The other healer had learned more on traditional practices after attending various workshops in Sikkim, Assam and Bangalore. Healer said;

> *"since the last 2-3 years, I am practicing and preparing medicine in the community. I have passed the examination conducted by FRLHT, Bangalore, which was on identifying medicinal plants, local name, usage, the botanical name for the practice. After passing the exam, I have built more confidence in making medicine and treating the patient in the community"* (Shaker, 55 years, East Sikkim).

There are other healers namely, Buddhiman, Kamal, Indra, Mani, Sukbir and many others who have updated their skills and practice of traditional healing by attending various training and workshops in Sikkim as well as outside Sikkim.

6.4.8 Learnt from Institution

There are two healers who have learned the healing practices from pharmacy and healer's hospital (Baidyashala) Kalimpong. Bhakta, has learnt about herbal medicine from Prem Pharmacy, Mehrauli, Delhi in the year 1987 (59 years, South Sikkim). Later the traditional healing for bone-related cases at his place, Sikkim. He also treats other cases in the community. He is both the herbalist and the bonesetter/Baidhya. He sells medicine in Jorthang Hatt bazar (market). He does the work of Purohit or Pandit (Hindu priest) also. He gets invitations for attending workshops and training, but many times he could not attain due to unavailability of time and clashes because of rituals and pujas.

Birkha has his own clinic/hospital in Saunay, Singtam. He has learnt about the traditional bone setting practices from one of the bone setting hospitals from Kalimpong, West Bengal (Healer 43, Years East Sikkim). In Kalimpong bone setting hospital is functioning from the last three generations. Hospital has the facilities of X-ray, assessment clinic and a single room for patients. He was an assistant at the beginning during his training period. He used to observe the treatment from the senior Baidhyas. After his training period, he joined his uncle and started the healing practices. Afterwards, when his uncle died, he took charge of the hospital.

6.4.9 Motivation for Learning Healing Skills

The healer narrates his journey of learning the healing practices on his own experimental basis.

> *"My grandfather was a traditional healing practitioner. My father was a healer, too, but the healing practices of my father were completely different from my*

grandfather. My grandfather used to treat the broken bones of an animal. I used to hide and watch him treating the fracture and broken bones of an animal at home. If grandfather sees me watching him during treatment, he used to scold and send me away. Whenever I go near to him during treatment, he used to send me away telling that "this is not good for young to be near and see the practices, this is a poor man's work". Therefore, I used to hide from him while treating the animal. Before starting the treatment, my grandfather used to boil the medicinal plants and herbs, then used to make a paste and apply over the affected area of the animal. After one week of treatment, the animal used to get healed and starts walking. Later, when the animal is killed during festivals, I used to check the part where treatment was done. I used to find the area to be completely healed.

I was never taught by anyone neither my father nor grandfather. I was a child and very much interested to watch my grandfather's work. There was a friend of mine of the same age; he also used to treat cuts and a bone fracture of body parts who never allowed others to see and learn. So, I was not successful in learning from my grandfather and friend. I used to go to the Himalayas with my friend and grandfather, but no one taught me about medicine. Gradually, I started practising by myself and watching their practices by hiding from them. I used to ask about the right time of collecting medicinal plants. They used to start going forest and travel to the Himalayas from March or April and come back by June, July or August. Initially, I started learning one or two medicinal plants and its usage and sometimes used to ask my friend.

First time I treated the broken hand of the patient. I treat by applying the paste of medicinal plants and didn't give any oral medicine. Later I started the actual treatment by treating the dog. Once I broke the leg of the dog of my relatives and then gave the treatment. I have made the paste of the medicinal plants and had done the bandaging on the dog's leg. The dog started showing the effectiveness of treatment after a week of treatment. The dog has also eaten the paste which was applied on his leg. The dog healed within 13 days. I was sure and believed that the treatment provided to the dog would help to treat humans. After a few days of treating the dog, one man in the village broke his hand. The family members were planning to take the patient to the healer who was in another place, which was quite far. I reached to the patient's house and told the family that I will provide treatment to the patient at home. Everyone was in doubt and were making sure whether I will be able to heal the patient at home or not. After taking the consent from the family, I prepared the paste of the medicinal plants and then applied over the affected area by doing the proper alignment and put the bandage by using bamboo.

Since it was the first time, the treatment was given without the x-ray report. The patient was healed after one month of treatment. With gratitude, the patient and the family member gave him local hen, biscuits, sweets and juice. After providing successful treatment gradually, one or two patients started coming to me for the treatment. Later, I started getting complicated cases for the treatment and started asking them to do the x-ray before treatment. I started providing treatment by assessing the severity of the fracture and broken bones in the x-ray report. This

made me more competent and easier to provide treatment to the patients. X-ray report is very much helpful in identifying the broken area and to treat the cases correctly. This is how I was motivated to start traditional healing practices in the community" (Healer Ram, 68 Years, West Sikkim).

6.4.10 An Anonymous Source of the Letter (mantra)

The healer's case is different than the other healers in Sikkim. The healer has learned healing practices to heal the snake bite patients through his dream and mantra which he has received in the year 1974, at the age of 24 years. Those days healer was staying in Assam with his family. Somnath revealed his learning of healing practices;

"One day I have received a letter in my name. My name was written on the cover of the envelope, but the name of the sender was not written. When I opened the letter, it was full of mantras written in Sanskrit. I was asked to learn those mantras and chant them 108 times when there is a full moon night. I was instructed to put the letter in the river after learning the mantras. After reading the letter, I waited for the full moon night, which took two to three months to happen. During the time of the full moon, I asked my mother to wipe the place with cow-dung where I can sit and chant mantras. I followed everything as per the instructions given to me in the letter. After that, I was advised to test the mantras on the patient, whether it works or not on the patient. One day I asked my neighbor, who was elder to me to bring snake bite or dog bite patients, if he finds anyone in the village. The man was surprised and made fun of me, and later he said ok. "I was excited and waited eagerly to treat the patients. I was also excited to know whether mantra is real or not. I was thrilled to put my learning into practice and want to know the result of what I have learnt through the letter and have followed every advice written in that letter.

After waiting for two months, I finally got the case of a dog bite. The patient was brought to me by the man whom I had asked before two months. I saw the patient having severe pain, and the dog had bit almost every part of her body. I asked the woman to tell clearly whether she has the excruciating pain or not. After that, I prepared 7 round balls from rice flour. I started chanting mantras by lifting each ball and placing my hand to head, then chest, stomach, umbilicus and then threw the ball in 7 directions. I also told the patient about the duration of healing, which takes one hour. After chanting mantras for 25 to 30 minutes, I asked the patient/woman whether she still has burning sensation or not. The woman replied of having no pain and feeling of burning sensation is over. Then I chanted for another thirty minutes and sent the patient to the doctor telling her that the poison of the dog is removed from the body and she can go to the hospital to get protection from injection of tetanus" (Somnath, 67 years, West Sikkim).

6.4.11 Incident, Monk Medicine, Searching for Medicine

The healer started telling the incident which has motivated him in doing the traditional healing practices. He said,

> *"When I was 7-8 years of age, I went for fishing with my father in the evening around 6-8 pm. While fishing, I fell into a pit of 50 ft and was unable to breathe at that time. My father didn't know about my fall as he was at far away distance. After a few minutes, I got up and went home. I reached home by 9 pm. I ate and went to bed. In the morning, when I opened my eyes, I was unable to wake up. I called my grandmother and told her about the incident of my fall. Immediately she prepared home remedies and gave me to drink. The drink was prepared with a mixture of harchur (medicinal herbs), eggs, honey, milk, etc. My condition remained the same, and I was not able to get up from my bed. My grandmother was a businesswoman, and she was knowing and having a connection with many people from different parts of Sikkim.*
>
> *There was a monk from Nepal who used to sell herbal medicines at that time. One day the monk reached our home and asked grandmother about my condition, which he was informed earlier by my grandmother. He assessed me and told me nothing to worry as there is no sign of bone fracture. He took out some herbal medicines and asked my grandmother to crush it and give it to me. After taking three days of medicine, I felt better and was able to get up from my bed. After 15 days, the monk visited my house and asked grandmother about me, but I was not available at home. I had gone to play football.*
>
> *The monk, who was herbal man again came to my house after many years when I was 16-17 years of age, and I was studying in 9th standard. I was curious to know about the medicine which he had used for my treatment before nine years. He said if I am interested to know about the medicine, then I must come along with him to the Himalayas to collect the medicine. He also informed about August when the medicine is likely to be found and collected. I was very much eager to know those medicinal plants and was ready to go to the Himalayas with him. He came at the end of July and I went along with him. I went to his house and stayed for one day, and the next day, we started our journey to the Himalayas to collect the medicine. He was so kind and showed all the medicinal plants that were used for my treatment. He also showed me many other medicinal plants such as white and black Bikuma, Jansing, panch aumli, kurki*[3]*, and many other medicinal plants and herbs. He also explained about the usage of various medicinal plants. I was influenced and motivated by his passion for healing. After coming back home, I started the healing practices. The first time I tried on the hen, and gradually started treating community people"* (Rakesh, 53 years, East Sikkim).

[3] Local name of medicinal plants found in cold and mountainous places of Lachen and Lachung of North Sikkim and Darjeeling

6.5 Specialisation of Healers

There are healers, who are specialised and have expertise in treating patients in the community. Majority of the specialised healers were found to be bone setters. They are specialised in treating other illnesses too. These Bonesetters are the herbalists who are expert in treating bone-related cases. On the other hand, they treat other cases in the community. Sometimes the medicines used for the bone-related cases and other illnesses would be the same. They treat major cases such as gout, piles, stone, asthma, hypertension etc. and minor cases such as gastritis, cough and cold, fever, abdominal pain, scabies etc. They treat bone-related cases as well as other illness as they want to have expertise in other areas by experiment, practice and experience. More than 75 per-cent of the healers are practicing traditional bone setting skills in Sikkim. These healers are expert bonesetters and herbalists. Most of the community people prefer to get initial treatment from the bonesetters in case of fracture and broken bones. If patients did not get heal or get satisfaction in the hospital, patients and community seek the treatment from the traditional healers. Healers do not demand the money for treatment but take the charges of medicines which have been bought and used for the treatment. Healers are respected, and their services have been recognised by the community people. There are other faith-based healers in the community who treats bone related cases and other cases (snake bite, jaundice) by chanting mantras. They do not use the medicine. There is a documentation of having more than 500 faith-based healers in the community. They deal with the psycho-social and supernatural causes. There are the other healers who are expert in treating epilepsy and some treat eye-related problems.

There are two to five traditional healers in every community. They provide treatment to all kinds of patients. The healer's specialisation of certain illnesses are sometimes due to their interest, and it may be due to their elders practising those cases which have passed down to the present healers. There are healers, who know the treatment of several illnesses, but due to lack of time and their job, they have continued to treat only a category of disease which later made them the specialist/expert in that disease treatment, however, they nonetheless provide treatment to all kinds of patients who come to them for the treatment. Lalit said;

> *"I do the procedures for fracture cases, body pain, toothache, eye infection, and ear infection, etc. Usually, I do not give treatment to patients who have a habit of consuming alcohol"* (Healer 83 years, East Sikkim*).*

Pema said, *"I mainly treat the patients with fractures and broken bones. I do treatment for both humans and the animals. Whenever the animals get fractures at home, I only treat them instead of taking them to the animal husbandry"* (47 years, West Sikkim). Santabir, does the treatment of fractures and broken bones. He also treats kidney and liver problem patients and other cases such as tooth pain, gastritis, piles, jaundice, etc. (62, east Sikkim). Birkha says, *"I used to treat bone-related instances, and if there is a need to admit the patients, I admit the patient at my small clinic by taking the consent from the patient's family"* (43 years, East Sikkim). The Pangthang healer treats the cases of joint pain, fracture-cases and broken bones. The healer is an ethno-veterinarian. He treats both animal and human bone fractures. First, he started healing practices on animals and seeing the efficacy of treatment. Later he tried hands over human bone fractures (Prakash, 58 years East Sikkim).

The old healer said that, *" I treat the bone-related cases only. I do not treat other cases even if I know"* (Bal Kumar, 80 years, West Sikkim). The healer said he treats the cases such as insect bites, fracture cases, gastritis, sugar, ulcer, jaundice, gout, etc. (Sukbir, 73 years East Sikkim). I mainly do the treatment of bone cases. Apart from that, I treat patients having food poisoning and piles (Mani 38, East Sikkim). Tirtha treats a snake bite, insect bite (dhokrey bijeko), Nas/kappat, tonsils, fractures and broken bones where he uses the medicinal plants, singeto and Chipley lahara (crippling slippery plants) (Tirtha, 68 years, East Sikkim). Somnath, specialized in treating dog bite and snake bite patients in the community, said that he does not give any form of medicine to the patients. He treats the patients by chanting mantras, which he learnt through his dream. He told till date by God's grace he has been able to provide satisfactory treatment to his patients. He uses the only mantra and sees the *jokhana*. When patients come to him, the healer will subside the pain of the patients by chanting mantras and send them to the hospital to get the vaccinations. The healer has more than fifty years of experience in this practice. (Somnath, 67, West Sikkim). Pemba said, he treats mostly the bone-related cases, but sometimes he also treats a snake bite, food poisoning, etc. (68, north Sikkim).

The healer from Daramdin, West Sikkim, shared;

> *"I do the treatment of epilepsy who has never fall in the fire and the water during the attack of epilepsy. In my personal opinion and experience that the person may get mainly it is a hereditary. If the family member has a history of epilepsy, it will transfer to the coming generation in the family. The second cause might be due to the neurological problem. People believed that during night time Akhey Ban (solar Eclipses), it is the night when it becomes very bright and when people get contact with that light the person will get epilepsy. Therefore the people in the village even do not put or keep their clothes outside during night time"* (Joel, 55 years, West Sikkim).

6.6 Experience of Healing Practices

All the healers have their own experiences in traditional healing practices. Their everyday methods of treating the patients in the community helped them to gain confidence in healing practices and become more experienced in providing better health care to the community people. Their experiences in healing practices also depend on their age at which they have started learning and treating the patients of the community. There are healers who have learnt at the early age of childhood from their fathers, grandfathers, gurus and few through their dreams. Those healers are now at the age of 50s and 90s. Therefore, they have years of good experiences in traditional healing practices. There are healers who have started learning in their middle ages and are having less experience in traditional healing practices in the community.

It was found that the majority (twenty-five) of the healers have been practising traditional healing for over forty years. They are the older healers, age between 60-90 years, who have been practising for a long period without any changes in their healing practices. There are also ten to fifteen healers practising healing from ten to forty years. They are of the age group 40-60 years. Only one healer was found practising from the last three years.

It was also found that healers were practising since three generations. First generation healers had learnt from their neighbors, friends and the elder persons in the community. They have also learnt through their dreams. Some of them have learnt by attending workshops and training. Even third generation healers of the families still practice in confidential and intact way. They still follow their ethics of not preferring to teach directly other members of the family. Therefore, the healers from third generations learned by

hiding themselves from their fathers and grandfathers. Gradually, the importance of healing practices and realisation of sustaining traditional healing in the community came into existence. Thus, the second-generation healers started learning directly from their fathers. Later, it continued with the first-generation healers. There is, in some cases, a hiatus maintained in the traditional healing practices where a grandfather in the first generation who did practice and later continued by the grandson keeping pause in the second generation. If the traditional healers in Sikkim are asked for the genealogical order of healing practices, they would exactly tell healing practices since three generations even though there were healers before three generations. However, when the researcher has met the healer named Vaidya Arjunan from Vellore, Tamil Nadu, he said of practising and learning since six generations because healers in the family were teaching their children of every generation. At present, in Sikkim, the 4th generation's children are also practising the healing methods in various communities.

6.7 Availability of Medicinal Plants and Herbs

Before treating the patients in the community, it is also important to know the availability of medicinal plants. One cannot treat the patient unless and until healer has all the required medicinal plants for the preparation of medicine. The most difficult part of the healers is to see the availability of medicinal plants. Healers do not treat the patients with only one medicinal plant. They need a combination of several medicinal plants and their properties for preparing medicines and treating patients. They collect medicinal plants from local surroundings, jungles, mountains and the Himalayas. They also travel to other states and countries to get the medicinal plants. Sometimes they buy from the people who sell the traditional medicine in the villages and markets. In the present time, the most challenging task for the healers is to get medicinal plants and their properties for the treatment in the community. There are rules and regulations imposed by the various departments to restrict the traditional healers to collect the medicinal plants from their areas. There are various challenges faced by the traditional healers to avail the medicinal plants which the researcher describes in the following sections.

The healer said that now the forest department has stopped the villagers from taking their cows and yaks in the dense forest and the Himalayas whereas during the early days people

used to take their animals to the forest once in a year. When animals are in the forest for months, they will be giving manure to the plants and help in growing plenty. Now the big trees are cut in the forests where medicinal plants used to grow. The forest departments also think that allowing the animals in the forest will reduce the number of medicinal plants, which is not true for the healers. The healer said the Government at present did not allow the people to collect medicinal plants from the forest. Everywhere there is a forest guard who does not allow them to collect medicinal plants (hem Assam). The other healer said the medicinal plants are not easily collected from everywhere. It is available in the place where it is not too hot and not too cold. The temperature must be moderate for the medicinal plants to grow (Pema, 47 West Sikkim).

According to Santabir, medicinal plants are collected from the surroundings and the forests. Sometimes he orders the medicine from outside which is not available in their locality (62, East Sikkim). The experience of the healers is different from the collection of medicinal plants for preparing medicine and treatment. Those who are in warm places have the notion of medicinal plants are available in cold places. The medicinal plants are mostly found in cold places (Bhakta, 67, West Sikkim).

Some of the medicinal plants are available in the community. A large amount of medicinal plants are available in the jungles, forests and the Himalayas. One of the healers from east Sikkim said he does not have any herbal garden at home. He collects all the medicinal plants from the jungle. He also said that most of the medicinal plants grow in north Sikkim (Tirtha, 68 years East Sikkim).

Rakesh concerned that, the medicinal plants are getting less day by day. Medicinal plants grow more in cow dung such as *chiraita*. Gradually the availability of this medicinal plant is decreasing along with other medicinal plants in the forest since the government has banned the Villagers from taking their animals in the forest for catering. He also told the medicinal plant called Jansing, which has very rich medicinal value, is getting exported outside the state (Rakesh, 53 East Sikkim).

Sometimes due to the unavailability of medicinal plants, they bring the required medicine from outside Sikkim. Budhiman from West Sikkim said he never asks medicine from other

healers in the community. He also provides an oil form of medicine to his patients. The medicinal plants required to prepare this oil is not available in Sikkim. Therefore, he buys two types of oil medicines from Nepal. The oil is used for treating various problems such as scabies, cuts, piles etc.

The healer have a concern of not getting his medicine for treatment of epilepsy. The medicine were given by his father. He said;

> *"I have tried to collect the medicine but it was very difficult to get the medicine because it has no name, no place to find and not able to prepare again. Nowadays, I treat the patients by giving them smoke and placing the medicinal plants over the body but the oral medicine I cannot give if the oral medicine gets finished. It is not possible because nobody knows about the medicinal plants that are given orally to the epileptic patients. I always tell people and the patients that the medicine which is being used for the treatment of epilepsy is going to finish and it is not available and even not able to collect from the forest. When my father found the medicine, that time it was very small. It needs to be rubbed very little"* (Joel, 55 years, West Sikkim).

Most of the healers have perception of getting the medicinal plants in the cold area. There are healers who collect the medicinal plants from the cold area. One of the healers Indra criticises that the healers, on the other hand, are also doing wrong by collecting medicinal plants from the forest. The government must provide registration and the license to all healers for the establishment of a small nursery in their own house. This may help the healers to prevent them from facing problems in collecting medicinal plants from the forest. Since he has done the registration and license of the herbal garden, he has suggested others to do the same. He was ready to volunteer for providing teaching regarding establishing these nurseries of medicinal plants, but nobody listens and bothers. He said there is no problem of planting medicinal plants in the hot area that grow in cold places. He said we need to see the soils and the timing, weather condition for planting the medicinal plants that are grown in the cold places. There are no issues of growing plants. People are making mistakes themselves. He said we cannot easily say about the preparation of medicine and give it to the patients. It must be done legally. If the license and registration are mandatory for horticulture, then why not medicinal plant board be provided, but nobody asks. He also

said that it is essential to know about the plants which can be grown in high, low, and middle altitude. Healers can preserve them in their registered nursery and later can give or exchange according to the need and use of healers (Indra, 64 West Sikkim)

6.8 Collection of Medicinal Plants and Herbs

One of the problematic parts or step in the traditional healing practice is to collect medicinal plants for the treatment. It is collected before treating the patients. Medicines are not prepared from only one medicinal plant. They use a combination of various medicinal plants and their properties. The medicinal plants are collected from the nearby locality and surroundings. They go to jungles, mountains and the Himalayas for the collection. Some of the medicinal plants are only available in the jungles and the Himalayas. Therefore, it is very difficult for them to collect. Mostly the difficult time of collecting medicinal plants is during the rainy season. The season in which the roads and path for walking get slippery. There are some healers who have established small herbal gardens from where they collect few medicines. Some medicinal plants are growing in cold places, and the healers also have the perceptions of getting more medicine in this area. Thus, they go very far for collecting medicinal plants, which takes several days for collection. If the healers are going very far for collecting medicinal plants from the mountains and Himalayas, then they add charges on medicine. Early days people used to collect medicinal plants freely from the forest. That is now restricted by the forest department. The villagers are not allowed to cater to the animals nor can collect medicinal plants. Nowadays, for collecting medicinal plants, one should have registration and license, and sometimes they must take the pass by paying a certain amount of money. Therefore, the healers have a hard time to collect medicinal plants for treating their patients in the community. Lalit said;

> *"I do collect medicinal plants from my surrounding area, sometimes I visit other places to collect the plants and herbs. The plants and herbs which are not available in my place I collect from the people such as shepherds who are living near the mountains and the forest areas. Sometimes I ask people who supply medicinal plants on demand. In some cases, I also ask my friends who have a good relationship with the department people. I borrow from other friends if the medicinal plants are not available in my surroundings and unable to collect from other places such as jungles and forests"* (83 years, east Sikkim).

Pema, collects the medicinal plants and herbs from the jungle, and he has also planted a few medicinal plants in his small herbal garden (47, West Sikkim). According to Santabir, apart from collecting medicinal plants from the local area and the forest, he orders the medicines from outside Sikkim. He said without ordering medicine from outside; he cannot provide complete treatment to his patients. Sannyasi, the healer, collects from the jungle and sometimes he gets it from other people and friends. Budhiman revealed, during the training and workshop, all the healers were told not to collect medicinal plants from the forests. They are advised and told to collect medicinal plants from the nearby locality. They are also suggested to grow medicinal plants in the herbal nurseries. The other healer said he has a permit from the government (Forest department) for the collection of medicinal plants from the jungle. At present most of the patients have started taking the Ayurvedic or traditional medicines due to the side effect of allopathic medicines (Rakesh 53 years, East Sikkim).

The healer shared the secrets of medicinal plants during the collection of medicine;

> *"My father used to say that, my grandfather often take my father to collect the medicinal plants in the forest and the mountains and whenever my grandfather sees the medicinal plants he used to spit on the plants from which my father has to understand that, it is the medicinal plants. This is how my father came to know the medicinal plants and started giving a treatment of epilepsy. Whenever we used to go to the forest to collect the medicinal plants, my grandfather never verbalised the name of the medicinal plants, to prevent the loss of its effect. Every time my grandfather used to spit on the medicinal plants. No baidya would share the details of their treatment and knowledge of healing practices"* (Joel, 55 years, West Sikkim).

Healer Ram treats both humans and animals. He collects medicines and buys from Siliguri where the medicines are taken from various parts of Sikkim and Nepal. He showed some of the medicines that are used for the treatment of animals, especially when the animals are attacked by the evil spirits (68 years West Sikkim). According to Sukbir, medicinal plants which are grown in hot places cannot be grown in cold places, and the same way which grow in cold places cannot grow in hot places. All the medicinal plants have their favorable places to grow. Plants have an environment for growth. Therefore, it is difficult to plant medicinal plants as well as difficult to collect while treating the patients in the family and community (73, East Sikkim). The other healer said medicinal plants should not be

collected after taking alcohol. They should not collect the medicinal plants and herbs during inebriation (Palzor, 90 years West Sikkim).

6.9 Herbal Garden

To have herbal garden at home is very helpful for the healers. Half of medicinal plants can be grown in the herbal garden. It helps them in reducing time in the collection of medicinal plants during the treatment of a patient in the community. It is not possible to grow all the medicinal plants in the herbal garden. The plants are grown according to the geographical location. The healers also believe that the medicinal plants that grow in the cold regions cannot be grown in the hot regions and vice versa. But having herbal garden is beneficial for the healers as well as to the community people. There are also the steps and procedure to have a personal herbal garden in the locality and nearby surroundings. They need to register and have a license to establish herbal garden at home.

The healer from west Sikkim, has an herbal garden in his house. He has planted medicinal plants and herbs. He has planted some of the medicinal plants that are grown in the deep forests and mountains such as *Chiraita, Gansing*. He has medicinal plants that are brought from the AYUSH department (Gangtok) such as *Sunjivani, Pakhanbeth, Ashwagandha, kurilo, Red Tamarkey*[4] etc. These plants are used for tonsils, diarrhoea and cuts, cataract etc. He has planted *Bekuma*, which is used as an antidote to poison cases. Other healer Raj Kumar who has an herbal garden at his home said that earlier he used to collect medicinal plants from the forest, but later he established an herbal garden in his surroundings. He now manages to treat his patients by collecting medicinal plants from his herbal garden.

The healer Dilip said earlier he had an herbal garden in his area. He had placed a board of herbal garden to indicate it for the community people. He used to run a small clinic near his herbal garden. Later due to family issues, he has stopped taking care of his herbal garden as well as closed his clinic. He said from the last five years, garden as well as clinic no longer exists. He also added that the fund that is given by the government for the establishment of herbal gardens is misused by the panchayat. That has become a

[4] These are the medicinal plants found in the healer's herbal garden in West Sikkim

disincentive for them to continue the traditional healing practices effectively in the communities (Budhiman 65 years, West Sikkim)

According to Indra, there is a process of establishing herbal garden. First, the proposal must be given to the minister and then it will pass to the secretary, and then the information is given to the leader of the healer's association. He has visited many other healer's place, but no one has the herbal garden. For him, it is very much essential to have herbal garden when treating the patients. He told that herbal medicine is different, and it has numerous qualities. Therefore, everyone should have enough quantity of medicinal herbal/plants to treat the various cases in the community. The plants could not grow in hot places by bringing them from cool places and cannot take from hot to cold places. If the altitude is the same, then there won't be any problem in growing the herbal plants (64 years West Sikkim).

The young and energetic healer from West Sikkim said;

> *I used to have herbal garden. One day I was asked by the person from forest department regarding the establishment of herbal garden, but I did not continue, since I was unable to get income from it. I do not need more plants to treat the patients. I can get lots of medicinal plants surrounding and nearby forest which will be enough for me to treat the patients. Therefore, I stop herbal garden and started floriculture* (Sanchaman, 44 years, West Sikkim).

It was identified in the study area that few healers have an herbal gardens. They have registration and license of establishing herbal garden in their surrounding areas. They collect medicinal plants from their herbal garden and collects from jungles and forests.

6.10 Healers Selling Medicine in the Market[5]

Traditional healing practices are the local and the indigenous healing methods which have been carried out from the ancient time, mostly at the primary level. Early days people use to treat the illness at their home and community. They used to prepare medicines at home for various illnesses. Elderly women in the community were expert in the home remedial

[5] See appendix 4, photo 4

products. Those days there were no alternatives to healing system; thus, people used to take the treatment from the local traditional healers. Slowly, community people started getting influence with western cultures. This is how the community people started losing the essence of many traditional values. However, the traditional healing practices and their utilization exist among the people in the community. The traditional healers not only practice the healing in the family and the community. They also sell traditional/ herbal medicines in the markets. There are also medicinal men and women who sell medicines but do not treat the patients. It was identified that one female person was selling the traditional/herbal medicine in Gangtok, the capital of Sikkim. She had displaced her item near Lal bazar which is wholesale and the vegetable market in the town. The medicinal men and women never sell their product by sitting at one place. They keep on changing their place for selling medicines. Sometimes they go shop to shop for trading their medicinal products. They sell medicinal oil in a small glass bottle and sell mostly the dry items such as powder medicine, dry leaves, stem, bark, flowers, seeds, fruit, root etc. The medicinal plants which they carry for selling are *harchur, dry Amla (gooseberry), Bikuma, panch amli, kurki*[6] etc. The medicinal plants are also sold by sitting on a footpath. Medicinal men and women have many years of experience. At present, the number of medicinal plants is decreasing and available in less amount. It is very difficult for them to get in the nearby locality. They must go far onto the mountains and the Himalayas for collecting medicinal plants which they sell. The traditional healers also buy medicinal plants from them if it is needed. The medicinal man is mainly selling their products in various places such as Jorthang, Pakyong, Namchi and Gangtok.

6.11 Healers Hospital (Saunay)[7]

It was identified that one of the healers has a small hospital for admitting and treating his patients. It was observed that it has a sign board kept outside hospital, where the details of healer were written as Baidhya (Dr)X. And the other signboard was hung outside his chamber where his details were written about his available timing 9 am -6 pm and 24*7 for emergency case. He was certified practitioner and got the registration in 2008 and started

[6] These are the local names of medicines
[7] See appendix 4, photo 18

the hospital in the same year. The hospital was run by his uncle. Later after his uncle's death, he has taken charge and treating the patients. The whole people of Sikkim call the bonesetter as Saunay Baidhya. The Saunay is the name of a place.

The hospital was visited thrice for an interview. In the first visit, the healer was not available but met his assistant. The patients were visited and interviewed. Also, I observed the treatment provided to the patients. The contact numbers were exchanged on the second visit. During the second visit, the healer was met and informed about the purpose of the visit and had a short conversation. In the third visit, the healer told about his training but did not share the details of his healing practices. He has learnt the traditional bone setting practices from one of the traditional bone setting hospitals from Kalimpong.

The hospital has a good ambience. It is present in a peaceful environment, isolated area and free from the crowd and pollution. They are situated on a hilltop surrounded by trees, plants and bushes. They can view the river running from the hilltop. The environment is very calm and where patients can rest without any disturbance. Patients are treated and provided the environment of being at home, which helps them in early recovery. The hospital is a three-floor building, and each floor is having a kitchen and toilet facilities. The rooms are established as a dormitory of having 20 beds. There are also single rooms available for the patients. The charges of staying at the hospital per night are Rs. 100 for dormitory and Rs. 200 for a single room without toilet facility and Rs. 250 for the attached toilet. Patients' relatives are also allowed to stay with the patients. The hospital has constructed the new building for the patients. Altogether the hospital has approximately 40-50 beds. They have both in-patient and out-patient facilities. Patients come from all parts of Sikkim, Kalimpong, Darjeeling and Siliguri. According to the patients, some of them come directly, and some of them come from other government and private hospitals for the treatment. It was observed, during the time of the visit there were 20-25 in-patients admitted in the hospital.

The relatives and the patients feels like living together. They are responsible for keeping the rooms and surrounding clean. Food is prepared by themselves and their relatives. The hospital is not only beneficial to the patients, but it has also helped and profited the

surrounding villagers and the local people. The villagers bring fresh vegetables, milk, fruits etc. and sell to patients and relatives. Local people have started running shops for business and income. The hospital has good road connectivity, and vehicles are available for 24 hours, which can be easily hired by the patients in times of requirement. The vehicle owners are also getting benefitted. The hospital is near to the government hospital, market and the main road which takes about 10 -15 minutes to reach. Medicine plays a vital role in treating the illnesses, but there are other factors such as cleanliness, peaceful environment etc. which plays an important role in providing comprehensive healing to the patients. The hospital (*Baidhyashala*) is at such a place where there is no overcrowding, free from pollution and noise in comparison to government hospitals which are very crowded, full of noise, bad smell etc. They do not maintain the cleanliness of the hospitals. They do not have proper management and segregation of biomedical waste products. Therefore, it is important to have proper ambience and healthy environment for providing better treatment and care to the patients. This allows patients to heal in a short period, and the duration of the hospital-stay gets reduced.

6.12 Healer's Hut and Clinics[8]

There are few healers having separate hut and clinic to practice their healing. The clinics are arranged in proper order with enough space to treat the patients. They have kept the chairs and table to talk with the patients and the small bed to do the assessment and treat the patient. There is one shelf also inside the clinic to keep the medicines. Prepared medicines are kept in an organized way with the label of medicines and are placed on the shelf. Powder medicines are kept in small containers with the label, and the extra medicines are kept in bigger containers of sweets such as mango bites, eclairs, cream fills etc. The clinics are well ventilated with adequate light. They have maintained the cleanliness and kept their clinics and surrounding clean. They have decorated the clinics with their certificates, registrations, certificates of appreciation, photographs of attended workshops and seminars. They have kept files for keeping records of patients.

[8] See appendix 4, photo 2

Some of them have kept the copy as a register to record and document details after treating the patients. It was also identified that one educated healer was running his separate clinic in the study area. He has kept his clinic in proper setup. The doors and the windows were having neat and clean curtains. There were shelves for keeping medicines with labels and were arranged very well. He has kept the bundles of gauge pieces for bandaging. He has a small bed and table in his clinic. The bed was covered with a clean sheet. He has a steel tray to keep medicines, gauge piece, adhesive tape and scissors on table while treating the patients. He has kept the bottle of volini spray for the patients. There is a moveable chair for him to sit and talk with the patients and chairs for the patients and relatives. The wall of his clinic is decorated with posters of human anatomy. He may or may not be using a stethoscope, but it was kept hung on the wall. He has kept the files and copies of the register at the corner of the table. He was also having the prescription letter pad for writing the treatment details of the patients.

There are other healers who provide treatment at their own houses. They consider their houses as a clinic. They have kept one separate room for keeping medicines and treating the patients. They also keep the medicines in the same way as other healers having separate clinics. They do not allow other people and children to enter the room where they keep the medicines. Sometimes some healers keep the patients for a few days during treatment if required. Including powder form of medicine, there are other forms which are available in their stores such as, oil medicine, ointment, other dry and solid roots, stems, flowers and fruits. Some of them have registered herbal gardens at their homes and clinics. The healers prepare their medicines in electric grinders and use the wooden grinder for less preparation.

6.13 Modifications of Traditional Healing Practice[9]

Due to modernization, various changes have taken place in several aspects of everyday life. There are transport facilities seen all over the urban and rural areas in the study area. Due to which the development and advancement are taking place in the primary health care level. The connectivity of roads has helped many to reach to different places. Arrival of new technologies and use in many rural areas such as tv, and mobile phones was seen.

[9] See appendix 4, photo 5 and 6

Children are sent and go out for higher education. Modification of skills in the traditional healing practices among the traditional healers in the study area was observed. Also, it was observed that earlier bonesetter in the community were using bamboo support for proper alignment of fractures and broken bones, which is locally known as (*kamra*). The bonesetters have come to know about the X-ray machine, and it's important for diagnosing the level of fracture and broken bones. It has helped them to understand and treat the patients. They started asking the patients to do the X-ray before treating the patients with fracture and broken bone cases. The patients with fracture and the broken bone cases were treated directly. Still, the bamboo support (*kamra*) is used parallelly with the modified techniques. The traditional bone setting practices have changed to a certain extent. They have started using bandages and slings for supporting the fracture and affected part. There are healers who have started keeping stethoscope even if it is not in use. The medicines are packed in the modern bag with a proper tag and sticker outside. They are getting support for packing medicines from organizations (NGOs) and other departments. Some of the healers have established separate clinics for treating their patients. They have a bed, tables and chairs for the patients and moveable chair for self while treating the patients. Bonesetters have started keeping the market products for the treatment such as steel tray, volini spray, adhesive tape, a bundle of gauge pieces, cotton and others. Almost all the healers have started keeping files and registers for documenting the patients' details. It was observed that one of the healers was having a prescription letterhead which may be available with other healers.

Earlier, medicinal plants and their properties were used directly after collection. At present there is modification in preparation of medicine through processing and packaging of the herbal products. The medicinal plants and herbs are boiled and oil/lotion is extracted through a more hygienic process. The healers are using the grinder for crushing medicinal plants and their properties. Some of the healers are imitating the preparation of biomedicine and making the medicine as per the market standard. Some of the healers have established a small herbal garden at their houses and collects medicines before treating their patients. Gradually the healers have started competing with the market medicines to maintain their standards of preparing traditional medicines and treating their patients. Previously the medicines were kept in open places and uncovered pots and sacs. Now the healers keep the

medicine in the containers with lids, oil in a small empty vial of injections. Powdered medicines are packed and sealed in the small plastic covers. Those who are practising mantras never changed their healing skills and practices.

6.14 Source of Motivation for Practice

There are various factors which have motivated the healers to practice and learn more about traditional healing practices. Training and workshop have a greater impact on the healing practices of the healer. The healers were initially provided registration for practising healing, which has initiated more healers practicing healing in the community. Before 5-6 years Alok from the regional Ayurvedic Research Centre, Tadong, East Sikkim had conducted the program, where healers were provided certificates and motivated in continuing healing in their respective areas. Healers were given the incentives of Rs. 600 per month but at present, they are not satisfied, but still they have continued their healing practice in the community. There are 3-4 healers whom the MLA, SDO and government officials have provided the appreciation letter and facilitated in the community. This greater achievement has not only motivated them but inspired many other healers to do more on healing and to teach others in the community. Patients and relatives are the strength and support in the community for the healers even if they are treated as untrained and unprofessional by the biomedical doctors. The community people play the greatest role in reviving traditional healing practices in the community. Thus, the healers are motivated by the support of the community to practice healing and treating the patients.

6.15 Record Keeping and Documentation

Not all healers have kept the documentation of their healing practices and details of treating the patients in the community. Healers lack awareness and never give importance to maintain records of treatment given to the patients in the community. There are few healers who have records about their patients and treatment given. One who have the records of the patients are trained healers taught in the workshop and the seminars. For Example, healer Lila Ram from East Sikkim has the records and documentation about his patients and treatment. He was taught by an organisation how to have record. He has the record details of patient's name, diagnosis, address and age of patients. He has written the

book on 60-70 medicinal plants and its properties. He has written a poem on conservation of biodiversity and the importance of traditional medicines (folk traditional healing). He is a healer who has kept the documentation and records of healing in a systematic way. He has kept the patients' testimony of getting healing from his treatment. Patients give their testimony after three years of healing, which was provided to him by many patients. He has kept all patients' testimony in his file, including his treatment details, all certificates of attended workshops, seminars and conference. The other healer Nanda has started keeping records and documentation from the year 2005. The importance of record keeping, and documentation was discussed and were provided ideas during field visit for those who have not maintained.

Ram, said he had received a letter of appreciation on panchayat letterhead which he was provided by villagers on treating and healing their patients. There are healers who have stopped keeping the records and documentation as they are not provided with any support from the government. Lalit reported that, every three years, he does rituals for the sick. He does not have any documents or written script about the healing practices. But he maintains all the patient's details in a small diary for my future reference.

Budhiman said,

> *"I have never documented the combination of medicinal plants and herbs for all the treatment. I have started to document the medicinal plants that are used in combination for the treatment of fractures and the broken cases of bone"* (75 years West Sikkim).

The healer said since he is uneducated, he is not able to write and keep the patient's detail. Sometimes he asks other people to write (Raj Kumar, 60 years East Sikkim). The healer reported that his son has helped him to document, but later all the written documents were burnt by his daughter (Man Bahadur, 88 years East Sikkim). Pema said, till date he has not recorded and does not have any documents of the patients. But he knows that 11 patients were successfully treated by his treatment (47 years West Sikkim).

There are healers who were happy to hear the advice from the researcher and to know about the importance of records and documentation. One of the healers expressed himself, saying;

> *"I have never expected such advice about my healing practices, and I am impressed with you (researcher). I will keep your words of maintaining the documents in my coming days of practices and healing the patients. I got an excellent idea after meeting you (researcher) because till now I was least bothered about the documents and I used to think only to heal the patients"* (Raj Kumar, 60 years, East Sikkim).

6.15 Dissemination of Knowledge

The dissemination of traditional healing knowledge is one of the important aspects of traditional healing practices. According to literature, traditional healing practices are not transferred from generation to generation. It is not distributed among the family and community. Many people in the community do not practice traditional healing practices due to lack of interest and no economic viability. There is a knowledge gap which is preventing the dissemination of traditional healing practices in the family and community, which has been explained many times before. Bhakta one of the healers expresses his concern about the knowledge, *"Nowadays, children want to earn money and find some financial sources to run their family. They do not see any scope in this healing profession"* (Bhakta, 67 West Sikkim).

Earlier the traditional healers never taught their children and grandchildren. They followed their ethics, which still exists in the present generations. They used to believe and have the perceptions of losing the effectiveness of medicinal values once it is disseminated to others. Sometimes the traditional healers are told by their gurus not to teach anyone about their healing practices. Some healers have promised their guru of not teaching their traditional healing practices to others in the family and community. The healer said he does not know about the truth that lies behind, of not telling the name of the medicinal plants and treatment methods which he uses for treating the patient, but his guru had told him not to tell and teach others about the medicine he used for healing the patients in the community (Karma, 52 years, North Sikkim).

According to Santabir healer, who is from East Sikkim, the traditional healing practices should not be learnt from others and utilized, rather it must come from within and one should know how to treat the different cases accordingly (62 years, East Sikkim). At present most of the younger generation is going out for education and job. There is no interest in learning traditional healing practices. The traditional healer teaches the healing

practice to those whom they trust in the family and community. Man Bahadur and old healer from east Sikkim told, their children are not interested in learning traditional healing practices. They do not know the medicinal plants and their usage. **His(who)** younger son has little interest and hopes that he will learn in future. Nowadays, due to western culture domination, various things are getting disappeared from the community (88 years East Sikkim). The healer Arun Kumar said,

> *"the children of the present generation do not use traditional healing methods. They are happy to go to hospitals and get treatment from the hospitals"* (70 years, West Sikkim).

In the study area, it was identified, some traditional healers are teaching their children, and some are not teaching. Some of their children and grand-children are assisting them in practising traditional healing in the community. The sustenance of traditional healing practices also depends on the religion. In a family if ancestors used to follow traditional healing practices and If the family gets converted to other religion, then there may be a loss of healing practices. When the healer changes religion, there is a chance of loss of his traditional healing practices due to various restrictions and rules of other religions. According to Somnath, snake bite healer, if the traditional healing practices disappear and the person has changed his faith and religion, but his God whom he was worshipping earlier will never leave him and let him go because God cannot be seen physically.

There are healers who have explained how their traditional healing practices are disseminated and have sustained in the family and community. Budhiman told regarding the involvement of his children in preparing the medicine. Sometimes the children are sent to collect medicinal plants from the surrounding area. Healer Raj Kumar, whose daughter is a nurse by profession and posted in the same place performs few traditional healing practices in the community. His daughter carries out his healing practices in his absence (60 years, East Sikkim). Palzor said *"I teach healing practices to other people in the community. Till date, I have not learnt from others, because nobody wants to teach others in the community"* (90 years, West Sikkim). Another healer has a perception of not getting the effect of medicine if it is brought or bought from other Baidhyas while treating the patients. Sometimes the treatment also varies according to the patients (Kundan, 68 years

East Sikkim). The other healer said he is teaching his son and grandson about the traditional healing practices (Pema, 47 years, West Sikkim).

Transformation of healing practices is important as it is ingrained in local knowledge in the family and community. Traditional healing practices have the acceptance and applications that have instigated within the ethos of community and are designed precisely for the requirements of the community people. The transformation of healing practices has come down to some extent due to various factors such as higher education, holding jobs in government as well as private sector, influenced by western domination and others. There are healers who value the importance of traditional healing practices in the family and community. They are trying to sustain and disseminate them to the others in the family and community.

Bal Kumar said, he is teaching the younger generation about traditional healing practices in the village. He is teaching them to identify the affected area by palpating with their hands, but he is finding difficult to interpret since it is challenging to understand and feel the affected site of the fracture and broken bone. Very few are in the process of learning his practices. His son has learned many things and needs to put it into practice. He was called many times by the panchayat to teach to the compounders and other people in the community. He is trying to impart his knowledge to many people in the community, but only a few are learning (80 years, West Sikkim).

Other healer said, whenever he goes to treat the patients in their houses, he teaches the family member about the traditional medicines used for the treatment. Many times, he had called the community people in his house to learn, but till date, no one has come to learn. He is also teaching traditional healing practices to his youngest son, who is doing graduation (Ram, 68 years, West Sikkim). Another healer's son, who is 26 years old, does the traditional healing practices (Dilip, 65 years, West Sikkim). The healer said he is teaching his children and family members. He also added that whenever he is not at home, his children will be giving the medicine to the patients. His children can prepare the medicine by collecting medicinal plants from the surrounding area. They are not going to

the far distance for collecting the medicines. He said due to his health problem; he treats very few patients (Sukbir, 73 years, East Sikkim).

According to Palzor, teaching healing to their children is to sustain healing practices for the future generation. He taught traditional healing practices to all his children. He asks them to collect medicinal plants from the jungles and teach about all the medicinal plants along with the usage of plants on different patients. The children are taught about the process and preparation of medicine. One of his sons has started performing healing practices. The healer said teaching of treatment is not successful if it is taught verbally or telling the name of the medicinal plants and herbs seen in the dream. One must teach the whole process physically from the time of collecting medicinal plants and herbs, preparation of medicine, and then the meaning of treating the patients. Thus, teaching becomes complete and successful (90 years, West Sikkim).

