THE ROLE OF COMMUNITY PARTICIPATION IN INCREASING ACCESS TO HEALTH SERVICES: A STUDY OF A VILLAGE IN SEONI DISTRICT OF MADHYA PRADESH

*Thesis submitted to the **Jawaharlal Nehru University***
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DECLARATION

The thesis entitled "The Role of Community Participation in Increasing Access to Health Services: A Study of a Village in Seoni District of Madhya Pradesh" is submitted for the award of the degree of Doctor of Philosophy to Jawaharlal Nehru University. This thesis is my original work and has not been submitted in part or full for the award of any other degree of this university or any other university.

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We recommend that this thesis be placed before the external examiners for evaluation for the award of the degree of Doctor of Philosophy.

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Abbreviations

ASHA – Accredited Social Health Activist

CAH - Community Action for Health

CBOs – Community Based Organisations

CHC – Community Health Centre

CHW – Community Health Worker

CIH - Community Involvement in Health

CSC – Community Social Capital

DHS – District Health Society

DOTS – Directly Observed Treatment, Short-course

GNP – Gross National Product

GP – General Practitioner

GoI – Government of India

GoMP – Government of Madhya Pradesh

ICMR – Indian Council of Medical Research

ICSSR – Indian Council of Social Science Research

IEC – Information, Education and Communication

ISC – Individual Social Capital

MGNREGA – Mahatma Gandhi National Rural Employment Guarantee Act

MP – Madhya Pradesh

NGOs – Non-governmental Organisations

NRHM – National Rural Health Mission

PHC – Primary Health Center

RSBY – Rashtriya Swasthya Bima Yojana

RKS – Rogi Kalyan Samiti

SHG – Self Help Group

UK – United Kingdom

USA – United States of America

WHA – World Health Assembly

WHO – World Health Organisation

Glossary

Adivasi – Term used for Scheduled Tribe

Adhiya-batiya – Share-cropping

Anganwadi centre – Integrated Child *Development Scheme Centre*

Anganwadi worker – Worker in the ICDS

Banihar – Labourer

Bani majdoori – Casual labour

Dai – Traditional midwife

Dalia – Porridge

Dalit – Term used for Scheduled Caste

Dhobi – Washer man/woman

Gram Sabha – Panchayat meeting of entire village electoral

Jhada - Ritual of removing the influence of the evil eye

Jati – Caste

Kharif crop – Crop sowed in the monsoon

Kheer-puri – Rice pudding and fried bread (a dish made on special occasions)

Kotwal – Traditional policeman

Kutcha house – House made of mud

Kutcha road – Unpaved or untarred road

Malguzar – Revenue collector under malguzari system

Malguzari system – System of revenue collection

Mangal Divas – Good day

Mantra –Spell or phrase that is uttered

Mukaddam – Traditional headman

Munadi – Public announcement done orally

Naukar –Servant

Panch – Panchayat ward representative

Panchayat – Local governance forum in the village

Panchayat raj – Local system of governance

Panchayat Samiti – Panchayat/ local governance forum at the block level

Patwari – Official who keeps land records

Puja – Ritual Hindu worship

Raiyatwari system – An old system of land revenue

Rogi Kalyan Samiti – Patient welfare society

Samaj – Community, society and assembly

Sarpanch – Head of village panchayat

Sawan – Month of rains

Zamindar – Large landowner

Zamindari – Status of being a zamindar

Zilla – District

Zilla Parishad – District panchayat

Introduction

Rationale for 'community participation' in health services

Despite making progress in various spheres, many development programmes have not been able to achieve their goals. It has been argued that development programmes have not had the desired impact because they did not involve the community in the formulation and implementation of these programmes. Development programmes are formulated in national capitals without taking local realities into account. The concept of participation by the community in development emerged as a critique of this top-down approach to development. Similarly, it has been argued that accessibility to health services will improve only when the community is involved in the planning and implementation of the health services. Another argument given is that participation will ensure that the needs of the marginalised are met.

In India there are major inequities in access to government health services. Caste, household income, gender, age and cultural practices, all have an influence on accessing health services. In particular, living in a rural area makes access to health services (public and private) especially difficult. It is more so for women, the poor and marginalised. An important reason for poor access in rural areas is that health care services are concentrated in urban areas. In addition many posts of health personnel are vacant in rural areas. The large distances that rural people have to travel to reach government facilities adds to the difficulty. The average health indicators for the population in India in many matters is lower than the health indicators of countries with similar or lower economic status. Though there is great variation across the country.

In the late 1960s and early 70s, efforts were made by non-governmental organisations (NGOs) to provide health care to the rural population. These projects were small but showed that community-based health programmes were more successful. Bhatia (1993) points out that these initiatives by NGOs led to innovations in delivery of health care. Charity oriented health programmes gave way to people's involvement in their own development; and initiatives about setting up hospitals and giving free services and medicines was replaced by the idea of providing healthcare at the door-step. In rural areas, the community/village health worker (who was from the community) was introduced by most NGOs to provide preventive and promotive health services. The government too acknowledged the role of NGOs in health

care and various Five Year Plans also recommended involving NGOs in the delivery of health. Many of these innovations carried out by NGOs were also adopted in health policy but often have not been successful since the government system is marked by bureaucratic inflexibility (Bhatia, 1993).

The International Conference on Primary Health Care at Alma Ata in 1978 (WHO, 1978) to which India was a signatory, brought up the issue of community participation at the global level. The conference recognised that health care for all can be ensured only when the community is involved in the planning and implementation of health services. In India too there has existed since independence, one school of thought that has advocated involving the community in development programmes including health. This view gained more credence after the Alma Ata conference. The first National Health Policy in 1982 and the second National Health Policy in 2002, both emphasised the role of community participation. Subsequently, the National Rural Health Mission (NRHM) that began in 2005, made community participation an important element of its implementation strategy.

The NRHM has evolved into the National Health Mission (NHM) which now covers urban areas too. However for the purpose of this study, I will continue to use the term NRHM since the study was carried out in a village. And the Framework of Implementation of the NRHM remains the same.

Community participation under the NRHM

The NRHM was initiated with the goal to improve the health status of the people and the working of the health system in rural areas. The NRHM recognises that community led action will work when the community is empowered. Therefore it speaks of institutionalising community led action. The mission put in place mechanisms to achieve this. The mission proposed that the panchayats from the district to the village would be involved in managing the delivery of health services. The NRHM envisaged that the village health and sanitation committee in the village under the gram panchayat will look into health matters of the village. This committee is to have representation from all sections of society, especially the marginalised. At the block and district levels too, elected representatives and members from NGOs or community based organisations (CBOs) would be part of the management

committee. The district panchayat would be responsible for health planning and budgets at the district level. Thus community participation was incorporated at every level.

The evidence for the argument that community participation leads to betterment of health and improved access to services, has come from small and micro level programmes. These programmes involve a lot of support to the community from the donors and implementers. A criticism against NGO led activities is that the project collapses when the NGO hands over the project to the community and exists (Bhatia, 1993). There is less research on how community participation works in large scale health programmes at a provincial or national level. The NRHM views NGOs and CBOs as part of the community, however at the village level, NGOs have substantially more influence than most ordinary citizens. In addition those working in NGOs are usually from the same social class as the bureaucracy. It is therefore important to examine how community participation in health works where there is no NGO. Besides, a minuscule percentage of villages in India have NGOs working in health issues.

The research context

The thesis examines the role of community participation in increasing access to health care services in the context of the mechanisms for participation laid out under the NRHM. While mechanisms for community participation have been introduced at many levels from the village to the district, the research looks at community participation in a multi-caste village. An ethnographic study was carried out to study the functioning of community participation and how it affects access to health in a village in Seoni district of Madhya Pradesh.

While there is no denying that people's involvement in decision-making will improve people's access to health services, the way it operates on the ground needs to be examined. This is especially true in the case of India with its deeply entrenched social hierarchies. Many authors have shown that hierarchies of caste, community, gender and class have a huge impact on the accessibility of various services, especially in the rural areas. Srinivas (1993) refers to the power of the dominant castes and their ability to divert the resources meant for the poor. The caste of the provider and that of the user also affects the provisioning of health services (Gupte, 1993). Other factors such as location of the health services, timings, attitude of providers, infrastructure, different perceptions regarding illness and health of the health system and the community, etc., have a bearing on access.

The working of community participation is also determined by the extent to which the state and the health system are responsive to feed back from the community. This will depend on the policy of the state. Participation will require firstly, systems of response to be set up and, secondly on the attitude of the bureaucracy towards participation, which is to a large degree is determined by state policy. Therefore participation varies a lot in how it works.

One can argue that the proof of participation is in its working. The social context, state policy, systems of responsiveness and the processes of participation all have a bearing on how community participation works on the ground. The processes determine the impact. This thesis looks at the working of participation on the in a village. While it is the analysis of one village, it brings out the enabling conditions that facilitate participation and improvement in access.

Structure of the thesis

The first chapter delineates the genesis and evolution of the concept of community participation. It looks at the contribution of the Alma Ata Conference in highlighting community participation as essential for providing primary health care to all. Participation was adopted across the world for various reasons and in recent decades it has also been adopted by international organisations like the World Bank. Participation has been interpreted in various ways according to the needs of the programme, and therefore has acquired many meanings. Linked to community participation is the idea of social capital. The chapter looks into its relationship to health status and access to health services. The chapter also discusses other theories that show that at times group interests clash with individual interests or the group is ineffective or detrimental to achieving the goal. The second part of the chapter looks at the development of the idea of community participation in India since independence. It looks at how the national health policies have viewed participation of the community in health matters. The establishment of Panchayat Raj institutions across the country that prepared the ground for participation is discussed. The chapter then looks at how community participation has been conceptualised under the NRHM.

The second chapter looks at the definition of access to health services and the related concept of equity in health care services. This is followed by a discussion on the definition of health

care needs and how health needs should be met in situations where resources are limited. The next section is on access to health services with reference to India – their distribution, utilisation and expenditure incurred by households. This provides a description of the situation on the ground. The last section discusses the research question of the thesis, the field area and selection of the village; and the methodology of the research.

The third chapter is about the village Peepalkheda where the fieldwork was conducted. This chapter describes a multi caste village society. I look at the social and economic stratification in the village. The interaction between caste and class and the economic relations in the village is discussed. The chapter also looks at types of political authority in the village – the traditional headman and the village panchayat. The panchayat elections are also discussed. This chapter describes the social context of the village in which community participation in health takes place.

The fourth chapter is about the various types of health services that the residents of Peepalkheda village use. These include both private and public. The public health system from the district to the village level is discussed. Since the research looks at participation in the village, the emphasis is on the working of the public health system in the village. The private health care providers in the neighbouring village where people go to first when needing treatment and the folk and traditional healers are also described.

The fifth chapter constructs a picture of the health needs of the residents of Peepalkheda. The chapter first outlines the demographic characteristics of the population of the village which has been collected through a household survey. The educational and occupational characteristics of the individuals are described. The economic situation of the households, ownership of assets, infrastructure in the households and social security instruments available to households, has been tabulated. The health needs of the community have been constructed using various parameters. The first part of health needs are those emerging out of environmental issues. The second part looks at the nutritional status of the population based on heights and weights. The third part is based on health needs expressed by the community. This comprises whether someone was unwell on the day of the survey and major illness in the last five years. Disability in the households and deaths in the last five years have also been recorded. Preventive health services and health camps organised by the public health system are also discussed.

The sixth chapter is about community participation in health matters in the village. The formal fora for participation are discussed in the first part. These fora consists of the panchayats, the village health, sanitation and nutrition committee (VHSNC), the village health and nutrition day, the rogi kalyan samiti and the district health society. The second part of the chapter looks at collective action on health issues in the village taken spontaneously. I also discuss how interpersonal ties in the village aid access to health care.

The last chapter of the thesis highlights the main findings from the research. It brings up issues that are relevant to improving community participation under NRHM across the country. Some of these are also applicable to community participation beyond national boundaries.

CHAPTER 1

COMMUNITY PARTICIPATION IN HEALTH

Community participation (also referred to as popular participation, people's participation, citizen participation, community involvement, participatory development) has become a mantra in development discourse, including the health sector. It is seen as providing a more efficient mechanism for delivering social and economic development to large sections of the population. While community participation in the health sector had been tried out in different parts of the world, it was the International Conference on Primary Health Care at Alma Ata in 1978 that provided the policy framework of community participation in primary health care and brought the concept to the forefront. Although there is a very large volume of literature that relates to the idea of community participation, this chapter will focus on a brief discussion of (i) the origins and various uses of the concept from the mid-20th century onwards; (ii) justifications for and evolution of the idea of community participation over time; (iii) different approaches to the idea of social capital as they relate to community participation; and (iv) India's ideas regarding and experience with community participation in health fields in India and how they are tied to the concepts, justifications and approaches introduced above.

Origins of community participation

The genesis of community participation can be traced to the community development programmes carried out in Europe and America in the 1950s and 1960s to address the welfare needs of the rural poor, which were also adopted by the decolonised nations, though it was the failure of the community development programmes of the 50s and the 60s that led to an interest in the concept of participation in the late 60s and 70s (Rifkin, *et.al*, 2000). At the same time the industrialised world, Cohen and Uphoff (1980) point out, was concerned about the gap between the developed and underdeveloped countries, and this difference was seen in terms of a 'technological gap'. Aid to lesser developed countries was seen in terms of transfer of technology. People's participation was advocated for the adoption of the new technology. Non-participation was seen in terms of traditionalism of people versus the modernity of the rulers, rather than the appropriateness of the technology. By the 1960s, development was seen in terms of the 'resource gap' between government revenue and

expenditure, savings and investment, etc. In this context people's participation was seen in terms of resource mobilization such as pay taxes, consume domestic products, save and invest, etc. Cohen and Uphoff (1980) contend that in the 1950s and 60s two approaches to rural development - community development and *Animation Rurale* - did introduce a more active idea of participation however; these did not catch the notice of governments or donors.

While community participation in development did not create interest within governments initially, it was seen as a critique of the 'modernisation' discourse by academics, activists and those working at the grassroots. It has been seen as the reverse of the top-down development approach. Robert Chambers (1995) views participation as the paradigmatic reverse of a development professional's reality that was universal, reductionist and top-down; to a poor person's reality that was local, complex, diverse and dynamic.

Central to community participation is the concept of empowerment that will enable the poor and the marginalised to express their needs and participate in the planning process. For the marginalised, empowerment is a prerequisite to counter top-down development professionals and elites at the local level. This makes community participation necessarily a political issue. Participation also is an antithesis of a centralised, one size fits all notion of development. Community participation is about prioritizing local needs and tailoring the development process to local conditions. This perforce refers to decentralisation of the development process and the involvement of local institutions in the planning and implementation.

International conference on primary health care, Alma Ata

Community participation with regard to health services got a boost at the global level when the International Conference on Primary Health Care was convened in 1978 by the World Health Organisation at Alma Ata. Till this point, community participation in health was largely seen as persuading people to adopt modern medicine and public health procedures. The Alma Ata conference brought people's involvement in planning and implementation within the ambit of participation.

The focus of the Alma Ata conference was on primary health care. The Declaration of the conference states that the promotion and protection of health is essential for social and economic development. It is in this context that community participation is discussed.

Community participation is viewed as a means of making healthcare accessible to the community. The Alma Ata conference on primary health care saw primary health as an integral part of development, and community participation as essential for achieving the goal of health for all. The Alma Ata Declaration states, 'people have a right and duty to participate individually and collectively in the planning and implementation of their health care' (WHO, 1978, section IV, p3).

Primary health care in the Alma Ata declaration is defined as essential health care universally accessible to people through their full participation and at a cost that the community and the country can afford in the spirit of self-reliance and self-determination. The declaration further states that primary health care 'requires and promotes maximum community and individual self-reliance and participation in the planning, organisation, operation and control of primary health care, making use of local, national and other available resources'...(pp4). It is important to note that the notions of self-reliance and use of local resources mentioned in the declaration are very broad and can be interpreted variously and therefore may not necessarily make health accessible to all, rather in many instances has led to the reverse.

The Alma Ata conference report defined community participation as the process by which people assume responsibility for their own health and welfare, and develop the capacity to contribute to their community's development, thus enabling them to become agents of their own development. The report envisaged the community getting involved in various stages of primary health care – assessing the situation, defining problem and reviewing implementation. The community could also contribute in terms of labour, finances and other resources. The conference report notes that community participation requires a national policy that will promote co-ordination at all levels and ensure that the community controls both the funds and personnel that it invests. At the same time central planning has to provide a clear idea as to what part communities can play in primary health care strategy at the national level. Community participation also needs mutual support and information feedback between the government and community. The Alma Ata conference urged governments to ensure community participation through information, literacy and institutional arrangements through which communities can assume responsibility for their health and well-being.

Community participation as discussed in the declaration has to be seen in the context of other important statements made. The first was that the attainment of the highest possible level of

health was a *fundamental human right* (emphasis added). Second, the declaration stressed the role of other social and economic sectors in the attainment of this goal, thus emphasising that the attainment of health is a political issue. The role of other sectors such as housing, agriculture, industry, water, communication, etc., in attaining health for the people was acknowledged. Third, health of the people was seen as an important aspect of development and it was stated that governments have a responsibility towards their people for their health and that comprehensive primary health care was the way to attaining this goal, especially the goal of health for all by 2000. Thus, it is in making primary care accessible to all that community participation comes to play an important role. Rifkin, *et.al* (2001) point out that the Alma Ata Declaration formed the link between community participation and health at the global level, where community development was seen in the context of health improvements and not health in the context of community development.