Though the government of Sikkim is not taking the initiative of sustaining the traditional healing practices and integrating fully in the current health services, he has a concern of his people around and helping their children to teach his traditional healing practices so that the poor villagers could able to survive in the coming days and years. He said both his sons have completed learning his traditional practices and assist him in providing treatment to his patients. His younger daughter also practices a few traditional healing practices (Indra, 64 years, West Sikkim).

There is a youngster who understands and give importance to traditional healing practices, but there are many who do not understand and bother about the practices. The healer from east Sikkim said that the children of the present generation do not understand the importance of traditional healing practices. They do not bother about the traditions and culture. They do not want to learn. This is how traditional healing practices are disappearing from the family and the community as well. He said the situation has become different and the time has changed where nobody can force their children. It is tough to advise the children. He also said that if we force the children of the present generation, they will harm themselves, so could not help themselves in advising the children work. They live their lives according to their preferences and choices. He said those who come for

learning; he teaches them. He had also taught two persons in Delhi when he was staying there. They got the medicines from Nepal. He started doing traditional healing practices from his childhood. He was working in the forest department, and from there he has learned how to collect medicinal plants. He said initially he was doing very little on his own and after that, he started doing much more treatment in traditional healing. (Bhakta, 59 years, South Sikkim).

One of the healer's sons said he knows the importance of traditional healing practices and have learnt a few things from his father. He said there is no support from the Government, which demotivates them from practicing traditional healing practices. Because of this issue, many younger generations are not able to learn healing practices in the community. If they want to learn healing practices, they must leave their job, which will be challenging for survival of the family (Sukbir's son).

6.15.1The teaching of a spouse

There are healers who have taught the healing practices to their spouses to some extent. The purpose of teaching them is to provide a feeling of comfort to the female patients who come to get the treatment from the healers. It is mainly taught to the spouses of bonesetters regarding the steps of bandaging on the female patients (Rakesh, 53 years, East Sikkim).

6.16 Continuing the Healing Practices

Since Government is not supporting and giving any importance to the traditional healers, his children are always forcing him to stop doing traditional healing practices. However, he believes in providing new life by treating the poor as well as the rich in the community as it is the best way of serving and better use of the knowledge that is passed down from generation to generation. He is confident that there is no decline in the stock of knowledge that existed since the time of their ancestors, in the family as well as the community. He prioritizes providing best services to save the lives of those who come to get the treatment from him rather than demanding service charges. He never demands any amount from his patients because his happiness lies in treating patients not in asking money from them. In early days if the member of the family happen to be a traditional healer, they never used to teach to anyone neither their family members believing that the medicine would not work

on the patients if they teach and treat. If anyone from the family or village is interested to learn the healing practices, they used to learn by hiding themselves from the main healers. This is how the knowledge used to pass-down from generation to generation. It never happened to be a direct way of teaching traditional healing practices. Very rare cases the healers used to teach their children and apprentices.

The same thing happened to Pemba, where he is the third generation to practice the traditional healing practices in his family, but nobody taught him directly. He used to learn conventional healing practices from his grandfather by hiding himself from him. He hid and followed his grandfather from the time of collecting medicinal plants, preparation of medicine and treatment to the patients. By the time his grandfather died, he was fully prepared and was having confidence in treating the patients. His father too was a traditional healer but never taught him regarding the healing practices. Only one thing he learnt from his father is to treat the cases having sprain of any part of the body (68 years, North Sikkim).

6.17 Conclusion

This chapter discussed the diversity of traditional healing practices in Sikkim. As people live in diverse communities, it was observed that people are practicing traditional healing according to their traditions and culture. The community people are practicing the traditional healing from the time of their ancestors and from the time when the civilisation took place. Most of the healers were having many years of experience in practicing the healing in the family and the community. Majority of the healers are of the age between 60 -90 and have many years of healing practices. They also have pretty good experience in their traditional healing practices. None of the healers is found having age below 35 years. As we look for the healers' specialisation, the majority of the healers are bonesetters. They not only specialised in treating bone-related cases, but they are treating other cases such as gastritis, gout, piles, eye problem, dog bite, snake bite, hypertension, cold and cough, fever and others. They treat other cases also as they want to be an expert in all other fields of traditional healing. Healers have acquired their knowledge and understanding of healing practices through ancestors, dreams, from the old documents in the family. There are healers who have learnt from their fathers and grandfathers. They have learnt from gurus, local healers, friends and through training and workshops. Some healers are inspired by

others in the community, which has led them to practice traditional healing. Father and the grandfather plays an important role in motivating their children to practice traditional healers. There are healers who are motivated by the incidents that happen during self-treatment and treating animals at home. Monks and their healing practices have motivated many healers to practice traditional healing in the community.

It was also observed that the healers are now teaching their children and others in the community which used to be kept secret in the earlier. Their knowledge and understating of healing is shared and disseminated to their children and others who are interested to learn in the family and community. They are teaching to their spouses about traditional healing practices. The younger generation at present do not bother about the traditional healing system, and they are not interested in using and learning. Some of them has an understanding of the traditional healing practices in the family and community. Very few are interested in learning traditional healing practices. The children of younger generations are all going out for the higher education and to seek job. They do want to stay in the villages as they want to focus on their carrier. According to one of the healer's sons, he has the knowledge and understanding of traditional healing practices. The healers are not getting support from the government. There is no economic viability which could draw them towards the learning and practicing traditional healing practices. It is difficult to run a family only by practicing traditional healing practices.

The healers need to have medicinal plants before treating their patients. The medicinal plants are available in their locality, surroundings, jungles and forests. Some of the healers have an herbal garden where they plant the medicinal plants and use during the time of requirement. The dried forms of medicines are also available in the market from where the healers buy and treat the patients. Collection of medicinal plants is the difficult step in traditional healing system. Healers never use single plants in treating their patients. They use numerous medicinal plants and their properties for preparing the medicines. They also buy from the market and borrow from others in the community. According to healers, it is very important to have the herbal gardens to grow medicinal plants. It reduces the time in collecting medicinal plants during treatment. To establish an herbal garden, the proposal must be given to the department and then only permit is given, but it takes a long time to

get a registration. This is the reason why most of them are not able to build herbal gardens in their homes.

There are healers and the medicinal men who sell medicines in solid dry forms of roots, seeds, plants stem, flowers, leaves etc. At present, the modifications have taken place in the traditional healing system. Due to road connectivity and advancement of technology, many changes have been introduced in several clinics and hospitals. The healers came to know about the x-ray machines and their importance. Earlier, they used to treat the bone cases directly, but now they ask the patients to do the x-rays and bring the report before treatment. The healers who treat bone cases have started keeping x-ray viewers to identify the level of fracture and broken bones. Some of the healers have separate clinics and herbal gardens. They also use electric grinders for making powder medicines and paste.

Some of the healers have started buying the market products for treatment such as bandages, gauze roll, adhesive tape, volini spray, scissors etc. It was observed that one healer has a steel tray to place the items such as gauze, tape, medicine, bandage and scissor during the time of treatment and has a stethoscope in his clinic for checking the patient. During the field visit, it was observed healer having a hospital. There is one healer who runs the hospital/Baidhyashala. It is situated in Singtam, East Sikkim. The hospital/ Baidhyshala is known to all in Sikkim. Patients come from all parts of Sikkim and West Bengal (Darjeeling, Kalimpong and Siliguri). It is a 40-50 bed hospital. The hospital has inpatient and outpatient facilities.

There are healers, who have separate clinics for treating the patients. They have organised the clinics properly and provide better care to the patients. The healers who do not have separate clinics treat the patients at their own houses. There are some healers who keep the patients for a few days at their houses for continuous observation and treatment.

The coming chapter describes the assessment, diagnosis and treatment process in healing. It will provide detailed information about the healers' performances on assessing the patients while coming to seek treatment from the healers. The chapter explacates and provides evidence on how the patients are being diagnosed and advised for further

treatment. It also describes the treatment method, which is the final step in treating the patients. In this, the complete features of the patient's treatment will be shown.

Chapter 7

Processes of Traditional Healing Practices: Role and Responsibilities of Traditional Health Care Practitioners

7.1 Background

This chapter mainly deals with the processes of traditional healing practices, their roles, and responsibilities in treating the patients in the community. Majority of the healers treat the patients having the problem of bone fracture. Due to the sloppy area and the mountain terrain region, the bone-related cases would be seen more in various districts of Sikkim. The examples are often seen due to the causes of falling from the trees while cutting their branches, accidental cases, falling to the ground while playing football, and due to the slippery roads. There are also cases due to falling at old age and even among the smaller children. Other than these in Sikkim, we could see the healers treating a mixture of healing practices, not only they handle a specific case, for example, bone fractures. Most of the healers treat both bone related cases and other illnesses in the community such as food poison (*Nas-Kapat*), snake-bite, dog-bite, insect-bite, piles, gout, diabetes, hypertension, stone, infertility and other minor cases such as diarrhoea, dysentery, fever, cough and cold.

In the process of healing, the researcher has captured the detailed picture of how the healers diagnose their patients, what kind of treatments are carried out for treating their patients, process of collecting and preparing medicines, dosage, duration and the follow-up procedures. It has also featured out the success of treatment, healers' experiences, and the patient's experience and satisfaction of getting treatment from the healers, cash and kind received from the patients after successful treatment.

The healers' role and responsibilities are not only to treat their patients but also to take active participation in various disputes in their community. The healers are respected and consider them as a knowledgeable person in the village and to give them a higher position. The people not only come to get the treatment from the healers, but they also visit the healers to get advice and consult for the treatment. They ask the healers about the

preventive measures to be taken during sickness, food pattern. They too bring their animals and pets in rare cases to the healers for the treatment. The people seek advice from the healers and involve them in decision making during any problematic circumstances. Healers do have their ethics of treating patients. The healers refer the complicated cases to the health institutions for further treatment. They believe in serving needy people in the community as social services and the blessings from God. They never send back the patients without addressing those who have come to get the treatment from them. Healers believe that serving needy people in the community is to serve God.

"*Afno afno dharma ho, usley k socheyra awcha ani afu k sochera garchow. Usko anubhow k cha ani mero anubhow k cha. K ma jati hunchu tyaha bhanney ra sochi kana tahkeyra ayo pachi, tyasma mailey pani uh jati huncha nai ho bhaneyra ma Ratan ho ani malai samjheyra ayo ma yaslai jati nai banowchu bhanney mero kartabya ho auru ma kai pani sodhdina".*

(Healer Ratan, 70 years, West Sikkim)

"आफ्नो आफ्नो धर्म हो, बिमारिले के सोचेर औछ अनि आफु के सोचेर गरछौ।

असको अनुभऊ के छ, अनि मेरो अनुभऊ के छ।

के म जाति हुनछु त्याहा भनेर सोचि कन थाकेरा आयो पछि,

तेशमा मैले पनि अू जाति हनछ नै हो भनेर…. म वैद्या हो अनि मलाई समजेर आयो

म यशलई जति नै बनाव्छु भन्ने मरो कर्तव्य हो, अरु म कहिँ पनि सोध्दिन"।

(वैद्या रतन, ७० साल, पश्चिम सिक्किम)

"Everyone has a religion, depends on what the patients think of coming to the healer and what the healers think before treating the patient. The experiences will be different. If he/she believes that the healer will treat them (bonesetter), then it's the responsibility of the healer to treat and heal the patient. Other than that, I will not ask and find out anything from the patient".

(Healer Ratan, 70 years, West Sikkim)

7.2 Diagnosis of the Patients

Every healer has their way of diagnosing patients whoever comes to get the treatment from them. In Sikkim, most of the healers do treatment of the bone fractures by referring X-ray report. In emergency cases, the treatments are promptly done without X-ray report by touching the affected area and aligning the joints by pulling the dislocated parts; they do bandaging as first aid. They also ask the patients about the history of causes, date, time, level of fracture, and position of getting referred to the hospital. Patients are examined whether they can go and get the X-ray report for the treatment or not. The people give prior importance to get the treatment from the healers if they are known to the healers. In the rural areas, the hospitals and the diagnostic centres would be in far distances, which may not be possible for emergency cases.

There are also cases which directly go to the hospital for the treatment mainly in the multiple fractures, but later after getting tetanus injection, pain killers and bandages from the hospital, they come to the healers for further treatment. In some cases, the patients go first to do the X-ray and then comes along with the report to the healer for treatment. But there are also few healers who were not able to identify the affected parts in the X-ray report and starts direct treatment without asking the report. Due to having many years of experience, the healers could give therapy without seeing the X-ray or other methods to diagnose the problem.

There are also other methods of how the healers are diagnosing the patients before providing treatment to their patients. The process for diagnosing jaundice patients also depend on their age group. They assess the patients by observing the colour of their eyes, nails, body skin and this assessment is mainly, done for jaundice patients. The patients were asked about the food habit and whether the person is alcoholic or not. The above methods centres for adults in diagnosing jaundice patients. In the case of jaundice in infants and newborns, they are taken directly to the faith-based healers where the treatment is provided by chanting mantras in uncooked rice and green grass.

During the visit, it was observed that the healer was sick and just came back from Vellore after the treatment of kidney problem. He was unable to walk, but still he managed to meet

the researcher. But after ten months, when researcher visited the second time on February 2019, the healer was looking fine enough. The healer shared about his diagnosis methods;

> *"I could make out clearly about the sickness of the patients, whether it is supernatural or natural causes having the sign and symptoms of illness. I do the physical examination of the patients before treatment such as checking of eyes, teeth, nails, eyebrows and pulse. I do the palpation of the area where the patient is having pain. In the hospital, the patients are provided with medicines, and then if it does not heal the patients the doctors will again change the treatment but, in my treatment, I will never change the treatment or the medicine. Once I diagnosed the patient, then I will be giving only one course of treatment for the patients. But for the supernatural causes I diagnose the patients using a mantra to see the jokhana[10]"* (Healer Sukbir, 73 years, West Sikkim).

Patients having piles are asked about their food pattern, any bleeding during passing stool, history of constipation, presence of a fistula and the habit of drinking enough water or not. The same past and present history is asked for the gout patients and asked whether they include sour food in their diet, family history, age of patients, consumption of red meat and smoked meat, and organic millet bear. The treatment is provided to the patients as per their complaints and history.

7.2.1. Bone Fracture

The occurrence of bone fractures is most common cases found in various parts of Sikkim as well as in the hilly region, which the community people often seek the treatment from the healers. The patients are also taken to hospitals. Majority of the healers would ask the x-ray report before treating the patients. The healers have many years of healing experience and could able to view the x-ray report well and identify the severity of cases. Sometimes if the patients are unable to get the x-ray reports in times of emergencies, the healers do the treatment as first aid by checking their radial pulse, touching the affected area, pulling the muscles and joints. The cases are also referred to the hospitals if they have multiple fractures, multiple broken bones, muscle /nerve compression where patients require tetanus injection and anaesthesia. After that, when the patient comes to the healers to get a continuation of their treatment. According to Karna Bahadur, he said

[10] It is a diagnosis of a supernatural causes through spell/mantras

> *"I never diagnose patient having bone fracture without x-ray report. Without an x-ray, it is difficult for me to identify the affected area, and the treatment may be wrong. Therefore, I do not take any risk of treating the patients. I do not treat the cases whose nerve got compress between the bone, which needed a surgical operation, and it can be done only by the biomedical practitioners. Apart from compression of nerves, I could diagnose and treat the patients"* (Healer Ram, 68 years, West Sikkim).

The healer is very famous in north Sikkim namely, Mangan, Lower and Upper Dzongu, and many other villages. The healer said; *"through X-ray report, I can identify the severity and types of breakage and starts the treatment accordingly. In minor and rare cases, I do the treatment without referring the x-ray report"* (Pemba, 68 years, North Sikkim). Having many years of treating the patients, healer Rakesh said;

> *"I can easily examine of fracture and a broken bone in children and women. The children and the female bones are fragile and can easily break. Children's bones are tender and easily breaks, whereas the female has mensuration and breastfeed their babies, which will reduce the calcium level from the body and easily breaks the bone"* (Rakesh, 53 years, East Sikkim).

The healer has explained based on his experience and observation in the field of traditional healing practices.

7.2.2 Patient with Severe Headache

The healer is from a small town and working as a petty contractor. He has learned the healing practices by his own experiment. The healer said;

> *"first I hear the complaints of the patients and ask the history before treatment. When a patient comes with severe headache, I ask, whether he or she is sport's person (hitting the ball by a head), history of fall, incident of forceful or big hit towards the hard object anytime. By hearing all these complaints, I will diagnose the patients and give treatment accordingly. All this history could help me in providing proper treatment to the patients. When these cases go to the faith-based healers, they diagnose the cases due to the causes of supernatural power. As the same cases arrive in the hospitals, the doctors would be asking the patients to go for various diagnostic procedures such as MRI and CT scan and give medicine and also advice for the surgical treatment"* (Santabir, 62 years, East Sikkim).

However, the healer has their way of treating the patients by knowing the detailed history as well as provide counselling to the patients.

7.2.3 Snake Bite and Dog Bite

The researcher visited a remote village called Khani Sirbong in West Sikkim in the month of October 2017. When researcher reached the healer's house, during that time the family were having the rituals or pujas for their ancestor's spirits. Meanwhile the researcher had discussion with the healer's son, who is an engineering graduate. The researcher asked healer's son about his father healing practices. He (son) said that, till date his father did not disclose any mantras for the healing of snake bite to anyone in the family members. After twenty minutes the healer came and had discussion. The healer shared his diagnosis methods;

> *"Patients come to my house for the treatment of snake bites and dog bite. In such cases, I will ask about how the patient got a snake and dog bite. The other details were asked such as date, time, and days of snake and dog bite. When a patient has come with the complaints of snake bite, I will ask about the colour of snake commonly available in the hilly region, size of the snake and whether the snake is killed or not. During snake bite, patients feel a severe burning sensation in the bitten area. Some snakes are very poisonous, and sometimes a patient will not survive for three to four hours when a venomous snake bites. Same for the dog-bite the history is asked about the type of dog, place, time, duration of bite, whether the dog is dead or alive, street dog or pet, vaccination is done or not to the dog, whether the dog is mad or normal. The patients had a burning sensation"* (Somnath, 67 years, West Sikkim).

7.2.4 Restriction food for Epileptic Patient

Joel, the healer told about the diet which can be eaten by the epileptic patients. He said;

> *"The patient can take milk, butter, rice, beef meat, roti and soft rice. The patient should not take the rotten food. The things to be prevented by not touching the goat and not to take the meat of a goat; it has to be strictly restricted by the patients. People might get surprised by listening to me, but it is a fact that epileptic patient should not cross the streams and the rivers for a month during the course of treatment. I do not treat such patients with the history of falling in the water and the fire. It might be that those cases would not get the effect of the treatment which is given by the healer or the Baidhya. This information has been passed from my great-grandfather. The patient could cross the streams and the rivers after one month of treatment, but he has to be taken care of the food that he or she takes. After my treatment the patient gets healed, but when the things are not taken care what is advised, then there will be the attack of epilepsy"* (Joel, 55 years, West Sikkim).

The healer further shared about the two cases;

> *"once there was a young patient; it was one and a half year after the treatment of epilepsy. The patient was healed, but once he has called for the preparation of sound system in his community where there was prepared the mutton meat and other meats for the guest in the party. The patient was again got the attack of epilepsy at his home even though he has not eaten the meat in the party.*
>
> *There was also one patient who got re-attack of epilepsy after five years since he has eaten the mutton meat. The healer said at least the patient should stop for ten years after the treatment of epilepsy. There are also patients who are doing well after the treatment of epilepsy since they are strictly following the food pattern that is advised during the treatment. Therefore, the patients should take care very strictly with the food that has been advised during treatment"* (Joel, 55 years, West Sikkim).

7.3 Treatment Methods and Practices

Healers have their own way of treating the patients in the villages of Sikkim. The treatment methods vary from one healer to the other. The purposes of treatment would be by using medicinal plants and their properties; the other is by using mantras and animal products. Patients are never sent away without treating them. They first diagnose the patients and begins the treatment. Patients take the treatment from the healers by staying at their own houses and visits in between if required. Otherwise, they come to the healers during follow-up treatment. In rare cases, patients are staying in healer's house in emergencies. Duration of treatment depends on the severity of cases and as per requirements.

7.3.1 Treatment for the Bone Fracture

Majority of the healers do the treatment of bone-related cases in the villages and communities. They treated both the cases which come directly as well as untreated cases from the hospital. The treatment is provided by seeing the x-ray report. All the bonesetters refer x-ray report before starting the treatment. During emergencies cases, the treatment is started without an x-ray report. First, the severity and site of the fracture and broken bones are identified viewing x-ray report. After that, the alignment of bones is done by pulling and pushing method. Medicine is applied over the affected area in the paste form after adjusting. Once the medication is applied, the bandaging is done using bamboo to support the bone (locally known as *kamra*). The oral types of medicines are also provided to the patients. The patients are called for follow-up treatment according to the severity of their

fracture and broken bones. Some they are named after seven days, 15 days, 21 days according to their situation. Healers always maintain cleanliness during treatment. The first healer will apply the medicine to dry and heal the wound externally and then starts treating the fractured bone.

The healer is well known by his work in his area and he is also famous in Forest Department by his healing practices. The healer revealed;

> *"the patient is required to keep the bandage for minimum fifteen days, but sometimes the patients are asked to keep the bandage for thirty days. After fifteen days, the patients are asked for a follow-up. If they need to keep the dressing for some more days, then they are asked to continue for up to thirty days. The patients are sometimes sent for the X-ray after the treatment"* (Budhiman, 75 years West Sikkim).

The healer works in the government high school as a non-teaching staff. He is from a small village in East Sikkim closer to West Bengal, Kalimpong boarder. The researcher got the reference from one of the retired Major of an Indian army, now working as an English teacher in private school. He told the researcher to meet the healer because when he broke his arm, he went to visit the healer and the healer healed him properly. The healer shared a case of a patient;

> *"The patient who had gone to Delhi for the ligament treatment. But the patient did not get healed and had come to me for the treatment. After ten days of medicine, the patient got improved. All I used for the therapy is herbal plants properties. Whenever the patients come for the treatment, I will collect the herbs and make it as a paste. Usually I advise to the patients to take proper rest. If the patients follow my instruction, then the patient will get proper healing within no time".*

The healer also shared another case of the student. The healer has done the treatment of a student from Kooch Bihar who was studying 10th standard, one of the best English school in the town. He further said;

> *"The patient had broken his hand while playing games in the school. The patient took to the hospital, done the x-ray, and was taking hospital treatment. The family told me that they came to know about my treatment through a newspaper advertisement and had brought the patient to me. I treated the patient and was healed within 11 days. It is equally essential for both biomedicine and traditional healing for me. It is the choice of the patients and in that I have nothing to say. I*

feel good even after getting the treatment from hospital, and patients are coming to him for the treatment" (Raj Kumar,60 years, East Sikkim).

The other healer explained about the two components of causes i.e., supernatural and natural causes. He said;

"If the patient had a fall and got fracture and broken bone, sometimes he/she might be having the supernatural causes where the patient develops fever, giddiness, etc. In this case, the faith-based healers will do the mantras to free the patients from supernatural causes. Later the patient seeks the treatment from baidhyas for a broken or fractured bone" (Kundan, 68 years, East Sikkim).

Healer shared the story about how he could be able to treat the young girl whose feet were abnormal and was having difficulty in walking. Healer says that,

"one girl was having nerve defect, which was making her difficulty in walking and causing a problem in maintaining her proper gait while walking. After the treatment, the girl started walking properly, and now she is doing her graduation" (Santabir, 62 years, East Sikkim).

The healer from North Sikkim said;

"if the patient goes to the hospital for the treatment of fracture cases, then they will be applying the ointment and do the bandaging. Sometimes if the hospital is nearby, then they will be calling for the X-ray. In the community, the healers also provide a similar treatment that is given in hospitals such as bandaging and the oral form of medicine" (Pemba, 68 years, North Sikkim).

The above case depicts that the treatment methods and practices are varies from one healer to the other healers. The healers could identify by themselves whether the healing has taken place or not. Once they make sure that the healing process has not taken place, then they will again do the bandaging. Sometimes they will be doing the bandage without support known as *Kamra*, but if the patients are not able to prevent their affected part, the patient is given the bamboo support with a bandage.

7.3.2 Hand Cut

The healer has an experience of successful treatment of a child in the community. He said;

"Once there was a child who has cut one of his hands with the sickle. The hand was cut in the wrist area, and the skin only supports the hand. After cutting the hand, the

child was immediately brought to the nearby dispensary, where the health care provider informed about the need for separation of hanging parts which was only held by the skin. The relatives were worried about the loss of their child's hand. They hurriedly returned the child from the dispensary and brought to my (healer) house. Then I checked the patient's hand and made the paste of the medicinal plants and then managed the separated part applying for medicine and then did bandaging. I told the family to bring the patient after a few days. When a child was brought for the follow-up visit, his hand was fully joined" (Budhiman, 75 years, West Sikkim).

7.3.3 Broken Leg

The healer, who is experienced and well known in Mangan bazar and surrounding areas. When researcher was in North Sikkim for the fieldwork, had asked many times to the taxi drivers about the healer. Most of them said about the successful treatment of the healer. The healer shared the story of a school student;

> *"There was a student who has a broken leg, and he was taken to the nearby hospital. The doctor has done the bandaging, but the bleeding could not be stopped, and then the patient was referred to the higher centre for the treatment. The family members did not take the patient to the hospital, after that the patient was brought to me (healer). First, I assessed the patient and then prepared a paste from the medicinal plants. The paste of the medicinal plants was applied over the bleeding site. After a few minutes, the bleeding stopped, and the broken parts were pulled and made in proper alignment followed by bandaging. The patient was sent home and called for a follow-up visit after a week. After one week patient came for a follow-up. The patient got improved and was happy for the treatment"* (Amrit, 70 years, North Sikkim).

The healer provides treatment for different bone fracture cases Further, we discussed the discovery of anaesthesia in traditional medicine. Healer said there is no anesthesia medicine in traditional healing.

7.3.4 Treatment of Gout

There are healers in Sikkim, who provides treatment for the gout patients. According to Kamal, who is 73 years from east Sikkim, makes fourteen combination of medicinal plants for the gout and arteritis. He also provides treatment for them. Another healer from west Sikkim also gives treatment for gout, arteritis and joint pain etc. Even the researcher also bought medicine from the healer. Budhiman who is a healer, says that;

> *"I use the combination of three forms of medicine, powder, and two types of liquid oils. The powder form of medicine is made from different medicinal plants and their*

properties. The medication is given for a month. The powder medicine has to take orally three times a day, morning, afternoon, and night after food. The dosage of the powder medicine is one small teaspoon with water. After that, the patient has to apply for oil medicine over the pain area. Oil medicine has to keep for five minutes to get dry. In the same method, the other oil medicine has to apply over the area of pain. Once the patient starts the medication, the effect will be seen within seven to eight days. If the patient takes alcohol in that case, the dose has to take after two to three hours of receiving alcohol. The patients also need to avoid taking food such as bamboo shoot, the meat of mutton, curd, and all the fermented food. Both oil medicine is prepared from animal products. Which is not available in Sikkim. The medicine is bought from Nepal" (Budhiman, 75 years, West Sikkim).

The other healer Kundan said, *"those patients with gout who got fracture and broke the bone should not apply bandages. Once the patient is under the treatment of bone, he/she should not take alcohol and meat because of adverse reaction"* (Kundan, 68 years, East Sikkim).

7.3.5 Home Remedies for Stone Healing

During my conversation with the healer. He also shared the knowledge of simple medicine for stone cases. Lalit said that,

> *"maize powder, millet powder, and soup of Gath and its seeds are used for the treatment of stone in the gallbladder. It has to grind and make it as a powder. The patient has to take solid or rough diet. So that the stone will remove slowly. The patient has to avoid soft food during the treatment of stone. This also I have learned from my dream. How the powder of maize and millet helps for treatment of stone which is present in many parts of the body. Since it is grown in the earth, it has taken so many things from the earth, so it works for the treatment of stone in the body"* (Lalit, 83 years, East Sikkim).

The healer also told about the patients who works as a engineer in the hydel project company got healed of taking medication for stone. But healer do not have the proper documentation of the treatment methods. All his treatment based on his experience.

7.3.6 Treatment of Stone Patients

The case of healer Budhiman revealed that, first his wife was diagnose with stone in kidney. After the treatment healer himself started to make medicine for the stone cases. Budhiman narrates the story of his wife, who was suffering from a stone problem.

"My second wife was diagnosed with a kidney stone and got treated by the doctor. I had spent more than 40 thousand for her treatment in a private nursing home in Kalimpong. After that, I thought of preparing my own medicine for the treatment of stone cases. I started making medicine and given to the patient in my community who has a kidney stone case. I was successful with the treatment, and again, I treated the other patient and was successful in treating yet another patient. Thus I started treating the stone patient" (Budhiman, 75 years, West Sikkim).

The healer shared other case history of the patient;

"Once there was a patient's of having a stone in the kidney, and the doctor has referred to the higher centre for the operation saying that the patient needs forty thousand for treatment. The doctor told them to arrange money for the treatment. The family members sat back and allowed the patient to die because of not having the money for the treatment. Later, when the patient's relatives heard about my treatment. They have come to me for the treatment. The treatment was successful. The medicine should not be taken by taste; it has to be taken for getting treatment and for good health. I ordered one of the medicinal barks from Nepal for preparation of medicine. The name of the medicinal plant called Bach. Which was found only in Nepal. The medicine is not available in our Sikkim. While taking medicine, the patient has to take a rough diet" (Budhiman, 75 years, West Sikkim).

7.3.7 Treatment on Types of Stone

It was found that there are 2-3 healers, who provides treatment for the stone patients. The healers treat the patient with a kidney stone and gall bladder stone. The patients with stone are suggested to drink extra water to remove the stone. The healer stated;

"It is easier to treat the patient with kidney stone comparing patient with a gall bladder stone. The patient having a small size of kidney stone will be easily flushed out in the urine, if patients drink plenty of water. I give the dose for a month. I prepare the medicine with the combination of 9 medicinal plants and its properties for treating the stone cases. Initially, the patients are provided one month of medicine, which helps to decrease the size of the stone. After a month, patients are called for the follow-up where again, one more month dose is given, which helps to dissolve the stones. Apart from medicine, the patients are counselled on a diet. Patients are advised not to take spicy and sour food but to include more water, green leafy vegetables, and fruits on a diet. They are also told to take more substantial foods such as sattu (a mixture of various pulses and cereals in powder form), rice, etc." (Budhiman, 75 years, West Sikkim).

The researcher observed form the patients' testimony, where many patients have witnessed the successful treatment for kidney and gall bladder stone. This is how the patients having stone are treated and advised by the healer.

The director of the botanical survey of India, Sikkim branch shared about the medicinal plants for treating the stone patients. He explained about the medicine;

> *"During the field visit, I witnessed the healer treating the patient having a kidney stone. The healer showed and gave me the plant, which is used to manage the patient. After knowing the medicine from the healers. I bought the medicine and explained to one of the doctors from the private hospital in Sikkim. The doctor suggested me to examine the medicine in the laboratory. I tested the medicine in a lab. It was found that the medicine has the potential to degrade the size of the stone in the body of the patient. Then after consulting with the doctor, I bought the stone of patients from the hospital. One night I kept stone on one small cup and mixed the herbal liquid. Early next morning I checked that the stone was turned into small pieces. On the other hand, it is unknown about the adverse effect of the medicinal plants. Therefore, it is essential to know the advantages and disadvantages of medical plants"* (Manish, Scientist-C, BSI).

7.3.8 Treatment of sepsis/ infection caused by Dhokrey[11]

Dhokrey local word is the covering of pupa, which is made to protect itself. It is often seen in the hilly region in both urban and rural areas. Mainly the fingers and toes get affected by *dhokrey*. The people in the rural areas are affected more since they do farming, cut grass daily and walk barefoot, etc. The healer says that;

> *"When patients come to the contact of dhokrey, very minute thorns get into the affected parts which is contacted with dhokrey. In such cases, the baby of honey bee (lit. maim of putka) are applied to the affected area after burning to the fire. Once the honey bee gets dried up in the applied area, it will remove, and helps to pull out the thorn which is inside the affected area. Thus, the healing takes place"* (Rakesh, 53 years East Sikkim).

Therefore, there are patients who come to the healers to get treatment whenever they are affected by dhokrey. These are the minor cases which are seen in the villages getting treatment from the healers. However, if the patients neglect to get proper treatment, sometimes they may lose their fingers and toes.

7.3.9 Traditional Methods for Snake Bite

It was reported that there are three types of treatment used in snake bite. The first type, the treatment done by using the properties of medicinal plants in the form of, paste, juice, etc.

[11] It is a Nepali term for pupa.

The second type of treatment is using *maim of putka*[12]. The third type of treatment is a combination of mantras and medicines. Mantras are used as there are faith-based healers in the communities who have received their knowledge of treatment through dreams and have learned mantras from other healers and guru. In mantras, they do rituals where they can identify the causes and removes the poison of the snake bite. It was reported by the healers that initially they use mantras for the treatment, and later they also provide medicines to their patients.

The same treatment methods would be used for the treatment of snake bite patients. When the patient has the complaints of snake bite, healer used maim of putka (small honey bees) which is useful for the treatment of snake bite. It helps to remove the poison of snake from the body where it is bitten. In small bees, honeycomb (maim of putka) must be applied after washing the affected area with running water for half an hour until the watery fluid comes from the affected site. One healer shared his experience of treating his sister in law during snake bite. He also knows the place where they get the honeycomb from a nearby farm called Azing farmhouse, where they used to collect various kind of honey and other materials for treatment. Early days the vaccination or medicine were not available in the hospital. People used to get therapy from the herbalist as well as the faith-based healer in the community. The key informant told about the healer of Lardyang, of West Sikkim, the informant said;

> *"healer treats the snake bite but do not share his methods of knowledge to anyone. During the treatment, the healer put the medicinal plant into the patient's mouth and chants mantra and then spit on the hand of the patient by which the healing takes place. Throughout the chanting process, the healer will not open his hand. Even working for five years with that healer it was unable to discuss the healing method. It is the most challenging task to know from the healers about the steps of their healing practices"* (Santosh, Ex. Director VHAS).

7.3.10 Traditional Methods of Sucking Pus

It was found that, there are healers who does traditional methods of sucking infected blood from the affected parts of the body. The healer is an expert in healing patients having bone related problems. He has ten years of traditional healing experiences. He mostly prefers traditional

[12] It is one of the type of bee comparatively small to honey bee found in the hilly terrain region.

methods in treating his patients. He follows unique techniques in treatment such as sucking pus and infected blood from the injured and affected body parts. He uses the horn of a sheep in sucking the pus and contaminated blood. He also confirms that, in the process of sucking blood, only the infected blood and pus would come out and the disinfected blood will not come out from the sucker which he uses the horn of a sheep. He further explained the process of sucking therapy;

> *"First, the affected area is slowly squeezed from out to in my thumb, and index fingers and a small cut is made in the centre using a new fresh blade. The horn of a sheep is placed over the cut/incision area. Once the horn is placed over the cut mark, I start sucking the pus and the infectious blood. Sucking is done initially, and later it keeps draining by itself. I just wonder as the draining of pus and infectious blood stops draining once everything comes out; it automatically stops coming fresh and the clean blood. When the sucking process gets over, I will apply for the medicine over the affected area"* (Healer Ram Kumar, 48 years, West Sikkim).

He showed the horn of a sheep, which is used for the sucking therapy. He said the horn was received from his grandfather who however was not practising the healing process. He said last three generations the horn is in use in his family. He also showed the medicine, which is called *Mayen/putka* in the local term. It is dipped in hot water before applying to the affected area. It looks hard, but when it is dipped in the water, it becomes soft. He provides treatment for those who are unable to get a cure from hospital treatment. Earlier, he used to visit patients in various places and their houses, but now he does not go because of his illness. Other than bone related cases, healer also provides treatment to jaundice patients. Patients from his same district mostly come to him for the procedure. He gives therapy to 2-3 patients in a week at his house.

7.3 11 Toothache Healing

The researcher got the references from health worker and healers from that local area. Many people have sought treatment from the healer. The healer said;

> *"one day my son called me from Gangtok for the treatment of tooth ache for his office staff. I prepare the oil from the medicinal plants and puts some drops to the ear of the patients and ask the patient to sleep for half an hour. After setting the drops in the ear when the patient opens the mouth the medicine will affect the nerves of all the oral cavity and all the insects of the teeth will die and come out from the teeth. After half an hour, the patient is given a cup of warm water to rinse the mouth. This is what I have learned for the treatment of for toothache"* (Man Bahadur, 88 years, East Sikkim).

7.3.12 Self-Medication

The healer shared about the incident that took place recently in his place and the problem he has faced. There was a patient who became serious after the insect bite, and the colour of the insect was black. The patient was taken to the hospital by his family members for the treatment. He said;

> *"One night I also doubted the same insect bite when he started having pain in his one sidearm and got redness and swollen. I got up and took the garlic and made a paste, spat on it and takes out the juice and applied over the affected area. In between, I got more pain and thought of going to the hospital. Later I applied all the garlic paste over the part where I had an insect bite. First, I had little pain, but after a few minutes, my pain was reduced and went to sleep. The morning when I got up and saw the affected area was healed. Mainly the garlic paste is used to treat the insect's bite. When the garlic is applied on the affected area, there will be the death of the poisonous substance. Therefore, the person will not have any problem. The garlic is also essential to keep safe from a snake bite. I used to apply whenever I go to the jungle"* (Kalyan, 65 years, East Sikkim).

7.3.13 Traditional Treatment for Diseases

In Sikkim, early days there were no clinics, hospitals, and medicines to treat many health problem such as measles, chicken pox, snake bite, dog bite, sepsis and others in the villages.

7.3.13.1 Measles, Chicken Pox

Healer shared the incident which was took place in his village. Healer says;

> *"Once the whole villages and the community people suffered from measles and chicken pox. All the villagers used traditional methods to get cured. The treatment is done from one kind of frog (locally called as man-paha) which was brought from rivers and streams. The urine of a frog was collected in the small bottle or cup. After the collection of urine, it used to be applied over the neck area by making small cuts. Two to three days of application, there will be inflammation seen in the neck where small cuts were made. The effectiveness of the medicine would be seen by the inflammation. If it is not present the procedure will be repeated as a treatment. Nowadays, vaccination and injections are available for measles and chicken pox" (*Rakesh, 53 years, East Sikkim).

The healer also showed his hand, where it has implied during his childhood days. His mother has the knowledge about various medicinal plants and treatment.

7.3.13.2 Traditional Tetanus

The healer and the community have the knowledge of various ailments and medicine for tetanus. Healer Kamal said *"for tetanus healer and elderly people in the community used*

to give sapur batti, it is a flower of siru[13] *plant — this sapur batti used to soak in the oil and used to beat over the body of the patient for treating them. There should be a gap while beating, and then the pain should be bearable"* (Kamal, 73 years, East Sikkim).

7.3.14 Treatment of (*Kapat*/Food Poison)

The cause and symptoms of kapat differ among individual, community, healers, and health workers. As per the perception of community, it is kept in some families, shops for the prosperity, to become economically stable in the society. It is provided in food by using magic or mantras. Once the person eats such food, he or she becomes ill and may die due to a fatal condition. According to healers and the community, kapat is due to supernatural causes and has various types. Some immediately cause death to a person, sometimes the person survives for a few days, and in some cases, they suffer for a prolonged period. There are symptoms where patients continuously pass a loose motion, vomiting, indigestion, abdominal cramps, cracking of teeth, etc. Same cases are considered as food poison in hospitals.

Healer shared his experience of being attacked by *kapat*, he says;

> *"during my childhood days, my grandmother asked me to get marcha (which is used for fermenting organic alcohol) from the shop. I went to the shop and bought marcha and also ate the snacks in the same shop. Just I completed eating snacks, I felt severe abdominal cramps and started having diarrhoea and vomiting. Anyhow I managed to reach home. When my grandmother saw me in pain, she was sure about the attack of kapat. Immediately my grandmother gave the piece of the tuber of bikuma plant. I was sick for three days, and then later, I became fine*" (Rakesh, 53 years, East Sikkim).

As per the healers and the community people when these cases are taken to the hospital, the patients will be diagnosed as TB patients. Because of this notion, the community people directly go to the faith-based healers or the herbalist. The faith healers do mantras and sometimes provide medicines to those cases. The patients are also asked about the place from where the food is consumed, types of food taken, time of food, date and day of food taken, etc. By asking the details, the faith-based healers do *phuk phak/jokhana*.

[13] It is a type of fern found in Himalayan region of Sikkim and Darjeeling.

The majority of the herbal healers used *bikuma* plant, which is an anti-poison. It is the choice of medicinal plants to treat *kapat* by the herbalist. The tuber of the plant is used to treat the patient who is affected by *kapat*. Patients are provided two to three tubers at a time of the visit and asked them to take a small piece from the tuber after food. Also, they are told not to take spicy food for a certain period, such as ginger, garlic, meat, alcohol, etc. Patients are told to be strictly in a bland diet. There are many cases of patients which researcher found in his fieldwork in North Sikkim.

7.3.15 Treatment of Piles (Harsha)

The researcher observed that, there are patients come to the healers to get the treatment of piles. Some patient accompanied by their parents, some they send their sons and daughters, or some patient send neighbor to get the medicine from the healers. There are healers, but this case depicts the treatment of one healer from west Sikkim. Healer says;

> *"The treatment is provided for one month in the form of powder medicine which has to take orally and oil for applying over the fissures or mass on the anal area. The powder medicine has to take orally three times a day, and while using the oil, the area has to rub and need to pinch the external part of the anus. The oil has to apply twice a day. After applying oil initially, the patient feels a burning sensation for a few minutes, and slowly, the burning gets reduced. Sometimes I break the duration of treatment in fifteen days and calls the patients for follow-up. During follow-up, I provide medicine for remaining fifteen days of treatment to the patients".*

Healer shared about the case whom he had done the treatment. Healer further narrated his patients case history;

> *"There was a case where treatment was taken initially from the hospital. Later the patient was not cured by the hospital treatment, and she (patient) was brought to me. I started my treatment and provided one month of medicine, which helped her to get better. I also orders medicines from Nepal, which is costly to buy, and I take the charges for those medicines from the patients while treating them".*

He also gave various case histories of patients have the problem of piles. The cases also reflects the treatment seeking behaviors of the patients to try multiple therapeutic measures. Healer cited that;

"Another case of a patient with piles who had taken the treatment from Delhi. Later the patient was also treated from a private hospital in Sikkim. But the patient did not get healed, and all the family members have lost hope and were tired of the treatment. After six months, the family members came to know about me (Baidhya/healer) and my treatment. They reserved the car and came to my house to get the treatment"

At the time of visits to the healer's house, he says, "*it's one month the family of that patient had taken the treatment from me. After that, I informed about the patient's recovery and started moving around and the patient, along with the family, has decided to visit the Baidhya"* (Budhiman, 75 years, West Sikkim).

7.3.16 Treatment of Animal (Cow)

It was reported by many healers that the case of dog bite to animals and humans happened during the summer season. The dog bite to animals is common in the villages. The healer also treats animal bitten by the snake and dog, he said;

"where snake and dog bite to the animal we can identify the symptoms in the animals, especially cow. I have treated many cows that was bitten by a mad dog affected with rabies (baula kukur). I am also called by the community people to treat the cow that was bitten by the infected Dog, after that cow did not eat grass for two days. In such cases, the I use mantra and medicines for the treatment" (Somnath, 67 years, West Sikkim).

The people reported from his village the healer does the treatment for snake bite and dog bite animal and human. There are many more cases where healers have provided the treatment successfully.

7.3.17 Snake Bite Healing by mantras

The Healer shared about the patient of snake bite for whom he had gone to the hospital and treated the patient. The shared the detailed case of his treatment;

"Once there was a child who was bitten by the snake, and she was taken to district hospital from there, she was referred to a government hospital in Gangtok. I got a call at 10 pm from the child's family, asking me (healer) to visit the child in the hospital for her treatment. Next morning the child's family send the vehicle to get me to the hospital. I went and saw the child who was getting intravenous fluid, and the face of the child was fully swollen. First, I asked the child about how she is feeling. The child complained of having a burning sensation in her body. Then I asked the child's father to get permission from the doctor to treat his child. I also informed the child's father of treating the child only with the permission granted

by the hospital. The doctor allowed the family to show their child to the healer. After that, I took the child to the next room and spells the mantras accordingly. I spell twice keeping one hour of the gap and then told the father that the child might ask the food by an evening around 4 to 4:30 pm. I also told the family that I will not be able to do for the child. If something goes wrong to their child as I met her after 24 hours of snake bite. But there is no danger in a child's life. Before leaving the hospital, I told the family members that if the child asks food who has not eaten since the day of snake bite, this will prove that the child will survive. After telling this, I left the hospital. When I was on the way to home, I got a call from the child's father telling that the child has asked and eaten the food. Two days later, the child got discharge from the hospital. I went to the child for follow-up and continued the treatment. The child was healed successfully" (Somnath, 67 years, West Sikkim).

The above case shows that the healer are not only called treatment in his village, but he called in the hospital as per the patients demand.

7.3 18 Mantra and Bone Healing

The researcher had visited the place called Khani Sirbung, West Sikkim. On the way, the researcher asked many people regarding the availability of healers in the community. In the police check post, the researcher asked the policeman about the healers. Because they have information about the community and the people. Police said that in this place, they do not have a herbal healer or the bonesetter. But they have several faith-based healers in this place. Even the researcher asked many shopkeepers regarding the healers in the place. Many of them told researcher about the healers in Khani Shirbong, where they have bonesetter who heal the patient using only mantras, snakebite healer, jhakri, etc. Then the researcher took his bike and reached the place. The place was an endpoint where the roads end. The small place has shops, higher secondary school, etc. The researcher have an interaction with the school teacher, village people and the students. They all informed that the bonesetter is very famous in this valley. They said that the healer gives treatment for the bone fracture using only mantras. All of them also had confusion about how the healers do this treatment. One of the teachers got so interested in listening to my work. He suggested that how we can use this kind of knowledge in future days. Then the researcher went to the healer's place, it took a ½ hour to reach the place by walk.