The conference sees community participation at all stages as one of the fundamental principles of primary health care. It further states, 'for communities to be intelligently involved, they need to have easy access to the right kind of information concerning their health situation and how they themselves can help to improve it. Of particular importance is a clear explanation of medical technologies available, their advantages and disadvantages, ... and their costs' (WHO 1978, p.76).

The report states that decentralisation is important for community participation as it is nearer the community to be sensitive to its needs and also close enough to the centralised health system to translate its policies into practice. The Alma Ata conference also recommends that the administration should share control with the community. Regarding resources for primary health care, it is recommended that underserved areas should be given priority and in terms of financing various ways should be tried, including use of local resources with the cooperation and participation of the community.

The conference report however does not discuss the mechanisms for attaining community participation. Issues such as how are priorities to be decided, how is information to be shared, communication mechanisms and such are left for countries to decide according to their situation. While the conference discussed the community's role in financing, it also acknowledges that it is most likely to be a joint effort by the community and government. It also notes that in developing countries, social security based health financing or taxation

based health financing are not possible. National non-governmental organisations should be encouraged to finance primary health care. The Alma Ata declaration by putting the onus of financing on the community albeit partially, contradicts the principle of making primary care accessible to all.

Community participation in health got an impetus after the Alma Ata Declaration in 1978 and in 1985 the WHO carried out a review of the concept. The WHO uses the term 'community involvement in health' (CIH) rather than community participation. In a publication delineating WHO's notion of CIH, Oakley (1989) points out that participation is concerned with acknowledging local knowledge, innovation and flexibility. However Oakley cautions that while community participation has also meant that there is an argument for using local human and other resources, it should not be interpreted as putting the onus for providing resources for health care entirely on the local community. CIH means local participation in the design and delivery of health services. WHO uses the term community involvement rather than participation as it denotes personal identification of community members with primary health care. CIH refers not only to health services, but also health promotion. The WHO views CIH not as a health programme, but as a principle of health development. CIH is about health promotion '*with* people and not merely *for* them' (original emphasis) (Oakley and Kahssay, 1999).

The concept of CIH has evolved into community action for health (CAH) which advocates a more proactive role for communities' involvement in health issues (Oakley and Kahssay 1999). CAH implies a partnership between health services and the community, and involvement of the community in all stages of health care provisioning – identification of needs, planning, implementation and evaluation. In CAH, the community is seen as an active agent for health and development, rather than a passive beneficiary. CAH differs from CIH, in that, unlike CIH where there is the potential for the community-government partnership to be tilted in favour of the government, CAH re-emphasises the role of the community in planning and decision making, and does not attempt to mitigate any conflicts that may arise with established interests.

Rifkin et. al. (2001) draw attention to the tension regarding participatory approaches i.e. whether they should be seen as an intervention or a process of change, and advocate that it would be more realistic if seen as a process. Oakley and Kahssay (1999) point out that

participation can be seen as a *means* i.e. as a process that allows for local people's collaboration or cooperation in externally introduced programmes; alternatively, it can be seen as an *end*, i.e. a goal in itself expressed in people's empowerment. Participation as an end can provide the poor a chance for involvement in development activities concerning their own community. However, participation as a means is more widespread in the development practice. The authors indicate two other issues regarding people's participation in developmental activities. The first refers to structural relationships and developing people's capacities to change and negotiate their lives, and the second, refers to the methods and techniques for people's involvement. While the first is oriented towards long-term sustainable development, the second is about immediate access to benefits.

Justification for user involvement

The benefits of community participation are acknowledged by most on theoretical grounds, though empirical studies on the benefits of community participation are lacking (Zakus and Lysack,1998). The most important reason for advocating community participation in health is that participation will make healthcare accessible to the community (Alma Ata declaration). It has been argued that community participation will increase access to the health system by meeting the health needs 'felt' or 'defined' by the people, as compared to those defined by the health system (Zakus and Lysack,1998, Oakley and Kahssay,1999). Another reason given is that the 'felt needs' of the community will be reflected through appropriate location, size etc., of the health services, thus improving the delivery of services (Zakus and Lysack, 1998).

Madan (1987) notes that it has been recognised that the responsibility of improving the health of the people is that of the state but the poor results of health schemes highlighted the limits of a narrow technocratic approach adopted by governments. In contrast, the success of health programmes in Cuba, Vietnam and China highlighted the contribution of the community towards its own health. It has been argued that even if people did not know better than experts, their responsiveness to innovations could be improved if they had a sense of being taken seriously and being allowed to participate in schemes intended to enhance their sense of well-being (Madan 1987).

Doyal (1998) contends that citizens in democracies should be able to participate in decisions regarding important issues such as access to health care. Decisions about policy have been

dictated by experts but there is no feedback mechanism of how it is experienced. He therefore advocates a 'dual strategy of democratic representation' that includes both experts and experiences of citizens. Citizens should be involved in issues such as needs assessment, audit and research regarding clinical satisfaction, defence of patient rights and equity issues in health care.

It has also been argued that community participation is a basic right, and peoples' involvement builds self-esteem and a sense of responsibility towards health (Zakus and Lysack, 1998; Oakley and Kahssay,1999). Another view is that participants have the opportunity to educate themselves to the possibilities of controlling their own destiny, often resulting in more equitable relationship between provider and client (Zakus and Lysack,1998). It would also make people aware about their potential for involvement in development (Oakley and Kahssay,1999).

There are also economic reasons given for community participation in health. Community participation enables health services to be provided at a lower cost and additional resources can be brought in through fundraising in the community and recruitment of volunteers. (Madan 1987, Zakus and Lysack,1998). On the other hand Oakley and Kahssay (1999) argue, given that resources for healthcare are limited, community participation can make health resources more responsive to the needs of the community and help increase coverage by using local knowledge and resources, though it does not mean that the local population has to absorb the cost of health care.

In more recent years, community participation has also been looked upon as the third way between the state and the market, especially as it has been realised that market principles do not work in the case of providing health services. For instance, Taylor (2007) points out that for the New Labour in United Kingdom, the community has emerged as a third way between the state and the market.

Participation has become routinised, and used by organisations as a 'rubber stamp' to prove their credentials (Mohan, 2001). One reason that participation has become popular is that under neo-liberal policies and structural reforms that emphasize privatization and cost recovery, there has been a reduction in spending on social and welfare programmes and community participation in various forms, especially the emphasis on contribution from the

community (in labour or cost sharing) has been used to fill the gap left by the withdrawal of the state and providing an efficient model for programme implementation (White 1996, Oakley and Kahssay 1999).

The 'community' in community participation

The body of literature on community participation has developed quite separately from that on 'community' in social sciences (Jewkes and Murcott, 1996). The 'community' in community participation has been used to refer to a variety of entities including family, neighbourhood, administrative units and even entire regions. The Alma Ata declaration did not define community, but was implicit as referring to sub-units of a country; implying a hierarchy of individual, family, community and country (Jewkes and Murcott, 1996). In some health literature, the notion of shared needs, cultural values and residing in a specific geographical area are in their definition of community. Others defined community in terms of shared interests without referring to geographical boundaries. Some others have referred to community as those having a 'sense of belonging' or 'social solidarity' (Jewkes and Murcott, 1996).

The word community has been used variously in public health literature. It has been used to refer to society at large or people in general, for instance, a medical procedure not being acceptable to the community. It has also been used to refer to any space outside the health/medical facility or institution such as when health personnel go to the community rather than patients coming to the facility. And related to the second meaning, community has been used to refer to the 'lay' people who do not have 'expert' knowledge.

Epidemiologically, a community has been defined as a group of persons vulnerable to infection (Espino et al 2004). In the context of tropical disease control, the geographical emphasis is practical because disease control programmes have often been implemented through primary health care services which are also defined with reference to geographical locations. The inclusion of locale is useful, as in epidemiological terms vector-borne and infectious diseases are transmitted and concentrated geographically. This geographical definition is used to define groups at risks and targeted interventions. But the emphasis on geographical location has meant that other non-geographical factors have been not given attention such as administrative (hierarchies from province, town, down to a village), culture,

social structure, psychological issues and needs and experiences of the 'community' (Espino et al. 2004).

While designing and implementing health programmes, there is in most cases a difference in the idea of community that exists for community members and that which is either needed or constructed for health projects by outsiders (Madan, 1987; Jewkes and Murcott, 1996). In addition a group which constitutes a community for one set of purposes may not do so for another. Thus a community of kin or caste fellows in a village would not be effective in the context of environmental sanitation, for which a territorial group will be the relevant functional grouping (Madan, 1987).

Community involvement in public health programmes differs with the type of community, whether it is a nomadic tribe is or an urban slum or an upper middle class neighbourhood. Madan (1987) notes that the settlement pattern, level of literacy, occupational structure, traditional health beliefs, character of available health services and the range and control of available communication media are some of the critical variables for community involvement in public health programmes.

Sceptics have questioned whether local representatives, citizen's groups, etc., can really mirror community interests or whether they only speak for certain segments or interest groups. The pressure of such groups should not be confused with community participation. Besides the people themselves may not be used to or interested in the idea of self-help and may prefer to be served (Madan, 1987). This is especially relevant in the case of India, where divisions of class, caste and gender are very powerful. Also, citizen's representatives do not have enough knowledge about technical matters or bureaucratic procedures and may not be able to disagree with experts (Madan, 1987).

Priya (2018) notes that though the government of India had aspired to provide primary health care to all citizens, its inability to do so is partly linked to the way the 'community' was conceived by policy makers. The government of India in the first three decades after independence decided to implement the western model development with an emphasis on modern science and technology where the 'native' was viewed as superstitious and ignorant. Various studies have pointed to the social alienation between the community and the modern health system and health service providers. Priya (2018) points to three reasons for this

alienation - disrespectful behaviour of health personnel, commercialisation of health services and the 'experience of the limitations of modern medicines'.

Community participation is political

Participation is political as it deals with issues such as who is involved, how, and on whose terms, and while participation has the potential to challenge traditional hierarchies, it may also be the means through which existing power relations are entrenched and reproduced (White 1996). At the macro level, participation can work out only when the political system is conducive to the idea, hence participation is an issue of political economy and not about 'participatory projects' (Oakley and Kahssay 1999). Oakley and Kahssay (1999) contend that political commitment within the country for participation is especially necessary to overcome the resistance at the local level, to enable reorientation of the health system towards decentralisation and strengthening of the district health systems, to ensure availability of resources especially in poor countries or in those countries where health is not a priority, and lastly to ensure the development of local structures and organisations that can work as a basis for participation.

Moore and Putzel (1999) argue that the poor are at a permanent political disadvantage that can be reduced by providing incentives for organisation. Public policy should also take into account to what extent government programmes help in mobilising the poor and this may also lead to thinking differently about the public-private divide. They point to a governance-poverty link since bad governance exacerbates poverty. At a fundamental level bad governance as defined by oppressive policing, lawlessness and lack of basic services affects the poor differentially, especially as they lack the means to seek justice. Hence, many of the policies that are needed to improve governance will benefit the poor. According to Moore and Putzel, at a more complex level governance is about public policy, taxation, citizenship and accountable government that is essential for poverty reduction.

'Space' and 'voice' for participation: the relationship between institutions and citizens

Several authors have acknowledged that community participation is always implemented by an outside agency since the poor and marginalised are unable to effect participation due to their own powerlessness (Morgan 2001). Following Henri Lefebvre, Cornwall (2004) draws attention to the concept of space where citizen participation takes place. One kind Cornwall

refers to as ‘invited spaces’, when the government establishes intermediary institutions for citizen participation. These spaces may be created due to donor pressure, shift in policies or on popular demand. These may be transient in nature or durable. The other type of spaces is ‘popular spaces’ where people come together on their own as a form of protest, to produce own services or in solidarity. Cornwall (2004) points out that the boundary between ‘invited spaces’ and ‘popular spaces’ is mutable; since popular spaces can get institutionalised and invited spaces can become sites for dissent. These ‘invited spaces’ have potential for enabling genuine participation but there is a long way to go before they become inclusive and participative. Contextual factors such as cultural ethos, political orientation, other institutions, kinship ties, patronage networks etc., have a direct bearing on the functioning of these invited spaces. How citizenship participation will work out will vary enormously according to context and Cornwall warns against the one-size-fits-all development rhetoric. Cornwall (2008) argues that while creating space by invitation is necessary, it is not enough to ensure effective participation, for invited spaces are often owned and structured by those who provide them. In contrast spaces that people create for themselves have fewer differences in status and power.

Goetz and Gaventa (2001) direct attention to the need to build effectiveness of citizens’ voice for the delivery of services. The authors draw the concept of the ‘voice’ from Albert O. Hirschman’s ‘Exit, voice and loyalty: responses to decline in firms, organizations, and states’ (1970). Like Hirschman, Goetz and Gaventa use the term ‘voice’ to refer to measures such as complaint, organised protests, lobbying and, participation in decision making and delivery used by civil society actors to put pressure on the service providers for better service delivery. Since the users of the services are dealing with the state, citizenship rights will define the responses of the state based on accountability systems within the state. Hence the more responsive, accountable and transparent is the public administration, the more effective would be citizen participation. The authors provide a framework where *consultancy, presence and influence* are three steps that link citizen participation with state responsiveness. Consultation involves opening arenas for dialogue and information sharing, presence refers to institutionalising access for certain groups in decision making, and influence is when groups are able to impact policy making and service delivery. Thus it is the state that determines the extent of citizen voice and its effectiveness.

Community participation and decentralisation

Fundamental to community participation is the issue of decentralisation, as it has been argued that bringing government closer to people will make it more responsive to the needs of people. Decentralisation refers to the transfer of responsibility for planning, management and resource raising and allocation from the central government to field units of central government, lower levels of government, semi-autonomous authorities, regional authorities, non-governmental private or voluntary organizations (Rondinelli, 1981, cited in Rondinelli, Nellis and Cheema, 1983). Rondinelli et al (1983) categorize decentralisation into four types. The first is *deconcentration* which refers to the handing over of administrative authority to lower levels within the central government. The second type of decentralisation is *delegation* which refers to the transfer of managerial responsibility for particular functions to organisations outside the formal bureaucracy. The third type is *devolution,* which is the creation of sub-national units of government whose activities are outside the direct control of the central government. The fourth type of decentralisation is privatisation in which the central government hands over the responsibility of certain functions to voluntary organisations or to private entities. Whether privatisation should be considered a form of decentralisation has been a contentious issue. Manor (1999) categorises decentralisation into three types. The first is *deconcentration* or administrative decentralisation, when agents from higher levels move to lower levels. The second is *fiscal decentralisation* when higher levels of government give-up influence over financial decisions and budgets to lower levels. And the third is *devolution* or democratic decentralisation when resources, powers and tasks are handed over to lower levels of government that act largely independently of higher levels of authority, and who are democratic to some degree. Manor does not consider privatisation as one of the forms of decentralisation.

It has been argued that decentralisation does not necessarily lead to greater participation. (Crook and Sverrisson, 2001, Crook 2002). However there is evidence that decentralisation does increase participation of those who were not earlier involved (Crook 2002). At the same time clear evidence to show that decentralisation automatically benefits the poor is hard to come by (Moore and Putzel 1999, Crook and Sverrisson 2001, Crook 2002). Increasing participation through decentralisation is not sufficient in itself to make governments more equitable or responsive to the needs of people unless, they are mediated through mechanisms

of accountability such as transparency or "open government" which gives citizens full information on what is being decided (Crook (2002).

Crook and Sverrisson (2001) delineate five factors that facilitate decentralisation in terms of responsiveness to pro-poor development. Firstly decentralisation was successful where the central government was ideologically inclined to pro-poor policies and was willing to counter resistance from local elites. Secondly, decentralisation was successful where the local elites were challenged by local groups externally supported by ideologically committed government or party such as in West Bengal and Brazil. The third factor is to what extent participation is able to bring about accountability. Fair elections at the local level and institutional accountability are key in this regard. Accountability for pro-poor outcomes is important in that, if a pro-poor political interest is represented at the institutional level, it will be visible in policy. The fourth factor is about allocating administrative and financial resources. Apart from generous funding; specific allocation for development or pro-poor schemes, reducing spatial inequality and power to raise additional resources are important. Administratively, adequate staff, administrative infrastructure and commitment to decentralisation are important. Fifth, the length of time decentralisation had been implemented was an important factor ensuring responsiveness and pro-poor development.

The WHO sees the district health system as essential for CIH. With the development of the CIH, the district has been seen as the key administrative level for the provision of health services. It is maintained that strengthening the district level health system would not only facilitate local participation, but also link up local priorities with national health policies. A WHO study (1988, quoted in Oakley and Kahssay 1999) made a distinction between 'district health systems' and the 'district level'. The 'district health system' refers to the entire district including all levels and all aspects, while the 'district level' refers to the administrative layer situated at the district capital, and is hierarchically situated between the communities and national and regional levels. The district health system is interlinked with the national systems, and therefore cannot function effectively without the support of the national system or without some authority for planning. The key issue is that the health systems have to decentralise in order for the district health system to function with resources and authority, and there should be mechanisms to enable the national policy to be modified on basis of the experiences of the district health system (Oakley and Kahssay 1999).