It was an evening time when the researcher met the bonesetter who was sleeping inside his wooden room. The researcher met his wife and told the purpose of the visit. She called the healer. Then we discussed the healing practices which the healer is doing. The healer saying that;

> *"injury could happen at any time. Even in the dream, people get injured. I have completed the age of 70. I got the knowledge through my dream from the age of 13 years. I am blessed with the blessings of God. I never gets angry with anyone, and till date, I have never sent the patients without treating them. At least I gives counselling if I had to send back the patients in case of certain situations".*

In the meantime, one girl came to his house with a broken hand. The patient was a student of a 9th standard. The patient's hand got dislocated while ploughing the vegetable called squash, locally known *as iskush*. The researcher asked permission from the bonesetter to see his treatment process. He said the researcher could observe his treatment as he says *'to do the truth is to keep our mind happy'*. Researcher asked the patient why she did not go to the hospital for the treatment and coming to the healer's place. She told, *"she was not taken and directly brought to the bonesetter for the treatment"*. She has started coming to the bonesetter from the day the bone of her hand got dislocate. She is coming twice a day, morning and evening (see appendix 4, photo 12).

The methods of treatment the bonesetter use only mantras, but he would not be telling the time when he does. He does not prepare himself before chanting mantras. He also added that when the truth is done, it comes automatically and he chants when he feels the time has come for chanting. He also said;

> *"I never treat the patients in a hurry. When patients come for the treatment and asked me to do the treatment as early as possible, I wait till the time when I feel, then only I start healing process. I do not treat such bone cases who have the history of fall from the fruit trees such as guava, orange, jackfruit etc. If I treat such cases, the fruit trees will die. Because fruits and flowers are the things, we offer to God and in holy places. I never interferes other work and if others will interfere with him and his work, he or she will be in trouble"* (Ratan, 70 years, West Sikkim).

The healer treats only bone related cases such as broken and fractured bone through mantras. The healer said it is the seventh day of treating the patient (school girl), and he can treat till she gets healed. Even the girl said she is feeling better and getting healed.

7.3.19 Treatment for Epilepsy

Joel said, about the three steps to treat the epileptic patient. As follows;

> *"The first step, I burn the roots of the medicinal plant, placing on the burning coal and kept in the patient's room under the bed. The room has to keep close, and the patient is being covered with the quilt or the blanket. When the room filled with smoke, allow the*

patient to sit in the room for at least 10-15 minutes. This is how the smoke is one type of treating the epileptic patient.

The second type of medicine that is used for the treatment of epilepsy is medicinal plants and herbs paste. The name of the medicine is Assamghosta. My father used to keep the medicine over the patient's abdomen which he used to treat the epileptic patient. The root of the medicine has to be rubbed in the Luke warm water, and once it is rubbed for little, there will be the whitening of water and only one sip of water is given to the patient for treatment.

The third type of treatment that is being given to the patient was the emulate (Tabiz) which is made by the medicinal plants (Jaributi). There are a crippling plant and herbal grass which has to rubbed together and tied on the white piece of cloth. It has to tie to the patient's body as an emulate" (Joel, 55 years, West Sikkim).

7.4 Usage of Medicinal Plant and its Properties

There are different types of healers found in communities such as faith-based healers, herbalists, bonesetters, etc. They provide treatment to their patients as per their knowledge, learnings, and years of experiences. Majority of the healers are a herbalist who uses medicinal plants and their properties in treating the patients. Healers never prepare medicines with only one medicinal plants; instead, they use combinations of many medicinal plants. The medicinal plants are collected from their surroundings and jungles. Some of the healers have established herbal gardens in their locality and collects the medicinal plants from the garden, whenever they prepare medicines to treat their patients. The whole parts of the medicinal plants and herbs are used for the treatment. They make all forms of medicines such as powder, liquid, oil, ointment, etc. whenever patients come for the treatment, the medicines are prepared and provided raw and fresh to get the best effect of the medicine. Paste form of medicine is never prepared before hand, but the powder and oil forms are kept ready before treating the patients.

7.4.1 Medicinal Plants and its Usage

Some of the medicine plants and herbs reported by healers of Sikkim. The medicinal plants and herbs are from surrounding areas, jungles and mountain.

Pakhan beth: Pakhan beth, which is used to treat the body pain and chest pain. He then told about the treatment of broken and fracture cases.

Chilawney (tree): The bark of chilawney (tree), hair of a person, spider web, all should be ground together, and then it must be applied over the affected area and then need to do the bandaging.

Small bee's honeycomb (Main ko Putka): Used during the treatment of snake bite and insect (dhokrey bijawnu) bite where the paste of honeycomb of a special bee, locally known as putka is applied in the site of injury.

Artemisia vulgaris (local name- titepati): The plant is used for the treatment scabies. Also, the leaves are used to sprinkles the water during deaths at home.

Urtica dioica (local name- sishnu): There are various types of, Urtica dioica (sishnu), some are edible, and some are not. It is also taken as a substitute for the food item. Its tender leaf and the flowers are edible. It has medicinal properties where it helps to treat the blood pressure. It helps to maintain blood pressure. It is mostly found in the tropical and sub-tropical region.

Swertia chirata ham (local name- chireto): This is commonly found medicinal plants in the hilly areas but known in different ways and names according to the place. In Sikkim, the plant is known as chireto which has medicinal properties. It is used in treating fever, cold and cough, pneumonia, etc. This plant is highly used by the healers and the community people. Also, the plant has tremendous economic value in the state of Sikkim. There are other medicinal herbs such as abijalo, golpatta, etc. for treating fever.

Buro Okhati: This medicinal plant is easily collected from the surroundings and is mainly used to treat body pain. The medicinal plant alone does not apply for the treatment, and it has to be mixed with other medicinal plants for its effect.

Bhuichampa: The medicinal plant which is mainly used for the treatment of sprain, fracture, and the broken cases of bone. Bhuichampa has loosened the effects of treatment.

Bikuma: The medicinal plants called Bikuma, which is used to treat Nas Kappat. It must be taken solid by orally in a very small amount. The patient should not eat oily, spices, alcohol, and meat while taking these medicines. Bikuma has very high demand and

expensive. Bikuma is used to treat, poison, diarrhoea, loss of appetite, vomiting, etc. It is difficult to identify bikuma, which has medicinal value since it has two types where one is used for treatment, and the other is poisonous. The bikuma which has medicinal value can be identified by its stem.

Kurki: kurki the other medicinal plants that used to treat fever. The medicine kurki has to boil and take to cure fever.

Harchur, Khokim, Panch amli, Fachayang: The medicine is used for the treatment of bone fracture cases.

Faledo, Ajuwine, Ganja: Gastritis

Diarrhoea and dysentery: tender leaves of guava, the root of aiselo, marijuana (ganja), bhakimlo, etc. for treating diarrhoea and dysentery.

7.4.2 Medicine of Liver Problem

The healer also provides medicine to the liver patient and even those who have the habits of consuming alcohol. According to the healer. "*when I treat the patient having the addiction of alcohol with liver problem, the patients stop taking alcohol. If the patients consume alcohol, the medicine will induce vomiting. Therefore, the patient will not take alcohol"* (Budhiman, 75 years, West Sikkim).

7.4.3 Medicine for toothache

There are healer who treat toothache in the communities. This is the minor cases where patients go to the healers for treatment. The medicinal plants that are used for the treatment of toothache look such as a crippling plant. The healer did not shared the name of the medicinal plants (Manbhadur, 88 years, East Sikkim).

7.4.4 Traditional Medicine for Dog Bite

There are healers namely, Budhiman, Ram, Somnath, Sukbir, Kamal, Rakesh and many others reported about the *Dhatura* Plant, which is used for dog bite, but it is given less amount as the plant itself is poisonous. The above healers are from east and west Sikkim.

7.4.5 Medicinal Plants for Retention of Placenta

The healer shared about the medicinal qualities of tiger grass (*amlisho)*[14], especially the root of tiger grass for the retention of placenta during the childbirth. The flower of tiger grass is used for making brooms. The healer explained;

> *"I have seen people using the root of Amlisho during the retained placenta of a cow. It can be used for both human and animal. It is used during the time of delivery, and the root of Amlishoo is placed over the abdomen of the delivery mother. Whose placenta gets retained inside after the birth. Once there was a cow, placenta did not come out then I placed the root of Amlisho on cow which helped to deliver the placenta. One should be careful when they are using the root of Amlisho. Because once the placenta is delivered, the root has to take out. Otherwise, if it is not removed, then there will be the chances of heavy bleeding and the removal of the uterus will take place"* (Kalyan, 65 years, East Sikkim).

7.5 Animal Products

The healers of Sikkim used animal products in their treatment. But present due to many rules and regulation from the Forest Department, the healers stop using the wild animal products for preparing the medicine. The healer told;

> *"Kulchura name of the local bird is used to treat a toothache. It has to wrapped in a warm piece of cloth and placed over the tooth, which is paining, and sometimes it is placed directly without wrapping when the person is having severe pain. The gallbladder of monkey is used for the treatment of Tuberculosis. Fox is also used for the treatment of tuberculosis. The meat has to be eaten, such as soup. The blood and gallbladder of a deer are also used to treat asthma. The stomach of a porcupine, which is found in April and May is perfect for treating the patients since they eat varieties of medicinal plants and herbs during those months. Leg of a bird vulture is also used in treatment. The leg of a lion, tiger, and elephant are used to treat the children when they are attacked by the evil spirit (moj lagnu). The treatment is not given orally, but it has to make such as tabiz/amulet and tied on the child's body"* (Kamal, 73 years, East Sikkim).

The other healer from village of west Sikkim started sharing the usage of animal products for different ailments;

[14] It is a name of tiger grass in Nepali language

> *"early days people used to utilize the animal products for the treatment such as gall bladder, blood to treat malaria and dysentery in early days. The gall bladder of (dafey) the bird is used to treat malaria, and the blood of an animal jharal is used to treat dysentery. Now those items are not used because there are medicines which are made from medicinal plants. Still, some people know, but they have stopped using because of forest rules and regulation. Earlier days, the asthma patient used to take the blood of deer, but now there is a treatment from medicinal plants. Some patients come and take medicine for asthma. Recently I have an asthma patient from Goa who had come and taken medicine from him"* (Budhiman, 75 years, West Sikkim).

7.6 Preparation of Medicine

There are various steps which need to follow for providing treatment to the patients in the communities. Preparation of traditional medicine is one of the steps that is done while treating the patients. When patients come to the healers, first the problem is identified, and as per the condition and sickness, the healers collect the medicinal plants. The collection of medicine is quite challenging for the healers, as they has to go very far and also the jungles and the mountains for the collection of medicinal plants. The herbs are prepared with the combinations of various medicinal plants and their properties. Preparation of medicines depends on patient's requirements. It is made in different forms such as powder, paste, liquid, oil, ointment, and others. When the medication is needed in the form of a paste, it is prepared fresh and raw. For developing powder medicines, the medicinal plants are dried well for many days and preserve for future use by making it powder. The same way the extractions of medicinal plants are done to make the other forms of medicines such as liquid, oil, and ointment. While preparing medicines, all parts of the medicinal plants are used as root, tuber, stem, bark, leaf, flowers, fruits, buds and seeds.

The old healer firmly believed that;

> *"all the medicines are not good, and all are, not bad, but there should be the balance of all the ingredients that are used for making the medicine"* (Kamal, 73 years, East Sikkim).

The other healer explained about the importance of the medicine;

> *"The herbal medicine is more effective when it is used fresh. The raw medicines such as paste or liquid tonic should not be kept for a long duration. Some medicines are made by the mixture of different medicinal plants and herbs, and it's harmful*

to the body. Therefore, it needs to be consumed or apply early. In some cases, the medicine is made by a single plant, and in this case, it can be kept for a long duration. Some medicines are kept separately, and during the treatment, it is mixed and given to the patients" (Lalit, 83 years, East Sikkim).

The healer showed his concern about the declining the medicine;

"I was quite surprised that how and from where my father had collected the medicine for epilepsy treatment. The medicine was collected many years back. Now it is neither available in the market nor able to collect from the forest. My father did not prepare the medicine, it was found somewhere in the forest, and now it is challenging to collect and difficult to get. The medicine is in the solid form, and whenever the epileptic patient comes, the medicine is given by rubbing and now the medicine is going to finish" (Joel, 55 years, West Sikkim).

7.6.1 Combination of Mantra and Medicine

The healer explained, how he stopped practicing mantras and follow only medicinal properties for the treatment methods for various ailments. He says;

"During the initial days. I used to practice mantras with medicine. But later I stopped doing mantras realizes that it should not be done and included in the treatment. The mantras can be learned but need to do lots of sacrifices. If the mantras are included in the procedure, sometimes the patient cannot be treated because of other healers who are jealous of other treatment. If the mantras or the chanting is included in the treatment, then it is very easy for the other healers to interfere in other treatment. Therefore, I stopped practices mantras in my treatment" (Budhiman, 75 years, West Sikkim).

7.6.2 Best Season for Making the Medicine

The healers reported the best season for making the medicine. They usually make medicine in the form of powder, oil, and many others. According to healer;

"I prepare medicine throughout the year except for rainy season. In rainy season since the plants do not get dry and are not possible to make the medicine in powder form. If the medicine is prepared in the rainy season, then the medicine gets rotten. Therefore, I do not prefer the rainy season to prepare the medicine I make prepare the combination of medicine sometimes a combination of three plants, sometimes seven and sometimes nine medicinal plants, which is based on the patient's cases" (Budhiman, 75 years, West Sikkim).

The healers revealed that, there is no expiry date of medicine unless and until it gets wet. Once the medicine gets wet, then it will not be in use for the treatment.

7.6.3 The Experiment of Preparing the Medicine

The healers explained how they have started their preparation of medicine through their experimental experience based on 'trial and error methods'. In the case of first healer said;

> *"long time back my daughter broke her hand in the evening time. I had collected the medicinal plants near the house and made a paste and applied over the broken part and tightly tied. I had also made the paste and kept for future use. After a few days, the paste got rotten and smelled very badly. Then I realize making the powder which works for so many days, and later I thought the medicine have to be prepared in the form of powder for the long-time use. From that time, I started preparing medicines from the medicinal plants treating the patient with bone-related cases"* (Budhiman, 75 years, West Sikkim).

According to elderly healer from village of east Sikkim said;

> *"in allopathy medicine pharmaceutical companies use all kind of chemicals ingredients mix in the medicine, but in traditional medicine, healers use only medicinal plants and its properties. In traditional medicine, there is one challenge which is to get medicinal properties. In traditional treatment, patients get healed and there won't be any side effects, only it takes some more time to get heal. Nowadays, people want the medicine that heals within a second, and again, there will be the same problem. Nowadays, the patient won't be getting treated with one or two plant medicine. The combination of different types of medicinal plants is used for the treatment of the patient"* (Kamal, 73 years, East Sikkim).

The another said;

> *"first I collect the leaves, roots, and barks of thirty-one medicinal plants. After collecting, these are kept in the sun for drying. The dried leaves, roots and the barks of medicinal plants are sent to grind in dhiki (traditional grinder made up of wood). Once it is ground in dhiki, the next process is to strain the product. The first strained particles are thrown, and again, it is kept for drying. After it gets dried up, it has be grind in okhli (another type of wooden grinder) and then for making it fine powder it is ground in the electronic mixture. Then the dust will be ready to be given to the patients. The medicine for oral course, I use the components of 31 medicinal plants, and for the external application, I use eleven components of medicinal plants"* (Raj Kumar, 60 years, East Sikkim).

The healer, who is form rural village of west Sikkim shared;

> *"I use the mixture of four medicinal plants and herbs. I use creeper plants, barks, and roots for preparing medicine. I prepare the medicine weekly and gives the patient"* (Pema, 47 years, West Sikkim).

The other healer said,

> *"I do not prepare the medicine in advance but prepares only in demand by the patients. The patients or the family members will informed me before coming to my house, then I make and keep the medicine for the patient. The medicine is no use when it is dried and prepare in the powdered form. I provide only raw medicine in the form of liquid tonic"* (Santabir, 62 years, East Sikkim).

The healer (Rakesh, 53 years, East Sikkim) said, *"I use six to seven combinations of medicinal plants to prepare medicine for bone fracture"*. The healer from west Sikkim, uses 108 medicinal plants for treating the patients. According to him, *"nobody can treat the patient with only one medicinal plant. I use all parts of medicinal plants for the preparation of medicines such as leaves, roots, and stem."* (Dilip, 65 years, West Sikkim).

The healer gave the example of few medicinal plants such as *harjora, gillajora*. He says;

> *"when these plants are crushed and make the paste it becomes sticky which is applied over the fracture and broken bone to get proper fixation and early healing. There wouldn't be any effect if the dried medicine is applied in the affected area. The oral form of medicine can be prepared and kept by making powder. The patient cannot be treated only one type of medicine and medicinal plants which are available in the hot places. To treat, the patients' medicinal plants are needed from both the Himalayas/ cold places as well as the hot places* (Kundan, 68 years, East Sikkim).

The healer explained, how he mixes different types of medicine for the effective treatment. The healer said;

> "*I get harchur from other people, then I mix with other medicinal plants and prepares the medicine. The person who gives the medicinal plants and herbs will not give in larger number. Therefore, I mix the combination with other medicinal plants and herbs. I use medicinal plants such as Bhuichampa, Saur, aiselu, panch amli, and many others"* (Bhakta, 67years, West Sikkim).

Another healer explained the different combination of medicinal plants, Healer Bal Kumar said;

> *"uses the combination of 14 varieties of medicinal plants then the healing will take place precisely for 14 days"* (80 years, West Sikkim). The herbalist said, *"40-50 percent of the allopathic medicine made up of from medicinal plants properties. The sustainability of powder medicine could be used for a year, and then after that, new medicine must be prepared"* (Indra, 64 years West Sikkim).

The healer also does the experiment on the medicine through mixing and testing with other medicinal plants. The healer said;

> *"other plants are arulai a medicinal plant which works better than Bhuichampa. Healers have also planted the medicinal plants such as Faleto, black tambarkay, ginseng, chitaita, bikuma, and Sanjivani. I will be testing and checking the effect between sanjivani and the new medicinal plant which I have planted. This is how I find out the effect of medicinal plants and used for treating the patients. There is also another medicinal plant called fachiyang, but it is not available in his place because of cold weather. This medicinal plant is found in warm places instead of cold place"* (Budhiman, 75 years, West Sikkim).

Majority of the healers keep the dried form of medicines which is prepared in advance. They store the medicines in the small air tight container, plastic bags, and zip polyethene. Powder and oil forms of medicines are prepared and stored in advance in various illnesses such as stone, piles, UTI, sinus, hair growth, gastritis, arthritis and gout. The medicines are prepared beforehand in treating their patients.

7.7 Dosage and Duration of Medicine

Dosage is the amount of medicines that is provided to the patients during the time of treatment from the healers. It depends on the types and severity of illnesses. There are no exact dosages of medicine but the healer's advice the patients as per the years of experience of healing. The dosage also varies according to the age group of patients. The oral dosage is advice to take mainly one to three times a day. The oil and other forms of medicines are asked to use one to two times a day. The treatment of the children is the same as the adult. Only the dosage of the medicine will vary between the adult and the children. The old experience healer from west Sikkim explained the dosage and duration of the medicine. He says;

> *"To treat the patients successfully, one should provide the treatment for a specific duration. The same way the healers also give treatment to a particular period according to patients' severity and types of illnesses. The term of medicines will be three days to one month, and it also exceeds as per the prognosis of the patients. If the patient has an extreme case, he or she will take three months to get proper heal but in minor cases, it will take one to two months to set the broken bones"* (Palzor, 90 years, West Sikkim).

Healer said;

"medicines need to be used as per the need; otherwise, the same medicine will become the poison" (Kamal, 73 years, East Sikkim).

The healer said;

> *"first the medicine is given for a week. One teaspoon of the medicinal powder is given to the patients where they has to take the amount which was picked by two fingers. The medicine has to take two times morning and evening with the warm water in an empty stomach. I give only in powder form, but if the patients are serious and unable to take powder medicine, in that case, or situation I prepare the tonic and gives to the patient. But it will take more time for the preparation of tonic medicine"* (Raj Kumar, 60 years, east Sikkim).

The other healer said,

> *"when a patient comes for the treatment there is the number of doses such as three days, ten days, fifteen days and one month. if I give three dosages, three roots of the plant is needed. Therefore, there should be enough medicinal plants. The patient with gastritis should avoid meat items, need to have enough water, fruits, should not remain empty stomach, and need to have frequent food"* (Kamal, 73 years, East Sikkim).

The old healer said;

> *"the primary fracture treatment is given for fifteen days; otherwise, for minor cases, it will provide treatment for a week to ten days. The patients are called once the given duration is over. Then I will remove the bandage from the affected area. The oral form of medicine is given until the fracture, and the broken bone gets joint"* (Palzor, 90 years, West Sikkim).

In fracture and broken bones, the course of medicines is given for seven days to one month. The patients are advised to take medicine by mixing with honey and milk. For gout patients, the medicines are provided for 15 days to one month. Healers give both oral medicines and local applications to the patients. The dosage or the course of medicines are the same for the patients having piles and UTI. For abdominal cramps, medicine has to take for a week. While providing treatment, the patients are also counselled regarding the restricted diets and also have to control a harmful diet. The informant then said that he also treats the patients with burning urination (UTI). He said if the patient has the severity, then he gives

them the treatment for a month and the case is not severe, then, in that case, the procedure is given for fifteen days (Budhiman, 75 years, West Sikkim).

7.8 Follow up

When patients start seeking treatment from any place, whether it is a hospital or traditional healers, it is essential to call the patients in between the treatment. This will ensure the doctors or the healers to know about the effectiveness of treatment, which is provided to the patients. It will also allow the service providers to make the required changes in any form of treatment on time. Majority of the healers in the communities are asking the patients to come for follow-up in between the treatments.

Most of the healers call their patients having a fracture and broken bones are on seven days, ten days, fifteen days, and one month for the follow-up visit. The follow-up visits will depend according to the healer's availability and the condition of the patients. The bandages/Kamro are removed and ask the patients to do the X-ray to know the alignment of the bone has taken place or not. In minor cases, by touching the affected area and seeing the progress of the patients' healers informs the prognosis of his patients. Healers sometimes do not ask the patients to get the report of X-ray during follow-up visits because the conditions of the patients would be deplorable and do not want them to waste their money. The healers will never force the patients to get the x-ray report, whereas the patients are asked in the hospital by the doctors. Also, in villages, the diagnostic centres are not available where the patients can do the x-ray. When patients come for follow-up, their dressings are changed, and the medicines are provided for the next seven to fifteen days to complete the course.

In other cases such as gout, piles, gastritis, stones, sinus and others patients are called after a week of treatment. In case the patients are not able to go for follow-up visits, then the family members will go to the healers and share the pieces of information and conditions about the patients. After hearing the patient's relative, the healer will decide either to continue the same medicine, need of changes of medicine/treatment or to increase the dosage of medicine for a certain period (not more than a month).

7.9 Patients Flow

Majority of the patients go to the healer's house those who are near to them. For example, in East Sikkim, the patients having bone fractures and broken bones are taken to Sauney, Singtam as the patients get accommodation facilities in less amount. It was also reported that the patients from all over Sikkim, as well as outsiders, come to understand the treatment from Sauney. In villages, there are also patients who come to the healers for the treatment from other districts, states, and country (Nepal) as well. Every day there are two to three patients going to the healers for the treatment. It was also identified that if patients need to stay in healer's house for the treatment then most of the cases will be taken to Sauney.

The healers in North Sikkim will be treating the patients only from their locality. The patients come to him in the local vehicle in reserve, and in some cases, the patient's relatives will come to take the healers in patient's house for the treatment during emergencies when patient's inability to reach to the healers for treatment. There are three healers found in North Sikkim where two of them are expert in treating bone fractures and broken bones. The healers stay very far from each other. One healer stays high in the mountainous region and very long distance for the patients to reach. The other healer never stays the whole time in north Sikkim as he travels most of his time for his work. As per the community, the third healer is not an expert in treating bone-related cases, but he provides treatment to other illnesses. The patients go to the healers from Mangan, Lachen, Lachung, Dikchu, Dzongu, Mangsila and other villages of north Sikkim.

The healer in Daramdin, West Sikkim, is an expert in treating the patients. He manages more than ten patients every month. It was found through the healer's register that he has the highest number of 20 to 24 patients in September and October 2017. He treats the patients from the age of 3 years and above and all genders. He treats the patents from surrounding places Soreng, Dentam, Kaluk, Sombarey, Timarbung, Ravangla, Namchi, Jorthang and all the remote villages of West Sikkim. (Sanchaman, 44 years West Sikkim). The healer said;

> *"I treat 1-2 patients every day. Sometimes there are 10-12 patients per day. The patients comes from Gangtok, Dentam, Ravangla, Jorthang, Soreng, Chachung, Gazying and Gangtok. I also send the medicines to patients in Gangtok through the driver's hand and receives money from them"* (Bhudiman, 75 years, West Sikkim).

The old healer from west Sikkim reported that;

> *"I treat 10-15 patients in a month. I not only address the patients but also do the other household activities such as cutting grass for the cow. I manage the patients in my free time. The patients from both far and near would come to get my treatment and those who know my treatment. Also, the student from the nearby school would come in any emergencies related to bone"* (Bal Kumar, 80 years, West Sikkim).

The other healer Rakesh treat 2-3 patients per day. Sometimes they do not get the patients. It is also reported that the number of patients has increased compared to the initial days of their treatment. At present, due to the advanced technology, social media, mobile phones, road connectivity, the healers get prior information about the visit of patients and requirement of treatments. The healer said after the advertisement of his practices in a newspaper in Sikkim Express, the number of the patient has increased.

7.10 Cash and Kind

Healers never demand the amount to the patients after treating them. Healers do have ethics in treating patients where they serve for the poor in the community and do not charge on that. Healers believe that providing treatment to the people in the community is a kind of service, and their knowledge is the gift from God. Apart from accepting cash whatever they give, they accept kind that is brought by the patients when they come to get the treatment from the healers. In kinds, they receive rice, biscuits, noodles, eggs, milk, and local hen.

When the healers successfully treat patients they also give cash to the healers as per their ability and to show gratitude to the services provided by the healers — some they give 100, some 200, 500, 1000, 1500 accordingly. There are also healers who take the charges after treatments get over. In case the healers buy certain treatment materials such as bandages, cotton gauze, etc. for the patients, then they charge only that amount, what he has spent in buying. They takes money because they have to collect medicinal plants properties from the Himalayas and the mountains, from other places such as West Bengal (Siliguri), Kalimpong, Nepal, and some they buy from other healers.

The majority of the well-known healers in the community take money from the patients. Some healers take money before the treatment, and some may take after the treatment. Because they charged money for their hard work. They give powder medicine in a small plastic pouch which has 100 grams. The healer said;

> *"if the patents can give, then some gives Rs.500, some Rs. 300 and some Rs.200. I never asks money to the patients, but if patients offered than I will take"* (Kamal, 73 years, East Sikkim).

Some healer said they do not demand any cash or kind from the patients. But there is a healer such as Santabir from east Sikkim charged the patients about the treatment and asked the amount from 500 to 1500 as per the course of treatment. Healer costs 500 per course of treatment. Rakesh said, *"some give two hundred, some give four hundred and some two to five hundred. They give after getting treated and sometimes in between the treatment"*. According to Raj Kumar, his collection reaches up to Rs.1000 per month. Many people advise him to keep a certain amount for the treatment, but he refuses them by saying he cannot take due to his philosophy.

7.11 Users' Experience

During the visit of healers in the community, many users were met who shared the experiences of successful treatment from the healers. The researcher came to know that most of the community take medicines from the healers. There are few cases where users have shared about their good experiences of getting successful treatment from the healers. Therefore, the testimonies of a few cases were taken and shared in this section.

One day researcher was accompanied by a policeman to visit the healer's house. He was on duty in check post in the border of Darjeeling and Sikkim, Ribdi Barang, West Sikkim. He too witnesses of the healer's successful treatment to his sister. The policeman shared the success story of treatment from the healer;

> *"Once my sister's leg was broken, she was taken to the hospital and shown to the orthopaedic doctor. The doctor did the bandaging properly for my sister's leg. Later my sister developed a complication. Her leg started swelling. After that, we decided to bring her to the healer for the treatment. The researcher asked the policeman why he brought his sister to this healer. The policeman replied, in Sikkim, 90 per cent of fracture and broken cases are taken to the healers, and I*

brought my sister to this healer since the healer is near to my house" (Policeman, West Sikkim).

The other patient who witnesses the treatment from a healer when he was treated successfully during the fatal situation and received new life from the dying stage due to a massive road accident. The patient explained about his incident and treatment. He said;

> *"soon after the accident; I was taken to the hospital. During the time of admission, my family was asked to deposit thirty-five thousand. We almost spent five lakhs on my treatment for fifteen days. Later I came to know from my neighbor about the healer who could treat the cases of fracture and broken bones. We decided to visit and get the treatment from the healer. We took discharge from the hospital and came to healer's clinic for the treatment. I started taking treatment from the healer, and it was one month of getting treatment from the healer. There was another patient who had to spend 20 lakhs in treatment in hospital and died in Siliguri. There is no burden of getting treatment from the healer as the treatment has no cost. Healer never demand the amount, but we give them out of gratitude. In Siliguri we had spent twenty-five thousand per day, but in the healer, I am giving one hundred and fifty rupees per day"* (Pakhrin, Baidhyasala Kalimpong).

In west Sikkim, there was a neighbor of a healer who has witnessed the successful treatment provided by the healer Ram Kumar. The neighbor said;

> *"Last fifteen years my grandfather had a leg problem and was unable to walk properly. He used to walk with the assistant. Every time he used to get infections on his leg. Our family members had tough times to get better treatment for him (grandfather). We took him to many hospitals and specialists. The grandfather did not respond well to any of the treatments. We also took the patient to Kolkata for further treatment but could not get a better prognosis. Later there were no other choices of taking around anywhere and brought him back home and thought of bringing once to the healer (Ram Kumar). After getting treatment from the healer, his leg problem started getting better. The healer did his traditional therapy of sucking the pus and infected blood through sheep horn. He took out all the pus/infected blood from the leg. After many days of treatment my grandfather started feeling better and gradually started walking with support, and now he is free from his leg problem. He walks around freely without any assistant"* (Healer, Ram Kumar's Neighbour, West Sikkim).

One of the patient's relative said,

> *"I have experienced the best treatment in the community and can tell about the treatment to other people. It is challenging for us to take the patient to the hospitals. When the patient gets referred from the health centre. It will be high time for us to arrange a vehicle and money. Every time whenever we take the*

patient to the health centre, the patients are referred to higher centres. In the hospital, there will be lots of expenses to be met for treating the patient. But in community, Baidhya will never ask money for the treatment. There are so many patients coming from different places and all the districts of Sikkim and taking the treatment from the Baidhya and getting successful treatment" (Relative of the Patient).

Other patient shared the medicine prepared by his mother;

> *"Long time back I got hit on my back on the road accident. My mother gave me preparation of herbal medicine. Where she mixed roots of a plants with water. Which I do not know the name of the plants. After one week of taking that medicine I became well. Till this date I do not have any back pain. Comparing to the allopathy and the traditional medicine, we found more reliable and more effective to the traditional medicine"* (Bhim, 45 years, West Sikkim).

The users were pleased to share their experience and satisfied with the treatment they received from the healers. They said it is very easy for them to get the treatment from the baidhya (bonesetter) because healers are available anytime whenever they come to receive the treatment. They also said that they have faith and trust in healers' treatment, and till date, the healers are successful in providing their treatment.

7.11.1 Medical Negligence and Healer's Treatment

One morning, I was accompanied by the healer to meet one of his patients (Mr. Bimal) in Ranipool. The healer told me that, he was treating Mr. Bimal's infant baby girl. We reached Mr. Bimal's house, where Mr. Bimal's wife and his two daughters were in the house. Mr. Bimal's wife offered water, tea and biscuits. In between, the healer asked Mr. Bimal's wife about the purity of the body (indicating to the mensuration of the women). Then, the woman said that she was not in periods. Only after that the healer took tea from her hand. Mr. Bimal used to work in one of the private offices in Gangtok. He is from the middle-class family. He narrated the story about the injury of his daughter, who have broken her leg during the time of delivery in private hospital;

> *"My newborn baby's leg was broken during the time of delivery. The hospital staffs told us that the baby had broken leg due to the birth defects. But we were sure that is not because of birth defects, but because of the negligence of the hospital staffs. The baby was then kept in the newborn ward with traction. Every time we used to ask about the progress, health staffs used to reply that the baby was under treatment and will improve soon. They used to tell that baby will get well after a week. But even after*

keeping the baby in the hospital for more than 15 days, there was no improvement. So we both were in trouble, helpless and depressed due to our child's condition. We requested the hospital's staff and doctor to discharge of the baby. We paid more than thirty-thousand for the treatment. They did not explained anything, when the baby was kept for the treatment. In the beginning and end, they only showed us X-rays report. The baby was in hospital and then we took her to home. At last, we decided to visit this healer.

Because he (healer) knows about the treatment for the bone fracture. One night, me and my wife went to the healer's house at Ranipool. He is here. Ask him, if you do not believe me, he refused to treat my daughter, because she was so small. After requesting two or three times, he agreed to see the baby in my house. Now, I realised is that, herbal medicine really works. Later again my child's leg got fractured. But this time also I took my child to the healer and take the treatment. He (healer) did not asked fixed amount for the treatment. We paid him 100 or 150 rupees per every visit and took reasonable prize for the medicine.

The healer interrupted and said, "First I refused to treat the baby girl. Because she was so small. The herbal medicine and bandage will not work. It will create problem for the baby. The family member requested me to do treatment for their child. After one month of treatment I advised the parents to do the x-ray of the baby where they found positive progress on baby's healing. At the same time when the baby was in hospital the parents were told that baby will be getting treatment for 3 months and if progress do not take place then the operation need to be done. I did not give the treatment directly to the baby. The treatment or the medicine is given to the mother through the breast milk from the mother. I acquire this knowledge from my father. My father used to teach me this methods. I slowly learn this practice. Initially I used to observe and then when I reached at the age of 18, in the year 1995 I start to practice bone fracture (Mani, 38 years, East Sikkim).

The above narratives of Bimal depicts that the medical negligence of the hospital. The helpless father seek treatment from the healer, where Bimal found satisfaction compare to the hospital treatment. The healer knowledge about the treatment methods through breast feeding shows the new dimension of health knowledge. Where many at a time biomedicine and science have no answer to it. Even healer maintain purity in his healing practices.

Healer said, he was questioned by many doctors about the treatment of the baby. Healer got so angry and said;

"I was questioned by many doctors. They questioned me for treating the baby. They asked me that how I have done the treatment where there is the risk of getting mental retardation of a baby. The surgery is also restricted before six months since it is the growing age. I was asked to write report and send it to Delhi. I refused to make the report, now I challenged to do the treatment with the doctors from Delhi and Sikkim

hospital on the same case. It is very sad that our own people will be there to pull the legs and never allow to progress in the society. This is how the people in the society plays politically to bring down the knowledgeable and intelligent people in the community. We do not want to see the good work. But we questioned every time, if they really care about the knowledge and success. They can ask my knowledge of healing practices but they do not, we are jealous each other in this society" (Mani, 38 years, East Sikkim).

7.11.2 Treatment Seeking from Bonesetter

Researcher met a young boy who was 24 years old. He looked healthy and energetic. The boy was playing the game on his laptop. After having few minutes of conversation, he told me about his education, sports career, and many more. Researcher did not ask many things because the healer had already told researcher about his sports career. The boy had won many medals in international and national Tournament. He narrated his story to me about his life as follows:

"Once, there was a state Karate tournament in Sikkim, when I was in 6th standard, might be in the year 2006/2007. I had participated in it. As I was playing in the karate court, I got hit on my left knee in between the match. My knee was swollen. I got the spray over the swollen part and somehow I won the match. Later, I noticed that there was severe swelling in the affected area. I was unable to stand due to severe pain. I was then taken to the diagnostic centre by my mother. I did the x-ray. The doctor told me that I can play the final and not to be worried as nothing had happened. The doctor plastered the affected area of my injured knee but the pain and the swelling didn't reduced, instead it began to itch. Even after few days of taking medicines prescribed by the doctor, the pain and the swelling remained unaltered. I was worried and took a bed rest for the whole day. The medicine was only a pain killer. Thus, I lost trust in the doctor. After that my mother took me to the healer to consult.

Therefore, my mother thought of taking me to the healer. After showing the x-ray report to the healer, he told me that I had a small bone fracture in my knee. He (the healer) applied jari-butti on a bandage and tied on my injured knee and also gave oral medicines. He also advised me not to worry and it will get better soon and need to take rest. After two days of treatment, the swelling and pain was reduced. I was advised to take the combinations of three medicines for ten days. After taking medicines for seven days, I was able to walk properly. After ten days my bandage was removed and was asked to do the x-ray. I noticed the healing process that had taken place. The dressing continued for ten more days, and after that, I was fully recovered.

Second fracture incident, again after many years, I got wrist bone fracture in the tournament. This time also I took the same medicine and treatment from the same healer. Since childhood, I had a problem of nose bleeding. When I used to play and as my body got warmer then it continuously used to bleed for 2 to 3 hours which made me feel very weak. Sometimes my bed also got wet due to heavy bleeding. After taking

medicines for fracture, I felt that the same medicine healed my nose bleeding too. Till date, I don't have a problem of nose bleeding.

Gradually I had also developed the problem of an gastric ulcer. I had this problem, after joining the sport classes in Sikkim. During my training, I was asked to reduce the weight, and for that, I used to keep myself without food and later suffered from an ulcer. But the training was different in China that they reduced the calories of food, not the diet to skip. Even for ulcer, I took the treatment from the same healer for six months. The healer had given me herbal green tea and I continuously took it for 1 to 2 years. Now I don't have much problem with an ulcer too. Even without cutting the diet down one person can reduces his/her weight with proper nutritional diet consumption.

Third fracture incident, In China, one winter night, there was snowfall everywhere. My friends and I just got out of the academy for a walk. Suddenly, I fell down the stairs. Due to cold, I could not realise the pain. When I came back to India, I realised that I had a back fracture. I had a believe in the healer so this time also I went to him. I took the treatment and got healed, but my right hand was not able to move freely. I showed the hand problem to the physiotherapist who had come from Germany. The therapist told me that I had a nerve problem and has to do physiotherapy. After that I had done regular physiotherapy and got healed. After taking treatment from the healer, I never took medicine and treatment from the doctors. Now I have faith and confidence in healer's treatment" (Sportsman, 24 years, East Sikkim).

The above case shows the story of a sportsman. In his narration, he had three times bone fracture. It also reflects the treatment seeking behaviour of the respondent, where he first visited the diagnostic centre for examination. After that he sought treatment from the biomedical practitioners. He did not get satisfaction from the biomedical treatment. At last, he sought treatment from the bonesetter. He also mentioned "I do not have faith in doctor and I have more faith in bonesetter". He also had two past history of health problems like nose bleeding and ulcer. He believed that after taking the herbal medicine for bone fracture. The medicine shows the improvement in his health problem. The herbal medicine not only healed the bone fracture, but it also heal the other health problems.

7.11.3 Out of Pocket Expenditure and Healer's Treatment

I was accompanied by the healer. He took me one of the political party office in Gangtok and the healer introduced me to his patient in his office. I saw this man and his age is around late forties, fair and healthy person. He was walking with the help of walking stick but he can walk slowly as we climb up third floor. After taking the permission for an interview, I asked about

the incident, cause of the bone fracture, treatment for the healer etc., and he slowly narrate his whole incident as follows;

> *"The accident took place in the end of year 2016. I was going back to my home. I was riding a bike. Suddenly one vehicle hit my bike from backside. I fell down 100 miter down to the river. After that my both legs got severely fractured. Soon after the accident I was taken to the private hospital in Gangtok. I was kept for four days. During my stay in hospital. I paid 80 thousand for four days of stay and treatment. The doctor advised me for amputation of both legs. Then I was referred to Delhi. After reaching to Delhi, doctor consoled me and told me not to worry.*
>
> *In Delhi, I was operated and applied steel plates and rod in both the legs and hospitalised for two months. During this time they fixed all my bones. They gave me medicine for seven months. I brought the medicines of 56 thousand. Healing has not taken place properly and the bones were not joined and healed. Doctor told me that I will be able to walk normally after 5years with proper treatment. The total expense was around 12 to 15 lakhs. I was totally helpless. I was tensed and depressed. I spend all my money for the treatment, doctor fees, medicine and stay in Delhi.*
>
> *I informed to the doctor of using traditional medicines. The doctor also allowed me to take medicines if I wants from the traditional healers. I came back to Sikkim and thought of taking treatment from the healer. But I was quite confused where to go and whom to seek treatment. Then I planned to go to the bonesetter who was the father of my friend. What made to get treatment for the bonesetter? The answer is, I was having the faith in traditional medicine. Once I was treated when my leg was broken in childhood. I was treated by the father of the bonesetter form whom now I am getting treatment. I was little worried that whether the son (healer) will do the treatment. What his father does or not. But I come to know that the father of healer was also a famous healer. After that, I went to the bone setter to Ranipool, Sikkim. After seeing, he (healer) identified me and he consoled me not to worry. But it will take time to heal. He started his treatment. He has given me nine medicines. In which I takes three before food and six after food. The medicine is all in a powder form, combination of different herbs.*
>
> *During the treatment from the healer I was asked to do the x-ray after every four months to see the progress. I was also advised to go for follow-up from where I was operated. The healer who has done the treatment of the patient said that comparing to other treatment the traditional medicines takes time to heal the patients. It was difficult to visit Delhi for the follow-up. The expense was too high. I asked the doctor that I will be coming only to remove the plates. Initially I paid to the healer Rs.1300. Now since the healer gets the medicine from long distance. I pay him Rs.1500 for 15 days medicine. But it is very less comparing to allopathy medicine. It was Rs.700, when the healer's father used to treat. Sometimes I give only Rs.1000. When I do not have the money.*
>
> *I got good treatment that I could walk. Till today I am taking the treatment from the healer. After four months of the treatment from the healer when I went to toilet. I feels*

like sitting down and then sat. I was able to sit and was so happy and there was no pain. Then I started walking slowly. After that I could walk upwards in the hills but not downwards to the sloppy area. I informed to the healer and advised to do the x-ray. Now every day I walks and go for duty and riches home by walking after duty. I do not carry heavy loads. Now I feel better. I do physiotherapy at home and some leg exercise. I also did not attend and gave speech during the seminars" (Political worker, 42 years, East Sikkim).

7.12 Referral of the patient

It was reported that the healers referred their patients to the higher health institution for the better treatment. When there was multiple fracture, and complication. healers referred the cases to avoid delay in treatment. Healers never consider that their treatment is best comparing to hospital. Instead, they give equal importance to send the patients to the hospital for better treatment. They also respect the choices made by the patients for getting treatment, either from hospital or healers. They never call the patients for treatment, but at the same time, they never send the patients without treatment once they come to the healers. They provide therapy by assessing the patients. The healers offer not only treatment but also advice and refer them to higher centres/hospitals. The patients are referred to if there are emergencies and fatal situations. While referring, the patients are provided first aids and send to the hospital. In case of patients and relatives do not want to go to the hospitals, then the patients are advised to get admitted in Sauney, Singtam, and Kalimpong, Pakrin Baidhyashala. These healers have the facilities of *Baidhyasala* with accommodation where both patients and relatives can stay for the treatment. The healer runs the hospital/clinic in Saunay, Singtam, East Sikkim says;

"when there is a complicated case, the patients are directly referred to the hospital for further treatment. There are also patients who come to my clinics when they are not able to meet the expense in the hospital treatment. Some they come to me when patients are not satisfied with the hospital treatment. Patients have their own choices and liberty to take treatment from anywhere. There is no such pressure from the concerned authority if the patients are treated by the Baidhya" (Birkha, 43 years East Sikkim).

The other healer from north Sikkim said;

"majority of the bone-related cases comes first to the healers with x-ray report. I check the x-ray report, and if the case is in critical situations, the relatives are asked to take their patients to the hospital. Most of the times the patients are not

brought to the hospitals as they confront that the cost of treatment is very high, and the duration of hospital stay is very long which they could not afford to meet the expenses" (Pemba, 68 years, North Sikkim).

The healer also refers to the cases to other senior and expert healers in the community as well as other places. The healer shared;

"I have a good connection with the healer named Baidhya Pakhrin in Kalimpong. We both refer the cases to each other. Whenever I get the referral patients from Pakhrin and get confusion and doubts with the cases I sends back or refer back the cases informing that the cases are doubtful for the treatment. I have a good connection with all the Baidhyas whom I know" (Raj Kumar, 60 years, East Sikkim).

The old healer said;

"even today the patient comes to me for the treatment, but I refuse to treat the patient telling that I am not able to do the treatment because of my old age. I refer to the patients to other healers who are near to reach. I am also taken care by that Baidhya in emergencies and provides treatment by that Baidhya" (Manbhadur, 88 years, East Sikkim).

It is important to refer the patients on time, but many times, it is delayed from the patient's side while deciding about taking their patients to hospitals and other higher centres. Majority of the healers are aware of referring the patient to hospitals. Researcher asked the patients in the healer's hospital about their previous experience and treatment from the healer. The patients and the family members reported that, sometimes the patients are not willing to go to the hospitals due to the previous experience of not getting satisfaction from the hospital treatment. The patients take the treatment from the hospital but in between due to high expense and long time staying in hospital overburdens to continue the treatment from the hospital and return to healers for further treatment. Some patients are not satisfied with the hospital treatment and want to get the treatment from the healers.

7.13 Other Role and Responsibilities of Healer

The healers play a vital role in the community. They not only treat the patients in the community but also participate actively in community decision making, discussion, clearing disputes and many other. They act as a counselor by providing counseling to the community people. Healers have a diverse role to play such as the role of father and head

of the family, looking after their livestock, some have jobs, some conduct rituals and some look after their children. The healer said;

> *"I used to call for solving the problems in the community. When domestic violence takes place among the family and community, I will try to solve the issues, and if the people do not understand, then it will be referred to the village panchayat and police station for resolving the matter"* (Bhudiman, 75 years, west Sikkim).

Healers were called during the night time for the treatment of the patients. Some cases, healers has to treat the patient on the roadside because of the emergency condition of the patient. He further said;

> *"sometimes I was called by the forest department to treat the patients in the Gangtok town. If I am not getting leave from duty, I will suggest the patient get the permission from the department for the leave. I still remembers that twice I had called through my department to treat the patients who had a history of fall from the staircase in their own house. In both cases, one was a doctor, and the other was a Commanding Officer in the Indian army. After that I was called from Namchi, South Sikkim for the treatment. This time I told the relatives of the patient that I am unable to come due to my duty. After getting permission, I was sent from a duty to treat the patient in Namchi. People come along with their vehicle to take me for the treatment in their various places"* (Bhudiman, 75 years, west Sikkim).

7.13.1 Providing Consultation to Community

The patients also come to the healers for consulting regarding their treatment. They get advice from the healers. The researcher observed, one day early morning, there was a man who had come to healer's house for the consultation of his father health problem. His father, who was suffering from vitiligo (Dubey in local term) and needed some medicine for the treatment. He came to the healer's house and took the advice about the hospital where he can take his father for treatment, duration of treatment, and medicine. The healer assured the man and told him to take medicine from the healer as healer used to treat such types of cases in the community. The man also said about his mother having a bleeding problem. The healer provided medicine for both vitiligo and the bleeding problem. For vitiligo, only the local applicant was given not the oral medicine. It was also informed to the man that the effect of the medicine can be seen after two to three days. The man took medicine from the healer and told of informing the healers once his father gets better, and he will come for a follow-up visit with his father.

The healer also gave the example of a very young woman. She was an employee of the power department was got healed as she had vitiligo. The healer said that, "*the patients need to stop taking ginger, bamboo shoot, red meat, spices and challis. If the patient of vitiligo does not take care of diet, then there may be a chance of re-occurrence"* (Bhudiman, 75 years, west Sikkim).

7.13.2 Healer Playing the Role of Dias

Healers sometimes played the role of a Dai in the communities. Some of the healers conduct deliveries in the communities in times of emergencies. The community people have become more aware of the institutional deliveries. Therefore, women nowadays go to the hospital in advance for the delivery of their baby. The healers also conduct delivery of an animal in the community, mostly in obstruction during delivery.

7.14 Conclusion

This chapter concludes the process of traditional healing practices. The section describes the process of diagnosis, treatment, usages of herbal medicinal plants properties, animal product, preparation of medicine, dosage and duration of medicine, follow-up visit, patients flow, cash and kind for the healers, users'/patients' experiences, role and responsibilities of the healers in the community.

It was found that the healers make a diagnosis of the patients by viewing the x-ray report. They also do the physical assessment by seeing the colour of skin, eyes, urine and colour of nails. The other forms of diagnosis the patients are by asking the details of family history, present, and history of patients. There were also faith-based healers who are diagnosing their patients by chanting mantras (jokhana) and identifying the supernatural cases of patients' illnesses. Based on this diagnosis, the healers provide treatment to the patients such as bone fracture, piles, stones, jaundice, gout, sepsis/infection (dhokrey), snake bite/dog bite. The healers not only treating human beings, but they are also providing treatment to the animals and other household livestock.

In the usage of medicine, it includes home remedies, medicinal plants, and properties for the treatment. The parts of medicinal plants are used as barks, stem, leaves, fruits, seeds,

roots, tubers, and some others. They also use animal products such as gallbladder of a porcupine, the bile of bear, meat, and bile of dear, the meat of fox, the meat of monkey, and skin of a wild goat. The majority of healers prepare the medicines in powder form. Other forms are made in the tonic, liquid, raw paste and sometimes provide the solid parts of medicinal plants during treatment.

The dosage and the duration of medicines vary according to the health status of the patients. It also varies according to the age group. Some patients are given an oral form of medicines, and some will be given the oil and other forms of medicines during treatment. The duration of the medicine will be such as seven days, 15 days, 30 days, and it can be increased according to the requirement by the patients. The patients are called for follow-up visits during treatment. They are asked to come in the first seven days and sometimes after fifteen days.

The healers never ask for the cash and kind while providing treatment to the patients in the community. In some cases, if the medicines has to be bought from other healers and for the collection of medicines from other places, then the healers will charge a minimal amount of money from the patient. They charge cash after the successful treatment of the patient. It was reported that the patients come to get the treatment to the healers from all parts of Sikkim as well as other States.

The users of traditional healing methods in the community are satisfied as the treatment is cost-effective, locally available, affordable and feasible. It was also found that many users have given the appreciation letters to the healers after getting successful treatment in the community. Some patients gave on the letterhead of the village panchayat. Healers never force the patients to come to them for the treatment. Patients are free to choose the healers or hospital in getting treatment. Healers always refer to the cases those who are severe and complicated in providing treatment. The role of the healers is not only to treat patients, but they take part in all the functions that take place in the community. They actively involve in the division-making, solving the family and village disputes, treating the animals, and many more. They are such as a doctor, whenever the patient call to the healer, they never say no to the patient and their families.

The next chapter deals with the perception of biomedical doctors, government officials on traditional healing practices. The section also talks about the power relation such as a community-healer relationship, healer-doctor relationship, the experience of healers' treatment, and one of these.

Chapter 8

Perception and Experiences Towards Traditional Healing and Primary Healthcare Services

8.1. Background

Health and healing have become a principal concern among people today. They take different forms of healing in the family, community, and society. This chapter includes the perceptions and experience of patients, community, biomedical practitioners, traditional healing practitioners, and policymakers regarding the traditional healing practices and primary health care services in Sikkim. It also explains their relationship with each other. The health-seeking behaviours of the community people were observed in the study area. It also describes the perception of healing and biomedical system. People must have knowledge and understanding of the different healing system to perceive. For example, patients in the community know about the treatment provided by the traditional healers; therefore, they believe and understand according to their understanding. In this dynamic period, people still seek treatment from traditional healers. There are various question arises, how the patient and the community people perceive conventional healing practices and biomedical health care services? How traditional healing practitioners understand their healing system and biomedical health care? How biomedical health care practitioners understand themselves and traditional healing practice? All these questions are discussed in different sections of this chapter.

8.2 Perception of Biomedical Practitioners

The biomedical practitioners have diverse perception and understanding about the traditional healing practices and traditional healers in Sikkim. These perceptions can build based on one's individual learning and experience in providing health care services to the community. While interviewing biomedical practitioners, these variations reflected in their views. According to a biomedical practitioner;

> *"We are accustomed to the traditions, cultures, and the custom that abides us. Even though we are educated, we have the perception of going to the traditional healers before going to modern medicine"* (Premit, Gynecologist, STNM Hospital).

There are different perceptions of individual, family and community regarding the health and illness. The senior doctor from department of non-communicable diseases said that;

> *"There are many countries where traditional healing system is included in the health care system. Even the spiritual healers are included in the official health system because the patient seeks their guidance and treatment. It is up to the spiritual and the folk healers who decide where the patient should seek the cure".*

He further says that;

> *"most of the time, patients say that they should not put any surgical mark in their body since they will create more complications in the future. This is all because of the stigma and failure of medical science to convince community people. The medical science cannot explain stigma, whereas social science can explain it, because of stigma in the community, many TB and mental illness patient seek treatment from the traditional healers. Even patient seek treatment from outside Sikkim, from places like Darjeeling, Kalimpong, and Siliguri because of stigma in the society"* (Sonam, JD, NCD, State Health and Family Welfare).

The biomedical practitioner working in the organisation revealed that;

> *"the traditional healing system is a science which has not received due recognition in the policy documents. When there is a living example of successful treatment done by traditional practitioners; why cannot it be integrated into the health system? It can prove the government by realistically gathering at least ten patients whose ailments have been healed by the traditional healers — for example, patients with gallbladder stone and asking the traditional healer to treat them. If at least 6 of them are healed, then the traditional healing method can be successfully proved"* (Suresh, VHAS).

But he has a different opinion about other self-limiting diseases where it can be healed even at home by proper diet such as jaundice, chickenpox, measles, etc. These sicknesses can be treated if the patients follow a decent/adequate diet and rest. However, due to less understanding about these sicknesses, the people seek the treatment from the healers, which may sometimes be healed with proper diet, not by the treatment of the healers. Therefore, it is difficult to believe in the healers treating these sicknesses. As according to Santosh,

> *"the perceptions of biomedical practitioners depends on their upbringing and cultural setup. If the doctors have never seen the healing practices and have never met the healers, then they will not believe in the treatment of the healers. The bonesetters and the orthopaedic doctors do the same treatment method; only the differences with the treatment methods and practices, the orthopaedic doctor practices in clinic and healers in their houses provide traditional methods of treatment. Every doctor can make mistakes, and in the same way, every traditional healer can also make a fault in treating the patients in the communities. Some healers' practices are very well, and some are*

not. Therefore, healers also need to send the patients to take medical advice from the doctors" (Ex. Director, VHAS).

Pranita, gave an example;

> *"if the patient goes to the healer to get the treatment of snake bite. The healer treats them successfully, and the patient gets cured. Maybe the snake was not so poisonous, which did not affect the patient and could quickly heal. Next day one more case of snake bite comes to the healer for the treatment where the poisonous snake has bitten the patient. The healer uses the same methods which he uses for the patient earlier or previous day by the non-poisonous snake. The processes are not scientifically proven of treating all cases of snake bite either poisonous or non-poisonous. Thus, the patients who are bitten by the venomous snake is in danger of losing a life. Therefore, healers also need to have a basic understanding of health and illness. They can refer to the cases early if there are any doubts and is complicated in treating the patients" (NHM).*

According to Sushma,

> *"I do not believe in the healer's treatment. Once there was a patient who had applied the teeth removal and denture from the traditional healers. Later patient came to the health centre due to severe pain. The patient had dentures, which were fixed, which need to be moveable. The dentures need to be removed during night time and must be used during the daytime. But the patient's case, it was fixed and which she had to remove and with difficulty the dentures were removed. When the dentures were removed the whole gum under the dentures were infected. Therefore, it's straight forward to believe in the healers who treat dental problems. There would be more problems when complications occur in the treatment of biomedicine comparing to the complexity that happened after the medicine from the healers"* (Dentist, CHC, Rongli).

During the interview with the orthopaedic practitioner in his office, he reported

> *"many bonesetters in the communities treat bone-related cases. The bonesetter is untrained, uncertified, and doing illegal practices. They are doing their healing exercises against the rules and policy. The complications are more when treated by the healers. Even there are many complicated cases which are unable to manage by the bonesetters and later got admitted in the hospitals. Because of not giving proper treatment by the bonesetters, the situations will be more dangerous when they reach to the orthopaedic practitioners/ hospital"* (Pusparaj Orthopedic Practitioner, STNM).

There are many cases which is not treated well in the hospital. For instance, healers Sanchaman explained about such cases;

> *"I do not treat the major bone fracture cases, which is handled by the doctor. But due to the force of the family members I only treat such cases which was received first treatment from the hospital. There were two such cases who were taken treatment from the hospital but unable to get healed and these patients were brought to me and was begged to treat them by their family members. Among them, one is still not fully recovered due to severe infection and the other patient got*

healed and able to walk. Other than the doctor of Namchi, everyone respects me and my profession" (Sanchaman 43 years, West Sikkim).

Director of Health Services of the state of Sikkim argues that;

> *"nobody is responsible for giving the license to the traditional healers. The government must take care of it. Previously the certificates were issued to the healers for practicing the traditional healing system in the community. Later, many orthopaedic surgeons have placed complaints regarding fracture cases that come from the bonesetters. The facts are very complicated for the treatment in hospitals. Therefore, it was of concern providing certificates to the healers unless and until there is an Act passed by the Indian healing system or the government. The person providing the declaration to the healers are responsible for the death of the patients during treatment"* (Tek Bahadur, Director of Health Services, Sikkim).

Another example shared by Suraj,

> *"the incident that took place when we were provided a course which was related to the medicinal plants. We were taken to one of the villages of Sikkim, the old man who was a healer, showed the medicinal plants that treat the patient with a snake bite. The healer demonstrated the wrong medicinal plants to us, which was not used to manage the snake bite. I could not say anything but sat quietly, respecting the older man's practice. This is how the healers are and what they do. They are not qualified, and they do not have degrees. They have just seen their elders doing, and then the healing practices have been transferred to the next generations"* (Scientific/Technical Associate, SBB).

The case is only from one healer; the researcher observed that many healers are treating the patients with a snake bite. The healers show the patients testimony about the healing and treatment of snake bite.

The senior doctor from NHM shared that;

> *"Some healers practice very well with ethics, some are having little knowledge, some are doing by force, and some are practising for the namesake as their ancestors were doing traditional healing. Therefore, one should carefully identify how the traditional healers are doing their practices in the communities, and they can be provided with the knowledge and skills by conducting programs and seminars"* (Monica, NHM).

8.3 Criteria for Healer's Clinic/Hospital in Sikkim

The informants shared their different opinion about the criteria for the establishment of healers' clinic/hospital in Sikkim. It was observed that out of 40 healers, one healer has a hospital in Saunay, Singtam East Sikkim. One of the officers from the Clinical Establishment Department said;

> *"Under AYUSH, the Government of India has permitted to give recognition and registration to Ayurvedic BAMS, BUMS, BHMS, Yoga, Naturopathy and Sowa-Rigpa. Therefore, they are working as per guidelines. The traditional practitioners/healer must be institutionally qualified for the opening of the healing centre. There should be operational standard, environment, beds, infrastructure 35 square ft, 70 square feet store, 40 square ft room for medicine, etc. There are no issues of promoting the healers, but it's challenging to give registration since there are many fake healers who are just taking the advantages of it. If the government provides registration or certificate separately to the state healers, then it would be good for the healers to practice. If they get the approval and the witness of healers about their treatment and success, then it will be easy to forward for the permission and registration"* (Chopel, Clinical Establishment Cell).

As according to the informant, that the traditional healers cannot open and run the institution as per the Clinical Establishment Act, 2010 of Sikkim, but the officer has affection towards the healing practitioners. The clinical establishment act of Sikkim will not allow, validate, or provides the documents or permission to the traditional healers.

The doctor from National Health Mission supported the above statement, saying that;

> *"the clinical establishment department only approve the established clinics or hospital. The traditional healers are not assessed by the clinical establishment Act. Those healers, who are running the institutions, should be evaluated. The clinical establishment cell which validates the documents of the healing practices or the clinics, their residential, qualifications certificates, etc. has not reported of qualifying or certificates of institutional training of healers in Sikkim. Due to the unqualified and inadequate understanding of health issues, there may be the chances of transmitting infectious diseases from one patient to the other. There is a concern about the transmissions of HIV/AIDS in such clinics where they have found so many haphazard"* (Pranita, NHM).

According to Suraj, argued that;

> *"there is no need of getting permission from the statutory body (clinical establishment cell) for starting the small healers' hut or clinic. It can be certified, and under the supervision of AYUSH department, the healer's hut/clinic can be started. This kind of model has started by FRLHT. The healers are certified in collaboration with IGNOU and Quality Council of India (QCI). In this project, the Ayurvedic doctor, village/panchayat head and experienced healers together by identifying the experience, expertise specialisation of healers certified them in the communities"* (Scientific/Technical Associate, SBB).

8.4 Traditional medicine and biomedicine

The healing practices of the healers are passed down from ancient times. These healing methods were found in *Acharya Samita*. Atharva Veda[15]. It has two parts, which are Acharya Samita in which the whole book contains Ayurveda where Ayur means life and Veda means science, which is called "science of life." In this Ayurveda, which is the science of life consists of two parts, one is Manushya Ayurveda, and the other is Brikshya Ayurveda. In Manushya Ayurveda, it is written about human treatment, human diseases, whereas Brikshya Ayurveda has the details about the plant treatments. Nowadays, we get the extraction from neem items like fertilizers and pesticides; they all have come from the Brikshya Ayurveda (Partha, Scientist-C, IBSD).

The healers do the treatment of various illnesses in the rural as well as in the urban areas. It is not against traditional healing practices. People in the early days were more familiar with traditional healing methods. They were using more traditional healing practices. Now the changes have come to various aspects. The environment has become more polluted; there is a change in food habit and diet pattern. All these changes have affected the immunity, and people are suffering from various illness. Traditional medicines are not enough for a cure for such diseases. Ultimately, the patient had to take allopathy treatment. Earlier people had more immunity to fight with the disease, but now the new generation's people have low immunity power to fight back diseases (Tak Bahadur, DHS, Sikkim).

The advancement of medical science and technology, the government of Sikkim, had started many programmes in the health sector for the Sikkimese population. One of the officer from Tribal Research Institute shared that;

> *"Sikkim has a chief minister health card; in this scheme, patients' blood group, health problem everything is recorded under the project of NHM. Health-wise Sikkim has shown excellent public health services like recently build Multi-specialty hospital, health insurance; the state government has a partnership with other multi-speciality hospitals like Apollo, Delhi, where patients get discounts for the treatment. If the patient is a government employee, they get an advance discount of rupees two lacs. The patients who are not working or unemployed, they also get concession in many government hospitals like AIIMS, Safdarjung, Rajiv Gandhi Hospital, etc."* (Lakpa, TRI).

[15] It is one of the larger body of the oldest religious text written in Sanskrit

According to Sonam,

> *"Today's world, one cannot rely only on bio-medicine, no matter how experienced the doctors are in their particular field, the demand of the body is identified by the diagnostic report. The doctor will advise the patients to have good food. Now the question is, what is good food? Even the doctor is not explaining what the concept of good food is. Every individual knows that one must eat healthy and good food. That's why many health problems are coming up"* (Sonam, NCD).

The health worker who is working as MPHW in the PHSC Aritar gave a reference of one healer who can identify the dental carriers by palpating the nerves of the fingers. She further said biomedicine is not only we should give importance. We need to consider age-old healing tradition, which our ancestors used to follow. At present, we are in a situation where we seek treatment from both the systems. She told that the biomedicine practitioner does not give importance to the traditional healers and the healing tradition and think that they are the only doctor who knows everything. Present time younger generations are also not interested in learning traditional healing practices. Therefore, traditional healing practices are getting disappeared day by day. She also told not only healing traditions, but nowadays, even people do not celebrate their rituals, festivals, etc. They all live in their world.

8.5 Perception and practices on Child Delivery

The Health Worker (MPHW) said, in early days, people use to consume organic foods from their fields and cultivations, which was healthy. He then cites the example of a woman who delivered the child on the way to the hospital, who is now 37 years old. But now no woman could deliver at home because everything they eat from the market. Their food habits got changed. It might be that early days there must be more vitamin and minerals in vegetables and pulses, which was organic. Before NRHM, women used to deliver 9 to 10 children at home conducted by elderly women and dais, but now nobody gives birth at home. After the NRHM, institutional deliveries have increased. It had also helped them after the appointment of ASHA. The ASHA has to bring the mother to the health centre. We also told the community people that first, they must come to the hospitals and then after they can visit the healers in the community.

The biomedical practitioner from government hospital shared about the facilities of institutional deliveries and the option for the pregnant mothers. She said;

> *"In earlier days, women used to deliver their babies at home. There were no alternatives for them to choose from. Now there are alternatives where they can deliver without bearing any pain. There may be complications in the cesarean section, but the choice is there, and the mothers are the counsel and inform about the alternatives. They have their freedom to select. Women those who prefer cesarean section can opt for Caesar, and those who do not prefer can go for normal delivery during childbirth. If delivery mothers are interested in getting the treatment from traditional practitioners, then they are allowed to get treatment only after getting discharge from the hospital"* (Premit, Gynecologist, STNM).

Komal said;

> *"it is complicated to convince the community people. During the community visit, the elderly women told about giving birth to 14 children, and some told they gave birth to 15 children at home without any medical aid. But after the introduction of institutional delivery, it has put an end to home delivery. The family size has also declined. Now, most couples want only 1-2 children. We go to the village and household and make them understand about maternal and child health. We sensitise women and family about the patient referral to the health centre during the pregnancy period. We tell about the preventive measures in health problems"* (Senior Program Officer, VHAS).

8.6 Perception of Government Officials/Professionals

According to Suraj, he perceives why traditional healing practices are not integrated into modern medicine. He said, it is not because of lack of knowledge that the healer has, but it is due to insecurity of not getting patients by biomedical doctors, and to hold their jobs. If the patients are sent to the traditional healer, the doctors won't be getting enough patients, and it would affect their career. In Sikkim, the traditional healers have not yet received the recognition from the government, which is very important. There is no use of giving a little number of incentives unless and until the healers will get the proper recognition from the government. There is a possibility of providing placement in hospitals for the Baidyas to practice traditional healing. But they need to have the degree and certificate of their practices. The question is being raised that how it is possible to provide the degree for the Baidyas as they learn and practice healing through oral tradition (Suraj, Scientific/Technical Associate, SBB).

Purna said,

> *"at the present scenario, the people mostly prefer biomedical treatment. If we inquire about the health departments regarding herbal medicines and healer, then the workers of the health department get angry with us. The government officials do not want to hear about traditional healing practices and AYUSH. It's the responsibility of the bureaucrats, health officials, doctors, and health minister to give equal importance to the traditional healing practices. One cannot neglect/ignore the essence of traditional medicines and healers though if he/she has more understanding of modern health system. Therefore, to have equal balance the government bureaucrats, health ministers must take the initiative for making the policies in Sikkim"* (Retd. Agricultural officer).
> .

The health institutions are under government, and they have politics, but the healers do not get influenced by the political touch. The healers neither follow, nor they do strike, they never involve themselves in the political issues. The healers have their dynamics and have their way of treatment. The doctors need to have the registration to practice their profession, but the traditional healers do not require any certification because the patients or the people come to the healer's residence for the treatment on their own decision. The healers are free from the political bondage (Retd. Agricultural officer).

Krishna said, till now, there is no proper guidelines or policy in the state government to strengthening the indigenous system. The government has given importance to the other alternative system, the placement of AYUSH department in the hospitals. Also, there is a doctor from Amchi medicine. But not the traditional healing practitioner (Krishna, Program Manager TMI). The government officials do not want to hear about tribal healing practices and AYUSH. Therefore, I do not want to argue with them (Tapan, Research Officer, RARI).

8.6.1 Perception of Cancer Healer

The informant shared the story of one of the healers in the Tamilian district of Manipur, who was a respectable healer who can treat the dreadful pancreatic cancer. The healer used to prepare the medicine with a combination of 47 medicinal plants. The healer told about his guru who has said not to disclose the name of the combination of medicinal plants in front of his mother. He said, luckily his (healer) mother was not present during their visit. The healer started explaining and showing each medicinal plant. After explaining about 31 medicinal plants, his mother entered the house, and then he stopped telling. There was no possibility to revisit the place since the place was very remote, and it took 19 hours to reach, and only five houses were after that crossing five mountains. The road was very rough for transportation.

Therefore, he was not able to gather the details of whole medicinal plants. The people of that place get vegetables for six months, and the rest of the year they depend on hunting. One medicinal plant was examined to know whether it could treat cancer patients. It was sent to many international labs for testing, but the result showed negative. It contained some radiological effect which could cause diarrhoea (Partha Scientist-C, IBSD).

8.6.2 Kidney Stone Healer (Copying from another healer)

Partha shared the story about the healer, who heal the kidney patients in the community. He said;

> *"There was a man where he (man) had gone to the other healer to get the treatment of kidney stone of her mother. During the treatment of his mother, he noticed all the medicinal plants used for her mother. After reaching home, he also started treating kidney stone patient with that same medicinal plants. From that day, he also became the healer and used that plant, and now he says that he could do the treatment of kidney stone and even his treatment was published in media. Later the original healer did not get anything but the pseudo healer who saw the medicinal plants treating his mother started treating with that medicinal plants, published his healing practices through media and got Award from the Government. He said there are still pseudo healers"* (Partha Scientist-C, IBSD).

8.6.3 Healer's treatment for Jaundice Patient

The informant said that he had done the study of the treatment process from the latex of mango and prayer mala, which is done for the jaundice patients. He shared the story about the healer's treatment through *jhad phuk*[16] for the jaundice patient. Before removing jaundice, the healer draws out the latex from the mango. It is then applied in patient's hand which give yellowish colour. After that, it is rubbed on the patient's body. The informant said, it is scientific that if the latex is rubbed in the body of the patient, it will help to take out the bile and bilirubin that has been stored in the body of the patient. Sometimes the patients are asked to wear the mala/amulet (chain), and if you see that chain, it is made up of medicinal plants. When the patients wear this mala (chain), they have the perception of mala going down in the body and take out the bile pigmentation and heals the patients. The more Bilirubin is taken out from the body, the more the chain becomes thin, it will get shrink. It says that the active/useful properties of the plants will be collected to treat the patient (Partha Scientist-C, IBSD).

[16] It is one of the spell or mantra used by the faith healers

8.6.4 Perception of Baidya (Bonesetter)

There is healer's hospital called Saunay (a place known exactly by that named) in Singtam, East Sikkim where patients are admitted and processed for the bone-related cases. Many fracture patients are admitted for complete bed rest as they are advised in the biomedical hospitals. Those patients are admitted in Saunay as the patients were unable to meet the expense of biomedical hospitals. Saunay is known to all Sikkimese. Every people have their perceptions about the hospital (Saunay). If the person gets a bone fracture, he seeks the treatment from the Baidyas, some they go to Pakhrin Baidya in Kalimpong, West Bengal. The informant Suraj, Basant, Nima, Krishna said, most of the people go to the Vaidya in Sauney, Singtam, and other Baidyas in Sikkim. Every people know about the treatment of Baidyas. Even the allopathy doctors see the treatment of Baidyas, but the doctors never allow to integrate the healing practices of Baidyas. Sometimes it may be because of economic aspects; the doctors do not want the patients to go to the Baidyas.

According to Santosh, he does not consider the Baidyas of Sauney as traditional healers or faith healers as they are only quakes because they neither know traditional healing nor they know scientific healing practices. The researcher then said that once he had done the visit of Sauney and had seen many patients getting treatment. He also said that every people in Sikkim is known to Saunay for getting treatment. He further added that if the healers are traditional faith healers or herbal healers, they should know how they have developed faith in it, but the Sauney do not know about the faith from where they got originated. The healers of Sauney are unknown about the science of Biomedicine, Ayurveda Homeopathy, and traditional healing practices. There must be a specific body of knowledge to understand any medical system.

He further added that the healer of Saunay also repairs/stitches of tear and breakage of blood vessels when the bone is out from the skin. He doubts healer's treatment of Sauney who confidently be sure about the patient's bone being appropriately joined or not. He does not believe in the treatment of bonesetters because the bone once it is broken it can get reunited or joined itself, but the science of therapy is done only when there is melanin or dislocation of a bone. In his understanding, the bone gets joined automatically, the science of treatment is needed only to identify whether it is getting correctly joined or not; the operation is required when the bone is bent to some other direction and not getting joined. Afterwards, he told if the

researcher could able to collect the details of healers from the root or their geniuses, then it would be helpful for the researcher to match with the modern healing practices (Santosh, ex. Director, VHAS).

The informant shared her opinion telling me that;

> *"I do not believe much in the bonesetters. There are cases which are not treated well by the bonesetters. She gave an example of few patients, first a young man of 35 years who has to amputee his leg while the treatment was not successful from bonesetter, the other was a woman whose hand was not joined properly. I don't believe the healing practices of bonesetters, but I think in traditional medicines. Even qualified medical doctors have the same understanding and opinion towards the healing traditions of bonesetter. The doctors do not visit the communities; they might be having understanding gaps in the community aspects. Even they do not believe in traditional healing practices"* (Regina, Atree).

Partha says that;

> *"he has taken three times treatment from Saunay bonesetter, when he got crack in his spatula due to fall. He was treated well and got correctly healed but could not identify the actual diagnosis. The healer of Sauney at present is the nephew of the founder of Saunay healer's hospital, who also was a healer. His uncle was very expert in his practices and had fame in treating the patients. Later, after the death of expert healer, the healing practices are carried out by his nephew"* (Partha, Scientist-C, IBSD).

8.6.4.1 Case: Treatment Seeking from Saunay Bonesetter

The healers of Sikkim are never exposed to other areas or places. They stay in the village and work in their place. Nima shared the experience of treatment taken for his grandson. He said;

> *"I have taken my grandson to the bonesetter for the treatment. My grandson got treated and responded well after the treatment. The bonesetters can treat multiple fractures very well. First, I took my grandson to the orthopaedic doctor, where he advised for the surgery. The doctor told me about the cost of fifty thousand for the surgery. I refused to go for surgery and took my grandson to the bonesetter where I was told that surgery is not needed and started to treat the patient and asked for the follow up after 15 days. I took the patient after 15 days where the bonesetter asked me to do the X-Ray and gave the medicine and called for the 2nd visit after 15 days. After 1-2 months, my grandson became alright and started going to school. It is challenging to have faith and believe in the bonesetters. I do not know whether it is a miracle or a treatment of healer"* (Nima, SMPB).

He further said that they must help the healers; they must give the money for the treatment. The bonesetter becomes satisfied with whatever amount of money is given for the procedure. He takes whatever amount is provided, whether it is Rs.300 or 500. The informant also said

that if he would have taken his grandson to the orthopaedic doctor, then he would have spent more than Rs. 50,000 for doing surgery and all but bonesetter did not take more than Rs. 1500. The bone setters do not ask the money; they accept whatever amount is given to them.

Bonesetters use bamboos, and the affected area is supported by bamboos, and it was tied from outside. The informant said that he was wondered of getting cured so well. The main thing the people go to the healers is due to their satisfaction and cost-effective. He said once he had gone to visit the forest and met one healer having the thread (choya) made from bamboo and kept outside the house. The healer was asked about the purpose of the thread (choya). The healer said thread (choya) is used to treat the cramps on the calf area during the night. The healer gave to the informant also as he too has the same problem. He said that he had tied that bamboo thread whenever he had pain and found very useful and believed that chanting bamboo thread helps (Topden, SMPB).

8.7 Pharmaceutical Companies

In India many pharmaceutical companies are built only for business purposes, and it has the most significant marketing in India. Once their business is stopped, then their company also gets closed. This pharma company was only promoting allopathy in India (Tapan, Research Officer, RARI). Suraj, said there are pharmaceutical companies, but they import all the drug materials from outside. They only do packaging in Sikkim. They are not using the resources from the biodiversity of Sikkim. The companies are not allowed to throw waste products wherever they want to throw. It is mandated not to throw the waste product of companies anywhere. They are given limited areas where they can put their waste products. The waste products are first tested before dumping (Suraj, Scientific/Technical Associate, SBB).

The pharmaceutical companies do not collect the medicinal plants from Sikkim. They are here to build their pharmaceutical companies. They bring staffs, materials, and ingredients from outside which are required for making medicine. They only prepare medications and sell. They are not allowed to violate the state's rules and regulations. They have pollution testing machine and can discard a certain amount of garbage on the riverbank (Newton, Scientist-D, IBSD).

8.8 Perceptions of Traditional Practitioners/Healers

Indra said there are allopathy doctors who are keen to know about traditional healing practices and interested in these healing practices. However, if they come to practice herbal medicine/traditional healing, then his clinic will remain closed for the allopathy medicine, and it is tough to go through the process of learning traditional healing practices (Indra, 64 years West Sikkim). Budhiman said;

> *"I know one of the doctors from Gazing; West Sikkim says that the treatment can be done in mutual understanding. The doctor says that if doctors are not able to treat the patient, then the Baidya can do the treatment and if the case cannot be treated by the Baidya then the doctors will be doing the treatment. So far I have not communicated with the doctors of STNM or Manipal, Gangtok, East Sikkim"* (75 years West Sikkim).

According to Budhiman, the community people go to the hospital and come to him if the hospital treatment is not successful. He further said,

> *"I have treated the cancer patient who was not cured with the hospital treatment. The patient survived for four years after my treatment. Similarly, I have treated many patients having complaints of piles, bone fracture, stone, gastritis, etc. those who have come from the hospital after unsuccessful treatment"* (75 years West Sikkim).

The other healer Rakesh said,

> *"if the patient is taken to the hospital, they are put for the complete bed rest for three to four months. They cannot perform any exercises or daily work. Due to that sometimes their healing will not take appropriately like bones will not set in proper alignments. Therefore, the patients mostly come to the healer where they are provided both oral medications and paste to apply on the affected site. The bandage is done, and it is removed after a few days; between 25 to 30 days or maybe less according to the patient's situation"* (53 years East Sikkim).

The healer from West Sikkim, who is expert in treating the epileptic patients in the small village;

> *"some people do not believe in the traditional healing practices, and they mostly prefer to visit the hospitals for the treatment. But I treat them when they come for the treatment. First patient visit the hospital and after they come to me for treatment. There were 5-6 patients, I treat in a year and I never do an advertisement for my treatment nor do I take money from the patients. I do for the poor who do not have money"* (Joel, 55 years, West Sikkim).

Joel further explained the stigma attached with the patients having epilepsy. The healer said epilepsy is a sickness where it is looked down the most hatred sickness, and mainly the people get from the evil spirit. When people get the sickness the patient smells very bad.

Both traditional healers and the allopathy doctors are equally crucial for the community people, and it must function in parallel with each other. Many people take treatment from the healers in Sikkim. There are healers like Baidya of Singtam, Falamay in Mangsong, etc. Some healers also treat moles or warts (Musa in the local name) and treat body and back pain. Patients come from different parts of Sikkim to take treatment from the healers. It might be because of the cultural belief and patients satisfaction in the different healing system, people are getting healed, whether it may be allopathy or traditional healing system. The community people go to the traditional healing practitioners before taking allopathy treatment (Tirtha, 68 years East Sikkim).

The other healer told of not having a license and certificates. Therefore, he does not go to other places to perform traditional healing practices. He treats all the patients at his house. Whoever comes for the treatment he treats according to his knowledge and practices. Some patients ask certificates of getting treatment from him, which he does not have, but he gives in writing form stating that the case has been treated by him according to the complaints and their consent. He never sent back any patients without treating once they have arrived in his house (Rajkumar, 60 East Sikkim). The CM of Sikkim is not serious about the practices of the healer. Traditional healing practices are essential in the primary health care level, and it must be in its practice as we live in the village. Many patients come from different parts of Sikkim as well as from West Bengal to get the treatment from him (Ratan, 70 years West Sikkim). The healers in the community do not need the percentage of a certain amount but need to be recognized and encouragement for their work of healing (Budhiman, 75 years West Sikkim).

8.8.1Healers Perception -incident case study

The healer explained about the incident of his brother. He started telling,

> *"One fine morning my brother had gone to cut the grass for our livestock. He had climbed the tree to cut the leaves from where my brother fell, and the hip bone got dislocated. Being a healer, I thought of giving treatment, but since the nerve has compressed within the bones, it was difficult for me to give treatment. I took my brother to the orthopaedic doctor in Gazing, West Sikkim. The doctor has done the X-ray and*

showed that my brother is sick for the past 2-3 years, and he has swelling in his chest. I was not happy with the statement of the doctor and replied to him telling that my brother has a hip dislocation and because of that he is unable to walk. After hearing this from me, the doctor got annoyed and started shouting at me and told me who I am to tell and teach the doctor. I was outraged when the doctor yelled at me and challenged him, asking to tell about the man and animals who have a nerve in the chest bone. Then I told the doctor about my practices as a bonesetter which I started at the age of 18, and now I am 58 years old, and till date, I have never seen the man and animal having nerves in the chest. The doctor then kept quiet for a while and later shook his hand with me. After becoming calm, the doctor blamed the machine, or else it might be the report of another patient. The doctor advised me to take my brother to a good health centre for an MRI.

I took my brother to Siliguri from where the patient was again referred to the higher centre to the speciality hospital in Bangalore. I took my brother to Bangalore, where he got rod insertion and sent back home with oral medicine. My brother was called for follow up treatment after three months. When my brother reached home from Bangalore, I started my treatment and did not allow him to take oral medicine given from the hospital. After one and a half month, my brother started walking. Three months later, my brother went for a follow-up. I told my brother to inform the doctor about the traditional medicine which he had taken instead of allopathy medicine. I also told him to show all the medication that he got during the time of discharge. After follow-up, my brother came home and told me the reaction of the doctor. My brother said the doctor was shocked to see his early recovery. The doctor told my brother that he wants to meet me once, but due to lack of time, I was not able to meet the doctor. Later, my brother had removal of two rods, and one rod is left inside the affected part, but he is fully healed. He is not having any problem to date" (Ram, 68 years West Sikkim).

8.9 Healer Relationship with Department and Organization

Majority healers have a good relationship with the biodiversity board, RARI, SMPB, Horticulture department, TMI. The healers are always involved in the seminars, workshops, and training by these departments. Therefore the relationship of healers with these departments is good. Whereas the healers are not in much contacts with health departments and institution.

"I have a good relationship with the people of the forest department. If I am in trouble to collect the medicinal plants, then I ask the help from them. The forest department officers also take the treatment from me if needed" (Budhiman, 75 years West Sikkim).

8.10 Healers Relationship with Patient

The relationship between the healers and the patient is already explained in the previous chapter. There is a sense of we feeling among the community people and the healers. The patients have belief and trust in the healing practices of healers. The treatment of the healers in

the community is affordable and accessible to the people in the community. Healers never fail to communicate and contact with the people even in emergencies. Healers also know the patients' background, family condition, socio-economic conditions, etc. The healers also provide counselling to the patients, along with the treatment. The treatment of healers are cost-effective and never demand money from the patients while treating. The healers are seen as a respectable person in the community.

8.11 Experience of Healer's Treatment

Suresh, shared his own experience of using traditional medicines. Once he got warts all over his hand and legs. He took medicine from the healer, and after taking medicine for one month, he got cured, and all warts got vanished. He has personally witnessed the healing of tuberculosis patient by the healer. He also suggested meeting the tuberculosis patient who is cured with the traditional medicine which was unable to treat by the allopathy medicines. Every year there is research published on the traditional medicines and its practices, but it's unable to prove. He is also interested in doing studies on traditional healing practices even though he is a biomedical practitioner (Suresh, VAHS).

Tek Bahadur shared his experience;

> *"I was treated for pneumonia when I was a child. I was told of having pneumonia and gave the juice of some medicinal plants for the treatment. I do not know how people or the healers used to diagnose, but they were known to treat the patients. Most of the healer's treatment passed on to generations after generations"* (Tek Bahadur, DHS Sikkim).

Pranita, witnesses the treatment of one faith-based healer, who works as sweeper/sanitation worker in Teesta bazar, Kalimpong. The healer has treated the jaundice patient who was one of his family members. Therefore, the beliefs in the healer's treatment. Four members in her family were treated by that healer. It takes 15 days to get healed from Hepatitis A. She was forced to take the patient to get early healing. The healer applies the oil on a patient's body, rub the charcoal on the palm of his hand, and then blow the air for three times. After that, the hands are washed with water. The yellow colour from the body is washed out. The procedure is carried out for three times (Pranita, NHM).

Regina, narrated one of the incidents about her student. One of her students got healed by the mantras and medicine prepared by a monk. The girl was not getting healed by the treatment of different doctors and medicines. She got better after getting the treatment from the monk. It was unable to believe and thought it might have been healed co-incidentally. Many times, we do not believe in such healing practices because of our less understanding and exposure to the healing practices (Regina, Atree).

Manish BSI said a long time back they were going to Siliguri. On the way, he slept off and got injured on his leg. The driver took him to his (driver) house where his mother used to practice the traditional healing as a bone setter. After reaching the driver's home, his mother applied for the medicine, and within two minutes, my leg was fine. For his understanding, traditional healing is the blend of art and knowledge. But it is not the doctor and science. She treated the leg by applying some oil and then twisted the leg and after a few minutes, the leg was fine. If she would not have used the oil, then the leg might not have got normal by twisting. The treatment is done with oil, followed by the turning of legs (Manish, Scientist-C, BSI).

Lakpa shared about the experience of ethnomedicine;

> *"I was born and brought up in the village; I can identify many plants, their uses, Lepcha name of medicinal plants, parts used, and treatment methods. The knowledge is acquired not through my family, but I gained over the years of my association with the surroundings, jungles, forest, etc. That is how I learned; I never took classes for herbal medicine. I also know a few poisonous plants to catch fish and few medicines to treat animals".*

These knowledge are there in the community; everyone has this knowledge. But slowly, the younger generation is moving out towards the city; now the gap is creating among the generation and one way the deficit is creating a huge vacuum. The older healers are dying; the younger generation is not interested and moving towards the city for education and job. They are losing contact with the village, culture, custom, tradition, etc. (Officer, TRI).

Nowadays, there are few real faith-based healers, but there are many traditional practitioners who use medicinal plants, jaributti, and Ayurveda. Today's' generation all are keen in perusing higher studies, and some become a doctor, and they use allopathic medicine, but still, in interior places, there are healers who know to identify the illnesses by touching the patient. These days 90% of the people prefer to take allopathy medicines as they want a natural response while the

herbal medicines take a more extended period to get healed. The community people are not interested in learning healing practices (Nima, SMPB).

8.12 Comparison of Biomedicine and Traditional Medicine

Being a pharmacologist, he prevents taking allopathic medicines because of knowing the adverse effect of the medicines. Taking medicine gives the feeling of providing poison to the body. He gave an example of conventional medicine (tablet aceloc), which people usually carries in their pockets or bags. He explained how it affects the health of a person. The medication is used to treat gastritis. People take this medicine as a counter medicine. Whenever they feel like having gastritis, they immediately take medicine to get a cure. They never realize how medicine is adversely affecting the health of a person. It mainly affects the kidney of the male and endocrine system of the female. The antacid has a side effect, and it affects the organ in men and endocrinal system in women. He also added how the traditional method could heal gastritis without producing any side effect. The person suffering from gastritis can take water in a small container and add a pinch of black salt. Mixed it and drink the water, the person get relief from gastritis without any side effect. Natural medicine is the best and has no side effect; the only thing is to have patience because it requires more time to get cured (Partha, Scientist-C, IBSD).

In the latest research done by the WHO in American states, it was identified that there is no such role of synthetic medications which are taking by the people but have much toxic effect in the body. Now the concept of disease has been changed. The cause of illnesses which is seen in an allopathic view is not the actual cause. For example, if the person suffers from acidity, they take H2 blockers, and if the people use ranitidine and pantoprazole for a more extended period, then the people will undoubtedly suffer from peptic ulcer kidney and liver diseases. This is because the medication is suppressing the normal biological function of the production of acid in the body.

He further added the example of a water pipe which gets burst after a few days of its blockage. Similarly, the allopathic medicines act as gambling blockers and the receptor blockers. Therefore, the allopathic medicines will disturb the healthy metabolism of the body and changes the normal physiology of the body. Due to one illness, people are suffering from more than ten other diseases as the principal organs like heart, kidney, and the liver is related to each

other, and the effect of medicines will be dispersing to all organs. Now the concept has been changed that the causes of infections are due to genetic changes, which means our gene in the body is mainly protein which gets disturbed when people get diseases. Therefore, the purpose of the root which is not apparent. Likewise, rheumatoid arthritis, which is primarily caused by autoimmune, where the protein gets disturbed in the body and the protein in the body, cannot be changed through scientific or allopathic treatment. The protein can be taken through diet and can improve naturally. The allopathic treatment is targeted therapy where one system is treated, whereas the traditional or ayurvedic medicine is given for the whole system that is why the Ayurvedic treatment is called holistic treatment.

The natural product used by people is Ashwagandha. It is not used for one system. Baruchi, which act as an immune suppressant, operates in rheumatoid arthritis and controls blood sugar, blood pressure, control obesity, control brain power. Now, WHO is planning and doing research, and maybe one day they will ban the use of antibiotics. Therefore, again, the world will come to its traditional system of treatment. Now 60-70% of people use traditional medicine (Tapan, Research Officer, RARI).

8.12.1 Use of Biomedicine and Herbal Medicine

There was one healer whose wife was taking medicine for diabetes mellitus from the hospital, but in between, she was taking the parts of medicinal plants. Partha, said once the insulin is generated, from that time till administration, it must be kept in the temperature below 4 degrees, but it does not maintain in the government hospitals. Therefore, after administration to the patient, the insulin level will not decrease.

In the case of women if she is getting the first drug, then she would be going into hypoglycemia because the body needs even sugar in the body for activities. Our brain cell does not keep the stock of glucose. Whatever supply is given by the blood, the same will be utilized. He said since the woman is taking government supply, there is nothing to worry if she is taking herbal medicine. He said if he suggests to patients, then he will ask them to take only one type of medicine, either herbal or allopathy medicine because the patient may go into hypoglycemic shock. He said the healers practice good science which we need to explore (Partha, Scientist-C, IBSD).

Rita, said the healers mainly treat gastritis, bone fractures, jaundice, piles, snake bite, dog bite, etc. mostly the people are diagnosed with gastritis in East Sikkim. Therefore, healers give more treatment for gastritis. Some healers also treat Snakebite, but the procedure is combined with chanting of mantras and medicines. Both allopathy and the traditional healers use some medicinal plants. The only difference is that the allopathy is mixed with some other synthetic ingredients while the traditional medicines do not have a mixture of other ingredients except the combination of different medicinal plants. It is good to take traditional medicine because it will not show the side effects in the body Whereas the allopathy medicines cause other side effects. But the traditional treatment will take longer time to get cured (Rita, Research Associate, IBSD).