Meanings of community participation

Various scholars working in the area of participation in development have pointed out that there is no single view as to what constitutes participation. What constitutes community participation, changes with the perspective and aims of the implementation agencies and the context in which it operates. Often, participation maybe used in name only without addressing issues of empowerment of the marginalised. Sherry Arnstein (1969) was one of the first to show that there are many meanings of participation. Sherry Arnstein in an article titled 'A ladder of citizenship participation' put forth a 'ladder of participation' in which at the bottom rung is manipulation which is *non-participation*, and at the top rung is citizen control which refers to *citizen power* which is the ultimate level of participation. Each level on the ladder refers to the extent of power citizens have to influence the outcome. Arnstein by formulating this ladder brought to notice how the concept of citizen participation has come to mean different things to the political elite and the have-nots. For Arnstein, citizen power is citizen participation.

Figure 1.1 Arnstein's Ladder of Participation

Citizen control	}	Citizen power
Delegated power		
Partnership		
Placation	}	Tokenism
Consultation		
Informing		
Therapy	}	Non-participation
Manipulation		

Source: Arnstein, Sherry R.(1969) 'A Ladder of Citizen Participation'

Since Arnstein, many scholars have pointed to the various ways in which participation has been interpreted to suit different ends. A few scholars are discussed here. White (1996) looks at participation in terms of forms, functions and interests (as seen from top-down and bottom-up approaches). She distinguishes between four types of participation. The first type is nominal participation where the chief interest for those implementing the participatory

approaches is that it provides legitimacy. For the people, the chief interest is that it gives them a sense of inclusion and the function of nominal participation is to display a popular base. The second, instrumental participation serves the efficiency function of outside funders such as getting voluntary labour from the local people. For the people, participation is seen as a cost which they have to bear for which they have no alternative, for instance in building a school. The function of instrumental participation is as a means for cost-effectiveness. The third type of participation is representative participation such as instances when the outside agency lets people take decisions regarding rules and laws, form groups, etc. For the implementing agency, this would ensure sustainability of the project. For the people taking part in meetings, it provides them with leverage to ensure the shape and management of the project. The function of representative participation is to give voice to the people regarding a project. The fourth type is transformative participation, which is when people's empowerment is in the interest of the people as well as the implementing agency, even though the implementers can only facilitate and provide outside support. In this case, the poor do not view empowerment as the key issue. It is usually the implementers who focus on empowerment initially, however when dealing with the more tangible and immediate interests people do see empowerment as being in their interest. Transformative participation is at the same time a means to empowerment and an end in itself.

Zakus and Lysack (1998) point out that community participation can range from passive participation of the community in pre-determined activities on the one hand to full control of health organizations and activities by the community and it is acknowledged that the level of participation by the community reflects the amount of power it possesses. In a publication delineating the WHO's concept of community involvement, Oakley and Kahssay (1999) highlight three interpretations of participation based on the ideological position of those initiating participation. The first refers to participation as collaboration, where people, especially in less developed countries agree to collaborate, through incentives, persuasion or voluntarily in externally determined projects. In this situation local people have hardly any involvement in the design or management of the project. Participation as collaboration has also introduced the concept of the 'stakeholder' which refers to individuals or groups which could affect or could get affected by the project. The second type of participation is participation as specific targeting of project benefits. Here the aim is to include previously excluded groups, such as the landless, the very poor, etc, and direct the benefits towards such groups. However, in many instances, participation gets interpreted as providing benefits only.

While in many cases, 'beneficiaries' are involved in the implementation and direction of the project, there is great variation. The third type is participation as empowerment, where participation is seen as an exercise in empowering people. Empowerment has been viewed in a variety of ways, while some refer to any developmental activity that involves capacity building or skills enhancement that will enable people to deal with every day issues involving political and administrative systems, and influence their decision; others see empowerment as a political issue involving issues of power, inclusion and exclusion. Mohan (2001) distinguishes between two modes of participation – instrumentalist where participation is seen as increasing the efficiency and cost-effectiveness of formal development programmes, such as the 'Women in Development' programmes of 1970s; and participation as a transformative agenda where development itself is seen as flawed and meaningful change can occur only by valorising non-hegemonic voices.

In essence, community participation has come to mean any activity that has involved people in development related issues. This may range from high levels of involvement of people to mere tokenism. But it is indisputable that community participation has become mainstream, with governments and global institutions such as the World Bank adopting the phrase. However the World Bank's conception of participation differs from the notion of community participation discussed in the preceding sections. For the Bank, 'participation is a process through which stakeholders influence and share control over development initiatives and the decisions and resources which affect them'(World Bank, 1996, pp.3). The Bank discards the notion of 'popular' participation in favour of 'stakeholder' participation. Popular participation, according to the Bank refers to participation of the poor and others who are disadvantaged; while stakeholder participation for the Bank includes apart from poor and disadvantaged people who were directly affected, a range of *other* stakeholders for Bank-supported operations such as elected officials, line agency staff, local government officials, nongovernmental organizations, private sector organizations, Bank management, staff, and shareholders (World Bank, 1996). White (1996) argues that the mainstreaming of the concept of participation has led to a political issue becoming a technical issue. 'Incorporation, rather than exclusion, is often the best means of control' (White, 1996, p.7).

Community participation as governmentality

Community participation has also been looked at from the lens of governmentality. Foucault (1991) refers to governmentality as the art of government based on principles of rationality that introduces the principle of economy into political practice. It refers to the right manner of managing individuals, goods and wealth of the state. From the eighteenth century onwards, population became the subject of government. Governmentality refers to the various strategies, institutions, procedures, tactics, etc., used by authorities to ensure well-being of the population. The population has characteristics different from the individual and the family. Statistics showed that population has its aggregate effects such as epidemics, rates of mortality, labour and wealth which are irreducible to the family. The family becomes secondary to the population and an instrument for campaigns to reduce mortality, promote vaccinations, etc. Rose, et al.(2006) point out, "thus, the governed are, variously, members of a flock to be nurtured or culled, juridical subjects whose conduct is to be limited by law, individuals to be disciplined, or, indeed, people to be freed." (pp.85). From the perspective of governmentality, power does not work through direct coercion, but through techniques, strategies and forms of knowledge where people willingly submit to processes of control (Rolfe, 2017).

Rose (1996) points to the emergence of the 'community' as a strategy and technique of government of the individual and the collective. 'A range of rationalities and techniques that seek to govern without governing *society* (original emphasis), to govern through regulated choices made by discrete and autonomous actors in the context of their particular commitments to families and communities' (Rose, 1996, p.328). The community that initially came up as a language of critique very quickly transformed into a discourse of expert knowledge specializing in community studies and developing community development programmes. The community is reinvented for governmentality or a *government through community*, through the building of responsible communities willing to improve themselves. Community participation, decision making and empowerment is thought to increase the sense of self-responsibility and self-government enabling communities to have control over their own destinies. Many government programmes operate through the presupposition of communities to which people are assumed to have allegiance. For instance, those residing in a locality are formulated as a 'community', where 'community groups' are presumed to speak

on behalf of the community. Thus, argues Rose, that governmentality is achieved through the responsibilisation of the individual and the collective.

Raco and Imrie (2000) show how the politics and policy agenda of rights and responsibilities has been used as governmentality. While development of community capacities is organised by the government for it enables community representatives to play an effective role in policy development and implementation; and ensuring that policy is more sensitive to their needs, at the same time the community has to adopt greater responsibilities in the implementation of their rights. Taylor (2007) uses governmentality theory to show how state power is reproduced in spaces for community participation. In a study of urban neighbourhood renewal programmes in the UK which involved community participants and voluntary organizations, participants felt that their influence in the new governance spaces was limited and that even though they had a voice, there weren't sure how far they were heard. They felt that their contribution was in implementation of policy and few could detect any influence on policy change or formulation. Taylor argues that community participation becomes a way of transferring responsibility downwards, and is a short step to holding communities responsible for their problems.

Community health workers and community participation

Community health workers (CHWs) schemes have often been seen as a part of community participation, but this needs to be examined. CHWs programmes were introduced in many countries, following the success of the Chinese barefoot doctors in the 1950s. CHW programmes have taken different forms and nomenclature, but have some basic commonalities. The CHW is from the community providing basic healthcare services and acting as an agent of social change. The CHW works part-time, has secondary education or less, and is the link between the formal health system and the community. Though they may be paid a salary or honorarium, they are not professional employees of the health system (Walt, 1988; Lehmann and Sanders, 2007).

It is this role of a change-agent and a link between the community and the health system that has prompted some to view the CHW programme as a form of community participation. Some programmes also stipulate that the CHW should be selected by the community and it is envisaged that they should not look at this position as a job, but should be committed to serving the community, even if paid a salary or an honorarium. These characteristics give a

sense that CHW programmes are a form of community participation. For instance, Joshi and George (2012) have argued that two important characteristics of the CHW programme across countries is that firstly, they are able to generate community participation, and secondly, by doing so health becomes a priority in the community which motivates people to access healthcare. Walt (1988) has emphasized a need to differentiate between NGO led CHW programmes which have had notable successes and large scale national CHW programmes. Regarding large scale national programmes she notes that in most situations the CHWs end up being extenders of the health system, rather than agents of social change; and while CHWs may be required to be selected by the community, in most cases they are selected by community leaders and staff of the health department. Lehmann and Sanders (2007) point out that 'problems arise when CHWs are expected to take responsibility for mobilizing communities, rather than working with the support of already active communities' (p.22). CHW programmes are weak unless they are firmly embedded in communities themselves and where this is not the case, they exist at the organizational periphery of the formal health system.

Lehmann and Sanders (2007) note that CHWs can improve access to basic health services, leading to improved health outcomes. But in order to have an effective impact, CHWs need to be carefully selected, trained and adequately and continuously supported. They are not an inexpensive option especially in low- income countries, where the alternate to having no CHWs is to have no access to health services since CHWs provide services where formal health services are inaccessible and people are poor. But at the same time CHWs are not a solution for a poorly functioning health system (Lehmann and Sanders, 2007).

Local organisations for health

Various studies were carried out by the WHO on the role of local groups and organisations in health development (Baum and Kahssay 1999). The WHO refers to these groups as local 'structures' which may be governmental or non-governmental, formal or informal. Based on these studies, Baum and Kahssay (1999) pointed out that the role of the local structures has to be seen in conjunction with decentralisation of the health system to the district level.

Some important activities of these structures include supporting health services, management of health services, planning and policy development and promoting collaboration between

various sectors and with communities. The authors also delineate some of the factors that impact the performance of the structures for health development. The most important factor that affects the functioning of local development structures is the *lack of resources*. A lack of funds means that the local people involved have to work as unpaid volunteers, as a result of which they are unable to give sufficient time or effort. In addition, most studies show that efforts at decentralisation and community participation have coincided with economic recession and local structures become a way of bridging the gap between supply and demand for health services. However studies that see the potential for cost sharing in involving local structures also warn against making communities and organisations bear the costs. The second issue is about *representation*. While a strong criticism has been that local structures are often not representative, it has been argued, that the involvement even of a few ensures some local input in planning. The studies also showed that government related structures were less representative than local, informal groups. Other issues are using *locally existing resources* and strengths of the community such as spirit of self-help, extended family, etc; using *skills of local people* regarding knowledge about diseases, environmental hazards, etc; *supportive health policies*, *acceptance of these structures by health professionals*, *people's involvement in producing local health plan*, and *political bureaucratic support* (Baum and Kahssay 1999).

Social cohesion and community participation in health

Since the 1990's the 'community' has come to occupy a leading role in public health discourse. This has to be viewed in the context of the comeback of the role of societal factors in influencing health outcomes which was marked by the emergence of social epidemiology as an important field in epidemiological studies. An important issue in social epidemiology was the revival of interest in social cohesion and its impact on population health. Durkheim's study of Suicide (1951) was the first to show that suicide rates are lower in communities where there is substantial social cohesion. In the 1990s public health discourse looked at the role social capital (characterised by social cohesion, trust, etc.,) in affecting health outcomes. Those who advocate the positive role of social capital on health have used the functionalist concept of social capital as defined by Coleman and Putnam and have tended to ignore Bourdieu's discussion of the role of social capital as an instrument of class differentiation.

According to Coleman (1988) social capital is inherent in the structure of relations between actors or individuals. For Coleman, social capital is defined by its function, it facilitates

action between actors or corporations. Intrinsic to social capital are obligation, expectation and trustworthiness. And hence, as Coleman points out, unlike other forms of capital such as financial capital, physical or human capital, social capital is a public good. For Coleman, social capital is a form of control (Portes, 2000).

Bourdieu (1986) had delineated a different notion of social capital. For Bourdieu, social capital is the actual or potential resources that are linked to a durable network of institutionalised relationships, i.e, that derive from membership to a group. This membership of the group provides the backing of collectively owned social capital which enables them to access credit of various types. The benefits that derive from membership of a group are the basis of the solidarity of the group. The amount of social capital that any person holds depends on the network of relationships the person has and also on the amount of other types of capital – economic capital and cultural capital. Therefore, according to Bourdieu, social capital is never independent of economic or cultural capital because the mutual exchanges presuppose some minimum homogeneity and also because social capital exerts a multiplier effect on other types of capital that any person possesses. The network of connections that forms the basis of social capital is a product of investment strategy which has to be constantly renewed and socially reproduced. The acquisition of social capital requires purposeful investment of economic and cultural resources (Portes 1998). Bourdieu points out that this reproduction of social capital requires continuous exchange which means that directly or indirectly economic capital has to be spent. This explains why the labour involved in accumulating social capital increases with the size of the capital. For Bourdieu, the logic of the functioning of capital is that one type of capital can be converted to another, where the profits in one area are paid by costs in another. The measure of equivalence in converting one type of capital to another is labour time. Bourdieu has stressed the fungibility of different types of capital and that ultimately all types of capital are reducible to economic capital defined by human labour (Portes 1998).

Those who see a correlation between social capital and health have based their argument on Putnam's definition of social capital. Putnam's derived his notion of social capital from Coleman's concept of social capital. Putnam (1993, 1996) defines social capital as comprised of networks, norms and trust that facilitate cooperation for mutual benefit and enable people to work effectively towards shared goals. Putnam (1993) argues that social capital also increases the benefits of investment in physical and human capital. For Putnam (1993),

communities are endowed with social capital, and communities with substantial amounts of social capital are better governed and therefore civic. Social capital which was seen by Bourdieu and Coleman as deriving out of networks and benefiting the individual becomes a collective good in Putnam's conception. For Putnam, social capital as a feature of communities becomes measurable in 'stocks' (Portes 2000). Those communities with greater stock of social capital are better governed. He refers to people's connectedness with their communities as 'civic engagement' (Putnam 1996). Networks of civic engagement encourage reciprocity and emergence of trust, and such well connected societies are better governed in terms of having better schools, less crime, etc. (Putnam 1995). Membership in associations (such as clubs, labour unions and parent-teacher associations) constitutes formal social capita and equally important is informal social capital such as meeting casually in bars, going for picnics, etc. (Putnam 2001). For Putnam, social capital is a communitarian issue, where participation in collective endeavours becomes the solution (Navarro 2002).

Portes (2000) points out that in Bourdieu's and Coleman's analysis, social capital brings benefits to individuals or families; but as the concept was taken up in other disciplines, especially by Putnam, social capital became an attribute of communities, leading to different meanings of social capital and a lot of confusion. On the relation between social capital and economic development, Woolcock and Narayan (2000) refer to four perspectives. The *communitarian* view which sees association and civicness as social capital, the *networks* view which focuses on ties between individual or among organisations and groups, the *institutional* view which sees networks or civicness as a result of political, legal and institutional environment, and the *synergy* view which emphasises the complementarity between the government and the citizen. A review of literature on social capital shows that social capital has been shown to have three functions – a) social control b) family support and c) accruing benefits through extra-familial networks (Portes 1998). It has also been recognised that social capital can be both an asset, as well as cause damage (Woolcock and Narayan 2000, Pearce and Davy-Smith 2003). Social capital has been distinguished between bonding (trust relationships within a group or people with shared identity), bridging (trust relationships between people of different groups) and linking social capital (networks between power differentials, especially with representatives of formal institutions) which has special significance for the poor (Szreter and Woolcock, 2004).

Social capital in public health

In 1996, the relationship between health and social capital was brought up by R.G. Wilkinson in his book *Unhealthy Societies* and by Kaplan et al. in an article in the British Medical Journal (Moore *et al.,* 2006). Putnam's idea of social capital was introduced in public health research by Wilkinson (Szreter and Woolcock, 2004). It has been pointed out that in his initial works Putnam did not consider health as an outcome of social capital, rather he considered it an input of social capital; however as the idea was used by many health researchers Putnam was convinced to consider the effect of social capital on health outcomes (Muntaner and Lynch 2002, Pearce and Davy-Smith 2003). Wilkinson takes up the ecological approach for analysing what makes one society healthier than another. Wilkinson in his book *Unhealthy Societies* (1996) argues that once basic material standards have been achieved in a society, which mark the epidemiological transition from infectious diseases to non communicable diseases as the main causes of death, health is affected by social position and the range of socio-economic differences rather than absolute living standards. Amongst developed countries, the best health is not seen in the richest but in the most egalitarian countries. Wilkinson shows that at lower levels of gross national product (GNP) per capita, life expectancy and income rise together. But when countries reach a threshold level of income, life expectancy plateaus, i.e. rise in GNP per capita is not associated with life expectancy. And this points towards psychosocial pathways to health outcomes.