It is said of being more than 100 years of the production of modern medicine, but there is no such medicine for the liver disease. There is no such allopathy medicine for jaundice or liver patients. Still, the liver patients are taking natural products like Levocin, Liv-52; which are the products extracted from medicinal plants. The liver is a miraculous organ when a part of the liver is cut then very soon it will regenerate. So, when the liver gets to damage the natural products is given because the natural products will protect and provide the anti-oxidant effect to the liver and helps in regeneration of the liver and once it gets regenerated whatever virus has affected the liver those viruses itself will come out from the body of the patient. But it is challenging to treat once the liver patient develops cirrhosis of the liver because there is no such medicine.

8.12.2 Preparation of Tablet and Government Supply

Partha explained how the tablet is formed. The paracetamol itself would not make a tablet. One tablet of paracetamol, which is 500 mg if weighted, it shows 1 gram. To make paracetamol tablet diluent is needed and lactose is added to make it in bulk. He said in India the supply of lactose is of 7th grade whereas the export supply is 1st and 2nd grade. In India, reputed private hospitals provide the medicines of having lactose of 2nd and 3rd grade. In the market, the supply is of 4th and 5th grade. The government supply has 6th and 7th-grade lactose in the tablets. Even for government supply, the manufacturing institute will be different. If it is seen in government supply, the dose is written 450 mg instead of 500mg; even the result shows the same amount or dose while testing. When there is two to three per cent less, the value won't

show the changes. Nothing could be done by testing in a laboratory, and drug inspector also shows the same amount. Therefore, government supplies will always have less quality; thus, it is less effective (Scientist-C, IBSD).

8.12.3 Betel Leaf, Ghee, turmeric

Partha says that during the time of an accident, the doctors do dressing of the wound and give painkiller and antibiotics. At the same time instead of taking the patients to the hospital, he or she can be treated with traditional healing methods by heating the betel leaf (pan) and put some ghee and apply to the wound. Within three days, the injury gets dry and healed, so neither we need any antibiotics nor any dressing, even we do not feel any pain. The informant said that betel leaf has the action of painkiller, and the ghee has the effect of anti-bacterial (Partha, Scientist-C, IBSD).

8.12.4 Ginger, Lemon Grass for Motion Sickness

The person having motion sickness is prevented by keeping the piece of ginger in the mouth during travel, so it works as anti-emetics, or the leaves of lemon can be smelled which reduces the vomiting tendencies or motion sickness during the journey. The Gingival zerumbet (yellow ginger) also called wild ginger which is used for the treatment of motion sickness. The healers used to give the white ginger to pregnant women, who used to have the morning sicknesses (Partha, Scientist-C, IBSD).

8.12.5 Turmeric

Turmeric is used for anti-infective, anti-viral, anti-bacterial, anti-microbial, and acts as preservatives. In turmeric the yellow parts have curcumin, and nowadays in Kerala, curcumin tablets are available which is used for cancer treatment, curcumin acts as anti-cancerous. The curcumin is difficult for the absorption, and now it is encapsulated and made the tablet form and give it to the patients. Traditionally turmeric is mixed with the milk, which helps to encapsulate the curcumin and helps in easy digestion. Now the curcumin is highly exported item. It’s mainly exported from Manipur and Kerala. It is primarily exported to the USA, Canada, and Australia. In Manipur, curcumin's percentage was highly 5% to 6 %, but now it is found that Darjeeling has the highest rate of curcumin in turmeric (Partha, Scientist-C, IBSD).

8.13 Perception of Communities towards Health Centres

The Health worker (PHC) said;

> *"nowadays, the community people are coming to hospitals or health centres due to the pressure from the hospital staffs. The patients are sent to the hospitals, even if they are seen by the traditional healers or the faith healer. The deep-rooted culture and tradition are showing that the traditional healers and folk healers still exist and practice in the communities. At present, road and transportation facilities are there, and the health centres and the hospital provides a vehicle to the patients, so they come to the hospitals and the health centres"* (MPHW, North Sikkim).

8.14 Perception towards the Extinctions of Traditional Knowledge

The traditional knowledge about collecting food resources, traditional health culture, traditional agriculture, and farming all are declining slowly day by day. For example, in an agriculture sector, with the introduction of the synthetic fertilisers and the pesticides, the organic method of farming got disappeared, and once the people thought of reviving the culture of natural way of agriculture they failed to meet their expectation of the outcome. Likewise, when the allopathic medicines were started in modern society. The people began neglecting traditional practices. Thus, it has already started reducing the number of traditional healers. The importance of allopathy has decreases the conventional methods in Sikkim (Purna, Retd. Agricultural Officer).

Remain distant from nature and traditional knowledge; one can forget the traditional culture and its practices. The same thing happening in many places of Sikkim, the traditional knowledge and practices are disappearing day by day. The Lepchas will be losing the healers like Bongthing, and the Limbu will lose the healers called *Fedangma*. Many other ethnic communities have lost their healers, both faith and folk healer. The entire system is in danger of losing cultures and traditions gradually. In earlier days, when people suffer from headache, cough and cold, fever, diarrhoea, minor cut, wound, etc. the home remedies or herbs were used as medicines from the garden. Some used to go to a folk healer, where healer used to treat with *jokhana or phuk phak* by chanting mantras, give herbs as medicine. These days even for minor health problems, people take medicine from a medical shop like paracetamol, D-cold total tablets, etc.

Purna criticises having ignorance and lack of unity among the general masses. No one is there to raise voice against various issues in Sikkim. The people are just following the government's order. The government is not worried about the culture and traditions, environment issues, etc. they are worrying only about their vested interest. No one has a concern about the preservation of culture, environment, rivers, unemployment, health, and education. This is the current situation of Sikkim where people are living. As an activist, one should be aware of the public and the community regarding the preservation of the culture and its traditions. In Sikkim, people are after money and do not bother about their culture and traditions but should not lose hope. There should be hope for getting back our cultures and traditions (Retd. Agricultural Officer).

Early days medicines for pneumonia and the snake bite was not available in the market. People used to go to the traditional healers to get the treatment. Even now, the medicines for pneumonia and throat pain is prepared at home and gives to the children who suffer from these sicknesses (Prakesh, 58 years, East Sikkim). With the emergence of modern religion, culture, and technology, the traditional healers are on the verge of extinct processes. Sikkim lies on the Himalayan belt, the people are very close to nature, and there is the availability of traditional healers. However, the older healers die, and many of them have become old to practice traditional healing. Gradually the number of healers are decreasing in the community. If the people do not place the issue of recognition of healers to the government than within a decade, there will be loss of healers. Thereafter the people are forced to rely on a biomedical system which will cause lots of side-effects to humankind (Santosh, Executive Director, VHAS).

8.15 Perceptions of Scholars

According to Basant, many scholars come and gather information and knowledge from the healers and community people without acknowledging them and misuse the information. Some of them sell data and information to other people from other places and the country. Many scholars come and do their research and could not collect complete details from the healers. If the local people or the scholars do this kind of studies, then there will be easy to understand the language of the healers and more details will be collected. If there is a scholar or researcher, they come from outside find it challenging to stay even for few days, and they receive little data, meeting only one healer and try to manipulate and show in their data that everything is

assembled. They do not visit the villages and houses of different healers. Therefore, there is less chance of getting the complete profile of the healers. He said some researcher does not have the patience to listen to the details; they want the answers in shorts of what, why, when, how, etc. (Principal Scientist, SMPB).

Budhiman said,

> *"many researchers have come for the research study. They come only for a day or a few days. They collect a few details, and some ask 6-7 questions and return. This is the first-time meeting researcher who had stayed for long with the community people, saw the practices, have noted and asked day to day life activities of the Baidya. The researchers who had come earlier never bothered asking about the issues of the Baidhya. Some researchers came and asked the name and use of the medicinal plants, some they asked to hold the medicinal plants and took the pictures and went. There were researchers from Goa, Delhi, West Bengal, and own state"*(75 years West Sikkim).

8.16 Exploitation of Community Resources

The people of present generations are getting qualified, and because of their occupation, they are getting shifted to the urban places. Some of them are changing due to their choices to live in the town. Many villagers are selling their land to the corporate companies due to which there is a considerable loss of medicinal plants and traditional practices. There are also cases of exploiting community resources. Some people collect data and various other information from the community and sold all the data in the corporate market. Also, there are many homestays in the villages of Sikkim. Many outsiders come and do their study; even some community people do not take the money from the people who come for the research purpose. They are considered as guests for a few days and share everything whatever they are asked. The detailed information and the data shared by the community are documented and later sell in the market. This is how the village people are getting exploited by the outsiders (Krishna, TMI). There are many researchers from both national and international; they come and do the documentation. The awareness has happened to every individual and community about the preservation of traditional knowledge. There is no more exploitation done by any researchers or departments and organisations (Rajina, Atree).

According to Suraj, the community people and healers are asked to collect the medicinal plants from the forest in less amount. Those people come from outside Sikkim like Nepal and other

states of India. The innocent healers are influenced and cheated by those people. Also, exchange the medicinal plants with the healers by giving the duplicate product of medicinal plants telling them that it is brought from the Himalayas. Even today, many community people started cheating the healers and the local people. They collect the medicinal plants in less prize and take more commissions from the brokers. The innocent villagers and the healers are not only exploited in medicinal plants, but they are also utilised by making them collect and supply animal products (Scientific/Technical Associate, SBB).

The efficacy of the medicinal plants is more in the place of its original place. The medicinal plants have their limitations too. The healer never tells the place from where he has collected the medicinal plants. There is a law and standing order not to misuse any medicinal plants or any other plants from the forest, but sometimes they also cannot stop the people from doing. People are asked not to misuse the medicinal plants rather tell them to plant for conserving and protecting. Some people are completely dependent on nature. The department had conducted 14 days of tracking in the forest where we had visited more than 90 cattle shades. It was found that people are staying in the huge jungles making a pucca house which are even dimensioned or ignited. There are forest staffs and guards appointed by the forest department and used to visit the forest for checking of any misuse of medicinal plants and other forest products. The people do not use forest products in front of the forest staff. The healers carry out their activities on their own and their capacity (Topden, SMPB).

Shaker said a group of researcher had come from south India were to research natural streams. They were guided in many places and help them to communicate with people in data collection in the villages. Later their book was published where healer and community people did not acknowledge anywhere in the book. This is how the healers feel that the people of Sikkim, their cultures, traditions are exploited by other people (55 years, East Sikkim).

The people who come from outside do not know the original concept about the community and their practices. They misinterpret in the wrong way. They mix the culture of one community to the other communities. The same way there are scholars and researchers who come from outside to do research; some of them wrongly interpret the cultures and traditions of different communities. For example, in Nepal, one of the reputed institutions does the editing of various studies. The study may be on Limboos or any other communities. Finally, the editor would say

everything has come from the Nepali culture and make it on their own. The reason for establishing an institute is for the unification of Nepal history, and their primary objective is Nepal unification. Therefore, whoever does the studies in any culture from this institute, the editor relate everything with Nepali culture, which is also a Nepalese Hegemony in the cultural context (Purna, Retd. Agricultural Officer).

8.17 Out-Migration and Younger Generation

At present, all the younger generations are going out for their studies and job. They do not go to the jungle, forest and the mountains for collecting medicinal plants, and even they do not spend much time at home, which is affecting the sustainability of traditional healing practices in the communities. Secondly, the government has banned the villagers from entering the forest and collecting medicinal plants. Due to all these reasons, ultimately, it is affecting the sustainability of traditional healing practices in the villages of Sikkim (Suraj, Scientific/Technical Associate, SBB).

The other informant said due to the changing trends and modernisation the people and the younger generation are adopting the western culture. The healing practices of father and grandfather are not accepted and believe by their children at home. When the children do not follow the healing practices at home and in the community, then gradually the knowledge of healing practices will get disappear. The healing practices got reduced because of the low economy and weak transport system. Now the allopathy medicines are available everywhere, which has also reduced the use of traditional healing system. Sticking to one system cannot neglect the other. It is also the belief of the community people to seek the traditional healing system (Tek Bahadur, DHS Sikkim).

The healers know about the treatment methods, he should propagate the knowledge so that the experience will be transferred from one generation to coming generation in the community. Also, the community should support the healers in the villages; the government also need to help them (Pranita, NHM). The younger generation is now not interested in learning traditional healing practices. This is a risk factor for us as the traditional healers are disappearing day by day (Partha, Scientist-C, IBSD).

At present, there are no real faith-based healers, but several traditional practitioners or folk healers who use medicinal plants, jaributti, and Ayurveda. Today's' generation all young people are keen in pursuing higher studies, and some become a doctor, and they use allopathic medicine, but still, in rural places, there are healers who know to identify the sicknesses by touching the patient (Nima, SMPB).

The informant said these days the number of healers has decreased in the community. People are less interested in the practices of their father, who used to do healing practices. There will be no use when the son is not following his father. If there is no interest among the people, then there is no use of giving importance and support by the government. We used to tell the healers to teach their healing practices or use of medicinal plants to their children, but that depends on the learner's interest (Topden SMPB).

Laden said, she had met the traditional healing practitioners and found them knowing healing the patients but were unable to transfer their knowledge to the younger generations. She told that the healers themselves said that the children of younger ages are not interested and they do not want to learn the healing practices in the communities. She noted that healers have tried to teach other community people, but none took an interest in learning. But in some, it is a kind of hereditary that they will transfer the healing practices only in the younger generation in their family. Now everything is taking over by the allopathy medicines. She told it could be reviving, but the healers should be able to teach to the younger generation and make them understand (Laden, JRF, Atree).

Depending upon the interest of the learner, the healers teach healing practices and medicinal knowledge, to their children, relatives, and community. Nobody is interested to learn the traditional healing practices in the family then the healers willingly teach the one who comes to seek the healing knowledge from them. The person who is learning the healing practices should always remain with the healer. It is a kind of guru shishya relationship. The learners are never taught by force. Nowadays, it is tough for the younger generation, as they are not interested in the field of traditional healing. The people are more concerned about their family, and they look for the things which benefit them financially. They expect money or the amount to be paid to them of learning traditional healing practices, planting medicinal plants, etc. It's a kind of economy. The people started looking for marketing value. For collecting some herbs

and medicinal plants, they must be paid in advance to make sure about the dealing (Nima, SMPB).

8.18 Intradepartmental Coordination and Lack of Awareness in the System

The informant from Institute of Bioresources and Sustainable Development, Sikkim said that it is regrettable that there is no intradepartmental coordination which is affecting them to carry out the research project in an effective way. If the government department would help them, then they could effectively do things. In Sikkim there is too much of political involvements like, if they need some medicinal plants for research then they must apply to the forest department seeking for the permission which it takes almost three to four months for the processes, and once the permit is granted then that time there will not be the availability of medicinal plants. The informant also said that there is so much restriction for the researcher from the government.

He further said;

> *"I have conducted research studies in medicinal plants in many places in northeastern states like Manipur, Arunachal Pradesh, Meghalaya, Tripura, parts of Assam where traditional practices are very much in a systematic way. They have the association in Manipur like Manipur Traditional Healers Association. I had good coordination with them when I was doing my research in Manipur. One of the main reasons behind the declining of medicinal plant in Sikkim is that the local people are not aware of it, so they do not preserve it"* (Partha, Scientist-C, IBSD).

There is a lack of awareness in the system and has a systemic failure in the system. There is a need to get reliable. There is a different department in the system where they should know about the various need of a system and must provide according to the requirement. Each department should understand their objectives of work. There is a flow of capital, and at the same time, there is a gap. No one is wrong in the system, but there is a lack of awareness and difference. The person must take responsibility to fulfil their duty. The government gives some funds in the state of Sikkim. If a person executes in between and finds there is a gap, and that is about the knowledge gap. When there is no appreciation, there will be a gap of knowledge in the system. There should be acknowledgement about the failures, weakness as well as the progress of the system. There is no use of blaming the system; instead, there should be

understanding. When someone is critically telling about the system is to appreciate and move with positive changes.

When someone thinks about the state, they need to hold the world and move. There should be a complete profile of traditional healing practices. The details of medicinal plants, usage of various parts, sources, day and times of collection, etc. When there is a complete profile of medicinal plants, then it will be helpful for the healing practices in the future and helps for the academic studies. The healers give verbal information when something is asked, but they do not have records and documents regarding their treatment. Therefore, it will neither befit the government, nor the healers themselves. There is a lot of investments if they have details and documentation of their practices. The state has the economy for the healing system of Sikkim, but since there is a gap in systematic functioning, the money is not in its use. The state government has the fund for cultural development, which is also not used properly (Basant, Principal Scientist, SMPB).

8.19 Collection and Usage of Medicinal Plant and Animal Products

There is no restriction to use resources for the research purpose, and there is no objection. Nobody can stop utilising the funds until it is available abundantly. The resources must be used in a limited manner. Once research work is over and achieves something to get it commercialised, then it needs to be discussed with different stakeholders. To research Sikkim, one must acquire a research permit from the forest department (Newton, Scientist-D, IBSD). There is no need for cutting big trees for the herbalists to treat the patients. They need only a small amount of medicinal plants and herbs. Therefore, the herbalists will not have any problem of getting medicinal plants and herbs from the forests (Purna, Retd. Agricultural Officer).

There is a season of each medicinal plants for its collection. If it is collected off the time, it will be useless and sometimes will not find, for example, there is a plant called *Calodendrum capense* which needs to be received one week before the rainy season begins because if this plant gets flowering, then it is not sufficient to be used. There are many plants in nature, but one must be able to identify it. In early days many people died after consuming certain poisonous plants which are not used by the people now. It was determined that mushrooms have around 149 species or 150 varieties, among which very few verities are edible (Partha, Scientist-C, IBSD). Healers are restricted to collect the medicinal plants from the forest but

some they have the certificates from SMPB to collect the medicinal plants from the forests. They mainly collect medicinal plants from their surroundings (Rita, Research Associate, IBSD). People know about the medicinal plants, but its usage is very less. The medicinal plants and herbs are only used in remote areas because the people who live in town use allopathy medicines. The utilisation of medicinal plants is very less (Deepesh, Technical Officer, G B Pant).

Some healers do not practice the healing practices, but they know the medicinal plants. Many healers and community people were found supplying the medicinal plants to the other people. This may be the case that the government has banned the grazing of animals and collection of medicinal plants from the forest. She told *Swertia chirata*[17] (local name-chireto) is now forbidden locally as the forest department has taken the responsibility of growing and selling of it (Laden, JRF, Atree).

Healers also used animal products for healing like elephants' leg, Bile of Bear, small honey bees, etc. In Manipur, the bile of python is more expensive than the bile of bear. There are many usages which are not explored. It is also used in liver problems. The other animal products which are used by the healers for the treatment are intestine of a porcupine, baby bird of Himalayan Whistling Thrush; (Kalchura -local name), *harrah, barrah, trifallah*, etc. (Partha, Scientist-C, IBSD).

8.19.1 Extinction of medicinal plants

In earlier days, India was rich in herbal plants, but when the western medicine came to its existence during the time of pre-independence era, then the western medicine and culture gradually started to influence the people in India. In every sector like medical education, health sector, pharmaceutical, etc. there is an influence of western medicine. If the herbal medicines were preserved earlier, then India would be now in the advanced state. Gradually people started adopting western medicine and considered as one of the main options for health problems (Birendra, Alternative Medicine Specialist).

There are many medicinal plants but some medicinal plants whose nomenclature are being endangered. The medicinal plants are being extinct mainly of two reasons: (1) climatic

[17] A local plant used for medicinal purposes

changes, i.e., Global warming and (2) due to failure of preserving its endangered species. The medicinal plants are more found in the north Sikkim (Newton, Scientist-D, IBSD). There is a decrease in the growth of medicinal plants. The people are taking care of it and trying to spread by preserving and planting. It is also protected by doing in-situ conservation through which the medicinal plants are getting preserved (Topden, SMPB).

8.19.2 Medicinal Plants lose their effectiveness

It is not as said because the system or the process is different. There is some deterioration about the study tried to find out the medicinal plant used for treatment. Therefore, we had taken three practitioners with three systems where they had 17 medicinal plants, and out of 17 medicinal plants, they found only three medicinal plants which were used for the treatment of arthritis. Then they found only necessary parts that are used for the formulation and the rest were discarded. Therefore, it will be helpful, and there will be less costly and can be easily prepared.

The informant said that there is some juice which can be rotten after 3 hours of preparation. It starts getting autolysis because some juice contains protein and the enzymes. The juice starts breaking down the protein, and there is no use. For example, the extract of the lemongrass is prepared before the sunrise as healers perceive that the excellent content of the lemongrass will evaporate due to increase temperature. In lemongrass stromal oil gets evaporated then there is of no- use. There may be the healing practitioners who do not have their scientific reason of ploughing the medicinal plants before sunset, but they have their traditional knowledge where they could make sure of the effectiveness of the medicinal plants and its timing to plough. The informant also said that same plants if we plough during night time we don't get the effect of it because the secondary metabolism is produced in the morning (Partha, Scientist-C, IBSD).

8.19.3 Difference in Utilization of Medicinal Plants

Laden said, nobody had a green garden; they were collecting the medicinal plants from their surroundings and jungles. She also said that among the two communities, in Pradhan community, she found more utilisation of traditional medicines as she ponders that those communities were mainly migrated from Nepal. But she found vast difference about the traditional healing methods between the same community people of Nepal and Sikkim. There was a difference in the name of the medicinal plants even though the object was equal in both

the places. She told me that she found a difference in treatment of the same sickness. The treatment also differs according to the geographical region.

The utilisation of medicinal plants is less in Sikkim's Pradhan community in comparison with the same community of Nepal. She said people of Sikkim has less knowledge of medicinal plants, and they get confused in identifying the medicinal plants whereas the people of Nepal have more extensive knowledge in medicinal plants and its uses. At the same time, there is no confusion among the Bhutia community as they are familiar with the medicinal plants, and even the Lepcha community knows the medicinal plants for various treatment (Laden, JRF Atree).

8.19.4 High Cost of Healers Medicine

The officer from SMPB had a different opinion about the high cost of healer medicine in Sikkim. Nima depicts that;

> *"it is due to the marketing and profit on biomedicine the people are getting the advantage of selling the medicine and forcing the people to buy. In the same way, people look for the benefit in each and everything. There is an example of paras plant, which has a market value of Rs. 5000. Every day the rate of the plant varies. At present, people mostly prefer allopathic medicine. They go to the healers if not treated by allopathic medicine. People are preferring to take the treatment from the doctors rather than visiting the traditional healers. The Government of India is focusing on herbal medicines but should recommend the fixed price. The cost of herbal medicines has become high compared to allopathy medicines. For example, the cost of one spoon of herbal medicine is Rs.100/- as compared to the allopathy medicines which can buy in Rs.20/-. This is also the reason why people are neither interested in learning healing practices nor taking herbal treatments and medicines"* (Nima, SMPB).

8.20 Healer- Doctor Relationship

The healer shared about his discussion with an allopathy doctor who has argued with him by asking how the Baidya can treat the patients within 28 days at the same time the orthopaedics takes 3-4 months to treat the same cases. The healer replied the doctor by telling that in allopathy treatment patient must get healed by the calcium and the afford of the patient, but in traditional practices, the patients are giving both the local application and the oral medicine equally. The healer said after one week of conversation and discussion, there was a patient who had multiple fractures and was taken to the orthopaedic doctor for the surgery. The healer got the call from his family members telling that the patients are getting ready for the operation

where the bone from the natural part is being cut and place over the affected area. The healer after getting a call from the family member immediately called the doctor and then asked him to cancel the surgery and told to send the patient to him for his treatment and told him that he would be sending back the patient after 28 days of treatment. Immediately the patient was sent to him and reached during night time, and he was called for the treatment. The healer told the family members that the work could not be done during the night since it is dark, so he will be seeing and treating the patient once it becomes morning.

The next day the healer got up and prepared the medicine which he took 4 hours to prepare. After the preparation of medicine, he went to the patient and applied over all the affected parts, given oral medicine and then asked to take complete rest for 27 days. On the 28th morning, he only helped the patient to get out of bed and then helped to walk around for a few minutes and asked the patient to walk. The patient walked by himself for a few minutes and then sent back to the orthopaedic doctor for his follow up and X-Ray. The healer also showed all the components of medicinal plants that were used for the treatment of the patient. The doctor was so happy and even did not argue with the healer and has done the laboratory test of the medicinal plants and congratulates for his great work (Rajkumar, 60 years East Sikkim).

8.21 Healer's Service as a Health Insurance

Healers have challenging situations. They are the neglected person of society, but they are the "health insurance" for the community. He also said that it is pertinent to accept the things that are going in the society, especially the work that has been done by the traditional healthcare practitioners in society. This is how the traditional healers will be encouraged, and in the communities, the people will advocate others about their healing and success of their treatment. They should be appreciated for their healing practices, and the people should know how to understand the healers in society. The work of the bonesetter is very much appreciated in the community. When a person gets a stomach ache, he will go to the allopathy doctor and receives the treatment, which will help to get relief from pain. Once the person broke his leg, then the bone setter can act immediately in that situation and can do the treatment.

The allopathic doctors will not be able to treat the patient immediately in an emergency. The bone setters are encouraged and are existed more than the other traditional healers because their healing practices have become the earning source whereas the other healers were not paid,

and they do not take the money from the community people. Therefore, bonesetters were only given importance in society. Baidhya have their identity as bonesetter in the community. They also have good earning from society, and they are earning more than Rs.10000 per month (Basant, Principal Scientist, SMPB).

8.22 Vanishing Local Faith Healer

The informant showed the list of the healers, where 38 healers' name were written. He said many of them are alive. Also visited the houses where healers are not alive to know whether the other members of the family are practising the traditional healing. He also told the incident of waiting for one healer for 6 hours as he was unable to communicate, and he was drunk. They interviewed and included in the list of traditional healers who uses only medicinal plants for treating the patients. Interviewed two to three folk healers but did not include in the documentation. He then suggested how to interpret the healers' interview while documenting as some of the healers are expired, but their practices are found documented by the state medicinal plant board (Partha, Scientist-C, IBSD).

Budiman revealed, "

> *Nowadays there are no faith healers like Faedungma, Jhakris, Bongthing, and Bijuwas[18] in the communities who used to do the rituals chanting mantras and see the Jokhana during the time of the problem. Their number has been decreased, and very few like four to five are there in the community. Some healers chant mantras and treat the patients within two days, and we need to believe them"* (75 years, West Sikkim).

There are some misconceptions that if the traditional practitioners die, they do not burn the body thinking that they will burn all his knowledge and if it is not burnt, then there will be a rebirth of the new healer in their own house. Instead of having misperception, they should teach their children the method of traditional healing practices (Premit, Gynecologist, STNM). The healer said the traditional healers would never disappear from society. Every time one or two will be there in the community who can do the traditional healing practices in the community (Kundan, 68 years, East Sikkim).

[18] These are the faith healers of Sikkim and Darjeeling

8.23 Decrease in Farming is leading to Poor Health

Health is very much crucial at present scenario. In early days money was significant for the people. The source of income was farming, which was not done intentionally. Those days people used to do agriculture and earn money. They used to eat the same vegetables which they grew. Thus, their health was good, and their body was fit due to regular exercise in farming. The traditional farming and growing cereals are all dousing and getting disappear day by day. Now, everything is readily available in the market where vegetables are not getting fresh. People have become lazy and not wanting to grow vegetables by themselves (Amar, Magnessa).

Now the government has given lots of facilities to the people of Sikkim like a free supply of rice, flour, cereals, etc. which is making the people idle. In early days the health care facilities (hospitals) were less and people used to get treated in their villages by Baidyas. The health care facilities are now increased everywhere, even in the very rural areas of Sikkim. Therefore, people are directly going to the health centres for both minor and major health issues. The number of Baidyas has decreased in the community (Suraj, Scientific/Technical Associate, SBB).

8.24 Assimilation of Healing Culture

The upper caste Nepali community do not use animals' products in their traditional healing. They only use medicinal plants and their properties as animal products are not allowed in their culture. When they started staying together with the mixture of other communities like Limboo, Lepcha, Sherpa, they have begun using few animal products in their healing practices. The impact of one community to the other can be seen among the traditional healing practices. There is a process of assimilation of a different culture and traditional healing practices in the community (Deepesh, Technical Officer, G B Pant).

8.25 Indigenous Concept of Heaven and Hell

The healers and their methods of Limbos in Sikkim are known as *sidapandang.* It is not easy to run the religious institutions since it needs support from the government and the state. When there is no institution, there will be no religion, and when there is no religion, they won't be the sustenance of culture. He said according to literature; we will get only two concepts, one is

internal where the whole world is within you and whatever we wish we get it. This is also called an inverted system, also known as contemplation system. The other concept or the system is an out verted system where people believe that after the death of a person, the soul will be going to heaven. So, in inverted, there are communities who come under it are Hinduism, Buddhism, etc. In out verted, there are other religions which are also called occidental religion like Islam, Christian, and Jews. They believe the souls will go to heaven after the death of a person.

Limbo community has a different understanding of heaven, hell, and the universe. The soul is simply a blessing of God. There is no application of the inverted and out verted system. There is a simple philosophy of believing the soul having an eternal return. There is a belief that everything is in the universe, and everything happens within the universe. Nobody believes in a different universe and different soul. Everybody considers the universe and soul are interconnected. But other religion follows inverted and out verted system. They believe the soul and universe are in different places where the soul goes to heaven by contemplation and by its action. Those practices do not exist in the limbo community. The people of the Limboo community believe in the eternal return, and the soul is the blessings from God. After death, the soul will go to God, where limbo healer (Sidapandang) will take the soul to God.

Sikkim has a complex society and has a mixture of believers which gets exchange among them knowingly and unknowingly. But the core people of the community do not know because their thoughts are different, and that is why it's imperative to sustain the culture and traditions. When people look for their things, they were looked as being communal, which is not valid. The people look for their cultural history and encourage the researcher to carry out the study, which is very important for the Lepcha community. The informant suggested the researcher keep the record when *Bongthing* does his rituals and must record and analyzed. He also asks the researcher to contact him anytime if help is needed (Purna, Retd. Agricultural Officer).

8.26 Different Healing, Practices and Experienced Healers

The current status of research in ethnobotany where it has enlisted 140 to 145 papers about Lepcha, but the description is functional, later when the article was found more about *Rum* the god and goddesses of Lepcha. For every sickness, there is separate Rum who stays in caves, rivers, land, and trees. If the person is suffering from stomach ache, he or she will pray to the

Rum by offering sacrifices. And when they get healed, they believe that the Rum has become happy. When people worship and offer sacrifices to their God in every illness, then the utilisation of medicinal plants will get decreased (Deepesh, Technical Officer, G B Pant).

Purna said,

> *"there is no detailed study about the folk medicines which are practised by the people in Sikkim. There is a book which describes the name of the medicinal plants and herbs which are used by the people of Sikkim. The book has a list of medicinal plants and herbs, animal and mineral products that are mainly used by the Limbu or limbo community in Sikkim. The book contains the farming, food culture, hunting, and the livelihood of the Limbu community"* (Purna, Retd. Agricultural Officer).

According to Topden, there are nine types of healers in the Limbu community, and among them, only one type of healer is herbalists. But when this allopathy (modern medicine), Ayurveda, homoeopathy and the Tibetan herbalists came into existence, the Limbu herbalists stopped performing their healing practices. Healers have their way of treating the patients. They treat different kinds of illnesses like problems related to abdomen, Hepatic cases, etc. (Topden, SMPB).

Purna said, his father was using hundreds of medicinal plants for the treatment and used to treat the dog bite patients, snake bites patients, jaundice, urine infection, bone fracture, infertility, and many other health problems. These practices are vanishing gradually because healers do not want to share the knowledge of traditional healing and had no such documents or records on it. In this way, traditional healing practices are gradually being lost in our areas (Purna Retd, Agricultural Officer). Every time the healers are informed about the seminars, workshops, and training, but it's up to them to attain or not. There is a healer named Budhima from West Sikkim who is very expert in traditional healing practices. He is taken for the seminars along with the healer Indra and other healers. These healers treat many cases and have medicines for many diseases. Their healing practices are more in demand in Gangtok, and supply medicines for the patients. They deliver medication on the vehicle which run daily by the driver's hand.

8.27 Usage of Supplementary Herbal Products

The present time life of a person has become so much important. For example, if a doctor says that the person is affected with cancer and asked to pay for lakhs of amount for the treatment, then the person is ready to spend the amount for treatment in any way. Therefore, whatever the

person is earning, everything is spent on the treatment. It all depends on the faith and belief of the people towards the magnesia wellness product or the healing system. Also, the product or the healing system can vary according to the people, how it works on them. Therefore, it is the choice of an individual to select as per the effect of product or healing system to his/her body. The people kept on trying and changing the product or the healing methods unless and until he gets the benefits and satisfactory effect on their body.

It will depend on their sickness. For example, it is not the alcohol which affects the liver, but some patients get liver damage without taking alcohol. Some people take treatment in the chronic phase. People do seek treatment according to their belief in the product, and they should have a strong faith to get healed. He also gave the example of his brother, who does not take the allopathy and do not want to go to the hospital during any sickness. His brother uses home remedial treatments like honey with hot water etc. and do not allow the family members to take allopathy medicines (Amar, *Magnessa*).

8.28 Conclusion

This chapter provided an overview of the perception and experiences of biomedical doctors, government officials and traditional practitioners/healers towards primary health care services. It has explained how the biomedical profession/doctors perceive or look towards traditional healing practices. Biomedical doctors maintain their hierarchy in the healing system. Their insecurity of being integrated into traditional healing practices into the modern health care system can affect their practices. The perceptions of government officials towards the traditional healers are explicated in this chapter. It has explained about the perceptions of various departments and organisations towards traditional healing practices in Sikkim. The key informants from multiple departments have shared their perceptions and experiences of traditional healing practices. The healers and the patient's perceptions towards traditional and biomedical healing system are also focused in this chapter. It has also explained about the relationship between the healers and the patients, healer and biomedical doctors relation and the healer's relationship with the government departments and organizations. Being available and affordable all the time for the patients in the community, the patients always seek the treatment from the healers. The people believed the healer's treatment and took prior treatment during any health-related issues. They follow the advice from the healers about health, diet and even during the time of disputes. Therefore, the healers and

patients relationship is in the utmost place in the community. Healers perceive that there are untreated cases from the hospital which they can provide treatment, and there are cases which they send to the hospital when they are unable to provide treatment. On the other hand biomedical doctors have the insecurity of losing their patients and job when healers get integration into modern medicine. The doctors perceive every case comes from the healers are complicated. The practices of the healers are considered as fake by the biomedical doctors. Healers are provided training, workshop, seminars by various departments of Sikkim. They are offered certificates, and some are awarded for their successful treatment. This is how the relationship of healers and the departments like AYUSH, SMPB, Biodiversity Board etc. are in good terms. There are various other aspects which have helped to understand the perceptions of healers, patients, biomedical doctors and government officials in Sikkim regarding traditional healing practices and biomedicine.

In the following chapter, it deals about the roles and responsibilities of departments, the process of integration and recognition of traditional healing process, its possibilities, challenges and mainstreaming of traditional healing into the modern health care system.

Chapter 9

Processes of Integration and Recognition of Traditional Healing Practices within the Modern Health Care System: Challenges and Possibilities

9.1 Background

This chapter mainly deals with the mainstreaming, integration, and challenges towards the integration of traditional healing practices into the modern health care system in Sikkim. To gather the information and data, the researcher had interviewed traditional healers, head of the department, medical doctors, a retired officer, NGOs, and so forth. During this period of data collection for the Ph.D. research, the researcher visited different Government department, Non-Governmental Organization, University viz. G. B Pant Himalayan, Research and Development (Pangthang), Institute of Bio-resources and Sustainable Development (Tadong), Voluntary Health Association of Sikkim, Atree, State Biodiversity Board, State Medicinal Plant Board, Horticulture Department, Botanical Survey of India, Sikkim, Ayurvedic Regional Research Institute, Health Department, Building and Housing Department, Sikkim University, National Health Mission Office, STNM Hospital, Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy (AYUSH) hospital and many others.

As the study deals with the integration of traditional healing system into a modern health system, it is quite challenging to consider the comprehensive integration of traditional healing system into a modern health system. There are certain loopholes which are not meeting the criteria to be called as comprehensive integration of traditional healing system into a modern health system in the state of Sikkim. As we see that traditional healers are provided the space by allowing them to visit the patients in the hospital but not permitting them to utilize their knowledge in treating the patient. Therefore, there is the ambiguity of

considering comprehensive integration. During the field visits, all the four districts of Sikkim is visited. Many healers were interacted, and the researcher collected their views and information towards the integration of traditional healing system into a modern health system in their state (Pemba, 68 years North Sikkim).

9.2 Role and Responsibilities of Different Departments and Organisations

In Sikkim, there are government departments, NGOs, independent institutes those who are working in the field of the environment, ecology, sustainable development, and community participation and livelihood, conservation. The researcher comes to know these institutions through snowball techniques, where one informant referred to another person. The main reason is to visit the institutions, to know more about their activities regarding their projects and programs for the traditional healers and their practices. It was found that every institution and organization has its projects and programs in their respective areas. Questions asked during the visit of institutions regarding the activities they have on the traditional healers and their practices.

9.2.1 State Biodiversity Board, Sikkim

The state biodiversity board is in Deorali, Gangtok. The board is function under the Forest Department, Government of Sikkim. The researcher had an interview with officer working in said organisation, about the role and responsibilities of the state biodiversity board. During the interview, the researcher asked a question regarding the conservation, preservation, protection of the biological resources of the state, training programs for the traditional healers, documentation of the medicinal plants and herbs, the possibility of integration of traditional practitioners/healers and many other aspects of Sikkim biodiversity. The officer shared the activities of the department;

> *"The board works on the Access and Benefit Sharing (ABS) of resources with the community and the healers. The primary job is to make community people aware of the Biological Diversity Act and Biodiversity Act, 2002 to protect the resources of the state. The main objectives of the board are to the conservation of biodiversity, sustainable use of resources, and access and benefit sharing to the community".*

In Sikkim, there is a total of 187-gram panchayat units. The board has formed the Biodiversity Management Committee (BMC). At the present date, the department has

developed 42 BMCs in the village gram panchayat level. Often programmes had conducted to train the field staffs and village people, benefit sharing, roles, and responsibilities of the people to protect the biodiversity resources. Through People's Biodiversity register in every gram panchayat to look after the community resources. He also shared about his article published in various national and international journals on traditional medicinal plants of Sikkim, traditional and community knowledge on medicine, the potential for economic viability of medicinal plants of Sikkim. Based on his experience, he said,

> *"Sikkim has more than 700 medicinal plants which have declared as scientific value".*

Under the Forest Department, different departments are implementing various Acts. The Forest Department examined the violation of medicinal plants, patent of medicinal plants then it comes through biodiversity board. Like if somebody kills the animal, the wildlife department will take care of it, if there is air or water pollution, then the pollution control board will take the necessary action. If the bio-resources are getting exported or exploited, then the biodiversity board will take strict action (Suraj, Technical and Scientific Associate).

9.2.2 State Medicinal Plant Board, Sikkim

The researcher got a reference from one of the officers from the state biodiversity board. The researcher took the appointment from the officer and fixed the meeting. Questions were asked about the department activities in the area of conservation of medicinal plants, integration and recognition of traditional practitioners and traditional healing practices. We started our conversation with the purpose of the visit, about university activities and healers in the region of Sikkim. The director has more than twenty years of experience in this field. He said;

> *"The area of Sikkim is very small and there are different cultures, customs, and traditions. Earlier, we used to give importance to all the medicinal plants, but at present, we only give importance to a few medicinal plants which have economic values. The focus is shifted from quantity to quality of medicinal plants, but we give equal importance when it comes for the conservation. Now the plantation of medicinal plants is very less, and those plants are planted which have excellent marketing values. We distribute medicinal plants to the small organic farmers and healers as per their requirements. The preservation of medicinal plants is done*

through in-situ and ex-situ conservation. Our department also gives platforms to the healers regarding the conservation of medicinal plants through conducting workshops. When the mela or exhibition is held, we invite healers to put their stalls at the festival".

He further said;

"long time back in the year 2008, the department had issued the registration number for around forty traditional healers of Sikkim. After that, the issuing of the registration process was stopped. At present, the SMPB is not in a position to give registration to the healers. But the department is trying to certify traditional healers with the help of Quality Council of India (QCI) New Delhi, which makes healers for their recognition and encouragement for the practice. The department is planning to research tradable and economic value plants, treatment efficient plants in the coming days. The department is planning to collaborate with Sikkim University, Jawaharlal Nehru University, Institute of Bio-resources and Sustainable Development, Botanical Survey of India, Sikkim for the research and Development" " (Naresh, Director SMPB).

9.2.2.1. Conservation of Medicinal Plants

There are two types of conservation ex-situ and in-situ conservation. The officer from the same department said that in his department or the board in Sikkim, they are mainly working on conservation through artificial resumption, like ex-situ, but they do in-situ also. The ex-situ conservation is conservation of re-endangered and threatened species of medicinal plants (mostly herbs, shrubs, and trees) in forest areas in alpines, sub alpines, temperate and subtropical zones. These medicinal plants are discovered in all the four districts of Sikkim. The in-situ conservation is done through resumptions and planting. The planting material is most important to conserve the plant population. The important thing is to need to establish nurseries and planting materials. The greenhouse helps to grow the seeds, and when they become saplings, they will be transplanting in the field during rainy or monsoon season mostly in May and June. He further said;

"There is a problem in the survival of plants that can thrive. The plants which used to grow in the jungle is brought and plant in the nursery. The plants which can grow in the snowy region cannot survive in other areas. The plants which are produced in tropical region cannot be grown in alpines and subalpine zone. All the plants have their habitat. The subtropical plants have to grow in the sub-tropical area. For example, the stem of the wild cane can be eaten; it can also be used in many purposes like making baskets, urinary retention. It can be preserved through conservation through reforestation or afforestation" (Topden, SMPB).

The term ex-situ conservation is to conserve the plants in its own habitat by protecting the area by fencing. Before conservation the area will be cleaned by cutting and burning grasses. He said with regard to ex-situ conservation,

> *"We are raising like alpine and subalpine are almost similar where they do aqauntism (bikuma) plantation. The medicinal plants like Aqauntism (Bikma), kurki, jattamasey, panch amley, pakanbetth, paspathey, so these are the medicinal plants which are mainly grown in the alpine and subalpine region. In the temperate zone, the medicinal plants that are mostly grown are chirowta, gaichara, pakhanbetth, bojo, bhuichamppa, kalo haldi, and wild lasun. In subtropical like harrah, barra, awala, hamal, totola, etc."* (Topden, SMPB).

Another officer shared about the project named Medicinal Plants Conservation (MPC) in all the four districts north Sikkim 400 acres, south 250 acres, east 100 acres and west 58 acres. The informant said that for research purpose,

> *"The in-situ conservation is very important and especially the preservation of biodiversity. We are not growing the plants artificially, but they are growing naturally. In future, we need to revisit in the department as it is in the guidelines of National medicinal plant board, to know the things whether they are doing correctly for preserving the medicinal plants or do they need any artificial way of preservation. Recently we have started herbarium in our department, but it is in the cradle stage. We have herbal garden nurseries for daily use"* (Nima, SMPB).

The department basically works on conservation of medicinal plants and their properties in Sikkim through various methods of conservation.

9.2.3. Ayurvedic Regional Research Institute, Sikkim

The Regional Ayurveda Research Institute (RARI) was established in Sikkim in 1979. At present, the institute is under the Ministry of AYUSH, Government of India. The institute has the facilities of outpatient department (OPD) from morning till 5 o'clock, pathology lab, medical mobile van, *panchakarma* therapy clinic and massage centre, *ksharsutra* therapy with basic facilities. The researcher had ample amount of opportunities to meet the Director of the Institute. We discussed institute activities and their community outreach programmes. The informant said about the various programmes such as Tribal Health Care Research Programme under ST sub-plan covering 20-25 thousand population from 10-15 tribal villages of Sikkim. After the survey, the village that they find out the new medicinal

plants for the clinical trials and scientific validation. They also find out the availability of the healer, targeting five healers from the village which they called as a folk claim. The other programmes are Ayurvedic Health Care Programme under SC sub-plan, focusing on the SC population of Sikkim. The third programme is Swasthya Rakshan Programme under the Swacha Bharat Abhayan covering the periphery of Gangtok town. In this programme, they organised health camps, free checkup, provides free medicine, free diagnosis, awareness of health and hygiene to their community. Even the researcher had a chance to observe this programme during his fieldwork in Sikkim. The health camp was organised on the way to Pakhyong, roughly about 20 kms away from Gangtok town. The people came for checkup for diabetics and hypertension and they medicine they took medicines for arthritis, gastritis, diabetics, gout, etc. Tapan said it as follows;

> "*the outpatient department that there was 30-40 patient per day. During the time of monsoon, the patient's flow will increase from 60-70 per day. The patient comes for various health problems like diabetics, hypertension, gout, piles, gastritis, sinus, body ache, and some common illness. The people are satisfied with the treatments that are provided by the institute. They visit twice or thrice, and the remedies which they are offering is very much helpful. There is no such allopathic painkiller for the joint pain and arthritis, and they give the painkillers which effect only for a few hours. Therefore, we are providing effective treatment for those patients such as oil for the external use and medication for the internal healing for those patients who have joint pain and arthritis. Many patients are having pain for more than five years. They are using our medicine, and there is progress in their health problems. He also added that even minister and politicians come for panchakarma therapy. Sometimes they send their people to their apartment for the treatment. The institute organises training programme for traditional practitioners"* (Research Officer, RARI).

Thus the RARI is looking after the health of various groups of people in their community from top to bottom including the common people and officials occupying a top place in the hierarchy.

9.2.4. Botanical Survey of India, Sikkim Himalayan Regional Centre

The centre was established in December 1979 with the jurisdiction of Sikkim and Darjeeling Himalaya. The centre is located below the Rajbhawan complex, near Zero Point, at Baluakhani, Gangtok. The primary work is to the identification of flora or the plant population in Sikkim. It can be a medicinal or any plants, but they do not use for their purpose. They discover the medicinal plants available in a particular place and geographical location. After that, the plant genetic resource is identified as useful medicinal plants and do the documenting work. He also shared about the geographic classification of the Sikkim and plants available climatic condition such as the species of plants distributed under tropical forests, subtropical forests, temperate forests and alpine vegetation ranging an altitude from 250 – 5898 m.

The BSI, Sikkim does not have any relation with other departments since BSI has its jurisdiction, which is under Sikkim jurisdiction. Therefore, they do not have a connection with other departments. Their work is to visit the forest and other areas of Sikkim to identify the medicinal plants and document them. If the plants are unable to locate, then the sample of the plant is brought in the lab for testing for its medicinal values. This is the primary job of BSI, and for that, they do not have to collaborate with other institutions. BSI is only the data collector in Sikkim. The office has functional units for research activities such as Herbarium, Museum, Laboratory, Library, Computer Unit, and Experimental Botanic garden (Manish, Scientist-C, BSI).

9.2.5. Institute of Bio-resources and Sustainable Development, Sikkim

The institute is located 5 km from Gangtok town. The institute primarily works on pharmacology. Researcher met the Pharmacologist, who is working in the Institute of Bio-resources and Sustainable Development, Tadong, Gangtok. The researcher asked him about the Institute's function and the informant's job profile. Newton said;

> *"I am from Manipur, and for six years, I have been working in this institute. We have both long and short term research project, which is sponsored by the Department of Bio-Technology (DBT) government of India. My work and I am very much concerned with the microbiological aspect, plant disease management, microorganism, biotic compounds, and laboratory-based practices. I use herbs, medicinal plants, but I do not use medicinal plants directly. First, I, isolate the*

> *micro-organism residing in medicinal plants before using. My job is to get the sample of medicinal plants, collect the plants from the field and test in the laboratory, and then once it gets confirmed I will present in the institute"* (Pharmacologist, IBSD).

There are so many procedures that need to be adopted, and again the findings will be analyzed or cross-checked by his supervisor. He said, whatever he is telling may not be accurate so he also has a supervisor to give advice. Above him, there is a director, council of a scientist who asks the questions and even for proofreading. There are strategies to follow, and he cannot claim that everything he has done is good or bad. The informant said yearly, or every three or six months they do the presentation of their findings to the higher authority. For example,

> *"If I collect medicinal plant properties from the healer or the community people and if the medicinal plants have certain medicinal values, then I go to the village and do the field survey of medicinal plants with healers and community people. After that, I get those plants from the healers with due permission. Then I do different testing, confirmation testing, different component extraction, and many things which have to do in the process. Once I get confirmed that it is truly potential compound found is to be anti-cancerous, antimicrobial, anti-hepatic, etc., and then different properties will be analyzed systematically"* (Pharmacologist, IBSD).

The informant also added, basically he is not working directly on the aspect of traditional healing practices and the traditional practitioners. He also informed the researcher about the challenges faced by the informants to get the details of the usage of medicinal plants and healing practices from the healers. He further said;

> *"The healers do not reveal everything to other people about their methods. One should create an understanding to get the details from the healers. Healers should be rewarded to get the details from them, and their practices should be respected"* (Newton, Scientist-D Pharmacologist).

The discussion was made more regarding the patent of the medicinal plants, benefit sharing to the healers, protection, and conservation of medicinal plants and so forth.

9.2.6. Atree

In Sikkim, the Atree has an eastern regional office. This organization is located in Development Area, Gangtok, which is few kms from the town. The institute is mainly a conservation-based organization. The officer 13 said;

> *"We work on eastern Himalayan region and Kanchenjunga Biosphere Reserve for the conservation of resources. We have the headquarter in Sikkim and have worked on the Western Ghats and the eastern Himalayas. The institute do action research on multidisciplinary policy, documentation, water, biodiversity, climate change, human-animal conflict, environment protection, livelihood, etc. So far the organization has not to work on the aquatic culture, mushrooming of pharmaceutical companies, deforestation, dams, declining of the flora and fauna, medicinal plants and traditional healing practices of Sikkim"* (Ragina, Senior Officer, Atree).

Herbal plants are there in the communities, and it is a part of their livelihood. But the institute is planning to have a research project on the above-mentioned areas. The red data list of danger and endangered medicinal plants of Sikkim prepared by FRLHT, Bangalore, where the organisation has conducted two days of workshop in Sikkim. The institute runs various research projects in Sikkim and the eastern Himalayas. Research scholars are enrolled for Ph.D. course and scholars come from different places of India as well as outside India for research work. She showed the report submitted by the Japanese researcher to the organization. She has done her research in Dzongu, North Sikkim on Lepcha traditional knowledge and healing practices (Ragina, Atree).

9.2.7. G. B. Pant National Institute of Himalayan Environment and Sustainable Development

The purpose of the visit was that many key informants suggested researcher to visit this institution to get more information about the healers and their practices. Before visiting this institute, the researcher read some of the article published by the authors from the Institute on medicinal plants and traditional healing practices of Sikkim. Based on the article and questioner researcher asked a question on institute activities and projects, working with traditional practitioners, their experience on traditional knowledge and practices, possibilities of integration, etc.

The senior officer shared the information telling that the G. B. Pant Institute had done many studies on medicinal plants, herbal nursery, and traditional healers in Sikkim. The researcher visited the regional centre of G. B. Pant National Institute of Himalayan Environment and Sustainable Development (Pangthang, Sikkim) under the Ministry of Environment, Forest & Climate Change (MoEF&CC), Govt. of India. The institute is located in a peaceful area under the jungle. The institute is surrounded by trees and forests. It is 20 km away from Gangtok town.

Deepesh an informant told the researcher about the various projects and activities carried out by the institution relating to the environment and sustainable development of the region. The Institute main focus is to work on more significant issues about the Sikkim on the ecosystem, community participation, participatory research, socio-economic status of the region, environment, sustainable livelihood, capacity building for the rural farmers and rural technology, etc. The informant said that the institute work with governmental departments, NGOs, CBOs, etc. for the people of Sikkim. The researcher observed that the Institute has laboratories, library, herbal gardens, auditorium, biotechnology park (where they do vermicomposing, decomposing, water harvesting, etc.), Bamboo Propagation, Rhododendron Propagation, Large cardamom conservation, tissue capture laboratory, greenhouse, etc. He informant shared about his study done in West Sikkim;

> *"Long time back, they had researched on traditional healers of Ribdi Barang, West Sikkim, where they found nineteen healers from different ethnic communities who practice conventional methods of healing. We found that, where there is a mixture of ethnic communities, there is more exchange of healing methods in the area"* (Deepesh, Technical Officer).

But after that, there are no such research or activities carried out by the institute in healing practices.

9.2.8. The Mountain Institute

The Mountain Institute initially was located in the Development Area, Gangtok. Later it got shifted to Tadong, Dara Gaon. The researcher met the Program Manager in his office (TMI) one of the American based organisation. He has the experience of more than ten years in this organisation. They run various activities and research funded by Indian

Council of Agriculture Research, (ICAR), International Centre for Integrated Mountain Development (ICIMOD), Government of Sikkim, etc. The institute is working with the collaboration Botany Department (Sikkim University), Community Based Organization (CBO), community people and healers, Sikkim Biodiversity Board, Forest Department, Government of Sikkim. So far, they have worked on Access and Benefit Sharing (ABS) to the community and healers for their promotion of knowledge and practice.

Krishna said about the studies they have conducted with the traditional healers and their practices. The awareness and training programme have been initiated in the year 2008. Where they had listed down 500 traditional healers from all over Sikkim. The healers from all the communities have participated in the workshop. They came with their dress, drums, medicine, and the healer perform rituals and exhibited their medicine. The healers had a workshop in Jhorthang, South Sikkim. The workshop was conducted by the Cultural Affairs and heritage, Government of Sikkim. It was also documented in the CD. During that workshop, healers had proposed the government to give recognition and provide incentives for the traditional practitioners. Now some people may be getting and some may not be getting the incentives for their recognition (TMI).

He further said that the institute is working with the healers and the community people to maintain the People Biodiversity Register (PBR) providing awareness on conservation and preservation of biological resources in the region. They organise community programme on biodiversity rules and regulation to every gram panchayats with the help pf village heals and local people. Every gram panchayat they had formed the Biodiversity Management Committee to look after the community issues relating to the misuse of the biological resources. The Geology Department of Sikkim University also helped them to form the BMCs and PBRs in the villages. At present they have formed the BMCs in 185-gram panchayat in Sikkim. They have also worked on knowledge documentation of traditional medicine, tradable and non-tradable bio-resources, healers knowledge and practices for sustainable development.

The informant said,

> *"at present, the Government of Sikkim and collaboration with other department and institute formed the "Traditional Knowledge Committee" to look after the healer's recognition and promotion. In this meeting, some of the recommendations were made for the future course of action-revised the incentives and honorarium for the healers, conservation, protection and promotion healers knowledge and practice and possible integration of healers in different departmental programmes. Gradually the government departments have started their work with traditional healers, meeting them, engaging in various programs, and documenting their knowledge and skills"* (Krishna, Program Manager, TMI).

9.2.9. Tribal Research Institute (TRI)

The Tribal Research Institute (Gangtok-Sikkim) is not very much old in Sikkim, and it has started recently under the Centre of Excellence, Ministry of Tribal Affairs. The institute is working on the mapping of a monograph on traditional healing practices and ritual healing among the tribal communities of Sikkim. At present, they are working on Lepcha healing practices and the healer's collaboration with the anthropology department, Sikkim University. In this project, the institute is working with all the tribal healers in Sikkim. They are working on the critical areas of documentation, identification, and validation of ethnomedicine practices by Lepchas of Sikkim. The director of the institute said,

> "*It is a dream project. We have tried our best to document the name of the plants, usage of the plants and their properties for various ailments, illustrate the picture of the plant, and then we will be recording local name, common English name, botanical name, scientific name, parts used a seasonal variation". He further added, "Documentation in the field level is over, upgrading it, and many plants have an interesting story, folklore, efficacy for the treatment, we are incorporating in that also. This will give a kind of catalog and also provides references for future use. We send all the plants to Botanical Survey of India, Sikkim further validation. Also, the institute is more interested in preservation, promotion, recognition, and integration in Sikkim policy framework. The institute is also focusing on starting a herbarium and gene bank as a model for sustainable development for the coming days. Many countries have stared herbarium if we can preserve, it will last 100 years, which is also a kind of artificial museum"*(Lakpa, TRI).

Tribal research institute and edges of social justice empowerment and welfare department (SJEW) government of Sikkim. The SJEW is doing a great job to expand TRI. The institute has two projects one is on ethnographic profiling, which is already done, and the other one for the development of welfare programme for the tribal communities. The institute also organized tribal festivals and helping them to promote tribal culture like food, dress, sports,

literature, arts, and artifacts, etc. For these research projects, the institute is hiring a good research scholar who has the knowledge of methods and specialised in the specific area of tribal studies. He also said, there are different categories of folk practitioners, for example, in the Lepcha community, there are 6-7 categories of practitioners, which has to identify a very systematic way. Where we fail is that understanding of the quality of interpretation and documentation depends on the interpreter, if there is a gap than the whole problem starts. In this situation, one can lose meaning in the field. A professor from Anthropology Department of Sikkim university said: "Translator become trans creators." The researcher has to know the local language, field study area, and need to build a good rapport with the community people, etc.

The institute is providing training and orientation for the scholar in interpretation, translation, report writing, etc. The information has to preserve, protect, promote, and disseminate to the world. At present, there is a deficit of research officer to be posted whose responsibility would be interpretation and report writing. From the government side, they have their ritual specialist for Lepcha Bongthing. The government has been recognized Bongthing and provided some fund for the development. The government of Sikkim has constructed a building for training and learning practices for Bongthing (Primitive Research Centre). Through this research centre the Lepcha Bongthing and the whole Lepcha community can preserve and protect their culture and heritage in Sikkim (Lakpa, TRI).

9.3. Issues on supplies, Human Resources, and Transportation

This section mainly deals with the lack of supplies, inadequate human resources and poor transportation in the study area in Sikkim. There are other contributing factors like doctors training, the interest of doctors, poor infrastructure, lack of medical facilities, out-migration of a health professional, overload, etc. which creates hurdles for providing primary healthcare.

9.3.1. Lack Of Supplies

The informant reported of having PHCs and CHCs in the rural level for the health care facilities to the rural population. The hospitals are having good infrastructure. However in

spite of having proper infrastructure the hospital is unable to provide health care facilities to the rural people due to lack of supplies. There are lack of equipment for patients' care which ultimately decreases the number of patients in coming to the hospitals. In some hospitals they do not have rooms for the doctors to sit and examine the patients.

9.3.2. Inadequate Human resources

Inadequate human resources in the public healthcare system also one of the main challenges to provide primary healthcare to the population. The doctor began the conversation by saying that;

> *"Though the government of Sikkim has given the permission to recruit the doctors who are coming from outside the state through the advertisement of NRHM and NHM in a contractual basis, but the doctor does not want to come and practice here. Why do the doctors don't want to come from outside Sikkim? The main reason behind this is due to a low income, i.e., salary is paid less to them. They have the urge to earn more money as they have spent lots of money on their studies doing MBBS/ Post Graduation or any specialization. So, after the completion of their courses, they join the institution through which it benefits them. Therefore, the doctors are not coming here from outside Sikkim"* (Premit, Gynecologist, STNM).

The other reason which researcher observed that the government give more preference to the Sikkim citizen. This is also one factor that it is responsible for dearth of doctors in Sikkim. The government should open recruitment for the outsider (doctor) who can come and practices instead of recruiting only those doctors from Sikkim. Due to inadequate facilities in the health centre, the majority of the patients directly referred from primary centre to the tertiary hospital.

9.3.3. Issues in hiring the Doctors

There are lack of human resources in the hospitals of rural areas of Sikkim. Doctors are very less that made the villagers to travel to districts and the state for seeking health care facilities. The doctor from VHAS said;

> *"There are several doctors in Sikkim and nearly hundreds of doctors are getting produced every year in the Sikkim, who are the domicile of Sikkim. The details of the passed out doctors are as follows: 20 doctors passed out from Sikkim Manipal Medical Science Hospital, 12 from outside with Sikkim with reserved quota, 30 doctors admission with a donation and 30 from abroad. The only reason for having*

> *a few numbers of doctors are due to government's negligence who are not interested in hiring the doctors because they want only the work and do not want to pay for them. They also make the same doctors do work for different places. He also gave the examples of doctors posted in the public sector of having one doctor in PHC"* (Suresh, VHAS).

He then told that when the doctors are posted anywhere, there should be proper infrastructure, medicine, and drugs, the supply of equipment, required number of nurses and other supporting staffs, adequate environment to work and so on. These are many problems which the government does not realise. They want only the work to be done. Therefore, many doctors do not want to work in the state. He further said that when the doctor treats the patients well in the PHCs, there will be an increased number of patients every day, and it is not possible for one doctor to manage them. Thus, he said integration itself had not taken place within the allopathy or the bio-medicine itself. He said there is a lack of working doctors in Sikkim because adequate numbers of vacancy are not getting created and there is also no fund from the government (Suresh, VAHS).

9.3.4 Transportation

Transportation in the rural areas of Sikkim is very poor. The roads are narrow and during rainy season the connectivity of the roads get destructed due to landslide, flash flood and sometimes due to earthquakes. It is very difficult for the rural people to travel from one place to the other. There are limited amount of vehicles in the villages for travel that over burdens the rural people to get or arrange the vehicle on emergencies. The doctor shared about the incident that took place in Lachen and Lachung (North Sikkim) where the community losses live of 3 to 4 pregnant mother in delivery cases due to the poor transportation. Then the community people filed the Public Interest Litigation (PIL) to the state government and also raised their voice to get the posting of one doctor in their place to prevent the complications in the future. The state government failed to meet the public's demand as there is a shortage of doctors in the state level health departments. The government decided not to place the doctors in the affected area because if the doctors are placed over those communities then there would not be any practical solution.

The informant also said about her department, where she has to visit many places to attain the patients in the hospital. Long time back the Government was ready for providing the

healthcare to the remote areas of the state through the chopper, but the questions roused up who will be going, and also the problems came with the helipad as the schools did not permit landing in their grounds since they get disturbances. The government's point of view, the population who seeks for the treatment, were less in number in that region (Premit, Gynecologist, STNM).

The places like Lachen and Lachung, one-fourth of the year there will be heavy snowfall and all the roads get blocked due to snow. Another season, monsoon! Sikkim monsoon is unpredictable. In Sikkim monsoon starts from the month of April-May and continued till September-October. The community knows that the monsoon season will stop before the Dushera festival (Durga puja). Even researcher observed poor roads and transportation, environmental hazards, natural calamities (massive landslides, flash-flood, blocked off roads, destruction of roads, etc.). For example, the researcher observed from the fieldwork, that in 13th August 2016 there was a massive landslide took place in Mantam river (locally people called 4th Mile). The whole bridge, which is connecting to the other side of the villages, got submerged under the river, including twenty houses. After this landslides, the other side eleven villages were cut off from necessary facilities. Till date, the government of Sikkim did not make one strong bridge for this place. People are carrying patients in bamboo baskets and they have to transit and change the vehicle to get the facilities.

9.4 Alternatives to Human resource in Health Care

The government had given the importance to allopathy, but there is no proper infrastructure of the health system. There are many problems like they do not have enough doctors and second, they do not have well-experienced doctors. Therefore, when there are no expert doctors, work cannot be done correctly. For example, if there are TB patients and for that there should be doctors who are expert to handle TB patients. So for the implementation, there should be proper human resources and strategies. Recently there was a national conference conducted where it was mainly focused on the strengthening of AYUSH and Local Health Traditions. There are very few Allopathy doctors in Sikkim. Therefore, the AYUSH department is given more importance (Tapan, Research Officer, RARI).

The eighty percent of doctors go to Delhi and other states for higher studies and job. After the completion of their course, hardly few of them come to Sikkim. The informant further gave the reference of WHO, for 1000 population there should be one doctor. In Sikkim, there are six lakhs population, and for these many populations, there should be a minimum of six thousand doctors. But there are only 1000 doctors who are not enough for six lakhs of the population in a state. They get a 20-30% response from the community, and the remaining 70% do not understand. Many PHCs, CHCs, and other hospitals due to lack of allopathic medicines or side effect they show interest in AYUSH and traditional system of healing. All the allopathic doctors in India believe that only allopathic medicine is scientifically proven treatment. Other than that the AYUSH and the folk healing system are fake.

He also added that if we see outside India like USA, Germany, African countries, South East Asia, they are running 15-20 complementary and alternative medicine schools, Japan is already running traditional healing methods since many years and Germany and London to have the school of traditional medicine system (Tapan, RARI). It clearly shows that the lack of human resources in biomedical professional on health services in Sikkim. The best possible methods to recruit more AYUSH doctors and traditional practitioners in primary healthcare. The researcher observed that the AYUSH started the new hospital in Sokaythang, Lower Sichay Gangtok, and colocated in the District hospitals and some PHCs in Sikkim. In DHs and PHCs they have a separate department for Ayurveda and Homeopathy. Many of the hospitals Homeopathy doctors acts as a medical officer. But the community people have less knowledge and awareness of both Ayurveda and Homeopathy in Sikkim. There is less utilisation of AYUSH system in Sikkim.

9.5. Engaging the Healers

The department and organisation engaged healers in many ways such as organising training workshop, seminar, fare or mela, taking healers to other places for the workshop, community health programme, and many other activities.

9.5.1. Programme on RTI and STI

There was a program conducted on RTI (Reproductive Tract Infection) and STI (Sexually Transmitted Infection) regarding National Family Health Survey (NFHS) where traditional healers were called for interaction and action plan for the community outreach programme. The senior doctor said,

> *"It is essential to know about the traditional healing system. Since the various ethnic communities of Sikkim believes and practice in the Traditional healing practices. The patient and community first line of treatment is community healers for any health problem if it is a supernatural or natural cause of health problem. Many times we include traditional healers during our meetings and seminars. The communities or the villages of Sikkim do not have quakes, but there are different types of traditional healers. The villagers mainly go to the traditional healers for the treatment".*

During the RTI and STI program, the reasons for including the healers was that the cases which come to the healers should refer. The main objective behind the program is to involve healers. Where most of the patient can go for the treatment to the healers, but at least the healers should know about referring the patient to the hospital. This is not only the purpose of including the healers, but it is to make them realise that the healers are equally important in our society. The healers provided sensitisation workshop regarding the process of the referral system. The healers do not have institutional qualification as they gain their knowledge from generation to generation (Dome, JD, RCH).

The department of NHM works in collaboration with another department like ICDS, gram panchayat, health centres, HRDD, school health department, AYUSH, etc. KI NHM said the department is trying to involve the traditional healers along with their religious leader in the communities through various programmes. Pranita said,

> *"Every traditional healer should be involved in the mainstreaming of their practices. Healers and religious leaders are the ones who can convince the community people and make them aware of the importance of health and the health care facilities. We cannot directly go to the communities and organized the health camp. First, we have to coordinate with the traditional healers or the religious leader, so that the health camp or health awareness programs will be done effectively and successfully. Therefore, coordination is essential with the healers and the religious leaders and involving them in various health activities"* (JD, NHM).

Doma said;

> *"without any benefit, the healers do not share their knowledge. We could only recommend the practices of the healers and everything the government must do. The healers do the treatment of various illness but how far it is useful that has to study. The patients with RTI and STI cases get the medicine from the healers. Also patients with jaundice, gastritis, gout, and bone-related cases get their treatment from the healers"* (JD, RCH).

9.5.2. Programme for the Healers on Referral System

The Information Education Communication (IEC) Department under the State Health Services and Family Planning is the main body who is responsible for the promotion and prevention of health care in Sikkim. The vision of the project of conducting a programme for the healers is to make them understand the importance of referring the patients to various health institutions as per the patient's condition. The healers are also provided formal and informal training on diagnosing the illness and diseases. Healers are expert are doing healing practices in their self understanding, but they do not have more in-depth knowledge about the causative factors of various illnesses. Dichen said,

> *"In villages, during illness first the people go to the healers than to the doctors for consultation. Earlier, we used to conduct programmes regularly. The healers were referring most of the cases to the health institutions. We used to tell the healers that they can do the treatment in their way but not to keep the cases for too long to prevent complications. But later, when the programmes and the funds got reduced, which again become the causative factor in referring the patients from the healers to the hospital. The referral cases from the healers got diminished"* (JD, IEC, Sikkim).

She further added that the government has now stopped providing funds for conducting a programme for the healers. The programme has been discontinued from 8 to 10 years. She noted that under NRHM it was included only RCH programme for them, where it was covered breastfeeding, care of mother and family planning method. But we pulled some fund from that and took the initiative to conduct programmes for the healers. At present, we do not have any data on records. We have only kept the photographs of conducting training to the healers. It is essential to have the fund to conduct the programme for the healers, which is lacking from the government. During the programme, the importance is given to the knowledge and practices of the healers.

After training during the feedback session, the healers used to tell that they have learned more about the basic knowledge of illness and told that they would be referring to the cases without delay. The healers used to come for programme in their respective traditional dresses. During the programme the participants were like healers, village head, Hospital staff, CMO used to attain. Dichen said, "I was pleased about the programme which used to be conducted very often and benefited both the healers and institution as many referral cases were treated on time. But once the programmes got stopped due to lack of support which automatically decreased the referral cases from the healers " (JD, IEC, Sikkim)

She also said that the government and the concerned department mainly look for the new programmes and the projects. The government officials of Sikkim, come and do their official work. The administration gives first preference to the newly launched programmes, and they neglect to do the older programmes. The people belonging to the higher status do not bother about the importance of traditional practitioners in health care. (Dichen, JD, IEC)

9.5.3. Healer's Exposure

The healers were attending conferences and workshops in other states through the initiatives of Sikkim biodiversity board and state medicinal plant board. In various programme the healers were called. Nima, said,

> *"Many years back, I had gathered a few healers from Sikkim to attend one of the workshops in Rajasthan, Jaipur in the year 2016. We had been there for four days. There were four healers from Sikkim. The workshop theme was on "campaign of national medicinal plants," where healers had come from different parts of India. They had displayed medicinal plants in this workshop. From Sikkim also the healers had taken the medicinal plants, in the form of powder and oil some they even bought and made for the exhibition. During the seminar, the healers got time to interact with other healers from different places. They shared the knowledge and importance of the medicinal plants which they had carried. It was observed that the plants which were not available in Sikkim were available in some other states and it was vise-versa. There is variation in the name of medicinal plants. In Sikkim, the medicinal plant has some other name which they called in different names by the other states. The healers do not know the botanical name of the medicinal plants since the healers are not highly qualified. But still, they managed to share their skills and practices to the other healer participants"* (SMPB).

The researcher asked some of the healers in the workshop about their practices. The healers from the seminar told me that they practice a tantric form of healing, which was utterly different from Sikkimese healers. The healers from Jaipur performed in a tantric way, which they were practicing for many years, and they are famous for that. After that, there was no more invitation for the workshop and conference, but the department received the invitation to the workshop and seminar for the healers. The healer was also called during the time of mela or fare for the exhibition of medicine and stalls (Nima, SMPB). The traditional practitioners of Sikkim should ask the government of getting exposure to those functioning places in different parts of India to get more ideas and knowledge (Premit, Gynecologist, STNM)

In the year 2009, five expert healers from Sikkim accompanied by one of the doctors from Regional Ayurvedic Research Institute attended the healer conference in North East Institute of Folk Medicine (NEIFM) Pashighat, Arunachal Pradesh where all the healers from northeast India gathered in the meeting. Recently 2018 four healers attended five days training workshop in Guwahati, Assam. Some of them attended formal and informal training in FRLHT, Bangalore. The healers provided training on preparation of medicine, collection of medicine, planting of medicine plants, training on diagnosis illness, etc. Apart from these, healers are called for the training workshop in Sikkim organised by the Health Department, Cultural Department, Regional Ayurveda Research Institute, State Biodiversity Board, SMPB, TMI, etc. The majority of the healers said, they only called for the workshop, and people come and asked many questions, but hardly they learned from the workshop. They only collect the information about the medicinal plants, name, usage of the plant properties, etc.

According to Basant, when there is no proper planning in the state, the healers will not be benefited. If there is a meeting for the healers, the government officials were asking about “what they do” “from where they collect medicinal plants” “knowledge about the medicine” etc. When the healers attended meeting, they are only informed about the planting of medicinal plants and workshop. They are not informed about the integrated part of how it is planted, collected, prepared, used for treatment, and documented. This is how

the healers do not get any benefit. This is how integration is not taking place in traditional healing practices (Principal Scientist, SMPB).

The informant said, since a long time back, we tried to do the documentation of healers and have documented their healing practices. Some healers they treat the patients by making the sound, but one should know what kind of sound vibration is helping the patient to get cured. We have tried to identify the various types of medicinal plants and its properties which are used for the treatment and a kind of vibration that is being used by the healers to treat the patients while documenting the details of the healers. Santosh further shared his opinion;

> *"it is not fruitful of conducting a workshop with the healers since they do not like the questionnaires which are prepared and asked in a group. There is no problem for the healers to come and attend the workshop, they will come, eat and go, but the primary objectives of the workshop cannot be achieved. He shared his experience that many times he also planned of organising workshop but did not get success because the healers do not have the habit of discussing in the group, they have their way or environment of practicing their medicine. The healers even do not have the pattern of writing, if we ask them to write, they may get angry and leave the place but do not write"* (Ex. Director, VHAS).

9.6. Scientific Validation of Traditional Medicine

The traditional healing practices is different than Allopathic practice. Since Allopathic doctor can blindly tell the name of medicine for the treatment as they have done the study which was already documented. But in traditional healing they have verbal information regarding the conventional practices, usage of medicinal plants and their properties, nobody has given the scientific validation. The concerned authorities, policymakers, the administrator has to set the policy for the experimental validation of the traditional methods and healing practices. Since there is a lack of awareness among the administrators, bureaucrat, and policymakers to understand this less known traditional knowledge or the under-utilised knowledge regarding traditional healing practices did not receive its recognition. There is no question of a clinical trial of traditional healing practices (example traditional bone setting) because the community and the users well accept their treatment methods and practices. There is some minimal complication in traditional bone setting, but

it can be solved through some training for the healer's skills upgradation (Krishna, Program Manager, TMI).

The medicines that the healers are using for treatment does not have prove whether it is correct or not. The medicine has to cross-check and scientifically validate. Therefore, it should be measured, and for that research needs to be done on that. The medicines used by the healers for the treatment are not disclosed to others; they will keep it secretly. The medicine needs to be shown and shared to others which are used by the healers. Modern health care is open to everyone. The healer should impart knowledge to others rather than keeping to self (Doma, JD, RCH). According to Santosh, it would be easier to know how scientifically the traditional healers are treating the patients. First, we should identify the plants used by the healers for treating the patient, and then which part of a plant is being used as a medicine has to be validated (Ex. Director, VHAS)

The government cannot do anything unless and until there is evidence and the research should publish in a proper protocol, need to bring in the notice of the concerned authority, there should be the committees and the members who prove that there is evidence in healing. This is how traditional healing practices can be involved in health care services. There are quakes in the allopathy medicines, and at the same time, there are certain loopholes in traditional healers from whom the patient develops complications. Therefore, there should be research about the authentic practices of the traditional practitioners, which may help the government to decide in adding it to the mainstream. There should be evidence-based practices of the healers as they are treating the lives of the patients (Monica, NHM).

The Krishna said, if there is no policy, then nobody can document the knowledge of the healers. If the knowledge cannot be documented, then it will be challenging to identify how experienced the healer is. The knowledge and the research both should have its value. For example, if there is a plant, one should have the experience regarding the utilization of that plant, and if there is knowledge about that plant, then one can understand the value of that plant. Therefore knowledge and research go together, and for that, there should be scientific validation (Program Manager, TMI).

9.7 Process of commercialising Resources

Suraj shared about the process of marketing the resources through the proper channel via community auction. He said that, suppose one company comes to them and the company wants to take the resources from Lachen, North Sikkim. Before taking the resources, the company has to apply for tender to the Sikkim Biodiversity board. There is also a committee in Lachen where the company must apply. After the negotiation of price, the company can take the resources for their use. After that as per the biodiversity authority guidelines, five percent must submit to the state biodiversity board. If the resources are sold in Rs. 105 then Rs. 100 is kept by the local committee and Rs. 5 will be given to the board.

After that, the resources are taken, and the product is manufactured. And if the product is sold up to three crores then again point 3 percent amount should be given to the state. If less than three crores then point 1 percent is given the state government. He further clarified that if the product is sold for rupees, one crore then point 1 percent, if sold in 2-3 crores then point 2 percent, if three crores then point 3 percent and if more than three crores then it's point percent must be given to the state biodiversity board. After collecting those amount, 95 percent is paid to the committee from where the resources are commercialized for the conservation of medicinal plants and the remaining 5 percent is used for the administrative work. He said all the profits are given to the committee. This is how the commercialisation of resources takes place through auction (Scientific/technical Associate, SBB).

9.8. Access and Benefit Sharing

Suraj explained about the access and benefit sharing, which is in the Biodiversity Act. It is not only to share money. Benefit sharing is in terms of non-monetary benefits. He said, patenting is very important, which will remain forever. If the medicinal plant is only found in one place and someone will implement the small processing of that medicinal plant for easy access in that place, then the community people will be benefited for a life time. This is what we called access and benefit sharing. Even in the biodiversity act rules, there should

be joined patentee; the community people should have the knowledge of differentiation between the scientific institutions.

The informant gave an example of one species of medicinal plants which are found in many communities. But these species is used in different ways in all the communities which has this species. May be these species will be commercialized in public domain, but the intellectual property rights will be the communities where this species is initially started for treatment by the healer. The main custodians of the knowledge would be traditional healers (Suraj, Scientific/Technical Associate, SBB)

According to Newton, the benefit sharing has to do with the state biodiversity, with the state's different groups, and with stakeholders. It is not necessary to give the money to the healer. But one has to acknowledge healer by saying that this knowledge was provided to me by him (healer) and he will feel good, which is a kind of benefit. I will be giving citation everywhere, where the healer was duly acknowledged and if it gets out to be commercialised in future and that particular community will also be rewarded to some extent as per the rules. He said that till now, there is no system of paying cash as a fee because it is a long term process of manufacturing drugs and to get it commercialised. It almost takes 10-12 years to manufacture one appropriate drug for a particular illness (Pharmacologist, Scientist-D IBSD).

9.9. Challenges For Integration

There are challenges in the integration of traditional healing system. The age of the healers is the crucial factor where the healers have become old and not able to impart their knowledge to others and also could not do the documentation. In Sikkim, the production of medicinal plants are more, but the monetary values are low. Even if the healers are ready to teach, there should be interest among the younger generation to learn. There is a lack of support from the system, no proper policy, the healers are not given full recognition. Due to the constructions of dams, roads, deforestation, urbanisation, exploitation of resources, medicinal plants, etc. have hindered in traditional knowledge and practices. The detail information is given in the following sections:

9.9.1. Coordination among the Healers

It is quite challenging to integrate traditional healing practices in the modern healthcare system. Since traditional practitioners do not work in a group and they have their inborn practice of traditional healing system. But the traditional healers do not take an interest in integration (Santosh, Ex. Director, VHAS). There is a deficiency among practitioners. The practitioners themselves do not have good relations among themselves. They ask the patients why they go to different practitioners instead of roaming around to different healers. We say every time for the integration, but there are various challenges to be faced for the inclusion (Premit, Gynecologist, STNM). According to Purna, the study which is carried out by the researcher is very relevant and essential in present time. But he feels it's challenging to bring the coordination among the healers as the healers do not want to share their knowledge and details to others (Retd. Agricultural Officer).

There is also a need for integration between the healers like when five healers live in the same village they do not share or discuss with each other about their details in healing practices and methods. So, if the healers could share their healing practices and processes among themselves, there would be healer integration among themselves. There are more chances to come out with many new things if there would be integration among the healers (Naresh, Director SMPB).

9.9.2. Coordination among the Healer and the Doctor

There should be co-ordination between the traditional and modern health care system. Sometimes the traditional bonesetters try to do the treatment which he even does not know. Therefore, there will be more complications when patients arrive at the hospital. At least the healers must provide training and sensitised to see the X-rays of a patient and identification of health problem; this will be prevented from significant complications. If there are clarifications to what extent the bonesetters can do the treatment and when to refer if this type of thing goes, then there will be less patient load in the hospitals. Dichen, Sonam and Doma and others also agreed that there should be proper coordination and reciprocity between the healers and the biomedical practitioners.

According to the healer Rakesh, there should be both traditional healer and the orthopaedic doctor before treating the patient. First, they need to interact among themselves and view

the x-ray report together and then manage the patients. Many healers do not know how to read the X-ray report even though they know the medications to treat. The doctors could quickly identify the parts where it is crushed and compressed the nerves since they have studied thoroughly about it. The orthopaedic doctor can give simple training to the bonesetter than it will be helpful for the healers to work effectively. He then said, it is good if there is an exchange of knowledge among the traditional practitioners and doctor. Through these methods, all the healers also get some knowledge and upgrade their practices.

He said when the bone gets broken sometimes the parts of the bone is protruded out of skin where the orthopaedic doctor will fix it properly and stitches the surface, but the healers do not know the stitching they directly apply for the medicine and do the bandaging. Later, the wound gets an infection and complications take place. He also said if the traditional healers and the orthopaedic doctors go together in treating the patients, then there will be more successful in their work and they will get more patients even from outside Sikkim (Rakesh, 53 years, east Sikkim).

9.9.3. Co-ordination and Collaboration

In Sikkim, many departments and organisations are working on medicinal plants and traditional healing practices with the healers. This department is working independently by their departmental activities. The most of the informants reported the lack of intra-sectoral coordination and collaboration between the various departments. The awareness has to be there in all the department towards the traditional knowledge and practices. The essential aspects of conservation and recognition of traditional knowledge and practice all the department have to come together. According to Krishna, many departments are working on their project and activities. The traditional healing practices and the healers are getting less priority for the government. There is a need of intra-sectoral coordination among the departments to form the policy for the healers and their traditional knowledge and practices (Krishna, Program Manager TMI).

Manish said that “the integration of traditional healing practices into modern medicine needs more collaborative work. One must visit all the traditional healers and identify their

usage of medicinal plants, its formulations and then treatment of patients. After that, the medicine must be tested in a lab. The doctors and officials from different departments like STNM, AYUSH, SMPB, State Biodiversity Board, etc., need to observe the healer's practicing, that how much it is safe for the use. This is how the integration will take place after proving scientifically" (Scientist-c, BSI).

Another informant said that, "It's challenging to integrate, but it can be done by giving capacity building training or by inviting the healers from outside Sikkim for exchange programme where they can exchange their knowledge of healing practices and knowledge of medicinal plants and herbs. Though people know about the availability of medicinal plants, they are not interested in using it and also the healers they do not share the details about the medicine that how they prepare since it's a combination of many medicinal plants" (Nima, SMPB)

When people come and stay together, there will be a mixture of utilisation, and there will be a chance of integration. It is challenging for one person to integrate since it needs many people to get the work done, but it can be recommended when the person is alone. Unless and until there is no advocacy, the Government will not come to know about the traditional healing practices, and there are elements for its support. The government will not move or look by its own, and there is an urgent need for collaborative work and initiatives from community people and healers to ask for the integration of traditional healing practices (Deepesh, Technical Officer, G B Pant).

9.9.4. Challenges in Colocation

Purna said that the cultural revival is significant, and thus it can revive the aesthetic and medical heritage of Sikkim. It is not necessary that every health system has to be in the same place as Biomedicine, Ayurveda, Homeopathy, Amchi, and traditional practitioners. Everything together at the same place is not possible and might create a problematic situation. Once the herbalist starts their practices, automatically it will begin to continue their practices, and thus the integration starts. For example, one place they have allopathy, one place they have Ayurveda, one place there are traditional practitioners, etc. The concept will be wrong if one thinks that integration has to be in one place. There should

not be complexity in everything. Otherwise, the aesthetic value of medicinal plants and healing practices will be lost because if everything is placed together then again the people prefer to go for allopathy (Retd. Agricultural Officer).

9.9.5. Gaining Confidentiality

The encroachment of knowledge is also one of the reasons behind decreasing the number of folk healers in some particular areas. He also added that there should not be the feelings of intrusion. One should make them understand that they are equally essential and helping hand in that particular environment. Partha said;

> *"the confidentiality of the folk healers should be brought and according to their need, one should go step by step for their recognition and integration, then only there can be progress. Otherwise, there will be a decrease in the number of folk healers in the future"* (Scientist-C, IBSD).

The folk healers should also feel the need of the people; otherwise, if the people show their aggressiveness, then the healers will stop giving treatment to the patients. These days there is a loss of culture which is due to the encroachment between the government drive and the political drive. The informant gave an example; it is challenging that even after the agreement with the government, the healers of Manipur did not share the details of their practices. But in some case, some healers shared about their practices like the healers of Pakhyong and Mr. Subba of Uttaray. The informant then said that the healer of Pakhyong is very knowledgeable and it took a whole day to talk to him and he has many formulations and he also treats many diseases. To gain the confidence of the healers, one should approach the government and make an agreement stating the practices shared by the healers will not be disclosed with the third party (Scientist-C, IBSD)

First, we need to take all the healers on one common platform. The healers should feel confidence towards the department. It must identify the importance of the healer's knowledge, how it could contribute to the society, source of livelihood for the future generation. The healers are very simple and humble, so the concerned department and government should convince them first about the importance of healer's knowledge and practices in the places. After that, the healers will share their knowledge and practices about traditional healing practices. There would be a regular conversation with the healers to gain

their confidence in sharing their knowledge. The healers should feel that the government is there for them. He said why the people are trusting to the biodiversity board? People have faith in the biodiversity board because the board is continuously interacting with the healers, community people and talking about biodiversity, the importance of medicinal plants, the importance of traditional healing system, their contribution for the society, what way the board could help them. This is how the department built the confidence of the people (Suraj, Scientific/Technical Associate, SBB).

There are healers and informants revealed that many research scholars come and take the details from the healers and never comes back again, which was an exploiting the knowledge. Basant gave an example, suppose one institution comes and interact with the traditional healers and go back. The healers feel that they are ditched. They think that they are cheated. This is how the reputation will go. In the future, if the other researcher will come, then the healer would not be entertaining. The researcher told that some healers also revealed not acknowledged by the researcher (Principal Scientist, SMPB).

9.9.6. Challenges of imparting Knowledge

The tribal communities believe that the medicine man or healers, they have a belief and ethics that, they should not disclose the medicine and its properties to anyone. The reason is that, if sharing the knowledge of the plant's leaf, bark, roots, etc. in coming days, the medicine does not work and its loosen the efficacy (Lakpa, TRI). The healers never reveal their treatment techniques, nor we can learn their treatment. It is unknown to us about how the bone is getting set with the Baidyas treatment. There should be scientific proof to be integrated into the healing system (Manish, Scientist-C, BSI). It is challenging to get the detail information, one should create an atmosphere of understanding to get the details from the healers. They should be rewarded for sharing their knowledge to others in the family, community and others. Their practices should be honoured and recognised (Newton, Scientist-D, IBSD).

The healers do not share the details of their treatment with anyone. According to Mondal, in his opinion that it is not because of the lack of confidence, but some healers having less education are sharing their few details. For example, the healer who is from Burmek, West

Sikkim who treats jaundice, skin diseases, bone fractures, and piles. When the was interacting with the healer from Bermeok, West Sikkim, the researcher asked the healer 'can you do the practices by tying up with the government?' Then the healer stopped sharing his knowledge about his practices. What the healers think is that whenever they share about the treatment details, the healers feel insecure that maybe the other person exploits there knowledge and practices.

The researcher tried to make the healer understand by telling that if the therapy is scientifically proved, then the treatment will be done to other places and the healer will be getting the benefit of sharing from the government. The healers should understand that if they do their practices with the government, then in future Government will take care of the practices and make it sustainable healing practices. The primary challenge is that the healers do not share their details, thinking that some other person will learn the healing process, and he will be losing their business. It has become a matter of concern about the healing practices which are done by the healers are getting decreased day by day and if they do not teach to the younger generation then one day the traditions will vanish in the community (Tapan, Research Officer, RARI).

Partha said, he has visited and worked in many places like Arunachal Pradesh, Himachal Pradesh, etc. The healers from all those places whoever he came across did not share their knowledge and practices. They have the belief that after sharing their knowledge and practices, the treatment will not be effective. He also shared the experience of visiting healers in Sikkim (saunay). The informant said, "I had not only gone for the treatment but also visited with my staff to convince the bonesetter to share knowledge. I told the healer not to tell the secret about the treatment, but he denied it. The informant then said that he had done the survey in 2009, 2010, and 2011 regarding the traditional practitioners where he found the healers were very aged of the 90s, now they may not be alive also and it was shocking to know that even the family members were unknown about what the healers were doing" (Scientist-C, IBSD). Some healers do not tell the composition of the medicine, and there is a specific dose of medicine where they combine and makes a mixture. These are the things which the healers usually don't disclose (Nima, SMPB).

9.9.7. Healers losing their Importance

The problems of the faith-based healers in the recent scenario in Sikkim is that the people ask them to come and perform the rituals during the daytime, which is against their religious and cultural ethics. Here, the faith-based healers feel like they are not being justified by the people and so they have stopped performing practices during the day. If someone is found practicing their rituals during the day, than it is because of socio-political pressure. If they are healing the patients and also worshipping the deities for the safety of their places, then the healers have a particular time at night but not in the daytime.

Now in Sikkim people have started summoning healers from different villages and they do processions with loud sounds as an act of performing for the peace and safety of the state. All those who participated are not the authentic ones except few. Therefore it is not the way of promoting the healers, but it is the demotion of the healers. He further added that the authentic healers do not perform daytime healing practices, and even their ethics do not allow them to attend daytime rituals.

At present the Lepcha community in Sikkim, especially in Dzongu, North Sikkim, they are losing their culture and rituals due to political invasions. For example, in Nepal, due to the intact of their system, there is no encroachment and dilution in their traditional healing practices; they are still inside the system. In Sikkim, there are various systems and have choices (Santosh, Ex. Director, VHAS).

9.9.8 Healers Association

The healers should be given a chance of practicing their knowledge, then only they will be able to share their healing techniques. There should be forum created for the healers to practice their healing practices. Other states they have the federation and also they have their own healers association. So, the healers do not have a problem in practicing their knowledge and healing practices. The informant said, there is a healer who belongs from West Sikkim, near Detang village that healer treats mainly the fracture cases of both animals and humans. His treatment needs 15-20 days for healing. Now his practices are gradually getting disappeared since there are no places for practices. The only thing is that the healer has to coordinate and work as a group or in a forum. First, they must have to

come together under one roof. After that further development will automatically take the place of its own (Purna, Retd. Agricultural Officer).

9.9.9. Policy for the Traditional Healing Practices

There should be a policy framework for the healers regarding their practices, and the department is preparing on how to document and strengthen their practices. In India, still, the debate is going on for the integration of traditional healing practices into the modern healthcare system. There is also a lack of awareness among people about traditional knowledge. Everywhere there is a traditional healing system, but people could not understand the value. According to Basant, "we could not go to the healers and told him about the patient of his work. Healers have their rights of not disclosing his knowledge and practices. They are the key knowledge holder, and it is on to them to share or not to share their knowledge with others" (Principal Scientist, SMPB). It is not a good idea to correct the healers and extract knowledge from the healers. The healers in the community might say which may not be correct, but if it is conducted in the developed societies, then it is not permissible to get the knowledge from the knowledge holders.