An important feature of egalitarian societies, Wilkinson points out, is social cohesion which involves strong community life and where individualism and market values are moderated by social morality. Following Putnam, Wilkinson argues that there is more social capital in these societies since people are likely to be engaged in voluntary and social activities outside the home. And those with more social contacts and involvement in community life have better health. He further states that there is empirical evidence to show that the narrower income differences associate with higher levels of social capital are likely to be beneficial to productivity. Hence rather than having to choose between growth and equity, they should be viewed as complementary. Wilkinson takes up examples – UK during the two World Wars, social life in the communist countries in the 1970s and 80s, lessening income inequalities in Japan after the Second World War, etc., – to show the association between egalitarianism, social cohesion and better health of the population.

Kaplan et al. (1996) examined income inequality and mortality in the USA. They showed that the variations in incomes distribution between states is strongly associated with variations in a large number of health outcomes, behavioural risk factors and mortality, and with measures related to investments in human and social capital. Economic policies that influence income and wealth inequality may have an adverse effect impact on the population health. Subsequently, a number of articles by Kawachi and colleagues have used Putnam and Coleman's definition of social capital to show its impact on health. A study by Kawachi, Kennedy and Glass (1999) in the USA that used Putnam's definition of social capital showed that those who reported low levels of trust, reciprocity and group membership also reported low levels of self-rated health.

Though studies have shown that there is a link between social capital and health status, there is no evidence of how social capital improves health. The explanations regarding linkages are based on assumptions. Kawachi, et al.(1999) using an ecological approach argue that at the *contextual* level, neighbourhoods with large amounts of social capital are likely to affect individual health positively. Social capital may cause rapid spread of information, promote healthy lifestyle, exert social control, prevent deviant behaviour, prevent budget cuts and provide support and enhance self-esteem. In contrast to the social capital argument, Pearce and Davy-Smith (2003) argue that income inequality, social capital and health in a community may be the result of macro-level social and economic forces, and intervening in communities to increase social capital may create resentment, increase burden on community resources and lead to a situation of blaming the victim. Recent evidence from New Zealand, UK and Japan shows that mortality rates have dropped despite rising income inequality and absolute GNP is associated with national mortality. The authors refer to a study in USA that has shown that education which is a marker for early-life circumstances and adult socio-economic position accounts for the association between income inequality and mortality. Studies from Denmark and Japan show that the association between income inequality and mortality or self-rated health disappeared when adjusted for individual income. Pearce and Davy-Smith argue that jurisdictions that allow for income inequality to rise may also be those that systematically disinvest in welfare and safety nets. Furthermore, social capital does not always have beneficial effects, for instance as regards the National Rifle Association in the USA.

Critics of social capital, have pointed out that there is nothing new in the concept of social capital (Portes 1998, Harris 2001). Harris (2001) questions why a common place idea – 'It's not what you know that counts, but who you know' should become such a complex concept. He argues that social capital and the related ideas of trust, activities of civil society, participation and NGOs have become the weapons of the anti-politics machine and suits the interests of global capitalism as these concepts allow one to present problems arising out of power and class differences as purely technical matters that can be resolved outside the political arena. Rankin (2002) shows that social capital provides a "governmental strategy" for shifting the onus of development from the state to civil society and offers justification for reducing the state's role in the provision of basic social protections. Harris (2001) draws attention to some other problems with Putnam's conception of social capital. First, it has been interpreted to elevate a symptom to a cause. Harris (2000) also argues that it is possible to think of groups of people who have abundant social capital but are unable to take advantage of it because of the context in which they live. Muntaner and Lynch (2002) point out that the social capital theory ignores class, race, gender and other conflicts. It creates the myth that social cohesion can determine population health and that the poor and minorities can improve their health status by 'self-financed projects' and accepting their position in the social hierarchy.

Portes (2000) also shows how the two notions of social capital –individual and collective – are at times at odds with each other. Individual social capital enables persons with the right connections to get profitable public contracts bypassing regulations and in such instances undermining collective social capital defined by civicness based on application of rules. Second, collective social capital has not separated the cause and the effect, leading to circularity of the argument. As a trait of communities (towns and nations) those with more social capital are better governed and, at the same time, the better governed are so because they have more social capital. However in later writings, Portes points out, when Putnam discussed measures of social capital such as membership in associations, newspaper reading and trust, the circularity was removed. The third issue is that social capital as civicness does not consider other causes, in particular other extraneous factors that may be causing both altruistic behaviour of the population and effective governance (Portes, 2000). Navarro (2002) points out that in Putnam's communitarian notion of social capital issues of power and politics are absent. Further, Putnam has used economic categories and is highly influenced by the dominant orthodox economic model and therefore does not show awareness of the

contradictions that arises due to the fact that the lack of togetherness is rooted in capitalism and competitiveness which have alienating and atomizing effects on citizens (Navarro 2002). DeFilippis (2001) has argued that Putnam's concept of social capital does not support community development practice as it separates social capital from economic capital. Rather it is Bourdieu's and Loury's definitions that provide a framework for community development. He points out that poor communities do have social capital in the way that Putnam defines it, however, they lack the power to convert social ties into capital. Putnam's concept of social capital is unable to address these issues. Community development policy and organising efforts should be based on a definition of social capital that combines Bourdieu's definition that allows for creation of social networks that will be able to realize the power needed to attract capital and control it.

Link between social capital and access to services

The bulk of research regarding social capital focuses on health outcomes, with very few studies on the link between social capital and access to services. It has been hypothesized that neighbourhood social capital may improve health by increasing access to health services, since evidence from criminology suggests that socially cohesive neighbourhoods are more likely to unite to prevent budget cuts in local services (Kawachi, Kennedy and Glass 1999). The World Bank website page on the relationship between social capital and health care delivery posits that social capital between government and market and voluntary providers may improve health outcomes as people are more likely to seek advice from people they trust. Second, social capital between providers and the community will ensure accountability of health services especially in remote areas (World Bank).

A study carried out in Uganda by Bakeera, *et.al* (2010) on the link between community social capital and health services utilisation examined three issues of community social capital - trust, reciprocity and informational support. The study showed that high levels of trust and medium levels of informational support were positively related with use of public health facility, however high levels of reciprocity were associated with non-use of public health facility, and therefore the authors argue that social capital is another contextual level factor that influences use of health care services. Regarding immigrant communities, Choi (2009) argues that social networks within ethnic communities can provide information about health care access but at the same time can also restrict access to health services by emphasising alternatives to formal health care. Since ethnic networks also have limited health information,

immigrants in exclusive ethnic networks may not be able to access health services in the local community. Choi studied Filipino, Korean and Marshallese immigrant communities' access to health care in Hawaii and the role of contextual social capital in increasing access. The study found that despite low socioeconomic status, the Marshallese had the best access due to the state policy of providing health insurance to them particularly. The Filipinos do not have state health insurance but have better care resources (health professionals, clinics and safety nets) and high levels of social capital. The Korean immigrants despite being economically and educationally better than the other two, did not have as good access to health care as the other two groups. A study in the state of New Mexico in USA, by Perry, *et.al*. (2008) examined the role of social capital in accessing health care by low-income individuals using psychometric properties of social capital. Access to health care was measured in terms of barriers to health care, use of services, satisfaction with care and communication with provider. For this study three social capital constructs were used – social support, psychosocial interconnectedness and community participation. The study showed that social support was inversely related to barriers to health care but there was no significant relationship between social support and use of services, satisfaction with care and provider communication. A significant relationship emerged between psychosocial interconnectedness and satisfaction with care but no other measure. Community participation did not show any significant relationship with any measure of access to health care. On the other hand the study found that structural and demographic characteristics were stronger variables in predicting access. Availability of insurance, male gender and older age was associated with fewer barriers for accessing health care, and rural residence and Hispanic ethnicity was associated with more barriers to care. Both studies from the USA suggest that health insurance is a bigger facilitator of access to health services than social capital.

Hyndrex et al. (2002) tested the hypotheses that community social capital enables access to health services in 22 metropolitan areas in the United States of America using Putnam's notion of community social capital consisting of interpersonal trust, engagement in civic activities and reciprocity. The study found a positive relation between community social capital and access to health services, however, the survey could not examine the direct mechanisms by which this happens. Following Putnam, the authors speculate that community social capital may be able to improve access to health care because most likely it improves the functioning and efficacy of institutions. The authors argue that social capital improves access through greater accountability mechanisms and accountability mechanisms are more

likely to evolve where the three components of social capital are present in the community – trust, reciprocity and civic engagement.

In a study done in Canada which has a publically funded health care system, Laporte, Nauenberg and Shen (2008) examined the link between social capital and health service utilisation. The study looked at both community social capital (CSC) and individual social capital (ISC) on utilisation of GP services and hospitalisation. The results indicated that greater CSC had the effect of decreasing the likelihood and number of visits to the general practitioner (GP) for seniors in the middle range (3-5 visits per year) of utilisation. ISC increased the number of visits to the GP in the lower end utilisation, while decreasing it for those in the 70^{th} quintile. The authors reason that ISC affects by encouraging people to visit the GP the first few times but at higher levels helps to avoid GP visits. The fact that neither forms of social capital affected the higher end utilisation distribution suggests that the highest level of utilisation is influenced primarily by health status. The authors feel that the low-end utilisation is marked by either a significant proportion of healthy people or people who need personal assistance to get them to the GP.

Story (2014) looks at the link between social capital and utilisation of ante-natal care, professional delivery care and child immunisation services in India using data from the India Human Development Survey. The study focused at the community level rather than state or country level with emphasis on three components of community social capital namely, intra-group bonding, inter-group bridging and social networks. The results showed that people in communities with high bridging social capital that led to heterogeneous ties showed higher utilisation of all three types of health care use - ante-natal care, professional delivery care and child immunisation services. While communities with strong bonding ties were negatively associated with the use of preventive care, but positively associated with professional delivery care. The association between social networks and ante-natal care and for complete childhood immunization was found to be statistically significant at the individual level but not at the community level. The study also found that social cohesion was not significantly associated with any type of health care utilization, whereas collective efficacy was negatively associated with the use of ante-natal care and positively associated with the use of professional delivery care.

Muntaner and Lynch (2002) point out that the emphasis on social capital has reduced the importance of the role of health services in determining population health. By emphasizing the psychosocial aspects, social capital theory diminishes the role of the state in providing health care and promotes privatization, thereby making the poor and the marginalized responsible for their health status.

Self-interest and collective interest

Many have pointed out the contradictions between the interests of the rational self-seeking individual and those of a group for collective action. Many theories have been put forth in this regard. One of the earliest is the argument of the Prisoner's Dilemma. In the Prisoner's Dilemma (Kuhn in the Stanford Encyclopaedia of Philosophy, 2019), two people have been arrested for a robbery and kept in different cells. Each of the prisoners can either confess or remain silent. The prosecutor gives each of them the following options. If the prisoner confesses and his accomplice remains silent then all charges against the prisoner will be dropped and his testimony will be used to ensure that the accomplice does serious time. Likewise, if the accomplice confesses while the prisoner remains silent, then the accomplice will go free while the prisoner does time. If both confess then the prosecutor will get two convictions, but will ensure that both get early parole. But if both remain silent, then both get token sentences. This situation shows the conflict between individual and group rationality. The 'dilemma' is that each prisoner is better off confessing rather than remaining silent, irrespective of the position the other takes. However, the outcome is worse for each when both confess rather than when both remain silent. This shows that a group in which all individuals work in rational self-interest is worse off than a group that pursues common interest (Kuhn, 2019).

Hardin (1968) argues that we cannot assume that rational decisions taken individually will also be the best for the whole society. He illustrates this by the 'tragedy of the commons' (originally conceived by William Foster Loyyd in 1833), a pasture that is open to all. As a rational individual, every herdsman would like to add one more animal to his herd which will bring him utility. For the individual herdsmen it brings him gain and the negative effect of overgrazing on the commons is a fraction since the negative consequences gets divided between all the herdsmen using the commons. However if every herdsman did the same, then the common grazing land would be ruined for everyone. Hardin argues that freedom brings

ruin to all. The solution to this is 'mutual coercion mutually agreed upon' such as taxation or privatisation. In a later essay Hardin (1998) argues that the only way 'managed commons' can work is either through socialism or privatism of free enterprise. Ostrom, et al. (1999) have argued that there are other ways in which the commons can be managed. The authors point out that the issue of scale means that different types of solutions have to be found for global commons such as oceans. They use the term common pool resources (CPR) to refer to natural and human constructed resources where 1) excluding some beneficiaries will be costly and 2) where exploitation by one user decreases its availability for others. The dilemma of CPR is that following one's individual interest will create outcomes that will be against the interest of everyone in the long term. However, this dilemma can be overcome. Reciprocal co-operation can be achieved when the proportion of those perusing narrow self-interest in the beginning is less. Cooperation can also be achieved when the members of the group which can identify with each other rather than in a group of strangers since people who can identify with each other can use trust, reciprocity and reputation to develop norms and ensure compliance. While in earlier times this meant smaller groups, modern technology and media allow monitoring even in large groups. Imposing restrictions on resource use also raises the question of which community of users is seen as having use rights and who is excluded.

Olson (1971) looks at the basis for organisation of groups that have an economic purpose or interest. Olson opposes the view that a group of individuals with common interests will further the interests of the group. His theory is based on the notion of the 'rational individual' who is interested in furthering her self-interest. Olson's argument derives from the conundrum of public or collective goods. A collective good is that in which no member of the group can be excluded from benefits of the good.

According to Olson, there is a need to differentiate between large and small groups. The size of the group has a bearing on the effectiveness and ability to achieve common goals. While all members have a common interest in getting benefits, they have no common interest in paying for the costs. All groups have to pay for the collective good, the cost of which varies. And like non-collective goods, the more the good is taken, the higher will be the cost. The cost of the first unit of a collective good is especially expensive and if the demand for the good goes beyond a certain point, the cost of obtaining the collective good rises, resulting in a U shaped curve. He contends that "unless the number of individuals in a group is quite

small, or unless there is coercion or some special device to make individuals act in their common interest, *rational, self-interested individuals will not act to achieve their common or group interests"* (original emphasis) p.2. This is because in some small groups each of the members or at least one of them, will find that his personal gain from having the collective good exceeds the total cost of providing some amount of that collective good; there are members who would be better off if the collective good were provided, even if they had to pay the entire cost of providing it themselves than they would be if it were not provided. In smaller groups marked by considerable degrees of inequality - that is, in groups of members of unequal "size" or extent of interest in the collective good - there is the greatest likelihood that a collective good will be provided; for the greater the interest in the collective good of any single member, the greater the likelihood that that member will get such a significant proportion of the total benefit from the collective good that he will gain from seeing that the good is provided, even if he has to pay all of the cost himself. Even in the smallest groups, however, the collective good will not ordinarily be provided on an optimal scale. He adds that in smaller groups there is likely to be some voluntarism but this action will also cease before the groups reaches the most advantageous level for all members of the group. "This suggests that, just as there is a tendency for large groups to fail to provide themselves with any collective good at all, so *there is a tendency in small groups toward a suboptimal provision of collective goods"* (pp.28). Large groups work when they are a federal structure of smaller groups.

Even in the case of pressure groups, Olson argues that the membership and power of large pressure groups does not derive from its lobbying abilities, but is a by-product of other activities. For instance, the American Medical Association gets its membership by providing benefits such as helping its members defend malpractice suits, publishing technical journals and making conventions educational as well as political, thus offering non-collective benefits which act as an incentive to join the organisation. Olson explicitly states that his theory does not apply to non-rational groups (in economic terms) such as mass movements for which one must turn to psychology. In terms of political activities, Olson points out that the average person will not make any sacrifice for the party she supports since a victory for the party provides a collective good. But for those who have political ambitions, a victory will provide non-collective goods such as political office. Large groups remain unorganised. Only small groups with particular incentives will organise and act together to achieve their interests.

Community psychologists have looked at the role of bystanders and how they react in emergencies. Darley and Latane (1968) did an experiment to see how people react when they see an unknown person who needs medical help. They found group size to be very significant. The victim is more likely to get help from one or two bystanders than a group of five in the first one minute. Having a larger number of bystanders reduced the sense of personal responsibility. The lack of response of the bystanders was not due to alienation, apathy or anomie, but due to the effect of other bystanders. In another experimental study Latane and Darley (1968) looked at the responses of male undergraduates in a smoke filled room. They found that individuals exposed to smoke in a room where others were passive were likely to remain passive and that a group of three was less likely to report smoke than a solitary individual. In post-experimental interviews people said that they did not act as they felt that there was no reason to act. In this case it was not the diffusion of responsibility but rather the social influence that inhibited action. Darley and Latane argue that both studies show that the failure to act has to do with the effect of other bystanders rather than the relation between the bystander and the victim.