Various health system is existed in the society where people do not have idea about it. The government gives importance only when there is adequacy in the process of healing. Proper framework or the guideline is the initial step, that helps the healing system to run efficiently. There are times when people have ideas and sources of income but do not want to use their ideas. The forest plantation has done in Lagshap but it is not functioning. Therefore, the planning should be done from the bottom to top approach. The policy should be made correctly. There is different system in society that are not able to execute successfully. There is no connectivity among the approach that is made for the system like the traditional healing system. Therefore, the various system in the community or the society could not be able to link with each other (Principal Scientist, SMPB).

It can be integrated by passing standard protocol or Acts at the local level. It can also be integrated by bringing the awareness in the village level and how to build faith among the community people with the healers so that the community people seek more help from the healers in the rural areas. At the present scenario, the number of healers is getting decreased

day by day. Suraj said, there is no ethics regarding not to take the fees after treating the patients. The healers are treating the patients in the society, and they serve the community people as a social service. But the healer has to get mandatory minimum fees for the treatment. The government has to take the initiative to formulate the policy, where healers can get their fees (Scientific/Technical Associate, SBB). The healers also should be brought to the mainstream. The traditional healing practices should be institutionalised. Everything is a science which the healers are practicing, but they are not of the natural order, its traditional science. There should be a certifying body and should know they are doing correctly or not (Suman, Architecture, Building and Housing Department).

To run any system smoothly, it has to be in a systematic way and to be in the proper process. Likewise, there is a process of maintaining the patency of traditional healing practices. One would think of punishable and in trouble to maintain the patency of conventional healing practices in the community. The system does not work efficiently as it has to wait until the right forum gets started for maintaining the patency of the traditional healing practices of the healers in the community. In society, everyone should have a sense of "we feeling" about traditional knowledge. Every individual needs to give importance to the traditional healing system.

The informant said everyone has different views of healers, but the healer's position is low in the health system. There is a need for a decision-making body to take care of traditional healers and practices. The committee should be liable to formulate the policy; the agenda would be recorded. If this type of framework is there, then only the healers can move forward. If there is no system and the policy, then there will be healers individually getting profit from the government. Therefore, we can see in the community that some healers are benefited, and some are not. When the healers are getting proper facilities, they will be automatically united. To unite the healers, there should be a standard framework, system, and policy (Basant, Principal Scientist, SMPB).

9.10 Recognition of Traditional Practitioners

The government has given the recognition to the healers by providing incentives, giving registration number and certificates, not restricting fully in practicing traditional healing

practices, providing appreciation letters, involving them in various programmes, training, workshops, and seminars in both states and other states. They are also given the medicinal plants to grow for use during treatment. The other details are explained in the following sections.

Krishna, said people are now losing everything, their policy has been changed. When there is no land, there will be the chances of losing traditional healer in Sikkim. Earlier, the healers were not given priority or due credit by the government. But at present, the government have realised their worth, and they are trying to preserve the traditional healers. To all the traditional healers who are present now, they are maintaining them in the state medicinal plant board, State Biodiversity Act.

Recently they have written a book which was submitted to the biodiversity board for its publication. The department has not worked with the healers in such a way, only the thing people do their documentation. Till now no one has done the separate documentation of the healers. The healer's name has only registered in the biodiversity register. There is no such documentation which is on the herbalist and the traditional healers and their knowledge and practices. In future, they are planning to conduct a program related on biodiversity along with Sikkim University, FRLHT where they will be discussing four species of medicinal plants, its nutritional values, its uses by the healers and how it can be documented (Program manager, TMI).

9.10.1. Government initiatives (*Samajik Sewa Bhatta*)

The initiative had taken by the state government working through the Cultural Affairs and Heritage Department, the government of Sikkim. They have identified the prominent traditional healers, faith-based healers, traditional artisans, musicians, etc. in Sikkim. The state government had initiated providing some Rs 600 incentives or honorarium for these traditional knowledge holders based on their experience. The money will be credited every three months in their respective account. These practitioners have their bank passbook. The criteria of selection will be done by the block development office and village panchayat. They will identify the practitioners, based on their experience, this governing body gives the recommendation to the higher authority for the consideration. With regards to their

practices are concerned, they are practicing on their own, the government is just planning and institutionalisation the traditional healers through various programmes (Lakpa, TRI). The government of Sikkim would provide the *Samajik Sewa Bhatta* or the incentives. The criteria of the scheme are the healer must be a Sikkim citizenship. The healer those who are not from Sikkim, they won't get the incentives (Suraj, Scientific/Technical Associate, SBB)

But the majority of the healers are not getting this incentive from the concerned department. But those who are getting the incentives, they are not eligible to hold other incentives, for example, old age pension. The majority of the healers are not aware of the incentives, and if they so, the massage are not reaching to them from the department. Still, healers are not aware of the procedure and criteria. The application forms are not reaching to them, and there is revised of the healers and lack of data of healers.

Kamal one of the healer said;

> *"the government is providing the incentives for all the healers and the money is the same for all. There is a healer who does not know the healing practices they are also getting. The money has to give based on the healer's experience and expertise. The knowledgeable has to get more money than the healer who does not know the healing practices"* (73 years, East Sikkim).

9.10.2 Installation of Herbal Garden

In Sikkim, most of the health centre, schools and houses have herbal gardens. They have common medicinal plants and herbs which is available in the surrounding areas. The herbal plants like tulsi, aloe vera, neem and other plants. Doma argued that the people have herbal gardens but they do not know how to use it for medical purposes. The government should give importance to it, and they should be given an awareness program on the medicinal plants and its various uses. In our locality, we find many medicinal plants, but we are unknown about their medicinal qualities and it has become somewhat a useless thing (Doma, JD, RCH).

The other informant said, he has introduced the promotion of medicinal plants and their cultivation in Sikkim. Earlier the people of Sikkim used to supply the plants to other states like south India. People were not aware of the rotation of planting medicinal plants. Later

the community people were trained about the rotation and plantation of medicinal plants. This is how it has started the planning and executed the methods to the people of Sikkim regarding the plantation of medicinal plants. The behavioral of the medicinal plant is changed based on ecological needs (Basant, Principal Scientist, SMPB).

Komal, who is from Voluntary Health Association of Sikkim (VHAS) said a long time back; we have started a project on Community Herbal Garden in Saunay, Singtam, East Sikkim. We have planted various medicinal plants and herbs. Later the project got closed due to lack of funds. After that, nobody was there to look after the community herbal garden. The community people also did not take the initiative to take care of the herbal garden, which remains under-utilised. Now, it has become 7-8 years of closing the project. We do not have any documentation on that project (Senior Program officer, VHAS).

Tapan said, the institute also provided some fund for the traditional healers to start the herbal garden in their land. Many have started the herbal garden for preparation of medicine. But at present only a few healers have the herbal garden in their house (Research Officer, RARI). For instance, Kamal said, he also started herbal garden in his land. But due to the road construction, all his herbal garden were destroyed. After that, he raised the issues with the concerned authority for the compensation, but he did not get any compensation (73 years, East Sikkim).

The other healer Dilip said, the area panchayat assured him to provide some fund for the herbal garden, without getting the money he started his herbal garden in his land. He spends more than five thousand but did not get any money from the department. Whenever he asked the panchayat, they used to tell him that the money has not released from the department (65 years, West Sikkim). According to Kisan, he has planted different types of the tulsi plant, but due to department rule and regulation, he destroyed all his herbal garden (55 years, East Sikkim). The SMPB and horticulture department had initiated the scheme to distributed medicinal plants and saplings for the small farmers and traditional healers in Sikkim for their livelihood.

Mangal reported that;

> *"the government and the concerned department always says of doing and maintaining the herbal gardens and the sustenance of traditional practices and usage of herbal/medicinal plants, but they do not put it in action. I had also done the training in Rishikesh with Ramdev baba. I had visited in all the factories in Rishikesh and saw the medicines are prepared from medicinal plants. If the government wants such type of factories in Sikkim then 5 lakh youth and unemployed people will be in the job"* (Indra, 64 years West Sikkim).

9.11 Possibilities of Integration of traditional healing practices

Before the arrival of the modern medicinal system, the traditional healers were the one who was treating the patient. Still, the healers are providing their health services in the primary healthcare in the rural and urban areas of Sikkim. They are the frontline health workers in the community. The healers know the problem of the patient, family, and community.

According to Sonam, one of the senior Doctor of Department of non-communicable diseases said;

> *"Nowadays people says to the patient, not to believe in the superstitions of the faith healers and the traditional practitioners but the earlier days they were the only person whom the patients used to believe and seek the treatment. The traditional healers should be provided with formal and informal training, and the government should give them recognition. The training can offer them on reading the X-ray report, diagnosing illness, knowledge about the illness, etc. Therefore, they should be credited and should be empowered. The herbal plants are more used by the Baidyas and the bone setters instead of AYUSH system. He said, "even I do believe in traditional healers or the Baidyas"* (Sonam, JD, NCD, State Health and Family Welfare).

Suraj one of the informant regards that before integrating the traditional healing practices into the health care system or any other department, the healers should be given recognition, the place should be provided to practice their healing methods. Also, the healers should be certified after seeing their practices, and then the traditional healing practices can be preserved (Scientific/Technical Associates, SBB). According to Purna, in his positive view, said that it could be possible to sustain these traditional healing practices. For this, the state government has to take appropriate initiatives to protect these traditional healing practices, and also it has to keep a few places for the complexity of the practitioners (Retd. Agricultural Officer).

It is not that the government does not recognise traditional practitioners, as every month the traditional practitioners are given honorarium of Rs.600. Why do they want someone to come forward and ask for their collocations in the health centres? The traditional practitioners should form their association; if they have an association, through that they can place their proposal to the government for integrating them in the PHCs, CHCs, DHs and the bigger health institutions. Instead of doing it individually and being neglected. The healers association would be much easier to put up their desired demand to the government. Till now the traditional practitioners have not submitted their proposal to the government or the concerned department. Maybe they are happy with the honorarium of 600 rupees per month, and some practitioners may not have yet received even that prescribed amount (Premit, Gynecologist, STNM).

The informant suggested that the researcher can look ahead for the possibilities of integration healing practices with the tourism department, health department, cultural department, horticulture department, forest department, panchayat raj department, rural management and development department, etc. with all these departments initiative healer, community and the state will get benefit. What does the department think of the integration? But if they work without any selfish motive, then there will be the promotion of healers, but if the integration is promoted as a view of project-based integration, then it will never become successful (Santosh, Ex. Director, VAHS).

The other informant also agreed in the same manner possible ways of integration can be brought in the traditional healing practices is by communicating with the cultural department, health department, tourism department, and forest departments. He also added that those departments should enable by changing the policies and access to Non-Timber Forest Products (NTFP) and allowing the healers to get an entry in the forests and if the healers are not allowed to enter the forest, then they should be provided the medicinal plants for their practices (Deepesh, Technical Officer, G B Pant). On the other hand, indigenous or tribal medicine help in biodiversity conservation because knowledge upon the environment is a fundamental issue, and we can encourage traditional healers for a different kind of biodiversity resource conservation. To preserve the healing is good for

biodiversity conservation, keep it as a culture, heritage, and knowledge perspective (Lakpa, TRI).

Indra said, once there were news regarding the starting healer's research institute. If it has been started, it may not function properly because of a lack of proper organization. Therefore, Baidyas must come together and write a letter to the department regarding the placement of the healers in the institute. The local Baidyas should be given more training and importance to carry this healing tradition. He has given advises my times to the higher authority regarding the establishment of small herbal nurseries, small-scale factories, where local healers can make the powder form of medicine before sending instead of taking raw herbal plants for the treatment. If they want, then the government department should appoint the doctors and consultants to train the Baidyas in the villages.

Bijendra said;

> *"there is no promotion and awareness for the sustainable of traditional healing practices. There is no initiative taken from the government in this part. The government is not helping the traditional healers for their upliftment in the progress of the healers. Maybe after a few years, the government of India will try to revive the conventional system of healing. The government must recognise the traditional healing practices of the rural community. The medicinal plants which we are using are organic, and now people have the habit of taking inorganic things. The inclusion of a food supplement in the prescription also helps in integration".*

He suggested that, there should be the curriculum in the medical education system, where people can choose any of the disciplines for example mixing of both pure science and other methods (Bijendra, Alternative Medicine Specialist).

9.11.1. Space for Healing Practice

Many healers and key informants said that they should be given a particular space for healing practices in health institutions and rural villages. The most important one should identify the villages where there are experienced traditional practitioners, and once they are identified in the communities, then the government should provide support to them. The healers should be available in the villages for those who come for the treatment. The healers should not be taken to other places for the treatment because they need everything

from the village, which is required for healing. The integration of traditional healing practices has to be at the village level and in primary health institutions.

If the healers stay in their village, then there itself is a way of promoting the village and the place. For example,

> *"if a person wants to climb the mountain, he has to go to the hill to climb, but he cannot bring the mountain and place wherever he likes. Similarly, the patients have to go the healers for treatment".*

Therefore the system should be well enough to promote in its original location; likewise, as the operation takes place only in the operation theatre. So what we want in this matter is that, the people those who are supporting they should sit with the traditional healers and should know why the healers they cannot go to different places for the treatment and the healers they could also share about the requirements what they need for the integration of healing practices (Santosh, Ex. Director, VAHS).

The informant further added that this is not the mobile van clinic where they can treat the patients anywhere they want. In some extent, in the small clinic, they can handle but not like in an original location where they treat the patients. The healers have their well-established house where they can adequately manage the patients. There are traditional healers in Lingthem, they run small clinics, and there are some veteran healers who do not boast about their knowledge of the traditional healing practices (Santosh, Executive Director, VHAS).

We need to support in terms of infrastructure, in village small clinic or lab where they can come and practice. They should have a ground staff, at least one can assist him or her in daily works and should encourage them in some other area. These things can be done in the village/sub-centre level (Lakpa, TRI). According to Pemba (healer), part of integration is taking place as healers are called for training, and the certificates are provided. But healers are not afforded the space in the health centre or in the village to practice their knowledge. He also said of being unhappy with the area minister of his village who promised him many times of founding clinic for the healers but never happened till date (68 years, North Sikkim).

The other informant expressed his concern saying that as we see the village integration, it cannot be brought to us; we have to go to the faith healers and provide support to them from where there knowledge can be utilized for the society. There should be an arrangement of accessible transport for the patients to reach to the folk healers or the traditional healers for the treatment. It should be like tourism where people get attraction. And also the government has to see the need of the healers for their upliftment (Krishna, Program Manager, TMI).

According to Suraj,

> *"integration is not only to give incentives to the Baidyas/healers. There should be a broader aspect, which the government has to understand. They have to give recognition and make a place for them to practice. The healers should provide small hut or clinic to practice, where they can practices once in a week. Same way certain amount and medicinal plant seed has to offer to help them to start their herbal nurseries. The government says that they are recognising the healer's knowledge and accepting their practices. But nothing has been done systematically. We always talk about traditional healers, but we do not see the importance and acceptance of their knowledge. When we get a headache, we immediately take allopathy medicine, but we do not take traditional medicine. Therefore, how could we protect and preserve traditional knowledge? We modern educated community marginalised the expertise and practices of traditional healers"* (Scientific/Technical Associate, SBB).

The above arguments makes clear that there is not a proper communication, arrangement and recognition for the work of traditional healers for them to make their contribution for the well-being of society in general and the people at large.

9.11.2 Folk Healing Centre (Assam lingzay)

The foundation stone of Folk Healing Centre laid by the honorable the then Chief Minister of Sikkim, Mr. Pawan Chamling on 23rd February 2018 at Pangsita, Assam lingzay East Sikkim. The area covers seven to eight acres of land. This is the collaborative work with the Forest Department, Building and Housing Department, Power Department, Tourism Department, etc. During the fieldwork, the researcher visited the place on 26th March 2018. On this day, they had just begun the project by cutting trees, measurement of the area, and many other activities in the area. The researcher got an opportunity to meet the chief engineer of this project. He has done many projects in Sikkim and had good experience in

this field. The researcher asked the chief engineer about the main idea of the Folk Healing Centre, involvement of departments, infrastructure, and other activities in the centre. He said that the central vision of starting the healing centre is made by the then Sikkim Chief Minister himself after meeting all the traditional healers and thereafter he began to initiate the project. He had the idea to establish the folk healing centre for the recognition of traditional healers of Sikkim. He further said, in the healing centre, there will be research lab for testing medicinal plants properties, auditorium, medicinal plants nursery and herbal garden, separate place for healing practices, training centre, rooms for the patients, etc.

After few days researcher had visited the departments, which informant had suggested to visit, but no one has the information about the project. Lastly, the researcher visited the building and housing department at Zero Point, Gangtok. Where the researcher met an Architecture, who worked in the Building and Housing department. The informant shared that, he is very much interested in anthropology and reading the anthropological literature. The then Chief Minister of Sikkim has a concern about the traditional knowledge and folk tradition of Sikkim. Under the vision of Chief Minister, the Government of Sikkim started many projects on preservation and conservation of the heritage of Sikkim.

The government had begun Primitive Lepcha Research Centre in North Sikkim, where interested researcher are welcomed and conduct research on Lepcha culture and Heritage, The another one is Indigenous cultural centre in West Sikkim, Mangkhim in Nando Gaon, South Sikkim, a folk healing centre in Assam Lingzay East Sikkim. All the centres has a research and development wing to promote traditional knowledge and practices. Through this institute, healers are also getting recognition and encouragement to carry their practices. There is an institution of Shamanism in Nepal where they provide six months of training. Most of the people from outside Nepal come and learn the healing practices (Suman, Architecture, Building and Housing Department).

The state government has taken an initiative to start the folk healing centre and have reserved the land in Assam Lingzey few kms from Gangtok town in East Sikkim to provide places for the traditional healers to practice their knowledge of healing practices. This centre will play a vital role in attracting the patient as well as tourist from different places.

The second thing is that there will be the providence of survivability of the healing practices. There will be the preservation of the medical and cultural heritage cum tourist destination, which will draw much profit to the government for the state revenue. This will be the best solution for the integration of healing practices (Purna, Retd. Agricultural Officer).

If integration will start from the panchayats and at the district level, it will be possible and viable for the recognition and integration of the traditional healing practices. Therefore, it should be complex. In this regard, every community will bring their herbalists like Limboo will bring their herbalists, Lepcha will bring their own, Bhutias will bring their own and finally all will be in one place which will help them in integration. This is how the people of Sikkim are asking the government for the integration. The government also agreed about this concept. The work has been already started but needs time to complete (Deepesh, Technical Officer, G B Pant). Purna, argued that the allocation of land and place for the healers is just a political game. It also added that to practice real traditional practices; there should be certain things to be remembered; first, it should not run by politics and other modifications (Retd. Agricultural Officer).

9.11.3. Training to the Youth

The government should take an initiative of inclusion of the healing practices in the health care system. It's not possible for everyone to do the study of MBBS and AYUSH in the institution. The present generation of people is not interested in learning traditional healing practices. The valuable traditional knowledge of healing will have vanished with the demise of the healers. The young generation should be encouraged to get into this field too. There are a lot of educated and unemployed youths in our society. For those interested people in the community if the government opens the institution and encourage the healers, then they can impart their knowledge to upcoming generations. Many experienced healers have sufficient knowledge about healing and medicinal plants which might vanish away if not disseminated in the community. She noted that it is good if the healers impart their knowledge not only to their family member but also to the other interested villagers (Doma, JD, RCH).

Basant, said the government is going to start a new folk healing centre for the traditional healing practitioners in Sikkim. There are other possibilities of learning traditional healing practices if the healer is not disseminating the knowledge to the coming generation. The government can create a platform for the village youths to get a basic training programme in the institution. Healers can impart their knowledge to the youth about the medicinal plants which are available in the surrounding areas. The healer can provide training on preparation of medicine, diagnosis, and treatment. This kind of initiative can conserve and promotion of traditional healing knowledge and practices in our society (Principal Scientist, SMPB).

Indra had conducted many training workshops on conservation of medicinal plants and herbs. He even taught many people from Sikkim as well as outside Sikkim about the plantation of medicinal plants; herbal harden and nurseries, soil adaptability, etc. He worked as a consultant in many departments like Forest Department, Biodiversity Board, SMPB, and Horticulture Department. He also provides his valuable ideas and knowledge for the departmental activities (64 years, West Sikkim). Sukbir said, in the year 2008, the healer in collaboration with Regional Ayurveda Research Institute, Gangtok had conducted the training workshop on the importance of traditional healing practices for the University and College students in Sikkim. He further said that healers took all the students at his house for the field exposure to teach them to identify various medicinal plants, usage of plant properties, its plantation, the use of medicinal plants in multiple illnesses, establishment of herbal gardens, etc. Many people had come from Banglore whom he had taught them. He also suggested the medicinal plants and its usages can be taught to the school children, college and university students. They can introduce herbal garden in their school, hospital, health centre, colleges, and Sikkim University vicinity (73, years East Sikkim).

According to Kamal, some healers do not want to teach their healing practices to others in the community as they feel insecure about losing their knowledge and patients. The healer is willing to share their knowledge and teaching about medicinal plants to those who are interested in learning. However, the teaching of medicinal plants and healing practices is

not possible in one day. The learners should have adequate time to learn (73 years, East Sikkim).

The learning of traditional healing practices and medicinal plants cannot be learned by force. The learning of traditional healing practices can be hereditary, from gurus, dream, self-learning, etc. to practice traditional healing, one should have dedication and willingness.

9.11.4. Certification and License

The community people have more trust in the traditional healers and that is why the people are going to the healers rather than going to the hospitals. The doctor charges Rs. 500 for the consultation, whereas healer does not take any amount. The informant gave an example stating that, *"even now if I go to the healers, he will not charge me"*. Therefore, the government should provide a license to the traditional healers. It would be the best thing that the government would do for the healers for motivation and conserve traditional knowledge. The healers should be provided with certificates by the AYUSH department. The existence of AYUSH, Tibetan medicine (Amchi system) in Sikkim.

When there is a separate department of Amchi medicine in the state hospital, then what would be the problem for the state to provide department for the traditional healers. Therefore, traditional knowledge can be retained for future generation. The various departments of Sikkim visit healers. They interacted with the healers and did photography and videography of the healers. The healers are given incentives, registration, and certificates, but they are not getting constant support from the state. They are left behind unheard. Healers can be provided simple technology as they are using very crude tools, for example, bamboo is considered suitable for bandaging, but some healers are not using. The department is looking forward to providing simple modern technologies to the healers (Scientific/technical Associate, SBB).

The government can give recognition and allow the healers to establish their clinic by providing certificate and license; then it would be the motivation for the younger generation to have an interest in learning the traditional healing system. Traditional knowledge and practices are getting lost, decreasing medicinal plants, biodiversity is becoming endangered

and extinction. One of the reasons for fading away traditional culture is the degradation of biodiversity. Therefore, the species are getting extinct from the wild so difficult for ex-situ conservation. He said when people continuously use the resources of herbal plants, they would have their herbal garden, which would be a kind of protection. He said the traditional healers are not given the recognition for their practices due to which they have stopped their healing practices (Basant, Principal Scientist, SMPB).

9.12. Conclusion

This chapter helped us to understand more about the process of integration and recognition of traditional healing practices within the modern health care system, its challenges, possibilities and mainstreaming. Various departments and institutions are visited to gather information and the healers are interacted to collect the data, their opinion, and information towards the integration of traditional healing system into a modern health system in the state of Sikkim. There are roles and responsibilities of various departments which run projects and programs for the traditional healers/practitioners. State biodiversity board is taking part in conservation, preservation, and protection of biological resources. Also conduct training programs for healers, documentation of medicinal plants and herbs, and possibilities of integration of traditional healers. The state medicinal plant board of Sikkim is responsible for the plantation of medicinal plants, its preservation through *in-situ* and *ex-situ* conservation. The conservation of medicinal plants is done through artificial resumptions by establishing herbal gardens and plating materials. There is Ayurvedic Regional Research Institute that has various facilities like OPD, pathology lab, medicinal mobile van, *panchakarma* therapy clinic, massage centre, *kasarsutra* therapy centre, etc. the institute also initiates other activities, outreach programmes and survey to find out new medicinal plants for the clinical trials and scientific validations. Botanical Survey of India, Sikkim Himalayan Regional centre works to identify flora on the plant population in Sikkim. Identify useful medicinal plants and their documentation. The Institute of Bioresources and Sustainable Development is concerned with the microbiological aspects, plant disease management, microorganism, biotic compounds, and laboratory-based practices. The Institute of Atree conducts research on multidisciplinary policy documentation, water, biodiversity, climate change, human-animal conflict, environment

protection, livelihood, etc. G. B. Pant National Institute of Himalayan Environment and Sustainable Development carry out the studies on medicinal plants, herbal nursery, traditional healers in Sikkim. The Mountain Institute works with collaboration with other departments. It also works on access and benefit sharing to the community and healers for their promotion of knowledge and traditional healing practices. The Tribal Research Institute has the role of mapping of a monograph on traditional healing practices and ritual healing among the tribal communities.

This chapters also describes how the traditional healers and their healing practices are strengthened. The traditional healing system is strengthened by engaging the healers on various programmes like RTI, STI, exposure to the workshop, seminars, training, scientific validation of medicinal plants, commercializing resources, access and benefit sharing. It can also be strengthened by recognition, providing incentives, installation of the herbal garden, integration of giving space in healing practices and motivating to impart knowledge to the younger generation youths, providing certificate and license. There are specific challenges for integration which are described in this chapter are coordination among the healers, coordination among the healers and doctors, coordination and collaboration, problems in colocation, strengthen the healers association, gaining confidentiality of the traditional healers and policy framework to protect healers knowledge and practices in Sikkim.

The last chapter provides the information on the main findings of the research. It includes a conclusion, summary, concern for further studies, recommendation on policies, based on the research findings.

Chapter 10

Discussion and Conclusion

10.1 Summary

A qualitative research study is conducted on the integration of traditional healing practices into the modern health care system. The study is carried out in all the four districts of Sikkim, India. In a simple understanding, integration is to combine one or more things to become more effective and comprehensive. The main purpose of the study is to explore the traditional healing practices and its possibilities of integration into the modern health care system in Sikkim. The objectives of the study are (i) to study the different types of traditional healing practices in the region and the possibilities of their integration. (ii) to study the processes of traditional healing practices in Sikkim. (iii) to study the roles and responsibilities of traditional healers and in the community. (iv) to study the perceptions of the traditional healers and biomedical practitioners about healing system. (v) to understand the challenges in the integration of the different healing system.

Various studies have revealed that there are a large number of traditional healing practitioners in Sikkim. Medicinal Plant Board of Sikkim has listed 29 traditional healing practitioners in the year 2009. During this particular study, 102 traditional practitioners were identified and listed (Panda and Mishra, 2010). For the present study, the collection of data was primarily done by dwelling amidst the traditional healing practitioners and also those who were in and around the radius. The data were collected from forty traditional practitioners and thirty-two key informants that includes biomedical practitioners, various government officials from State Medicinal Plant Board, State Biodiversity Board, The Mountain Institute, GB Pant, Atree, Regional Ayurveda Research Institute, Voluntary Health Association of Sikkim, Institute of Bioresources and Sustainable Development, Botanical Survey of India , etc., patients and the people. The data were collected through interview schedule with open-ended questions. The study area was visited repeatedly to gather information and data. During the field visit, the majority of the traditional practitioners were identified between the age of 50-90

years. Among forty traditional practitioners, only two were females. It was found that the traditional practitioners mainly belonged to upper caste, twenty-five out of forty traditional practitioners were Hindu, and were all married. The study found out the qualification of traditional practitioners, and it was identified that only two-thirds had passed 12th standard, and the rest have completed their primary and high school only. Majority of the traditional practitioners were farmers, and they were doing agriculture and farming. There were healers doing government services in the forest department, education department, veterinary, horticulture, etc. Traditional practitioners were found more in the East, i.e., twenty. In the West it was sixteen, three in the north and one in the south. The researcher also came to understand about their basic information such as housing, livestock, water sources, cooking fuel, electricity facility, cell phones, vehicles, television, and monthly income.

Sikkim has several medicinal plants and herbs. Living amid nature containing varieties of medicinal plants and herbs, most of the people depend upon forest for the natural products. The knowledge and understanding about the diversity and process of healing provides a deeper insight into their health-seeking behaviour, perceptions on various aspects, relationship among different departments etc. The higher number of traditional practitioners were found to be bonesetters. There was also a hospital run by the Baidhya/bonesetter in Saunay, Singtham in East Sikkim. The hospital is famous and well known among all the Sikkimese and many other outsiders for traditional healing of the fractures and broken bones. It was observed that the biomedical practitioners have both positive and negative view of traditional healing practices.

On one hand, the biomedical practitioners (orthopaedists) considered the traditional practitioners as untrained and regarded them as someone having poor knowledge and understanding of medical practises. On the other hand, the traditional healers, community, officers and the patients reported providing treatment to many complicated and untreated cases of the biomedicine. Few have regarded them as “health insurance of Sikkim” as they provide health care services free of cost. However, it was observed and reported that the healers do not touch the cases which were beyond their capabilities and in that case they were referred to biomedicine. Some of traditional healers have stated

that the treatment of healers and the biomedical practitioners have to be parallel to each other with proper mutual understanding. Exchange of knowledge and practise is important for proper treatment of the patients.

To integrate and recognise the traditional healing system within the modern health care system. It was identified that various departments which are playing different roles in integrating and recognising traditional healing practices have to come together and plan. There are challenges that are observed in considering comprehensive integration and recognition of traditional healing practices at different levels. However, the possibilities are not too far to overcome the challenges.

10.2 Findings and Discussion

Living in a diverse community, with a variety of healers around, people have the choice of seeking alternative medicines during the time of illnesses. It was found that the people trust the healers, and they are seeking their advice, at the initial stage they opt for the treatment from the traditional practitioners, after consulting them, the patients go to the hospital. It was revealed that the health-seeking behaviour of the people were primarily influenced by their health culture, environmental factors, socio-economic status and many other impulses. The people of Sikkim have a worldview which revolves around the cosmic world of spirits both malevolent and benevolent and God and Goddesses. They believe in the myths and supernatural causes of illness.

It was identified that each and every community have their healing practices. It is revealed that the traditional healing practices are passed down from the ancestors to new generations . Also, it has been transferred along with the civilisation. Earlier the traditional healing practices were carried out on the animals as the villagers used to take their animals to the forest for grazing. Later the treatment methods and practices were applied on human beings. It was also found that there is no such vernacular name for the traditional healing practices of Sikkim. Usually, they called it as *'Pahaday Dabai' 'Jari Butti' 'Baidhya ko dabai'* Baidhya system of healing practices.

The government has to reach out to the health care facilities and introduce biomedicine in every part of Sikkim, both rural and urban areas. There is a need to establish sub-

centres and PHCs at the ground level to provide health care facilities. People have become aware of the utilisation of biomedicine and the free services offered by the government. In rural areas the infrastructure of various hospitals is good but the quality of services do not meet the requirements or provide satisfaction in treatment. But still, there is a strong belief among the people towards traditional healing.

But there is a lack of human resources, lack of supplies such as medicines, consumables (gloves, syringes, etc.) and also lack of equipment for patients' care. Even for minor cuts, fractures, etc. the patients are referred to the district hospital and from district to the state. Therefore, the utilisation of traditional healing is more in the study area of Sikkim. Recently Sikkim has started the multi-specialty hospital to provide quality care to the people of Sikkim as well as other parts of India. But the people from rural areas are finding it difficult to get the benefits of the multi-specialty hospital of Sikkim due to poor transportation, inadequate vehicles, not having connectivity of roads. All these factors have diverted the local people to opt for the local/traditional treatments from the healers.

The traditional healing practices in Sikkim are influenced by the Tibetan pharmacopoeia and also Ayurvedic practices. Despite modernity all around and various biomedical advancements, people use local/traditional medicines. Both the urban and rural people use the traditional system of healing, but rural people are more close to it as the traditional healers are available and affordable to rural population. The biomedical health care services are expensive, unaffordable, inaccessible due to the hilly terrain, lack of proper roads and transport, and people usually hold their belief in traditional healing as the healers are trustworthy.

As the healers are in the sunset stage of death and dying phase, it will impact medical inheritance. Eighty percent of healers were found in their old age, i.e. above 50 years, and only eight healers are found between the ages of 30-50 years. There were no healers identified below the age of 30 years. Thus, the question arises how the new generation will learn about the traditional healing practices.

The role of women in traditional healing practice was seen to be diminishing, only two elderly women were found to be practising in the study area. It was also identified that,

the female healers were not involved in training, and there is no proper dissemination of knowledge to the younger generations of females. The knowledge of childbirth, prenatal and postnatal maternal care, knowledge of consumption of food, massage and many other roles played by the female healers in health care services were found to be fading. The legacy of imparting knowledge of healing was not passed down to the females because Sikkim akin to any other community is a male dominated society. Healers have also clearly said that the traditional female practitioners are less in the community because it is very difficult to collect medicine from the forest. There will be a narrow and sloppy path to walk, which becomes slippery during the rainy season; one has to climb the unsteady and rocky mountain. These are the risk factors that concern the female practitioner from practising traditional healing.

There is no caste discrimination or variations in healing practices among the traditional healers (Prasad, 2007). There is no caste and class discrimination about healing, and among the healers in the study area of Sikkim as they were found treating both rich and poor. It was observed that the healers were providing the treatment and from the patients' perspective, healing them successfully. They treat the patient with a feeling of "Gods Services". The healers keep their treatment or healing areas clean as they consider it as sacred and holy and do not make it dirty.

Initially, the researcher thought that the healers were from the poor socio-economic background. But gradually, as the fieldwork started, it came to be known that healers were not from the poor economic background. They have a good family income support from their family members, not all of them. There are family members holding government jobs, and doing business. There are five to ten healers who stay in old houses; especially the older healers who prefer to live in their old houses. It is sometimes mistaken in perceiving the healer's actual condition. It was identified that the majority of the healers have sound economic status and their children hold better employment status. They have their children to support them anytime during emergencies. Healers have to carry forward the practices which had been practised by their ancestors. There are many healers those who have left the healing practices, and many are leaving due to lack of support from the government. They can leave the traditional healing practices at any hour

of their life as it is not a need-based job for them, they practise it because it had been passed down to them. It is not the source of their income. Therefore, the government of Sikkim should support the healers; they should be motivated, encouraged, recognised, certified and helped to build their capacity in treating the patients in the community.

It was observed that there are three means of healing practices that are particularly used by traditional healing practitioners. These are (i) healing by mantras, (ii) healing by mantras and medicinal plants/herbs, (iii) healing by medicinal plants, herbs including minerals and animal products. The study highlights the role of traditional practitioners who practice healing with traditional medicines and herbs. Traditional practitioners have revealed that healing practices have been learnt through dreams, by birth (*Pairashi).* The other way of learning of healing practices was from books, i.e., the old documents and records kept by the family of healers, learning from guru and self, inspiration from fathers, local healers and friends, training and workshops and institutions.

However, there are healers, who have learned to heal through behind-the-scenes. In the early days, the healing methods were not taught even to the children and other family members at home. There is an ethics of transferring the healing knowledge to the family members and outside the family. When healers have full faith in their family members or any *shishya*, then only they impart their healing knowledge and practices. The healing methods are not taught in details by all the traditional practitioners. As a result of that, the number of traditional practitioners are decreasing.

Dissemination of traditional knowledge and practices is very important and is necessary among the traditional practitioners as well as community people. Healers used to believe that their knowledge of healing is the gift received from God, and if they teach to the others, then the treatment will not affect the patients. There are traditional practitioners who have started teaching others in the family as well as others in the community. The passing down of knowledge from one generation to the other is grave, as it seeks trust. It is difficult for the healers to trust people easily and to teach them. It is more of a knowledge which is preserved and passed to the only ones who deserved. If their

knowledge and practices are not disseminated to the younger generation, there will be a great loss of traditional knowledge in the community.

Majority of the traditional practitioners were identified as bonesetters in the study area. They not only treat bone-related cases but also give treatment for other health problems. The notion of healing bone setting, healers want to be an expert on treating other health problems realizing the needs of the community. The bonesetters who started the practices of healing at the beginning started by practising on the animals such as cow, dog and rooster bird. Gradually started practising healing on humans. These practices of the traditional healers show that their practices were based on the experiential 'trial and error methods' on self and animal. The *epistemology* of healing practices is different from biomedicine.

It was revealed that traditional practitioners do not have a qualification, an institutional certificate to practice traditional healing. But they have certificates provided by various departments which they have got through by attending a training workshop in their respective fields. They are found to be specialized due to their many years of experience. The traditional practitioners, especially those who have many years of experience, are getting older day by day. It was found that traditional practitioners are collecting medicinal plants from the forest. They also collect the required medicinal plants or things from their surroundings and the Himalayas. Only a few traditional practitioners had herbal gardens at their house. Traditional practitioners also informed that the medicines are brought from the market from the medicinal men for treating the patients in the community. They reported that it is difficult to collect medicinal plants, and that is the most challenging phase of treatment in the community.

There are traditional practitioners who sell crude medicines in the market. It was also observed that old age traditional practitioners have stopped practising healing as the medicinal plants have to be collected from the forest and the mountains that are not possible at their age. The healers informed that they are being restricted on entering into the forest for collecting medicinal plants. Due to state biodiversity rules and regulations, the healers are not permitted to collect medicines. For this reason, the concerned

department has to provide medicine to the healers so they can practice their healing at the primary level.

The study found out that some bonesetters have hospitals and clinics for providing treatment to their patients. It was found that one bonesetter/Baidhya having a multi-storied hospital in Saunay, Singtam, in East Sikkim. He has learned the traditional healing from the institution in Kalimpong, West Bengal. The hospital is equipped with thirty to forty beds where patients are kept for longer durations and treatments are provided. There were four to five bonesetters who were found having small clinics for treating their patients. As the traditional practitioners have hospitals and clinics, the traditional healing can be taught to the younger generation by providing training in the healer's institution. Therefore, the traditional healing practices will remain for long term or sustain in the community for treating the patients.

It was noticed that traditional practitioners are assessing the patients when they first arrive in their houses for treatment. The healers identify the illness by holding the wrist and checking the pulse rate, and the eyes are checked to know the level of blood and jaundice on the patient's body. Bone-setters asked the patients to get the X-ray report before treating the patients. During the assessment, it was also observed that the healers ask the patients about their family history, past medical history and the symptoms of the present illness. This is how the healers were diagnosing the patient before starting the treatment.

It was observed that the Baidhyas/bonesetters can read and understand the X-ray film and the report before treating the patients. They are sending all the patients to go for X-ray in cases of fracture and sprain. Bonesetters were not treating the patients without an X-ray report. There are healers, who also use the marketed biomedical products in treating the patients such as gauge piece, cotton, adhesive tape, and volini spray for relieving pain. If the bonesetters are trained adequately and are provided with proper knowledge and understanding of body parts during training, then it would be helpful for the bonesetters to treat their patients more efficiently and also help them to refer the

complicated cases on time. This may also reduce the burden of biomedical practitioners and hospitals.

It was reported of having more cases of fracture due to the difficult terrain and varied topography. The availability of bonesetters was more in number compared to other practitioners. It was also observed that the bonesetters not only treat the bone-related cases but also treat other cases in the community. Apart from bone-related cases, they treat a snake bite, dog bite, insect bite, piles, gout, diabetes, hypertension, stone case, infertility, diarrhoea, dysentery, fever, cold and cough.

Patients were provided with the treatment according to the level of illnesses. The patients are called for follow-up treatment after seven to twenty-one days of treatment as per the prognosis. The duration of follow-up is extended up to thirty days. The treatment of medicines is used in three forms, such as oil, paste, and powder. It was also observed practitioners using home remedies such as maize powder, millet powder and soup of *gath* for treating the patients of Gallbladder stone. Healers also shared about their experiences of treating different cases such as hand cut, broken leg, treatment of gout, stone cases, sepsis (*dhokrey*), snake bite, measles, chickenpox, UTI, Tetanus, food poison (*kapat*), piles, and toothache. One healer reported of the traditional method of sucking pus during infection. The other healers also stated of treating-to-self during snake bite where he had applied the paste of garlic and saliva and got healed. Healers also treat animals such as cows and goat, when they are bitten by infected dogs. It was also found that healers treat a snakebite cases by using mantras. Also, there was one healer who used to treat bone cases with mantras. But the study focused mainly on the Baidhyas/healers who only use medicinal plants and herbs in treating the patients.

The traditional practitioners reported using a combination of different medicinal plants and their properties for preparing the medicine. Every single healer has their way of preparing medicines. It was revealed that the practices and methods are different from one healer to the other healer. Healer Kamal strongly believed that, *"all medicines are not good and all are not bad, but there should be a balance of all the ingredients that are used in preparing the medicines for treatment"*. The collection of medicinal plants are

done throughout the year except for rainy season due to the narrow and slippery path, landslides, heavy rain, etc. The dosage and the duration of the treatment depends on the patients' level of illnesses. The terms of the medication are three days to one month and sometimes exceeds three months. Healer Kamal said, *"Medicines need to be provided to the patients as per their requirement; otherwise, the same medicine will act as a poison"* (73 years, East Sikkim).

Traditional practitioners are also calling their patients for follow-up treatment. They explained about calling the patients for follow-up treatment after seven days, ten days, fifteen days and one month as per the severity of illness. Majority of the traditional practitioners were observed treating the patients from their locality. In North Sikkim, three bonesetters were identified, where two were expert and experienced in healing the community patients. They treat the patients from their area such as Mangan, Lachen, Lachung, Dzongu, Magsila and other villages of North Sikkim. In West Sikkim, bonesetter from Daramdin is expert in his treatment, and he treats ten patients per month. The record showed twenty to twenty-four patients in the month of September-October 2017. Healer treats the patients above the age of three years**.**

It was found that the traditional practitioners treat the patients at their own respective houses. The patients are treated and sent back to their homes when they come for treatment. The traditional practitioners do not have adequate space to keep the patients at their home for a long duration. The patients are sent to their homes with medicines for the duration and advised to come for follow up on a given period. Sometimes, traditional practitioners also visit to the patient's house for providing treatment. It was identified that healers were providing treatment in the open space outside their houses due to lack of space inside their houses.

It was found that the healers have attended workshops, training and seminars. They also get incentives of Rs. 600 per month. They have received the appreciation letter for treating the patients in the community. This was how the older traditional practitioners were motivated in practising traditional healing practices. However, there are traditional healers and the younger practitioners who have not received any recognition and

incentives, and neither they have been called for the workshops and seminars. The government and concerned departments have to give equal opportunity to all the traditional practitioners. If they only focus on a few healers, it will demotivate the other healers and their practices.

Traditional practitioners do not keep records of their patients. They were not aware of the importance of maintaining records of their patients' details after providing treatments. Only a few practitioners were identified as keeping records in the study area. Few of them have kept records from 2005. Even though they do not keep the records of their practices, but there are healers who have integrated themselves by using advanced methods in treating the patients in the community such as one traditional healer was identified using a stethoscope in his clinic for assessment of the patients. During the field visit, many were advised to keep the records and also informed about the importance of keeping records.

It was observed that there is a prevalence of offering presents in cash and kind to traditional practitioners. It was found that traditional practitioners do not demand cash and kind from patients after providing treatment. The patients in the villages are provided with free treatment as services. They revealed holding government services and personal businesses for earning money to run their family. But they accept the cash and kinds if the patients and their relatives offer them after treatment. It was observed that the patients and their relatives are coming and offering cash and kind after getting successful treatment from the healers. The patients offer cash as per their ability, and it ranges from Rs.100-1500. The traditional practitioners also described the charges when the medicines need to be bought from other places such as West Bengal (Siliguri, Kalimpong) and Nepal. They take charges when the medicinal plant's properties have to be collected from far mountains and Himalayas. They also charge the patients when market products are used for the treatment such as gauge pieces, cotton, adhesive tape, etc.

There were different cases who have witnessed the fracture cases, hypertension, piles, stones, gastritis, etc. The community showed their satisfaction of getting treatment from

the traditional practitioners, and they also revealed spending a large amount of money in getting biomedical treatment from Sikkim and outside of Sikkim.

Traditional practitioners explained about the cases whom they refer to biomedicine for further treatment. According to them, the patient with multiple fractures and in severe conditions are being referred to allopathic hospitals for further treatment. However, the record of referring the cases was not available with them. It was observed that the patients who were unable to meet the expense of the hospital stay in biomedicine would come to the hospital of Baidhya in Saunay (Baidhyshala) after getting treatment from the hospital. Albert and Porter (2015), in their paper, describe that healers in Meghalaya refer the cases to the biomedical institution but do not keep a record of the documents. Therefore, it was identified that the documentation by the healers is important for integrating them in the health care system. It would be effective if we inform them to keep the records that will help them in mainstreaming and integration of their healing practices.

The traditional practitioners provide treatments to the patients in the community. However, they also get involved in taking decisions, resolve any disputes in the family and the community. Healers also decide where to take the patients for treating them. Traditional practitioners have a diverse role to play such as, the role of father and head of the family, looking after their livestock, some hold government/private services, some conduct rituals, etc. They also provide counselling to the patients. It was also reported that the patients and their relatives would come for consultation regarding the treatment.

The study also deals with the perceptions and experiences of biomedical practitioners, government officials and traditional practitioners towards primary health care services. It is observed that many biomedical practitioners have strong opposition and argument on not believing the treatment of traditional practitioners. The biomedical practitioners have a preconceived notion about the traditional practitioners, and they brand them as untrained, illegal and uncertified. But there are some of the biomedical practitioners who have a positive attitude towards the traditional healing practices and traditional healers. Healers too have a critical attitude towards the biomedical practitioners. Many of them

reported and witnessed getting treatment from the traditional practitioners. They also revealed that traditional healing is healing with no side-effects but takes more time to get healed.