Community participation has been interpreted in various ways. It was initially a reverse of the top down approach, an effort to involve people in the development process in the 1970s and 80s. But as various scholars have shown, community participation has been applied variously, with different intentions. From the 1990s onwards, with the growth of neo-liberalism, community participation has been advocated to fill the gap left behind with the withdrawal of the welfare state.

Community participation in health activities in India

Even before India gained independence, health system planners had recognised the need for increasing access to health services as one of the ways of improving the health status of the people. At the time of independence health services were largely in urban areas and catered to the British population and the Indian elite. Health planners since the beginning had argued for the need to reorganise and expand health services to rural areas and were aware of the necessity to make the health services socially and culturally acceptable to the vast majority of the population. Community development initiatives in western countries and developments in the Soviet Union immensely influenced the trajectory of development policies and programmes at that point in time.

Bhore committee report

The first mention about involving village people in health goes back to the Report of the Health Survey and Development Committee (GOI, 1946) chaired by Sir Joseph Bhore and presented in 1946 (Bhore committee report). The Bhore committee report took the idea of village committees for health related work from developments in the Soviet Union. The report viewed village committees as an example of self-help which would help in promoting health in the community by forging co-operation between the community and health authorities. The proposed village committee was based on the idea of the panchayat as a council of five elders. The health committees were to bring popular men and women of standing in the village who would help in promoting health activities. These village health committees were however not to be decided by people, but formed by health personnel. "We suggest therefore that the two medical officers and their subordinate staff should carry out, before attempting to create these village committees, a considerable amount of educative work among the people in regard to the proposed health programme and the desirability of the more public spirited in the community accepting as a privilege the right to associate themselves with the activities of the health organisation in the interest of promoting the welfare of all." (pp38, Vol.2).The value of the selected people, according to the report, lay in that they would be able to induce the village community to carry out works without payment, which otherwise would be expensive.

The report mention's two areas, where village committees would have a useful role. Firstly in maintenance of community hygiene and secondly, in collection of vital statistics. One person in the committee, it was suggested should be made in charge of recording births, deaths and cases of infectious diseases, one person to be concerned with the sanitation of the community and a third for the prevention of outbreak of communicable diseases, especially during fairs or floods, etc. It is to be noted that the report does not see a role for these village committees in village planning, though in the concerned chapter, issues such as how to dispose manure etc. are discussed. The Bhore Committee report was statist in its approach and placed emphasis on setting up of health and related institutions managed by experts. If one were to use White's (1996) typology of participation, the role that was envisaged for these committees was 'instrumentalist'. Social inequalities and their relationship with health status were not discussed by the committee. The notion that community participation enables addressing the health needs of the marginalised sections is also absent.

After India got Independence from British rule, several committees were set up to improve the efficiency of the health services and increase people's access to these. Most reports were concerned with developing public and medical health services based on rational principles and technical expertise. The emphasis was on setting up medical colleges to produce doctors, while little attention was given to primary and secondary health facilities, especially in rural areas (Priya, 2018). Community participation in health services however did not get attention until after the Alma Ata Conference in 1978.

Community participation in India from independence to 1980

The first three Five Year Plans laid a great deal of importance on community development. The First Five Year Plan 1951-56, (GoI, 1951) recognised the role for local bodies/ self-governing institutions such as village panchayats and municipalities in the administrative process. The plan suggested that local bodies should be linked to the state administration and should be brought under the constitutional and administrative framework. To the extent possible the state government should use the agency of local bodies to carry out developmental work and social service programmes since these programmes are successful where the community takes responsibility in solving their own problems, relies on co-operative community effort, uses local resources, with minimum assistance from the state. Voluntary service is an important element in community participation and village labour for local development is seen as synonymous with participation. In the second Five Year Plan 1956-61, (GoI, 1956) village planning had an important role with regards to community development; with emphasis on taking into account the needs of the weaker sections. In the third Five Year Plan 1961-66, (GoI, 1961), establishment of district and block and village level panchayats was emphasised. Some states had already passed acts for the establishment of Panchayat Raj. The significance of the panchayats lay in that they would implement the community development programmes under the supervision of the state administration. The community development programme gives way to small-scale industries and livelihood issues in the fourth plan.

The government also started the Community Development Programme in 1952 aimed at agricultural and socio-economic development. The emphasis was on self-help and voluntary work and the government was to provide technical assistance and limited financial resources. The programme assumed that village people were eager to improve their lives and the

programme was an opportunity to see what could be achieved through their own efforts (Dube, 1958). This also raised the issue of relating planning to people's felt needs (ibid). The programme was to address sanitation, drinking water supply, malaria and other programmes, ante-natal and post natal care, medical aid, generalised public health service and education.

Subsequently, the government set up the Balwantrai Mehta Committee in 1957 to report on the workings of the Community Development Projects and National Extension Service which recommended decentralisation and devolution of powers through the establishment of a three-tier panchayat system down to the village level (Singh, et.al, 1997). The panchayats that were established after independence were different from traditional panchayats, in that the focus was on community development and people's participation and members to these panchayats were elected on the basis universal franchise. Despite various committees recommending the setting up of Panchayat Raj all over the country, its evolution was uneven till the 73rd Amendment to the Constitution was passed in 1993.

A committee was set up under the chairmanship of Dr. A.L. Mudaliar to review the developments that had taken place since the publication of the Bhore Committee report. The report titled Health Survey and Planning Committee in 1962 (GoI, 1962) noted the dismal state of health services in rural areas and recommended the strengthening of the primary health centres, sub-divisional and district hospitals, While the report acknowledges the establishment of Panchayat Samities and Zilla Parishads, community participation is not seen as a way of improving services.

CHW programme in India

Drawing from the Srivastava Committee Report, the CHW scheme was started in 1977 in India (before the Alma-Ata conference). The Srivastava Committee Report (GOI, 1975) felt that state controlled professional health services had been inadequate and unsatisfactory and were not able to reach 80 percent of the population that lived in rural areas. The committee recommended the setting up of a supplemental part-time semi-professional work-force from the community who would provide promotive, preventive and basic curative medical services needed in common minor illnesses.

As described by Leslie (1989), the Government of India started a CHW programme in 1977 which sought to put in place one CHW for every 1000 people in rural areas by 1981. The

candidates could be of either gender, should be literate, active and willing to devote some hours in a day to voluntary work. Preference was to be given to those below 30 years of age, had at least six years of schooling, had practised some form of medicine and were a member of the scheduled castes. Candidates would be nominated by the community and would be decided by the medical officer of the primary health centre. The selected were given a stipend of Rs. 200 per month during the three month training period, and after that Rs.50 per month and medicines. The emphasis was on preventive and simple curative medicines.

There were many issues that made this programme unsuccessful. One of the reasons was that the CHWs did not get the support of the medical profession (Leslie 1989, Bhatia 2014). There was also resistance from the bureaucracy, insufficient resources and lack of political commitment (Bhatia 2014). The training of the CHWs was not done diligently, the trainers were themselves not trained in the goals of the programme, and at places did not go according to the training manual or even distribute the training manual to participants. (Leslie 1989, Strodel and Perry 2019) Only three percent of the trainees received their medical kit during their training (Strodel and Perry 2019). In addition, most of the CHWs selected were men, while among the most vulnerable were women and children, and as a result very few women utilized their services (Leslie 1989, Bhatia 2014). The selection of the mostly male workers was based more on political patronage than on a desire to serve which reduced the effectiveness of the scheme (Strodel and Perry 2019). Later the emphasis shifted to maternal and child health programmes for which women were recruited and the scheme slowly came to a halt as resources were not allocated. While there was no national CHW programme, some states in the 1990s started their own CHW programme for which women were recruited (Bhatia 2014).

Priya (2005) observes that there was an expansion of village level health services from mid 1960s to 1980 and the introduction of the village health volunteer scheme to provide basic health services at the doorstep. The health volunteers were seen as a communication link between the community and the health service as a type of community participation but ended up being menials to the health personnel (*ibíd.*).

Community participation in health 1980s

It is after the Alma Ata conference in 1978 that a notable shift towards community participation in health is seen in policy formulation in India. The World Health Assembly

(WHA) in 1979 endorsed the declaration of the Alma Ata conference and launched the Global Strategy for Health for All by 2000 where individual member states were urged to formulate national strategies for achieving this (WHO 1981). In India this led to the ICSSR-ICMR 'Health for All: An Alternative Strategy' report in1981 which gave a lot of importance to community participation in health. The report put forward a model for the organisation of the health services that would address the health needs of the people, especially the underprivileged; and also be socially and culturally acceptable to the people. In place of the top down, elite-oriented, urban based curative and centralised health system, the report advocated a system strongly based in the community and one which would integrate preventive, curative and promotive aspects of health services. By community the authors meant a population of 100,000 for which a Community Health Centre would be built, a sub-centre would be there for every 5000 and a neighbourhood service centre for every 1000 population. The authors are of the view that "most of the health problems of this community should be taken care of by the community itself and that more than half the expenditure on health services should be incurred within this community" (ICSSR, 1981, p.85). It is envisioned that health services should rise from this base in the community to referral and specialised services at the district and state level. The report further goes on to say that studies have shown that, 'given the necessary encouragement and guidance, the community can itself look after the majority of its preventive, promotive and simple curative health problems, leaving only a proportionately small quantum of the difficult curative problems to be dealt with by the more sophisticated referral services' (*ibíd.*).

The Health for All report proposed that the highly bureaucratised and centralised health system should be replaced by a democratic, decentralised and participatory system. It proposed that all the integrative services up to the district, including the district health services should be placed under panchayat raj institutions. The report advocated that since panchayat raj institutions did not exist at that point in all states, alternative mechanisms for community participation from the village to the district should be established. The report also takes note of the argument that there is no 'community' at the village or district level and that at the local level the elite is likely to become more powerful, however it is argued that with adequate checks this problem can be overcome. The report further states that community participation in health services will be possible only when financial and administrative control is handed over to the community. It is acknowledged that the community at that point

was not equipped to undertake participation in health services for which major social and political change was required. The report recommends that at the sub-centre level the gram sabha, for the community health centre the panchayat samiti /block panchayat and the zilla /district panchayat for the district health centre shall disburse salaries, manage funds and purchase drugs and other supplies. The report acknowledges that there is the potential for misuse of power due to administrative and financial decentralisation, especially in the initial stages. But the report argues that misuse is also prevalent under a centralised system, with very little benefits reaching the people,

The 'Health for All' report recommends part-time community health volunteers for every 1000 population and also training of selected individuals from every 10^{th} or 20^{th} household. A village health committee should be constituted comprising of the government health workers, community health volunteers and the trained individuals from households to ensure people's participation in health programmes.

The first national health policy in India was brought out in 1983 and sought to provide 'health for all by 2000 A.D' (GoI, 1983). In orientation, it was similar to the ICSSR-ICMR report. The national health policy sought to provide 'health for all' through a comprehensive primary health care approach that took into account actual needs of the community and at a cost that people could afford and at the same time ensuring the community's participation in planning and implementation of health programmes. The policy recognised that people have to travel long distances for curative services for ailments that can be dealt with at the community level. It envisaged a primary health care system that incorporates the extension and health education approach and felt that a large majority of health issues could be handled by people themselves with the support of volunteers, auxiliaries and CHWs. The policy stated that instead of enhancing self-reliance of the community to treat its problems, the current approach had increased dependency and weakened the community's capacity to cope with its problems. The policy states that "a satisfactory health status for all our people cannot be secured without involving the community in the identification of their health needs and priorities as well as in the implementation and management of the various health and related programmes (para. 4.2, p.3). The policy stated that the success of the decentralised primary health care system would be built on self-reliance and effective community participation, with support of secondary and tertiary level health services. The policy acknowledged that decentralisation of services would require establishing a well worked out referral system

based on the actual needs and problems of the community. This integrated referral system would require establishing a chain of 'sanitary-cum-epidemiological stations' between the primary and secondary levels with trained staff to identify, plan and provide preventive , promotive and mental health services. The district health unit would co-ordinate the various epidemiological units.

It is in the 7th Five Year Plan 1985-90 (GoI, 1985), that community participation in health services is mentioned for the first time. Participation of the community and voluntary organisations is acknowledged of being of critical importance and to be encouraged. Further it is stated that the district and block level panchayats would be involved in planning, organising and running of the health services.

1990s: the decade of participation

In the 8th Five Year Plan 1992-97 (GoI, 1992), community participation is seen as an important component for rural development. The Panchayat Raj act was also introduced in 1991 and passed in 1993 during the 8th Plan period. With regards family planning, the plan considers decentralised planning and implementation an important strategy in which panchayat raj institutions and voluntary organisations play an important role.

The most important development regarding participation was the establishment of panchayat raj institutions all over the country. Panchayats or community councils of various kinds are known to have existed since time immemorial. The traditional village panchayats were made up of men from the dominant castes who had greater power over other castes and command over resources, and were able to organise local activities (Srinivas, 1998). The traditional panchayats settled disputes in the village. Even to this day, though a new panchayat system has been put in place, the traditional village headman exists in many places who often arbitrates disputes. In addition, each caste or community has its own panchayat which takes decisions regarding caste matters. In independent India, while caste panchayats continue to have a strong hold in rural areas, traditional village panchayats are still called to settle disputes. After independence, the Balwantrai Mehta Committee and subsequently other committees were set up to give recommendations on how to strengthen panchayats. However, panchayats were not given due importance and panchayat elections were not held regularly till the passing of the 73rd and 74th amendment to the constitution of India in 1993.

The 73rd amendment gave a constitutional mandate to panchayats. A three-tier panchayat system was made mandatory all over the country. The top most tier is the district or zilla panchayat followed by the block/ taluka/ janpad panchayat and the lowest tier is the village or gram panchayat. Another important feature of the 73rd amendment was that one-third of the seats in the panchayat are reserved for women. The amendment defined panchayats as institutions of self-government for rural areas and required the state governments to enable decentralisation and devolution of powers to the panchayats at all levels so that they may carry out functions of developing plans and implement schemes for economic development and social justice as listed in the eleventh schedule of the constitution, article 243G (Singh, *et.al*, 1997). Included in this list are powers and functions relating to health of the community. These include health and sanitation including hospitals, primary health centres and dispensaries; drinking water, women and child development; family welfare; and social welfare including welfare of the handicapped and mentally retarded (*ibid*). The standing committee for welfare at the gram panchayat level and at the block level are to look into issues of public health. At the district level, there is separate standing committee for health and education to look into public health issues.

Behar and Kumar (2002) point out that devolution and decentralisation of power and functions to the panchayats faced resistance from the bureaucracy and established political entities. The functions that devolved to the panchayats have been regarding supervision of projects, identification of beneficiaries, and giving administrative approval mainly. While panchayats also have the responsibility of implementing projects, few line departments have handed over this function to the panchayats. In most cases the role of panchayats has been restricted mainly to maintenance of projects, if at all.

Community participation year 2000 onwards

Community participation continued to be emphasised in the 21st century. The second national health policy was brought out in 2002, which acknowledged that devolving programmes and funds for health through different levels of panchayat raj institutions had had a positive impact. A principle objective of the policy was to formulate a strategy to reduce health disparities and improve the access to public health services of disadvantaged sections. It recommended a decentralised public health system by establishing new infrastructure in deficient areas, and upgrading the infrastructure in existing institutions to

achieve this goal. The policy advocated that the government should implement the national disease control programmes through local self government institutions by 2005.

The National Rural Health Mission (now the National Health Mission) was launched in 2005 and gave a lot of impetus to community participation. The Framework for Implementation of the NRHM states "the Mission seeks to provide universal access to equitable, affordable and quality health care which is accountable at the same time responsive to the needs of the people, reduction of child and maternal deaths as well as population stabilization, gender and demographic balance" (GoI, NRHM, p.9). In order to achieve its goal, the NRHM emphasised 'communitization' of activities, and increasing the role of panchayat raj institutions amongst its strategies.

The NRHM refers to *institutionalizing community led action* for health as communitization of health care. Communitization under NRHM includes firstly community action; secondly, the village health sanitation and nutrition committee; thirdly, appointment of the accredited social health activist (ASHA); fourthly, establishment of the village health and nutrition day and lastly, setting up rogi kalyan samitis. The emphasis in community action is on monitoring of activities of the mission by community members, community based organisations, non-governmental organisations and panchayat members. The aim is to bring back the 'public into public health' by allowing the community to give feedback on the functioning of the public health services. The village health committee has existed since the 73rd amendment introduced panchayat raj all over the country. However, the committee has received more thrust and is expected to supervise the functioning of the village health and nutrition day, supervise the anganwadi centre, raise awareness about nutrition and monitor the nutritional status of children. On the village health and nutrition day, immunisation and ante-natal care is to be carried out in the village. This day is also seen as a way of interaction between the community, the health system and the anganwadi centre. The position of the ASHA was introduced to act as a link between the community and the health system. It is to be noted that the ASHA who is to be a woman from the community itself, is seen as an 'activist' who will raise awareness about good health and sanitary practices, be a depot holder for basic medicines and initiate local health planning in the community. Rogi kalyan samitis (RKS)/patient welfare society or hospital management committee were instituted at all health institutions above the sub-centre. The committees should include elected representatives, administrative and technical personnel, and community members.

The NRHM gives a greater role to panchayats to manage public health infrastructure at every level. The village health sanitation and nutrition committee that is to be formed in each village is to have representatives from the gram panchayat, and representation from all hamlets, especially marginalised communities. The sub-centre and the primary health centre (PHC) will be accountable to the gram panchayats where they are located and their management committees are to have representations from all gram panchayats they serve. The community health centre (CHC) at the block level and the district hospital are to have rogi kalyan samitis (patient welfare committee) with elected representatives from block and district panchayats. At the district level, there will be a district health society (DHS) which is to be under the control of the district/zilla panchayat. The zilla parishad (district panchayat) will be responsible for the health sector budget and for planning. It is also envisaged that the DHS will take up the entire management of public health at the district level as its capabilities evolve.

The DHS which is to be under the control of the district panchayat will be responsible for the public health of the district. As part of decentralisation, the DHS has to formulate an annual health plan for the district. The framework for implementation states that planning teams are to be formed at every level, i.e. village, sub health centre, primary health centre, community health centre and the district, comprising health functionaries at the particular level, panchayat members at that level, CBOs and NGOs. The planning team in the village is to conduct household health surveys. It is envisaged that dissemination of the findings of the survey will lead to greater accountability. The district health plans are to be prepared by 'aggregation and consolidation' of plans from the village level, sub-health centre level, cluster/PHC level and the block. The district level plans are to be made on the basis of block plans. The framework acknowledges that the professionals would be needed for planning and NGOs would be required for capacity building. Shukla et al. (2014) point out that despite the mandate to take inputs from the community, the annual district health plan is very centrally controlled with very little space for suggestions from community representatives.

The NRHM has provided spaces and institutionalised mechanisms for community participation. But as has been discussed, participation can acquire different meanings. And while spaces have been created for participation, this does not automatically ensure it. This ethnographic study looks at the social context of the village in which participation takes place. And whether the mechanisms put in place for community participation enable it.

CHAPTER 2

ACCESS TO HEALTH CARE SERVICES

Access to health services is intertwined with the notions of equity and health service needs. The first part of this chapter looks at how access to health services has been defined, what are health service needs, and how equity is integral to defining access. The second part reviews issues affecting access to health services in rural India. The third part of the chapter looks at the methodology used in the research.

Defining access to health services

While many have written on how to conceptualise and measure access to health care, two of the frameworks widely used have been the behavioural model given by Aday, Andersen and colleagues; and the taxonomical framework by Penchansky and Thomas.

Aday and Andersen (1974) argue that it is "most meaningful to consider access in terms of whether those who need care get into the system" (p.218). Characteristics of the health system and population do influence whether those in need are able to gain entry to health services. But it is not the availability of services or resources that define access, rather their utilisation (behaviour) by those in need. Aday and Andersen (1974) developed a framework to measure access to health care which they conceptualise as "proceeding from health policy objectives through the characteristics of the health care system and of the populations at risk (inputs) to the outcomes or outputs: actual utilization of health care services and consumer satisfaction with these services" (p.211). The starting point is **health policy** since it has a major affect on determining access to health services. The second issue is that of the **inputs** which comprise the organisation and resources of the health care delivery system and the characteristics of population at risk. The population characteristics are the individual determinants of utilization and may be predisposing, enabling, and need components. Implicit in the access concept is the fact that certain categories of people have more or less "access" to health services than others which derives from predisposing and enabling components. Health policy aims to improve access to health services of groups by changing the more manipulable illness beliefs and enabling variables such as income or health insurance coverage. The third issue refers to **outputs or outcomes** which is seen firstly in the utilisation of health services and secondly in levels of satisfaction. The level and pattern of actual

utilization of the system may be used to test the predictive validity of the system-based and individual-based access indicators. The authors note that policy, inputs and outcomes are inter-related and influence each outer.

Penchansky and Thomas (1981) have given a 'taxonomical' definition of access which can be broken into five dimensions for which operational measures can be developed. They define 'access' as the degree of 'fit' between the clients and the health care system. The first dimension of access is *availability*, which refers to whether the volume and type of services address the clients' needs. *Accessibility* is about the location of services and clients ability to reach them, taking into account issues such as transportation, distance and cost. *Accommodation*, refers to the manner in which the health resources are organized and the clients' ability to accommodate to these factors perception of their appropriateness such as appointment systems, hours of operation, etc. *Affordability* is the relationship of prices of services and the ability to pay. The client's perception of worth relative to total cost is also a concern here. *Acceptability* refers to patients' expectations and attitudes regarding characteristics of service providers such as age, sex, religious affiliations, etc., and also service providers' expectations about clients. The authors also point out that these dimensions of access influence the relationship between the clients and the health system in three ways – 1) utilisation 2) satisfaction with the system 3) provider practice patterns.

Both the behaviourial and the taxonomical definitions stress on utilisation as the most important component of access to health services. Both definitions also emphasise on the satisfaction that users feel with the health system. Other definitions of access to health services have derived from these two models. For instance, Gulliford, *et al.* (2002) make a distinction between *having access* to health services which refers to the potential to utilise a service if required, and *gaining access* which refers to the actual process of utilising a service. *Having access* implies that there is adequate supply of health care services when required. This traditionally has been measured in terms of number of doctors and hospital beds. But having access is not enough, since it may happen that people have access to services but may face barriers to using them. Gulliford, *et al.* point out that access has also been seen in terms of health outcomes. When health outcomes are used to measure access, it is possible that delays in treatment due to organisational barriers may lead to poor outcomes. Accordingly when health services provide favourable outcomes, the use for health services may reduce over time, and bad-quality health services may be associated with higher

utilisation. Levesque *et al.* (2013) view access to health services as an opportunity to obtain appropriate health care services in situations of perceived need, taking into account the supply side factors of health systems, the demand side factors of population and the process factors describing how access is achieved. They conceptualise five dimensions of accessibility to health services, i.e. 1) approachability 2) acceptability 3) availability and accommodation 4) affordability 5) and appropriateness. These correspond to five dimensions of abilities of people to generate access to services. These dimensions are 1) ability to perceive 2) ability to seek; 3) ability to reach 4) ability to pay and 5) ability to engage respectively.

These definitions of access to health services focus on utilisation of services by those in need resulting in satisfaction or favourable outcomes (to the extent possible). While access to health services is discussed, utilization is used to measure access.

Equity in health care access

Access to health services is concerned about providing appropriate health care to those in need, which brings up the concept of equity. Tudor Hart (1971) noted that the availability of good medical care tends to vary inversely with the need for the population served and that it is inevitably the poorer areas rather than middle class areas that face a shortage of health care services even though morbidity is higher among the poor. He called this the Inverse Care Law. And the situation continues. A study on the inequities in the health of children in low and middle income countries found that children from poorer families are more exposed to pathogenic agents, and when ill they have less access to health services and the quality of care is likely to be lower; and have lesser access to life-saving care (Barros, *et al.*2010). Therefore the concept of access to healthcare cannot be discussed without the notion of equity in healthcare.

It is important to differentiate between equity in health and equity in health care. Many factors determine the health status of a population of which health care is one. According to Whitehead (1990) equity in health refers to removing health differentials between groups that are unfair and avoidable and that cannot be explained on a biological basis. While equity in health care is defined as comprising 1) equal access to available care for equal need, 2) equal utilisation for equal need and 3) equal quality of care for all. ‘Equal access to available care

for equal need' implies that equal entitlement for health services to everyone based on healthcare needs across geographical regions, and the removal of other barriers to access. The issue of 'equal utilisation for equal need' comes up when utilisation of services is dictated by social and economic conditions. Whitehead cautions that all instances of differences in utilisation by different social groups does not necessarily mean inequity in health care, rather it implies that further study is required. 'Equal quality of care for all' refers to a situation where every person is given attention based on need, rather than on social influence.

Most literature on equity to access to health care has used this principle of *equal access to health care for equal need*, i.e. horizontal equity. Horizontal equity implies that those with equal needs have equal *opportunities* to access health care (Oliver and Mossialos, 2004). On the other hand vertical equity means that those with unequal needs have unequal access to health care.

Daniels (1982) discusses equity in terms of fair equality-of-opportunity. He notes that in many societies it is expected that health care should be distributed more equitably than other social goods. Health care is considered special because it enables 'normal species functioning' which is an important component of the *opportunity range* available to individuals in a society. Health services serve a variety of functions, of which only some may give rise to a social obligation to provide them. These are the basic services needed to 'maintain, restore, or compensate for the loss of' normal functioning. Daniels refers to these as the basic tier of health care services that impact those health needs that influence the opportunity range. There should be no obstacles – financial, geographic, and ethnic – to access this basic tier, though upper tiers may be financed differently. According to Daniels, from the perspective of distributive justice, it is important to distinguish between acute therapeutic services on the one hand and preventive and public health measures on the other. Even if health care services are equally accessible to all but focus on acute interventions, then for some diseases such as black lung, asbestosis, etc., they will not fulfill the distributive justice principle of fair equality-of-opportunity. People are differentially at risk of contracting certain diseases because of their living and working conditions. Daniels argues that we have to look at both equity in access to services and at equity in the distribution of risk.

Len Doyal (1995) is also concerned with how to ensure equity in providing health services in situations of resource constraints. He offers a moral theory for health care rationing based on

the principle that all humans have an equal right to access to health care based on equal needs. Doyal suggests seven procedural principles that will ensure equity and fairness in ensuring that people have equal right to appropriate health care based on need. The first is that health care needs should be met in proportion to their distribution in the population. The second principle is that within areas of treatment, resources should be prioritised on extremity of need, such that acute cases get priority, followed by urgent cases and lastly elective cases. The third principle is that those with similar needs should have equal access to health care. Fourth, resources should not be spent on ineffective care. Fifth, lifestyle should not determine access to health care. The sixth principle is that health care should be distributed rationally on basis of need, and care should be taken to limit the influence of external factors such as purchasing policies, internal markets, memberships or political power within organisations and politically popular decisions that go against the rational principle. The seventh principle is that the public should be consulted and views incorporated but the public should not determine the allocation of health services. This should be decided on the basis of evidence and reason. The main theme underlying Doyal's argument is that health needs should determine allocation of resources for health care.

Health needs

There is a great deal of variation in the ways health needs have been conceptualised. The most inclusive notion of health needs is the primary health care (PHC) approach of the Alma Ata declaration that views health as a fundamental human right. The PHC approach talks of providing preventive, promotive, curative and rehabilitative services to the community and thus addressing the corresponding health needs. In the PHC approach, proper nutrition, safe drinking water, sanitation, maternal and child care, family planning, immunisation, control of epidemics and health education are a part of primary health care. Advocates of the PHC approach like Green (1992) maintain that within the context of the PHC philosophy, it is important that information on health and health needs is not confined to demographic information, but also looks at the wider indicators of poverty and of social justice, such as status of different groups. Green points out that measures of heath such as incidence and prevalence of disease of the individual or community correspond to a narrow definition of health which is inconsistent with a PHC philosophy. A community's health needs profile has to include social and economic indicators too. He points out that a slum child is unhealthy not only due to poverty but also because the quality of life is lower. Green notes that there is a

difference in perception as to what health professionals consider health needs or medically determined needs, and the community's perception of health needs; and that both should be included in measuring health needs of the community.

There are other ways in which needs have been defined. Bradshaw's (1972/77) fourfold classification of needs has influenced the notion of needs in social services. Of the four types of needs, *normative needs* refer to professionally or expert determined needs in a situation, which often refer to standards laid down. However there may be different and conflicting standards laid down by different experts, influenced by the value orientation of experts or these needs may be paternalistic. The second type of needs is *felt needs* which refer to wants. While assessing a service people are asked what they need, which tells what people feel they need. Felt needs can be gauged though a survey. However, Bradshaw argues that this does not tell us the real need since felt need is influenced by individual perception. People may not know whether a service is available, some may feel ashamed to express a need and, in some situations, needs may be inflated. *Expressed need* or demand is felt need turned into action. In health services, the demand for a service is seen as expressed need, however on the other hand, not all felt need is expressed by demand. Waiting lists are seen as an expressed need. The last category is that of *comparative need* which looks at whether people in the same situation are able to avail of a service, and if some are not, then they are in need. This refers to gaps between individuals and between areas.

Economists have been concerned with how to meet various health needs efficiently within resource constraints. Acheson (1978) defines health needs in terms of needs for health care and proposes a definition of health needs that takes into account the availability of resources whether the condition can be improved at a reasonable cost. Acheson calls this a 'realistic' approach which is different from the 'humanitarian' approach which refers to health needs as states of poor health. In the realistic approach the measurement of health needs for planning purposes should take into account the constraints determined by service equivalents to meet these needs. These service equivalents are determined by the level of economic development, medical expertise and government policy regarding resources allocated for health care. He further argues that there is no justification for surveying the populations of Chad for varicose veins for instance, because resource equivalents for providing treatment are not available there. Acheson acknowledges the humanitarian approach has the merit of taking into account those who are not able to avail health care services. For Acheson the definition of needs is a

joint responsibility of the health profession and citizens and this makes it political. Culyer, (2001) views need for health care as instrumental, something that is necessary for the ultimate objective, that of a flourishing life. Further, the need for health care is culturally determined both in terms of what is considered pathological for a flourishing life and in terms of what is considered 'flourishing'. Culyer argues that need for health care is not synonymous with ill-health, since a measure for ill-health is not the same as need for health care. Health care is said to be needed only when it promotes health; or prevents or reduces ill-health. '... A need exists over the whole range of cost-effective health, wherever the marginal product (to use the economist's term) of care is positive in terms of health' (pp.279), i.e. only when health care can have a positive impact. But at the same time Culyer maintains that need differs from capacity to benefit as they refer to different things. Capacity to benefit is about outputs, i.e improved health due to health care intervention, while need is defined as the resources required to expend the capacity to benefit. Therefore it is possible that two individuals use the same resources in terms of health care needs but their capacity to benefit will differ. Third, need is prospective rather than retrospective since what has happened in the past or the current health status is important only in that it may affect what can be done. Fourth, due to resource constraints, it may often be equitable for some needs not to be met. Culyer like Acheson views healthcare need as that which can lead to a positive outcome or benefit and resources should not be spent on those treatments where there is no benefit.

The issue of how to allocate scare resources to address health needs has been of interest to philosophers too. Daniels (1981) maintains that a theory of health needs is required to guide the distribution of scarce healthcare resources that does not rely just on market allocation. Health needs are those that we need for species-typical normal functioning and are distinct from wants or preferences. The theory of health needs has to deal with two issues - that there is something special about healthcare needs that distinguishes it from other social goods, and second, there will be some healthcare needs that will be more important than others. Daniels defines health-care needs as those things that are required to "maintain, restore, or provide functional equivalents (where possible) to, normal species functioning. They can be divided into: (1) adequate nutrition, shelter (2) sanitary, safe, unpolluted living and working conditions (3) exercise, rest, and other features of healthy life-styles (4) preventive, curative, and rehabilitative personal medical services (5) non-medical personal (and social) support services" (pp. 158). Regarding support services Daniels points out that where cure or restoration of function is not possible, we enter the area of non-medical social support and

services. From the point of view of their impact on opportunity, the support services that meet health-care needs have the same rationale and importance.

Len Doyal (1995) views health as both a basic need and a basic human right. Physical and mental health is a basic human need without which we cannot socially participate or flourish. And if people are to be good citizens then we have to ensure that they have a right to appropriate health care to enable them to be their best as citizens. Doyal (1995) defines need as "requirement for specific clinical intervention to avoid serious and sustained disability" (pp 276). To ensure this, accuracy of needs is very important. Assessment of needs should not be based on extrapolation of mortality data or previous health care expenditure since this can hide variations between social classes, geographical locations and underestimate chronic illnesses. Doyal asserts that failure to provide services on the basis that certain treatments are more expensive, less effective or unpopular in public perception is a violation of rights. Health care rationing should be done fairly within treatments rather than between treatments. Any reduction in resources for health services that happen, should be applied in equal proportion across all types of clinical services.

The principle of capacity to benefit has been used in health needs assessment too. Wright, Williams and Wilkinson (1998) define health needs as those needs that have the 'capacity to benefit' from health care or other interventions. They argue that health needs assessment is an evidence-based approach that refers to an objective and valid method of tailoring health services to the needs of the local population and effective intervention based on the resources available. The authors are of the view that health needs assessment should not be only about measuring ill-health as it would suggest that something could be done about it, rather capacity to benefit should be included as it suggests that something can be done about the state of ill-health.

Doyal (1995, 1998) has argued that participation at the local level is necessary for better health needs assessment to establish how these are distributed across class, sex, race, occupation, etc., and how disability affects people individually across these categories. In democracies, citizens should have the right to participate in vital issues, of which access to healthcare is one but at the same time he opines that public should not be involved in decisions regarding rationing of health care (Doyal 1998).

The above definitions of health needs have come from the developed world where there is good measurement of morbidity, disability and mortality, good reporting mechanisms and well-regulated health systems. The situation in developing countries such as India is that information on disease, disability and mortality is haphazard and incomplete. In addition, there are different types of health systems such as Ayurveda, Siddha, Unani, Homeopathy, etc., and folk traditions which people use. Most of these systems are found both in the public and private sectors and those in the private sector are largely under-regulated. There is no information available on needs for rehabilitation, geriatric care and terminally ill patients. In the Indian context, it is important to get a holistic picture of health needs before caveats such as limited resources and capacity to benefit are introduced. By introducing, the issue of resource constraints in the definition of health needs, needs (what is required) are getting conflated with ability to address these needs. The ability to address health needs of a population will depend on the politics of governance, resources and technological development which is constantly evolving.