It was found that the traditional practitioners have a good relationship with various departments such as SMPB, RARI, Horticulture Department, State Biodiversity Board, the Mountain Institute, VAHS, etc. It was revealed that the traditional healers were involved in various workshops, training, seminars, etc.in Sikkim and outside Sikkim. The traditional practitioners were also having good relation with the patients and the community. They are the respected and trusted people in the community from where the patients seek treatment during various illnesses. There are informants from government department and organisation who have stated the positive views on traditional healing.

It was revealed that the research scholars from outside are extracting and exploiting the community knowledge and resources. They come and collect the data and information, but did not acknowledge the traditional practitioners. The out-migration of the younger generation for the search of better education and employment opportunities is creating gaps in transferring the traditional knowledge and practices in the family as well as in the community. The economy cannot be adequately generated from healing practices and the second generation of healers family do not opt to practice it. This is one of the factors that the younger generations do not carry forward the traditional healing practices in the community. This is how traditional healing or local healing is getting vanished day by day. It was found that the departments were not having intra-departmental or inter-sectoral coordination and due to this factor there is a widening gap between the departments.

It was identified that the process of integration and recognition of traditional healing practices had taken place into the modern healthcare system in the study area. There was some haziness in considering the comprehensive integration of traditional healing system into a modern health system. The traditional healers are provided space by allowing them to visit the patients in the hospital but not permitting them to utilise their knowledge and skills in treating the patients. The roles and responsibilities of various departments and

organizations that are working for the process of integration and recognition of traditional healing practices in the state of Sikkim need to be coordinated.

The State Biodiversity Board is functioning for the conservation of biodiversity, sustainable use of resources, and access and benefit-sharing to the community. The State Medicinal Plant Board gives platforms to the healers regarding the exhibition of medicinal plants by conducting workshops and trade fairs/melas. It also does the *ex-situ* and *in-situ* conservation of medicinal plants. The Ayurveda Regional Research Institute is doing the outreach medical programme and tribal health project, and it also identifies new herbal plants and folk healers. The Botanical Survey of India, Sikkim validates the medicinal plants and herbs which are available in Sikkim. The Institute of Bioresources and Sustainable Development works on pharmacology and plant properties.

It was found that the healers were engaged in various programmes such as RTI and STI, but due to lack of funds, the engagement of the healers on various programmes has decreased. Healers were also provided with formal and informal training for identifying various illnesses and to refer the cases on time. The impact of such engagements was observed as the healers used to refer the cases. Later the fund for training has stopped, which ultimately reduces the referral patients from the healers. It was reported that many a time the healers' knowledge about medicinal plants being extracted during conduct of training. It was identified that healers are playing an important role in promoting, preventing and curing the illnesses at the local health care level. It was found that the healers are provided incentives as per the cultural aspect rather than healing aspects. Healers are not being integrated into a holistic and comprehensive system.

The key informants shared about the scientific validation of medicinal plants properties and traditional healing practices. The Government of Sikkim giving recognition to the traditional healers such as, (i) *Samajik Sewa Bhatta* (Rs. 600 per month), (ii) installation of herbal garden, (iii) medicinal plants seeds for small farmers, (iv) appreciation letter from area MLA, (v) training certificates from forest department, (registration number from SMPB in the year 2007-2008).

There are challenges in integration of traditional healing systems which are as follows; (i) coordination among the healers, (ii) coordination among the healers and doctors, (iii) coordination and collaboration of different departments, (iv) challenges or problems in co-location, (v) gaining confidentiality from healers, (vi) challenges in imparting knowledge, (vii) healers losing their importance, (viii) healers association, and (ix) no policy support for the traditional healing practices.

The possibilities of integration are, (i) space/place for healing practices, (ii) folk healing centre in Assam Lingsay, (iii) training to the youth, (iv) certificate and license, (v) formal and informal training to traditional healers, (vi) integration of knowledge and practices

Healers have been provided space in the health care facilities, but they are not able to function and use their skills and knowledge. It was identified that government is focusing on establishing several healing centres, but there is a doubt whether it is for the healers or it is made for tourism. It was found that gradually, the healers are getting recognition. They are included in workshops, given a registration number, herbal medicines, etc. It was identified that various challenges in the integration of traditional healing system is having difficulties in co-location. There was no coordination among different departments. There are difficulties and challenges to gain the confidentiality of the traditional healers. The most significant challenges that were identified among the healers was that they were not imparting their knowledge to the younger generations, which ultimately reduces the traditional healing practices in the community. Due to which the traditional healers are at the verge of extinction in the community.

There should be a village level integration among the healers as the primary health care services are not properly reaching out to the local people. It was identified that the majority of the community people are taking treatment from the local traditional practitioners. It is not only the younger generation to be sent for the learning, but interested people from the villages can attain the training. It was observed that the government is now taking small steps in recognising and promoting the traditional medicines and healing practitioners.

When talking about the integration of traditional healing practices with the biomedical practices, there are departments such as State Medical Plant Board under Sikkim Forest Department, AYUSH department of Sikkim and Quality Council of India, New Delhi where they are planning to start the work of certifying the traditional healers of Sikkim as revealed by the key informants. These departments have collaborated and proposed a draft of 'Traditional Healers Act' according to which the incentives for the healers is to be increased. The processed documentation of healers knowledge is something which requires attention and execution of laws for the purpose has been initiated. Few healers have come together and integrated the traditional knowledge with modern technology and have created the spaces of modern health institutions by constructing hospital equipped with modern equipment and clinical setup.

There are various integration models initiated by the small independent organisations such as Foundation of Revitalisation of Local Health Traditions (FRLHT), Bengaluru by creating home herbal gardens and using these medicinal plants in the healing process. They have identified the biodiverse reserves across the states and are documenting, preserving and conserving the herbal medicines. *Jan Jagaran Vikas Samiti*, Udaipur, Rajasthan are providing traditional health-care services at Village Health Centres (NHSRC, 2009).

The greatest challenges that were identified is the age of traditional practitioners. Majority of the traditional practitioners were in their old age. The age group of the healers was 50-90, where 21 healers were above the age of 60 years. Age is the concerning factor of disappearing or decreasing the numbers of the healer in the community. Every day the healers are getting old and reaching their dying age, and if they do not share and teach their knowledge and practices in the family and community, then there will be the chances of losing traditional healers and the knowledge of traditional medicines. The government should be responsible for framing the policies of sustaining traditional healing and traditional medicine in the state of Sikkim.

During the field visit, it was also observed that the healers are not having the coordination among them. They did not have functional healers' association. Many healers did not

know about one another. Therefore, the healers should form an active and functional association where they can come together and talk to the government regarding recognition and certification to all.

Initially, it was thought that integration would take place only in the health system, but there should be integration in the cultural department, health department, tourism department, forest department, Panchayati raj department, cultural department etc. There are biomedical practitioners who also have a favourable view of traditional healing practices. The biomedical practitioners can also provide training or update them with the simple technologies that can be used by the healers. They can also inform the healers regarding the referral processes and the impact of timely referring the patients to biomedical practitioners.

The challenges in the co-location of traditional healing have been observed during the field visit. It was also stated that there should not be any complexity in the healing system. If everything is placed together, then again the people prefer to go for allopathy and their demand may go down. It was reported that the confidentiality of the folk healers should be kept. According to their needs, there should be step by step recognition and integration, then only there can be a progress.

The researcher has expressed his notion of integration by categorising 'integration' into three levels:

a. Clinical Integration,
b. Functional Integration,
c. Normative Integration

At the initial stage, functional integration has a great role to play as it comprises of knowledge and practise of the healers, which must be integrated with biomedical practices. Formulation of policies is to be initiated, which encourages such integration and facilitate the convergence of the two spheres of knowledge for the synthesis of a new model of the healthcare system. Secondly, clinical integration is another level of integration by giving recognition to healers. The healers are an important human resource

which must be given a permit/license to work in all kinds of health institutions at State level, district level, block level and at village level Health Centres.

Lastly, normative integration which is an important part where the traditional healers and biomedical practitioners must be acceptable in terms of their knowledge, values, behaviour and norms. The attitude of policymakers should be positive and must give equal weight to them in all possible sections.

The Government of Sikkim is also taking some initiative for integrating, but it is becoming a 'problematic integration' where the healers acquire the "semi-legal status" (Bode and Hariramamurthi, 2014). The problem is when the healers are getting some amount of incentives but they haven't attained the same status as the biomedical practitioners enjoy. They should get an equal amount of importance in primary health care services. Instead, their importance has been limited as an attraction for tourists as 'Folk Healing Centres'. However, partial recognition has been initiated by giving them certificates of recognition, seeds and saplings of medicinal plants and encouraging the healers to attend workshops of all India level, but they are not allowed to treat the patients in the hospitals even at the village level. Therefore, there is a need for 'comprehensive integration'.

The policies of the government till date have talked about the need to certify, patent and standardise the medicinal plants along with benefit sharing but this only helps in generating income. Commercialisation of the herbal and medicinal plants will only be reflected in boosting of the economy. The important question that arises here is who will be the custodian of the traditional knowledge and medicinal plants and herbs. The response should be, it is the healers as they are the repositories of knowledge about these medicinal plants and herbs. If we carry the discussion further with this perspective, then our main concern must be to help the healers to progress. This can be achieved by integrating the traditional healers and biomedical practitioners and policymakers to lay the foundation of a new healthcare system. The main motive should be to give due recognition and share to the beneficiaries.

10.3 Policy implication

The government of Sikkim has only given importance to the medicinal/herbal plants. However, healers are the main sources of knowledge regarding traditional healing and medicinal plants and come first and then the concepts of herbal/medicinal plants. First, healers should be motivated, recognised, registered and certified to sustain traditional knowledge and their practices. After that, the medicinal/herbal plants can be looked at to be conserved, protected and propagated.

It is equally important to provide training to the female healers. Female healers should be provided training for capacity building and need to encourage them as they have the source of knowledge on home remedial treatments and various medicinal plants in the community. Thus, the female healers are also encouraged to practice traditional healing.

The government should take responsibility to encourage and motivate the traditional healers by providing no objection certificate to collect medicinal plants from the forest. They should also be provided registration to establish herbal gardens that make it easy for the availability and collection of medicinal plants while treating the patients.

The Government of Sikkim provides the healers with incentives of rupees six hundred per month irrespective of age but most of the healers were not aware of this scheme. Apart from this, old healers are supposed to get both incentives and Old Age Pension but it was found that they were held back from getting the benefits of the scheme.

The government should take initiatives in training the healers and also help them to build the healers' capacity in establishing herbal garden, plantation of medicinal plants, collection, preparation of medicinal plants, etc. The government should motivate the traditional practitioners in constructing small healer's hut where the patients can be treated and also the patients can be kept for a few days, those who have a major problem. This helps the traditional practitioners to provide continuous treatment to the patients in the community. They can follow-up the patients regularly and can see the prognosis of the patients on time, which further helps them to refer the patients on time. The younger generations should encourage by allowing them to learn from the experienced healers and also giving exposure to the Baidhyashala hospital in Saunay, East Sikkim.

All the healers should be provided with the exposure of workshops, seminars, training, recognitions, certificates, incentives, etc. All these elements motivate and encourage them to continue healing practices in the community. There should be capacity building training for the healing practitioners where the experienced practitioners can exchange and share their knowledge with others and many more in the future. This will help in sustaining the traditional knowledge and practices in treating the patient at the local health care level.

Awareness is an important tool of man's life, if people are not aware then even when the solution is at their doorstep they will not be able to avail it. Hence, advertisement is an instrument which will help spread the information widely. The advertisement must be done through All India Radio Gangtok channels and other FM radio channels, so that people may be able to contact the healer easily.

The knowledge must be persevered for future reference. It has been found out that most of the healers are at their sunset age which means that if their knowledge is not documented or recorded it would be lost. Hence, it is very important that it must be well documented by using audio-visual aids and the traditional knowledge and practices must be digitalised.

During the field visit, many healers were advised to keep the records and were told about the importance of keeping records. It is important that all healers should be involved in various programmes and training and should update their knowledge and practices in healing patients in the community. They should be informed about the importance of record-keeping and documentation of the healing process that will motivate the younger generation.

The government should be responsible for the policy regarding traditional healing practices, and there should be scientific validation. If there is no policy, then nobody can document the knowledge of the healers. It is also challenging to identify how experienced healer is. The knowledge and the research both should have its value. For example, if there is a plant, one should have the experience regarding the utilisation of that plant, and if there is knowledge about that plant, then one can understand the value of that plant.

Therefore, knowledge and research go together, and for that, there should be scientific validation (Newton, Scientist-D Pharmacologist). The healers are not having the coordination among them. They did not have healers' association. Many traditional healers did not know about one another. Therefore, they should form an association where they can come together and talk to the government regarding recognition and certification to all.

There should be village-level integration as there is lack of health-related issues on not having proper health care facilities. The primary health care facilities do not reach out to the local people. It was identified that the majority of the community are taking treatment from the local traditional practitioners. It was also observed that there are possibilities of sustaining traditional healing by motivating the younger generation and encouraging them to take the training from the healers' institution such as Saunay, Singtam East Sikkim has the healer's hospital, who is willing to teach and train the younger generation. There is also an institute in Kalimpong, West Bengal where the training can be done on traditional healing practices. It is not only the younger generation to be sent for the learning, but the interested people from the villages can attain the training. It was found that the government is now taking small steps in recognising and promoting the traditional medicines and healing practitioners.

To integrate traditional healing practices into modern healthcare system is in the hands of the government. Government has an important role in the integration and should know why traditional healing is important and necessary in the health system. There is the growth of biomedicine, but on the other side, there is also rise in the utilisation of local/traditional medicines. The traditional healing has its status in providing successful treatment at the local level. Majority of the key informants have shared their positive views on traditional healing that healers can treat and heal the patients. They also argued on how the capacity can be built about the treatment of healers and talked about the scientific validation of the healers' practices.

The purposes and objectives of the diversity of the traditional healing practices are to know the process of a variety of traditional healing practices in the community, how the

healers are providing the treatment, their roles and responsibilities while treating the patients in the community. These objectives also help them to integrate into the biomedical health system. There are certain challenges in integrating the traditional healing into modern medicine as they do not get complete recognition from the government since the healers are provided proper certification, licence to practice in the health care system. Over above, if there is no acceptance by the biomedical practitioners then there is no interaction in the health care service system. Also, the purpose of being close to the community will be lost if they also have to sit at the heathcare centres which are out of reach.

This study brings out the perceptions of various government officials, patients and the community people regarding the traditional healing. Nonetheless, in spite of having challenges there are possibilities of integrating the traditional healing system by giving recognition to all the traditional/local healing practitioners and also providing small space in the health care facilities to practice their methods and knowledge of traditional healing, provided, they are treated fairly and treated with respect and dignity. There are previous studies that have been carried out for the local health tradition in eighteen states survey and showed that the utilisation is quite high (Sweta and Priya, 2010). Even the range of utilization was identified more when the data was collected during hundred household survey in the year 2013 (SADAD field Survey, 2013).

Even the utilisation is less of AYUSH system of medicine in Sikkim. The utilisation of traditional healing is more that needs to be integrated, but the Government do not pay much interest into it. Even the utilization is less of Amchi medicine, homoeopathy, Siddha and Unani which are not in much use. The government has given more importance to this form of treatment. In the North-east, Meghalaya, there is no AYUSH and do not have acceptance, but still, the government has given importance to it. The Government of Sikkim has given the recognition and incentives to some healers but not to all. Only a few traditional healers are provided certificates. The government has given importance and integrated AYUSH in the biomedical system, but the utilization is very less in Sikkim. Thus the question arises why the integration of traditional healing practices is not taking place and how the local/traditional healing is to be integrated into

biomedical healing system. The healers are integrated partially by giving recognition, certificates and incentives, but they are not fully integrated as they are not provided space for utilising the knowledge and practices in the hospitals.

Integration is not simple and easy that can be done at once, but it needs/takes a specified period. To integrate traditional healing practices into biomedical healing system is in the hands of government. Government has an important role in the integration and should know why traditional healing is essential and necessary in the health system. There is the growth of biomedicine, but on the other side, there is also high utilisation of local/traditional medicines. The traditional healing has its status in providing successful treatment at the local level.

Majority of the key informant shared their views on traditional healing that healers can treat and heal the patients. They also argued on how the capacity can be built about the treatment of healers and talked about the scientific validation of the healers' practices.

The healers in the study area have been recognised in some areas such as receiving incentives, certificates, etc., but not received comprehensive integration in the health care system. They are called for the training from different governmental departments such as forest department, state medicinal plants board, AYUSH Department, GB pant etc. for the training. As per healers' report, the trainings were conducted many times but never taught about the medicinal plants and herbs. During training, the healers' knowledge about different medicinal plants is extracted rather than providing more knowledge about medicinal plants/herbs. Upgrading the knowledge of traditional healing is a part of the integration. Therefore, healers can be upgraded in their existing knowledge of medicinal plants/herbs that motivate and help them to provide more treatment to the local people in the community.

The healers can be integrated by providing a place in hospitals in primary health centres where they can sit and treat the patients and also get the exposure of updating their knowledge and skills. Healers can be taught about the process of documentation of their practices. The other option is to give them space and infrastructure in their village with small equipment to practice — also incentives to grow herbal gardens.

There is a need for the establishment of the herbal gardens in all the healers' houses, and construction of small ‘healers hut’ where they can treat patients at their doorsteps, especially given the mountainous terrain with limited road and transport facility. These things were discussed with various government officials during an interview with them. The government should take the responsibility of providing comprehensive integration to traditional healing practices. It is their role and responsibilities to frame the policy regarding certification of the herbal garden for all healers and construction of healer’s hut in different areas where healers can sit and treat their patients.

The integration processes must be laid at all levels; from village, state to national level. Providing facilities to establish the ‘healer’s hut’ at the village level is an important step which would bring about healers from different areas and provide health care services. For instance, five healers from Taraythang, East Sikkim can come together twice a week and practise in these huts. The hut must have appropriate tools such as simple grinding machines, containers, air-tight pouches, weighing vessels and instruments. On Sundays, at the *haat* or Sunday market the healers must be given a space to treat their patients in a clinical setup, where they can treat patients providing services readily rather than the patients coming at their door. This will benefit the beneficiaries of availing treatment at lower costs.

The ‘healer’s hut’ at village level and ‘folk healing centres’ at State level such as in Assam Lingzay, Sikkim and North Eastern Institute of Folk Medicine of Pasighat, Arunachal Pradesh at National level must be interlinked with each other for wider dissemination of knowledge, technical know-how and proper understanding and practices of health care services.

Given the limited healthcare resources and difficult topography in the hills of Sikkim to achieve universal health coverage and also Sustainable Development Goals (SDGs), it is necessary to recognise the important role of healers, who are at the forefront to treat and heal at the primary level in the communities, and integrate them before it is too late.

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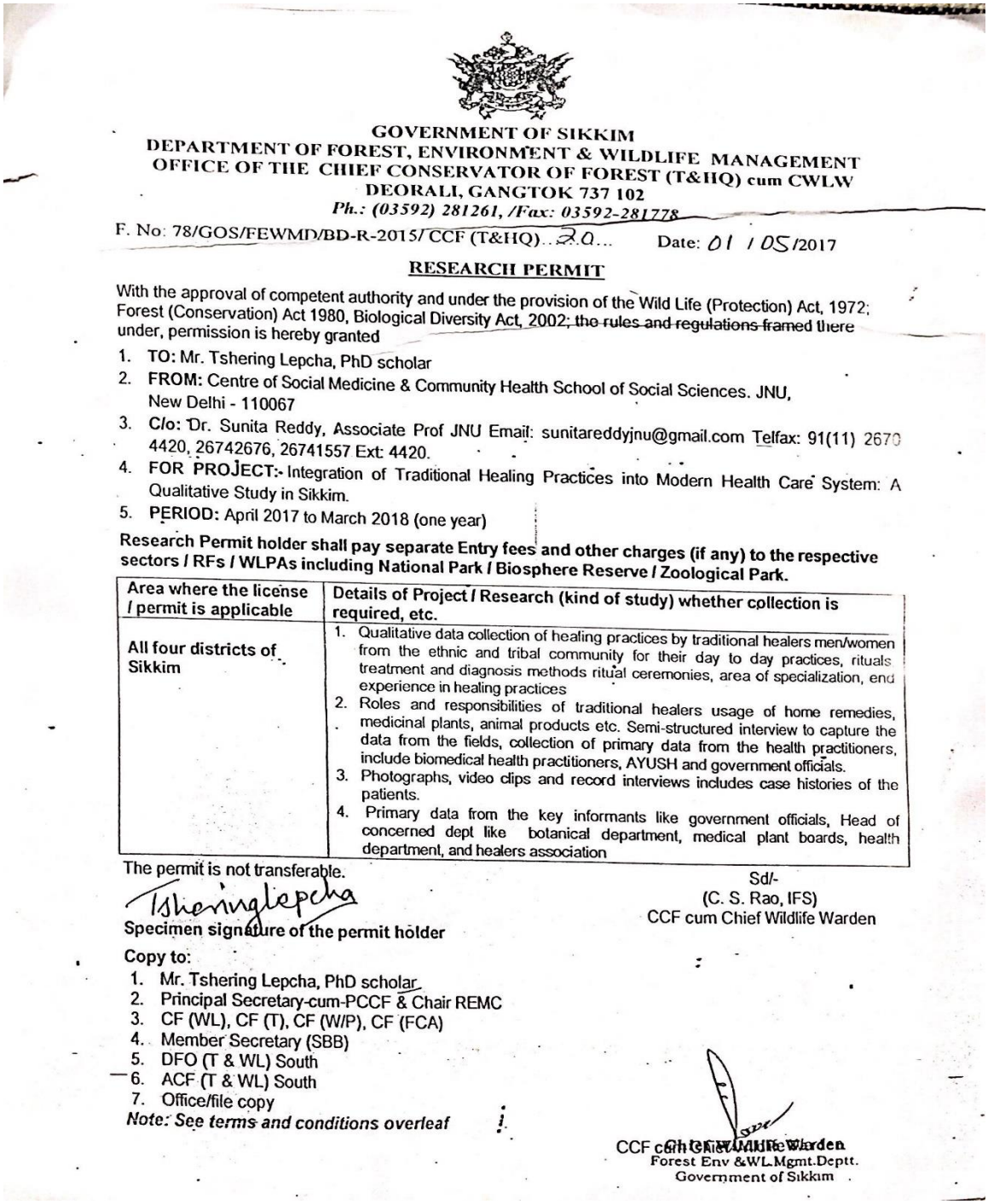
Appendixes

Appendix: 1: State Research Permit



GOVERNMENT OF SIKKIM
DEPARTMENT OF FOREST, ENVIRONMENT & WILDLIFE MANAGEMENT
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F. No: 78/GOS/FEWMD/BD-R-2015/ CCF (T&HQ)...20... Date: 01 / 05/2017

RESEARCH PERMIT

With the approval of competent authority and under the provision of the Wild Life (Protection) Act, 1972; Forest (Conservation) Act 1980, Biological Diversity Act, 2002; the rules and regulations framed there under, permission is hereby granted

1. **TO:** Mr. Tshering Lepcha, PhD scholar
2. **FROM:** Centre of Social Medicine & Community Health School of Social Sciences. JNU, New Delhi - 110067
3. **C/o:** Dr. Sunita Reddy, Associate Prof JNU Email: sunitareddyjnu@gmail.com Telfax: 91(11) 2670 4420, 26742676, 26741557 Ext: 4420.
4. **FOR PROJECT:-** Integration of Traditional Healing Practices into Modern Health Care System: A Qualitative Study in Sikkim.
5. **PERIOD:** April 2017 to March 2018 (one year)

Research Permit holder shall pay separate Entry fees and other charges (if any) to the respective sectors / RFs / WLPAs including National Park / Biosphere Reserve / Zoological Park.

Area where the license / permit is applicable	Details of Project / Research (kind of study) whether collection is required, etc.
All four districts of Sikkim	1. Qualitative data collection of healing practices by traditional healers men/women from the ethnic and tribal community for their day to day practices, rituals treatment and diagnosis methods ritual ceremonies, area of specialization, end experience in healing practices 2. Roles and responsibilities of traditional healers usage of home remedies, medicinal plants, animal products etc. Semi-structured interview to capture the data from the fields, collection of primary data from the health practitioners, include biomedical health practitioners, AYUSH and government officials. 3. Photographs, video clips and record interviews includes case histories of the patients. 4. Primary data from the key informants like government officials, Head of concerned dept like botanical department, medical plant boards, health department, and healers association

The permit is not transferable.

Tshering Lepcha
Specimen signature of the permit holder

Sd/-
(C. S. Rao, IFS)
CCF cum Chief Wildlife Warden

Copy to:
1. Mr. Tshering Lepcha, PhD scholar
2. Principal Secretary-cum-PCCF & Chair REMC
3. CF (WL), CF (T), CF (W/P), CF (FCA)
4. Member Secretary (SBB)
5. DFO (T & WL) South
6. ACF (T & WL) South
7. Office/file copy

Note: See terms and conditions overleaf

CCF cum Chief Wildlife Warden
Forest Env &WL Mgmt.Deptt.
Government of Sikkim

Terms and Conditions

1. Application to be made to Forest Environment and Wildlife Management Department (FEWMD), at least two months before the proposed date of commencement of field work and submitted along with Form-1 or Form-2.
2. All research proposals received by the Forest Environment and Wildlife Management Department (FEWMD), Government of Sikkim / Sikkim Biodiversity Board will be routed through the Research, Evaluation and Monitoring Cell (REMC) of FEWMD.
3. Permission for research will be issued only after obtaining views/recommendation of REMC of FEWMD.
4. The Organization / Institution / Individual permitted by the FEWMD, Government of Sikkim / Sikkim Biodiversity Board to collect specimens from Sikkim, should not give the collected materials to anyone or any institution/organization/individual without permission of the FEWMD, Government of Sikkim.
5. Specimen/ Sample collection ~~(if permitted only) should be restricted to~~ **two numbers each** of only those species for which permit is issued and specimen collection should be reported in Form-3 ~~with GPS Coordinates~~ to FEWMD before the researchers leave the State.
6. Collected specimens should be used purely for research and must not be used / allowed for use for commercial purposes without the knowledge and consent of the FEWMD, Sikkim Biodiversity Board, relevant Biodiversity Management Committee (for future Access and Benefit Sharing or ABS mechanism) and approval/permission of National Biodiversity Authority, under a formal Memorandum of Understanding.
7. For plant specimens (**if permitted only**) one full set of plant specimens, properly mounted, identified and labeled correctly will be deposited with the Sikkim State Forest Herbarium, Forest Secretariat.
8. Relevant provisions relating to Intellectual Property Rights (IPR) under the relevant Acts and Rules are to be followed.
9. The Organization / Institution / Individual should share all research findings with the FEWMD, Government of Sikkim and submit the copies of all reports relating to the research findings which are submitted to the Funding Agency to FEWMD as well.
10. Copies of all publications arising out of the research should be submitted to the Principal Secretary-cum-PCCF and Principal Chief Research Officer, FEWMD in hard and soft formats and the FEWMD should be duly acknowledged in all such publications.
11. For research projects beyond one year, and specifically based in/on Sikkim, at least 50% of research scholars should be sourced locally from within Sikkim.
12. The Organization / Institution / Individual may also collaborate with Department of Science & Technology, Government of Sikkim or Sikkim University for research activities wherever possible.
13. Following permission, the Organization / Institution / Individual shall liaise with concerned DFOs before starting fieldwork for proper coordination of field work and any assistance and inform the area DFO on completion of field works before leaving the field.
14. The Organization / Institution / Individual shall not be entitled to collect the endangered species / rare threatened species / high valued plant except when permitted to do so by the competent authority.
15. Organization / Institution / Individual shall not be entitled to patent anything related to wild / domesticated diversity of Sikkim without the approval of the FEWMD / Sikkim Biodiversity Board.
16. Any action detrimental to the natural resources, forest areas and wildlife is cognizable under the Sikkim Forest Water Courses and Road Reserve (Preservation and Protection) Act, 1988; Indian Biological Diversity Act, 2002; Wild Life (Protection) Act, 1972 and Environment (Protection) Act, 1986 and other relevant Acts.
17. Organization / Institution / Individual will adhere to Do's and Don'ts in regards to the protection of biodiversity of the region and will be energy sufficient regarding provision of cooking, water, etc. No camp fires are allowed.
18. Organization / Institution / Individual shall declare the Research Project cost in their Application.
19. Organization / Institution / Individual shall ensure that admissible / entry fees or any other levy in Forest and Wildlife Protected Areas are deposited with the competent authority.
20. FEWMD reserves the right of cancellation of Research permit without assigning any reason thereof.

Undertaking by Permit Holder: I agree to abide by above terms and conditions. Tshering Lepcha

Specimen signature of the permit holder

Name in Block letters: TSHERING LEPCHA

Date: 2-05-2017

Contact Details of Researcher:

1. Detailed Postal Address: Jawaharlal Nehru University, CSMCH/SSS-II
2. Tel/Fax no. /s (Office): (STD Code)..... (No.) .....Cell phone no. +919958652413
3. Email Address: nvelt.lepcha@gmail.com Alternate Email Address: .....
4. *NAME OF GUIDE:* Prof. Sulita Reddy
5. *Contact Details of Guide: Postal Address.* Jawaharlal Nehru University, CSMCH, SSS II
6. *Tel/Fax no./s (Office): (STD Code)* 011-26742676 Cell phone no. +91 9818858383
7. Email Address: sunitareddy@mail.com Alternate Email Address: .....
8. Name and Address of Institution/Organization: Jawaharlal Nehru University, New Delhi

RECEIVED (in Dept. of FEWLM) BY: Bishnu Pri. Sharma
Biodiversity Research Fell

Appendix: 2: Interview Schedule for Participants/Healers

Interview

Date:…….

Venue:…….

1. Basic Information of the Practitioners

Name:

Age		**Education/ Qualification**	
Gender		**Occupation**	
Caste		**Address**	
Religion		**Mobile No.**	
Marital Status		**Family members**	

2. Basic Information about the Family Assets

Sl. No.	**Particulars**		**Sl.No.**	**Particulars**	
1	House		7	Electricity	
2	Housing Plot		8	Mobile/ Phone	
3	Land holding		9	Vehicle	
4	Livestock holding		10	Television set	
5	Water source		11	Monthly Income (Rs.)	
6	Cooking fuel		12	Annual income (Rs.)	

3. Working Experience in Healing Practices:

A. Since how many years you are working as a practitioner?

B. What could make you to start this profession?

C. How do you acquire these skills and knowledge of healing practices?

D. What is your specialization in practicing your profession?

E. Since how many generation you are practicing this profession?

F. How many types of healing practices you do? Mention it,

G. How do you get the patients in order to treat and serve them?

H. How do you diagnosis the patients and treat them?

I. What kind of medications you prescribe for your patients?

J. Have you ever advised home remedies for the treatment of your patients?

K. How long have you spent your time to practice your profession?

L. How many patients come for the treatment in a week?

M. What was the total number of cases that you have treated in the last week?

N. Do you get the same number of patients every week?

O. What about your income, do they pay you for getting treated?

P. Where do you collect medicinal plants and herbs?

4. Notions about Health Care Services:

IV. How do you feel about the services that you give to your patients?

V. What is your view regarding Biomedicine, Ayurveda, folk system, home remedies and self-medications?

VI. Have you ever treated the patients that have been referred by other practitioners?

VII. Is there any patient that you have referred to other practitioners?

VIII. How do you relate your practices with other healing practitioners?

IX. Do you have something to tell about private and public health services?

X. Can you see the changes in the health care services over the years? If yes, specify how it was before and the changes that took place now.

XI. Do you feel that there is a change in peoples' perception? If yes, specify.

XII. Are you satisfied with the practices that you do in healing system?

5. Integration of Traditional Healing Practices:

1. Have you attended any workshop or training conducted by the state government?
2. Are you aware about the schemes and incentives provided by the state government?
3. What is your role and responsibilities in the community?
4. What are the initiatives taken by the concerned department/authority for the promotion of healing practices?
5. What kind of steps and initiatives do you want from the concerned authority?
6. How do the concerned authority restrict you to collect herbs from the forest/surrounding area? If yes, then explain.
7. What are the challenges faced by the traditional health care practitioners?
8. What kind of integration of traditional healing practices has to be there in the health services?
9. What is the status of transferring of knowledge to maintain the tradition?
10. How do you see your profession and what do you feel, whether day by day this tradition is decreasing or increasing?
11. Do you think that the coming generation will continue this healing practices?

Appendix: 3: Interview Tools for Key Informants

A. General information about the area.

1. Demographic history, migration and trends
2. What are the minor, major, common and seasonal illness in the community?
3. How many and what types of health institutions are present in the area such as Public and Private hospitals, nursing homes, SCs, PHSCs, Clinics, Anganwadi/ICDS, Pharmacy and others?
4. How they utilize the existing health institutions for the care of illness?
5. What are their perceptions regarding existing health institutions?
6. What about their general health conditions and living standards?
7. How they are maintaining their health (sanitary condition, housing, drinking water, toilets and drainage system)?

B. Perception of Illness, Culture and Changes

1. Perception of health, illness and disease
2. Changes in communities' perceptions and its applications
3. Changes in present food habits and nutritional state
4. Tendencies in self medication and home based practices for illness
5. Health related community practices like cultural practices, rituals, occasions/events, offerings and worshiping
6. Are they aware of the health facilities provided to them by state Government?
7. Types of health problem and preferred therapeutic services
8. Major destination of therapeutic resort
9. Referral among the various practitioners/traditional or biomedicine
10. Causes of multiple uses and its impact
11. What is the expense of one-time illness when you get admitted in the hospital?
12. What are the expenses they meet for the minor and major illness?

13. How community people manage during child delivery?

C. Integration of Traditional Healing Practices

1. How they utilize the local healing practices such as home remedies, medicinal plants, traditional healing practices and others?

2. Traditional healers and medical practitioners (their number and types and class, caste and gender categories)

3. Do they found effectiveness when they go to the traditional health care practitioners for the treatment?

4. Why people are seeking treatment from the healers, is it due to the lack of health facilities, for their satisfaction or cost effective?

5. What kind of illness treats by the traditional healers?

6. Interrelation between traditional healers and biomedical practitioners

7. Interpersonal relation between bio-medical doctor-patient and traditional healer-patient

8. What are the initiatives taken by the government for the promotion, protection, recognition and preservation of traditional healing practices in Sikkim?

9. What are the schemes and incentives provided by the government?

10. Which particular aspects of traditional healing practices are integrated into modern health care system and why?

11. What are the perceptions regarding integration of the two medical systems, i.e., the modern health care system and traditional healing practices in providing health care services towards traditional healing practices?

12. What are the challenges faced by government health institutions, medical researchers, medical consumers, medical-practitioners, politicians and bureaucrats in integrating the traditional healing practices with the modern health care systems?

13. How can the challenges of integration be possibly overcome?

14. How traditional health care practitioners collect medicinal herbs and plants for the treatment?

15. Are the Local health practices in preventing illness and promoting and procuring good health?

Appendix 4: Photographs from the Field

Photo 1: Healer showing the treatment materials

The picture above is taken from healer's hut. In the picture the bonesetter has displayed the traditional bandages made up of bamboo locally known as (*kamro*) that is used during the treatment of fracture and broken bones to support the affected area. The single curved shaped bamboo is used to support the elbow and other chain typed bamboos are used to support the straight bones of hands and legs during fracture and broken bones.

Photo: 2 Healer's hut in Sikkim

The bonesetter is showing his traditional medicine that has prepared and stored for the treatment of his patients. Room has shelfs to keep the containers of medicine. The medicines are kept in an organised manner with proper labelling. Mostly the dried powder

form of medicines are store in the containers. Larger quantities of medicines have stored in the big containers and less quantity of medicines have stored in the small containers.

Photo 3: Offering kind to the healer

Patient's mother offering kind to the healer after treating the patient.

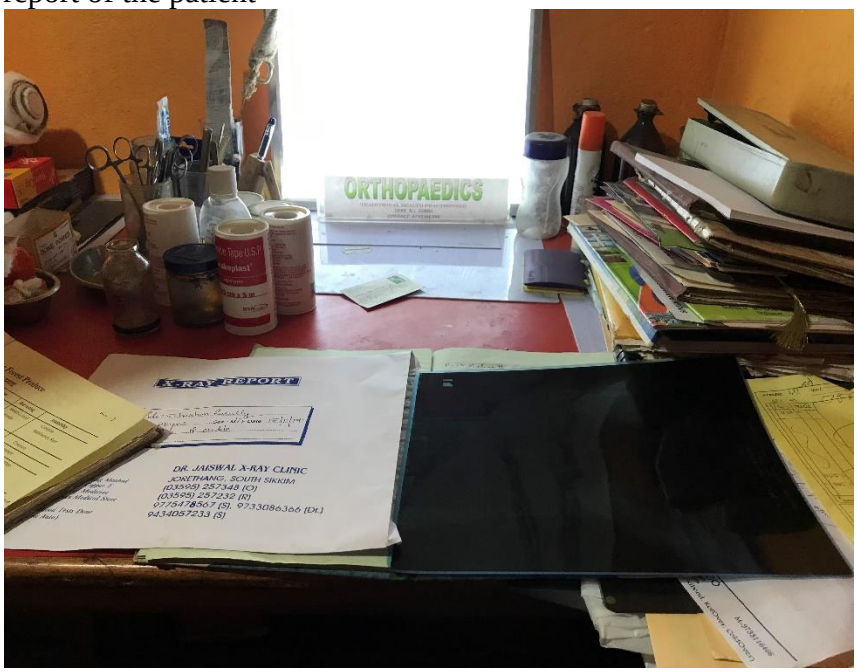
Photo 4: Selling crude medicine in the footpath

Medicine man from Darjeeling, WB, selling crude medicine in Jorthang, South Sikkim, hatt bazar during weekly market on Sunday. The man with red t-shirt is buying the crude medicine from the medicine man.

Photo 5: Healer in his clinic

An educated bonesetter in his clinic. He uses market supply for bandaging like cotton, gauge, adhesive tape etc. He keeps the treatment materials in the tray during treatment. He has examination table to do the assessment of his patient before treatment.

Photo 6: X-ray report of the patient



X-ray report of a patient before getting treatment from the bonesetter.

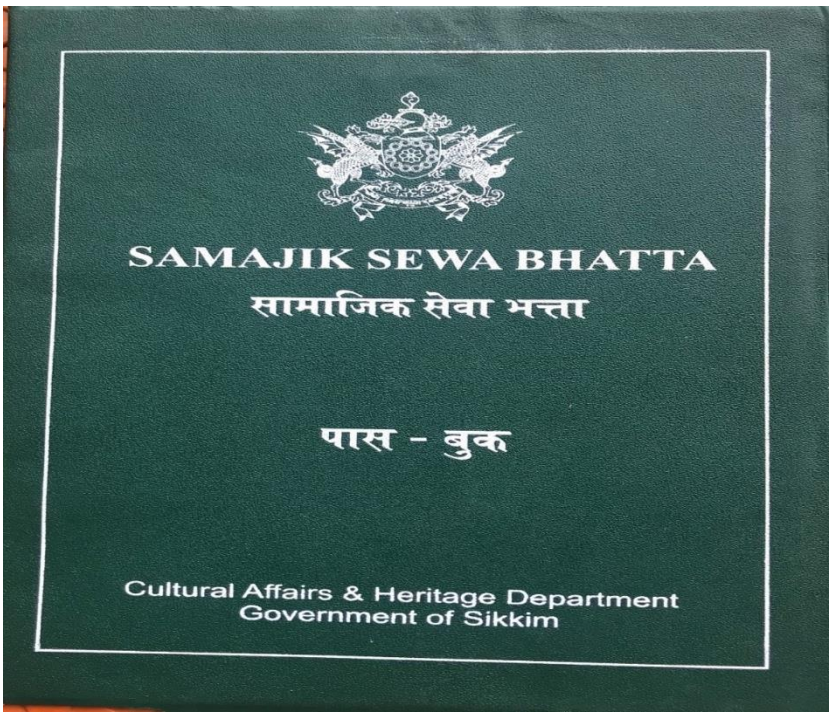
Photo 7: Preparation of herbal medicine

Healer showing the collected medicines that are preserved for the treatment of his patients.

Table 8: Collection of medicinal plants

Healer collecting medicinal plant roots for the treatment of his patients.

Photo 9: Healer's passbook



Passbook of Sikkim healers to receive the incentives from the government.

Photo 10: Healers licence

Healers' licence for collecting medicinal plants from the forest.

Photo 11: Treatment process

Bone-setter treating sprain of leg by pulling the muscles.

Photo 12: Follow-up case

Patient visiting bone-setter for the treatment.

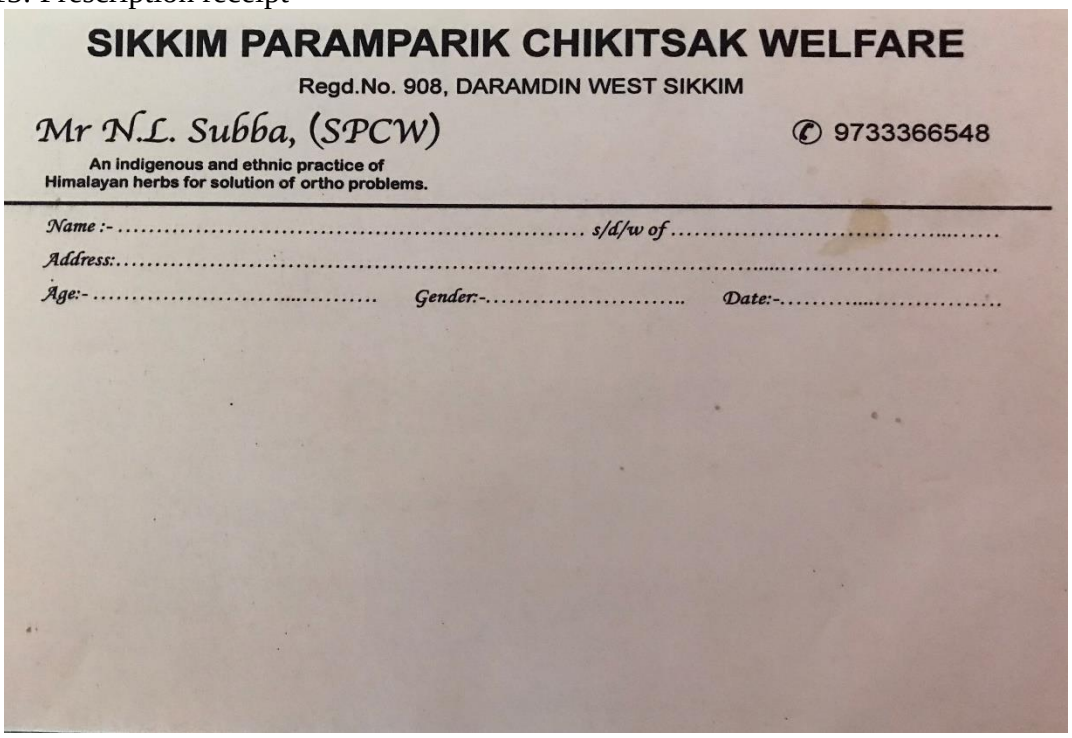
Photo 13: Stone grinder

Stone grinder used for the preparation of traditional medicine before treating the patient.

Photo 14: Prepared medicine

Powder form of medicines are prepared and stored with labelling of different diseases like gastritis, liver cancer, gout, diabetes, tonsil etc.

Photo 15: Prescription receipt



SIKKIM PARAMPARIK CHIKITSAK WELFARE

Regd.No. 908, DARAMDIN WEST SIKKIM

Mr N.L. Subba, (SPCW) ✆ 9733366548

An indigenous and ethnic practice of
Himalayan herbs for solution of ortho problems.

Name :- ..... s/d/w of .....

Address:.....

Age:- ..... Gender:-..... Date:-.....

Prescription receipt to wright the treatment note of patients.

Photo 16: Letter of appreciation

69TH INDEPENDENCE DAY CELEBRATION COMMITTEE

MANEYBONG DENTAM CONSTITUENCY

Dentam, West District, Sikkim, India

Letter of Appreciation

to

SHRI NAR BAHADUR LIMBOO

Ayurvedic Practitioner - Baidya

Dear Sir,

In the time when physical health of the people was at the mercy of few physicians available and when the instant medical aid was a distant luxury... with people's health left at the mercy of their own fate. And at that time you styled yourself as a ray of hope for your fellow villagers in your own style.... treating them from diseases like Diabetes Mellitus, Piles Hemorrhoids, Urinary Disorders, Asthma , Stones, Teeth ,Gastritis, Hyper Tension with the locally available Herbs-Jaributi in Gumpadara Village of Uttaray, Maneybong Dentam, Sikkim. You have also pioneered the use and medication from locally grown Ginseng Herb to treat various ailments your own way.

Born in 1958 in the serene village of Gumpadara, Uttaray... you are serving the local people since 1985 with your devout self gained knowledge in the ayurvedic medication and have treated hundreds. You are more popularly known as the "JARI-BUTTI-WALA" and you have been also awarded with the commendation certificates from various Ayurvedic Boards and Institutions.

We, therefore, feel it as our privilege, our absolute pride to acknowledge and appreciate your achievements, your contributions to the society at large as an "Ayurvedic Practitioner-Baidhya".

With best wishes for your good health, happiness and more services to the people of Maneybong Dentam.

Date : 15th August,2015,Dentam

Appreciation Letter given to the healer after successful treatment.

Photo 17: Heelers meet

Healers attended workshop in Jaipur, Rajasthan.

Photo 18: Healer’s hospital

Healer’s hospital in Saunay, Singtam, East Sikkim.

Photo 19: Herbal medicine

Medicinal plant used for the treatment of ligaments.

Photo 20: Healer with family members

Healer distributing the juice of medicinal plants to the family members for keeping their body strong specially the ligaments.