Health services in India

Since India became independent, the country has never been able to overcome the inequities in access to health services (Priya, 2005). Priya points out that the Bhore committee report set the tone for the expansion of health services in India due to which the emphasis since the country's independence has been on maintaining international standards and technology while health services remained inaccessible to a large segment of the population, especially in rural areas. This lack of public health care services, Priya notes, has been filled by the private sector which works on a fee for service basis. The modern health services were also socially alienated from the people due to three health service issues - contemptuous behavior of health personnel, commercialization of health services and what people experienced as the limitations of modern medicine (Priya, 2018). Amrith (2007) points out that the Indian state in the aftermath of partition was more concerned with consolidating its hold over territory so much that public health was not considered a priority and did not get the required funding. And therefore while the Indian state did have a commitment for providing health for all, its public health approach was not matched by sufficient resources due to which the state put in place target driven, techno-centric vertical programmes. In addition, Amrith (2007) notes that independent India had inherited a health system that was inadequate and at places absent; a bureaucracy that did not pay much attention to public health and a perspective that saw well-

being in instrumental terms. Even today public expenditure on health in India is abysmal. Public expenditure on health constituted only 1.02 % of its GDP in 2015-16 (GoI, 2019a).

Distribution of services

Health services are unevenly distributed across states and between districts in a state. Duggal (2006) points to three inter-related dichotomies regarding the distribution of health care services in India. The first is the rural-urban dichotomy. Most of the formal, recognised health facilities, qualified practitioners and diagnostic facilities are in urban areas, while rural areas have primary health centres which provide preventive health services through paramedics. Therefore for curative services the rural population has to depend on private practitioners, the majority of whom are unqualified. The second is the private-public dichotomy of health services. The private sector provides mostly curative services only and though the public health sector provides both preventive and curative services, most of the public curative health services are based in urban areas. The third is the preventive-curative dichotomy with preventive services largely in the public domain while curative services have a very large presence of private players.

In addition, health services are concentrated more in urban areas. Rao et al. (2012) estimate that sixty percent of health workers are in urban areas while the majority of population lives in rural areas. According to their calculations, there are 6.1 allopathic doctors per 10,000 population in India as per the year 2005. However of these, it was estimated that 37% of doctors (63% in rural and 20% in urban areas) were not qualified, reducing the density of allopathic doctors to 3.8 per 10 000 population that. In urban areas, the density of allopathic doctors is four times that of rural areas. But the density of qualified doctors is 11.3 in urban areas and 1.2 in rural areas per 10,000 population. There are 4.9 nurses and 2.5 midwifes per 10 000 population but after adjusting for unqualified workers, the density of nurses reduces to 1.7 and that of midwives to 0.6 per 10 000 population. The density of nurses and midwives in urban areas is three times that of rural areas. The density of qualified nurses is 4.3 in urban and 0.7 in rural areas. The authors point out that states that have higher per capita health spending have higher workforce density and better health outcomes. Rao et al. (2012) point out that the ratio of nurses to doctors is also very low in India as compared to levels considered necessary for quality care, which is 2:1 as a minimum and 4:1 as satisfactory. There are 1.6 nurses and midwifes per allopathic doctor in India and when the unqualified personnel are removed, the nurse-doctor ratio is only 0.5.

This lack of health services in rural areas is exacerbated by the large number of vacant posts for all types of health personnel in the public system. In the country as a whole, the maximum shortage in 2012 was of specialist doctors in CHCs (69.7%) which has gone up since 2005, followed by radiographers at CHCs 53%, laboratory technicians at PHCs and CHCs 43%, nursing staff at PHCs and CHCs 23%, pharmacists at PHCs and CHCs 18%, doctors at PHCs and CHCs 10% and female health workers 4% (GoI, 2013). The large number of vacant posts has affected even the vertical disease programmes which had been instituted in place of a holistic primary health-care programme due to a lack of resources. In a study of malarial deaths in endemic areas of West Bengal, Sharma et al. (2009) found that the inadequacies of the public health facilities pushed people to rural private practitioners who were not trained to deal with severe malaria cases. They note that the public sector had a reasonable infrastructure in the study areas but there were vacancies of community workers and laboratory technicians which lead to a reduced ability to identity and diagnose malaria.

Gautham et al. (2011) point out that the public health system is not geared to meet the demands for health care in the rural areas, even if all the posts of health workers were filled up. Even where a qualified allopathic doctor in the public sector was sought, doctors prescribed diagnostic tests and medicines that had to be obtained from the private sector. Another major cost was what they had to spend on transport to reach the public facility, which was often more than the expenditure on medicines.

In a study carried out in Madhya Pradesh (MP), De Costa and Diwan, (2007) found that of the qualified doctors for all systems - Allopathy and Indian Systems of Medicine and Homeopathy - 77% worked in urban areas where 26% of the population resides. Of the qualified doctors, 75.6% were in the private sector, and 80% of these private doctors were in urban areas. The rest of providers were categorised into 1) qualified non-doctors, trained paramedical staff with a degree or diploma, nurses, pharmacists, laboratory technicians, radiographers, health workers, ophthalmic assistants, barefoot doctors, diploma holders in ISMH, (2) informally trained providers with a few weeks of training but no formal qualification (trained birth attendants), and (3) untrained providers. Seventy-one percent of paramedical staff worked as solo private practitioners in rural areas (1:670 rural population). The study found that more than 90% of traditional birth attendants and unqualified providers, all working privately were in the rural areas.

Most state governments have been finding it difficult to find doctors willing to go to rural areas. In Madhya Pradesh, the government allows private practice for government doctors in off-duty hours, due to which there is a strong preference for urban postings while tribal and remote areas have vacancies (CBHI 2007). There has been a decline in the percentage of shortage of different health personnel in 2012 as compared to 2005 (GoI, 2013). But the percentage shortage of health personnel in the state is more than the national average, except in the case of female health workers who were more than the required strength in 2012. The shortage of doctors at PHCs has remained the same in 2005 and 2012 at 29.5%. Shortage of specialists at CHCs reduced from 94.6% to 80% in 2012 but went up in absolute numbers. The shortage of radiographers at CHCs was 42%, pharmacists at CHCs 54%, laboratory technicians at PHCs and CHCs 59% and nursing staff at PHCs and CHCs 28% in 2012.

Utilisation of services

In India large gaps can be seen in terms of health services utilisation in terms of caste, gender, economic categories and urban-rural divide. Various studies show that the poor, who are also socially marginalised, have the least access health services (Baru et al. 2010). The Scheduled tribes (ST) and Scheduled castes (SC) population rely heavily on public health services for inpatient treatment but it is their economic status rather than caste that determines the use of the public sector (Dilip, 2005).

The private sector is the dominant player in the providing outpatient care in both rural and urban areas (Sundaraman and Murleedharan, 2015; Jana and Basu, 2017). The 71st round of NSSO reveals that treatment in the public sector has gone up to 28.3% from 22% (60th round) in rural areas. In urban areas the increase was less, from 19% in the 60th round to 21.2% in the 71st round. The authors feel that this is because there has been some strengthening of the health system in rural areas but not in urban areas.

The lack of qualified doctors in rural areas is filled by others not qualified to practice. Gautham et al. (2011) in a study in Andhra Pradesh and Orissa (Odisha) found that the majority in rural areas go to the non-degree allopathic practitioner (NDAP) based in or close to the village as the first point of contact. While proximity was the main reason for choosing the NDPA other important factors were convenient time, willingness to make house-calls and availability at anytime. NDAPs referred complex cases to qualified doctors so no conflict

exists between the two. Distance and cost decided whether the services of a qualified allopathic practitioner were sought.

Cross sectional surveys have shown an inverse relationship between economic status and morbidity and these class differentials are more in case of hospitalisations (Dilip, 2005). Prinja et al. (2013) analysed data from the NSSO 60th round (2004) to estimate horizontal equity in hospital care utilisation at public and private facilities. They found that on the whole hospital services were utilised more by the rich. As expected, public services were utilised more by the poor and private services by the rich. Their analysis shows that the poorest and richest quintiles individuals accounted for 20.8% and 16.5% of all public sector hospitalisations respectively. For hospitalisations in the private sector, the share of the poorest and richest quintiles was 13.4% and 26.8% respectively. While the public sector was pro-poor in both rural and urban areas, it was significantly more equitable in urban areas. Sundaraman and Murleedharan (2015) refer to the NSSO 71st round (2014) to point out that public hospitals are used more by those in lower quintiles with 57.5% of rural hospitalisations in the first quintiles using the public sector, which declines to 42.5% in the fourth quintile and to 28.9% in the fifth quintile. The distribution shows a similar pattern in urban areas with 48% of all hospitalisations in the first quintile happening in the public hospital and only 18.7 % in the fifth quintile. They opine that the cost of care in the public hospital is about one-fourth of the average costs care in private hospitals, which is still too high.

Access to maternal and child care

The NSSO 71st round shows that home deliveries account for 19.9% of deliveries in rural areas, and 10.5% in urban areas which is substantially lower than the figures in the 60th round of 65% in rural areas and 26.1% for urban areas (Sundaraman and Murleedharan, 2015). The dip in home deliveries can be attributed to the Janani Suraksha Yojana that was launched in 2005. Sundaraman and Murleedharan (2015) point out that nearly 70% of rural women who had institutional deliveries chose public hospitals with the poorer quintiles choosing a public facility more often. However the difference between the quintiles was small, about 10%. In urban areas among those who had institutional deliveries, 46.6% chose a public facility, 53.5% in the first quintile and only 18.9% in the last quintile.

Regarding the utilisation of maternal health services Raman (2014) points out that choice of hospital is based on trust which results is many of the extended family and friends going to

the same provider. Very few women were able to exercise their choice in deciding which facility to go to since the decision was usually taken by the husband or family. However women with tertiary education were able to take decisions regarding the institution for delivery or paediatric services. Choice is shaped by socioeconomic and cultural settings. It was found that people were ignorant about the services and facilities that they were supposed to receive from the government especially in the post-natal period and were even denied these services if the delivery had taken place in a non-government hospital in the city. The study found that women travelled long distances to come to the hospital where they had delivered for immunisation of the child. The author asks why is it that a tertiary hospital should be providing these preventive services?

Non-treatment of ailments and non-utilisation of health services

Dilip (2005) notes that non-treatment of ailments is wide spread in India, and it is more in rural areas than in urban and more amongst women than in men. Those who did not take treatment either due to financial problem or lack of medical facility was higher in rural areas as compared to urban (Dilip, 2005). Over the last two decades, the proportion of people in rural areas stating 'lack of health infrastructure' as a reason for non-treatment has gone up from 3 to 12 percent (Mukherjee and Karmakar, 2008).

Non-treatment of ailments are due to delay in recognition of the problem, delay in decision to seek treatment, difficulties in reaching health facilities and inability to pay for medical care; all of which are related to the socio-economic status of the person (Dilip 2005). Regarding non-treatment, Dilip (2005) using data from the 52nd NSSO shows that 'financial problem' is severe among SC population in both rural and urban areas, while 'non availability of health facility' is the most common reason reported by the ST population, with 26 percent amongst them reporting this reason from rural areas.

Iyer et al. (2007) have examined how gender biases against women impacts access to health services in rural Karnataka. They call 'pure bias' those attitudes that curtail treatment for women irrespective whether the household can afford health care, and 'rationing bias' those situations when females and males are treated differently in terms giving treatment due to poverty or resource constraints. They found pure gender bias operating against women in treatment for women in all expenditure quintiles. Rationing bias was seen in discontinued treatment among the poor households. Men in poor households passed on all the burden of

rationing on to the women, but in the poorest households both men and women were forced to discontinue treatment. In rural communities, most health care expenditure is out of pocket and hence they found that economic class rather than caste is the basis of discrimination. And it is poor women who carry the double burden of both gender and economic class.

Analysing data of the 60th NSS round Mukherjee and Karmakar (2008) found that fever of unknown origin was the most frequently reported illness and also the one of the most frequently neglected, along with orthopaedic and respiratory ailments. The top four reported ailments and most frequently neglected diseases are the same with a slightly different ranking. The most neglected ailments were those happening in old age resulting in a decrease in demand for health care as the age profile increases. The authors feel this could be as many ailments may be considered normal in old age. They found no significant gender difference in reporting of non-treatment in rural areas, and neither is there much difference in the reasons cited for not accessing healthcare between females and males. In urban areas 20% more females reported non-treatment of morbidity than males. In the 15 to 45 years of age category, the demand for healthcare is low, however the proportion of untreated morbidity is greater for females than for males, and the difference is more in the urban areas as compared to the rural areas. In rural areas, untreated morbidities in children below 15 is less for females as compared to males and the difference is minor for those above 60, while in urban areas, the gender inequality is higher.

Mukherjee and Karmakar (2008) show that there is an inverse relationship between household head's education level and non-treatment. They divided the education of the household head into four categories – illiterate, up to primary, up to secondary, and higher secondary and above. The share of untreated morbidity where the head of household is illiterate is over 45% and drops progressively to below 7% in the highest education level. They note that the proportion reporting ailments is the highest among those with the highest education level which they attribute to the linkage between better educational levels and greater health seeking behaviour. They also examine the reasons for non-treatment for every expenditure quintile. The proportion of untreated morbidity due to financial reasons shows a decline from the poorest expenditure group to the highest in rural areas. In rural areas, lack of access to a health facility is found in all expenditure groups but not in urban areas. Even for the richest in rural areas, access to a health facility, quality and financial constraints have an effect on whether treatment is sought.

Dalal and Dawad (2009) analysed data from NFHS-3 to examine the reasons for non-utilisation of public health facilities. Fifty-eight percent of the women said that their family members did not use public healthcare facilities because the quality of care was poor (32%), there were no nearby facilities (27%), long waiting times (17%), facility times were inconvenient (9%), and absenteeism among health personnel (5%). Those with higher education, wealth and standard of living were more dissatisfied with public health services.

Studies show that people are not satisfied with, or lack trust in government health services (Baru et al. 2010, Raman, 2014). Data from the NSSO shows that "not satisfied with medical treatment" is the main reason in both rural and urban areas, followed by "lack of availability of services" in rural, and "long waiting" in urban areas (Baru et al. 2010). But the belief that private services offer better quality of services is not supported by hard evidence since the private sector is very heterogeneous; and micro studies show that both private and public practitioners are more skilled and knowledgeable in wealthier areas as compared to poorer areas (Baru et al. 2010). Basu et al.(2012) compared the performance of private and public sector health service facilities in low and middle income countries and did not find evidence for the claim that the private sector is usually more efficient, accountable, or medically effective than the public sector. However they argue that the public sector has to improve timeliness and hospitality towards patients.

Household expenditure on health services

Berman et al. (2010) analysing the 60th NSSO round argue that impoverishment due to health expenditure is higher than previously estimated and is higher for out-patient care than for hospitalisations, in both rural and urban areas. Baru et al. (2010) show that expenditure on healthcare is higher in the rural households as compared to urban. In the 60th round of NSS (2004-06), the average direct health expenditure on outpatient care (reference period 15 days) per treated person in rural areas was nearly 20% of total household consumption expenditure and increased to 33% when indirect costs and loss of income for those days were added, while in urban areas the corresponding figures are 13% and 17%. The data also shows that there is a clear gradient across consumption classes regarding the load of direct health expenditure as percentage of household consumption expenditure with the poorest spending 30% and declining slightly for the next seven consumption classes at 25% which comprise

60% of the rural population. For hospitalisations, the poorest spend 28% and is around 20% for all other classes except for the richest.

Goli et al. (2018) show that the share of out of pocket expenditure (OOPE) on accidents and injuries was greater than that of any other major illnesses or causes of hospitalisation in the 71st round NSSO. The catastrophic spending on accidents and injuries was determined by 1) type of health facility, 2) health insurance, 3) economic status, and 4) place of residence in decreasing order. Using a public facility over a private facility can reduce catastrophic spending by 26 percentage points and having health insurance can reduce catastrophic expenses by 23 percentage points. Patients from rural areas incurred a double burden of high medical and non-medical expenses since there are no tertiary care services in rural India.

The expenditure on healthcare is mainly financed through (1) household's own resources, and (2) borrowings; and in rural areas nearly one-fifth of expenditure for outpatient care and 40% for hospitalisation is financed through borrowing which is higher than for urban areas (Baru et al. 2010). After the launch of the NRHM, there was a surge in publically funded health insurance schemes launched in the country, beginning with Rajiv Arogyasri by the Andhra Pradesh government in 2007, the Rashtriya Swasthya Bima Yojana (RSBY) in 2008 and Kalaignar's life saving scheme by the Tamil Nadu government in 2009. However, Berman et al. (2010) note that schemes like RSBY that are supposed to protect BPL families from impoverishment are not based on evidence of the risks faced by poor households regarding health expenditure. Sundaraman and Murleedharan (2015) note that while government-funded insurance schemes are pro-poor, the lowest quintile have the lowest cover and increases in higher quintiles. In rural areas it is 10.1% in the lowest quintile and 17% in the fifth quintile while in urban areas it is 7.7% and 15.1% respectively. They also point to the gap between notional coverage and effective coverage (effective coverage being the proportion of hospitalisation cases that receive part or full reimbursement for their expenses). In rural areas only 1.2% of the hospitalisation cases and 6.2% in urban areas received even part re-imbursement.

In a study on the role of self help groups (SHGs) in a panchayat in Kerala, Mohindra et al. (2008) have argued that leaving aside the poorest of the poor for whom SHGs do not work; for those above them economically, SHGs can be considered a risk mitigation strategy for

those unable to access health care or who fall into debt or impoverishment due to financial burden of health services while at the same time promoting their mental health.

Role of community participation in health issues

One of the states where panchayats did play a role in managing health services before the NRHM was introduced was Kerala. Varatharajan et al. (2004) conducted a study to examine the effect of decentralization on the functioning of the primary health centres (PHCs). Decentralisation was introduced in Kerala in 1997 under which the village panchayats were to administer, manage and finance the PHC. The panchayats controlled about 13% of the state revenue. Panchayats were also given the power to generate revenue through local taxes. Panchayats could temporarily appoint staff against existing vacancies, assign health related work to the PHC staff, monitor performance, and impose penalties if so required. The authority to create any new posts lay with the state government. The authors note that the amount of control that the panchayat had over the PHC was determined by the amount of resources allocated by the panchayat to the PHC. The panchayats that had allocated a high amount of resources to the PHC had built buildings, boundary walls and provided furniture. The participants in the study considered the efficiency of the PHCs on the availability of medicines. The PHCs that were supported by the panchayats were considered more efficient and about 6% of people who took immunisation services from other areas came to these PHCs for treatment of common illnesses. On the other hand 30% of population from not well-supported PHCs sought treatment elsewhere. While panchayats have contributed to furniture and buildings, there has been no contribution towards strengthening the PHCs in terms of supply of medicines and water, extended doctor stay, high quality care and good doctor-client relationship. Besides, the authors note, that the health department's response to decentralisation was 'lukewarm'. Varatharajan et al. (2004) point out that there were other factors than enabled Kerala to achieve this level of decentralisation which may not be present elsewhere. These are 1) high rural literacy, 2) reasonably big local governments, 3) smooth mobilization of masses and 4) devolution package that includes non-salary recurrent expenditure of the health care centres.

A study by Kulkarni et al. (2012) looked at the role of decentralised governance i.e. panchayats, in improving the accessibility and availability of health care services using nationally representative data collected by the National Council of Applied Economic

Research. The results show that for a substantial section of villagers, provision of health care facilities is a major concern but statistically less significant than those who reported availability of drinking water and sanitation as problems. There is an inverse relationship between the perception of the panchayat's performance and the expectation. Although residents of the southern states as compared to the other regions reported the highest incident of panchayat taking action when faced with the problems of health care issues, the extent of dissatisfaction and lack of confidence associated with the panchayats is also high among the respondents living in the south. The authors call it the paradox of participation. They argue that this could be because a higher percentage of people living in the south were of the opinion that panchayats are responsible for improving the provision of health care facilities than in other parts of the country. In all regions, the performance of panchayats was considered better when the problem was specific such as assisting pregnant women than when the problem was general such as providing health care facilities.

Community participation is a complex issue that has many aspects to it. Despite the paucity of studies on the role of panchayats in health issues, evidence indicates that access to health services on the ground can be improved by involving the panchayats. In what ways can panchayats increase access to health care services also has many facets. The social and political context in which the panchayats operate, the amount of autonomy they have and economic resources available to them will determine this.

Study rationale

The Alma Ata conference established the ground for community participation in health related matters. It stated very clearly that primary health care for all could only be achieved when the community participates in the planning and implementation of health services. But as has been discussed in the previous chapter, community participation can have various meanings. It can be in name only on the one hand, and on the other may involve giving real power to the community to take decisions. As has been noted, community participation will be effective only when the state supports it. Therefore the state needs to create spaces for participation, give voice to the people and put in place processes that will translate people's health needs into outcomes.

The NRHM has prepared the ground for the community to participate by institutionalising community led action. The mission has created spaces for participation at all levels, from the village to the district. It has emphasised the role of the village health sanitation and nutrition committee under the panchayat to monitor the health of the community. Decentralised planning has been advocated at the district level. In the context provided by the NRHM, can community participation lead to greater access to health care services?

Objective of the research

The objective of the research is to look at how community participation takes place in a village and to what extent can access to health services be improved through community participation.

The research questions that this study looks at are:

1) The meaning of community participation and its inclusion in policy matters in India.
2) The concept of access to health services. What are the barriers affecting access to health services in India?
3) What are the caste and class relations within the study village? Do these differences come in the way of the village acting together as a community?
4) What are the various types of health facilities available to the village community?
5) What are the health needs of the community? Where all do people go for treatment for these health needs?
6) What are the various mechanisms for community participation under NRHM? Have these been established?
7) How does participation take place in the village? What are the processes that bring people together for community led action or participation?
8) Can community participation at the village level increase access to health services?

Research methodology

This is an ethnographic study of a multi-caste village in Seoni district. The research used both qualitative and quantitative methods. Participant observation was the main method since it is an ethnographic study. The researcher lived in the village from April 2009 to March 2010. It helped to understand the social structure of the village and the social, economic and political linkages between various communities and households. In-depth interviews were carried out

with selected households to track illnesses in households and cultural notions of disease. In-depth interviews were held with private and public health service providers in and around the village, village health committees; panchayat members; and other key informants.

The survey

The aim of the survey was not to quantify absolute morbidity or quantify use of services, but to understand patterns of access to health care. All households in the village were included in the survey. And all members of the household were included, even newborns. Only those households who spent most of the time outside the village and hence their house was locked were left out. A total of 199 households were included. The survey was carried out using a structured partly pre-coded interview schedule. The households in one ward were taken up together for survey. At most places the respondent was the lady of the household assisted by other women. The household was defined as those members sharing a common kitchen. Before starting the survey a pilot survey was carried out in a nearby village.

The interview schedule for the survey was divided into six parts. The first part recorded household characteristics such as size, gender of head of household, religion, caste and years of residence in the village. Demographic, educational and occupational details of all members of the household were taken. Along with this the heights and weights of all household members was taken. In case, some of the members were not there, repeated visits were made only for heights and weights. All heights and weights were recorded within four days of interviewing the family.

The second part of the schedule was about the health status of household members. For current health status, the respondent was asked if anyone was unwell in the household that day. Chronic and repeated illness of a duration of more than 21 days was recorded for any member in the household in the past five years. Disability, hospitalisation and mortality in the past five years in the household was recorded. For all illnesses and mortality, the symptoms, duration, source of treatment, amount spent and amount of loan taken was asked. Based on the symptoms, the type of illness was coded. The classification of symptoms into type of illness was checked by the researcher's Ph.D supervisor Prof. Ritu Priya who trained as a physician. Prof. Ritu Priya also classified the symptoms into various groups. Regarding the source of treatment, it turned out that often people visited more than one health service provider if the illness continued for more than three days. Many could not tell the amount

spent, for reasons such as, not being able to remember, did not handle finances, did not know or had been to too many places for treatment. Regarding the amount of loan taken too, many were unable to recall.

The third part of the interview schedule is about preventive health services being provided by the public health system such as health camps organised, immunisation, etc. The fourth part focused on reproductive health and was canvassed to ever married women in the age-group 15-45 years. The fifth part is about the economic status of the household. This covered ration card, infrastructure, sources of income and movable and non-movable assets. The sixth and last part pertained to indicators for community participation such as attending *gram sabhas*, knowledge about village level committees, membership in any other organisation or self-help group.

The study tries to construct a holistic picture of the felt health needs of the community. While height and weight of the population has been taken to overcome perception bias in reporting, there still remain other issues that have the potential to influence reporting of morbidity. Some of these are cultural perceptions of illness, issues of gender of the respondent and that of the investigator, time of the year, and selective memory if the recall duration is long.

Selection of field area

This is an ethnographic study of Peepalkheda (pseudonym) village in Seoni district of Madhya Pradesh. Seoni district is in the southern part of the state spread over 8758 sq.km. Of the total population in the district, 37% is scheduled tribes and 10% are scheduled castes. The selection of the district has been purposive. It is neither at the bottom nor at the top of the state in terms of development indicators. The human development index for MP (GoMP, 2007) shows that on health, education and income the district ranks above average but in terms of access to safe drinking water, latrine, assets, etc, the district is below the state average. The selection of the district has also been influenced by the fact that not much research seems to have been carried out in this district. The district was also chosen from a region where there was less *ghunghat/purdah*, and traditionally more women were seen in public spaces since the researcher is a woman. In this region adivasis have been residing for centuries and their women face fewer restrictions for going in public spaces and events.

The selection of the village was also purposive. The criteria that governed selection of the village for study were 1) a multi-caste village to understand differential access and utilization by various socio-economic groups, 2) village should not have a public health facility situated there, however it should have easy access to the facility, preferably within 2-3 kilometres, 3) there should not be any NGO working on health issues in any capacity in the village and 4) there should be between 180-220 households in the village to enable a good survey. The choice of the village was also influenced by availability of contacts, cooperation by the village residents and availability of accommodation.

Before starting fieldwork in the village, effort was made to collect district level data from the district secretariat and the health department. After the village study, discussions were held with various officials in the health department. During this period, three chief medical officers (CMO) had headed the health department and the block medical officer was also changed once.

Table: 2.1 Selected Indicators for the State and District.

Indicators	**MP**	**Seoni**
Total population (Census 2001) (in millions)	60.35	1.2
Scheduled Tribe population	**20.3 %**	**36.8%**
Rural	25.8%	40.1%
Urban	4.9%	7.7%
Scheduled Caste population	**15.2%**	**10.3%**
Rural	15.6%	10.2%
Urban	14%	11.3%
Households occupying *kutcha* houses	**2.7**	**1.1**
SC households occupying *kutcha* houses	3.6	1.0
ST households occupying *kutcha* houses	4.3	1.7
Houses with access to electricity	**70**	**66.7**
Houses with access to safe drinking water	**68.4**	**66.4**
Houses with access to latrine	**24**	**14.6**

Households without any of the specified assets	**42.2**	**49.8%**
SC households without specified assets	47.1	47.8
ST households without specified assets	65.7	65
Crude literacy rate	**63.7**	**65.6**
Male	76.1	77.2
Female	50.3	53.8
Percentage of Children suffering from total malnutrition	**50.38**	**47.75**
MMR (lowest – highest blocks)	379 (SRS 2006)	636 – 1146 (M.P.HDR 2007)
Population per health centre	6645	7308

Source: Government of Madhya Pradesh (2007) Madhya Pradesh Human Development Report 2007: Infrastructure for Human Development.

CHAPTER 3

THE VILLAGE PEEPALKHEDA

Policies and programmes of the government have viewed the village as a community as regards the implementation of health programmes. The village as community fits the traditional definition of the community as a territorial unit. However, communities have not been confined to territorial units either in the past or in the present, examples of non-territorial communities are caste groups, professional communities, virtual communities, etc. There are other criteria that are important for forging a sense of community. These are notions of shared needs, interests, values; a sense of identity; and a feeling of support from other members of the community. Furthermore, at any point of time people are members of multiple communities and therefore membership of a community is contextual.

The government's tendency to view the village as a community also stems from administrative concerns. For the government, the village as a community is a geographical administrative unit and an effective way of implementing programmes. It is the only way that the state can reach out to people with health services, in contrast to people approaching health institutions.

Most Indian villages are not homogeneous units but are divided in terms of caste and class. This results in a high degree of inequality and entrenched hierarchical social relations within a village, which has an impact on access to resources. Since the major objective of community participation is to ensure that the health needs of the village community are met, community participation will have to address access to health services corresponding to health needs across these social divisions, especially of marginalised people.

Many have asked whether the Indian village can be considered as having cohesion given the divisions along caste lines. In this regard Pocock and Dumont have argued that the 'solidarity of the village' is an artificial creation and that relationships between castes are the real unit of study (Béteille, 1974). Dumont and Pocock view the Indian village as an 'architectural and demographic fact', and elsewhere Dumont argues that the concept of a community is necessarily an 'equalitarian group' and therefore he is critical of the tendency of Indian scholars to underplay the inequality and hierarchy in the Indian village (Srinivas, 1998).

Srinivas in response has contended that Dumont does not consider 'the question whether unequal groups living in small face-to-face communities can have common interests binding them together' (Srinivas 1998, p.21). Srinivas (1986 (1969)) points out that there are two types of ties that operate at the village level. The first is horizontal ties or solidarity which is seen within a caste. The second is vertical ties or solidarity which refers to ties between castes which may be of economic, political or ritual nature. 'The weaving of stratified castes into a unity on the basis of division of labour, and common loyalty to the village may be termed "vertical solidarity" ' (Srinivas, 1986, p.44). He points out that people of a village often have a sense of unity and identity which is usually seen in the celebration of festivals, or when epidemics or drought hits a village and the local deities are appeased. Furthermore, people are distinguished on the basis of village membership at the caste level and on the basis of caste at the village level (Srinivas, 1986).

If we consider the village as a community, albeit one based on socio-economic inequality, the question remains whether these inequalities can be overcome and the village community is able to take into consideration the health needs of all across all strata. In this chapter I look at the way the village is stratified and the various ties between the people of the village.

Peepalkheda village

The village of Peepalkheda is a multi-caste village of 199 households. It is about 27 kilometers from Seoni town in one direction which is the district headquarters and is 25 kilometers from Kurai, the block headquarters in another direction. An unpaved road connects Peepalkheda to Talgaon two kilometres away, where the bus from Seoni town comes. This important arterial road that connects Seoni to Talgaon was an unpaved (*kutcha*) road till 2004. A couple of private operators ply mini buses that connects the area with Seoni town. The last bus for Seoni leaves at 3.45 p.m. hence it is difficult to go to Seoni after that unless you have your own transport. Apart from this there is also a 'commander' (jeep) service, that runs between the area and Seoni town. In an emergency, people hire this 'commander' to get to Seoni.

Life in Peepalkheda is inextricably linked with Talgaon. Apart from being the main bus stop, Talgaon is also the main market place in the radius of six kilometres. A weekly market is held every Thursday where cattle, goats, hens, fruit and vegetable, vessels, cloth, spices and

other food items are sold. Recently a silversmith has also started coming regularly to the weekly market.

Health services, both private and public are located in Talgaon. The government health sub-centre and the residence of the auxiliary nurse midwife (ANM) is in Talgaon. On the weekly market day a government mobile clinic from the block comes to the market. Apart from the government health services, there are five non-formal practitioners in Talgaon who are the main health providers for villages in a radius of seven kilometres. There are also four chemist shops in Talgaon. Apart from the government health sub-centre, there is also a post office, a telephone exchange and a bank in Talgaon. Till 2005, all residents of Peepalkheda used to get grain from the public distribution system (PDS) outlet in Talgaon. A separate PDS outlet was established for Peepalkheda gram panchayat in 2005.

There is a senior secondary school in Talgaon which serves all the surrounding villages. After completing primary school all children from Peepalkheda go to Talgaon for schooling. This school was upgraded to a senior secondary school in 2002. Since 2005, two private primary schools have also started functioning in Talgaon. One of them is an English medium school that is patronised by the well-off families in the area.

Talgaon is the centre of economic activity in the area. People from Peepalkheda have started to set up shops in Talgaon. The only barber's shop, two mobile shops and two ladies' tailoring shops (both set up by women) have been set up by residents of Peepalkheda in Talgaon.

Ecology

The village is situated in the Satpura hills in southern Madhya Pradesh. Peepalkheda is surrounded by a designated forest area, however there has been large scale denudation of the forest by residents for firewood. Villagers say that about 25 years ago the forest was very dense and that leopards and other big cats used to come into the village and take away goats. The Sal tree is found in abundance in the area. Today, trees with some canopy are seen only on the top of the hills, while only the stumps of trees remain in the rest of the forest. While the poor women fetch only small amounts of firewood that can be carried on the head from the forest, the well-off get cartloads of firewood comprising of whole trees from the forest. The present forest guard has the reputation of being particularly corrupt or easy to handle,

depending on the perspective. One only has to pay Rs.200-300 to the forest guard or give him some hemp leaves (*ganja*) to smoke and one can take a cartload of wood from the forest. A small rain fed canal encircles the whole village and marks its natural boundary. Till the year 2000, the river had some water most of the time (except peak summers), but with a large number of bore-wells being installed, the river fills up only when it rains. All the cultivated land is within this natural boundary formed by the river. The small area where the river does not encircle the village, small hillocks which are part of the forest form the village boundary.

History of the region

The district of Seoni is part of the Gondwana area. The following summary of the history of the region is based on Prasad's (2003) account of the history of Gonds of the area. Prasad questions the assumption that Adivasis were living in forests since time immemorial. She argues that Adivasis did not live in forests since time immemorial and their residence in the forests was perhaps due to marginalisation by the Maratha polity that was carried on by the British. There is evidence of the Gonds using the plough since the beginning. Forests as an important part of the livelihood of the Adivasis is not found in the pre-Maratha histories. Gond society was occupationally differentiated in pre-Maratha period. They viewed themselves as prosperous with land and wealth. This region was ruled by sovereign Gond chieftains, who paid a nominal annual tribute to the Mughal empire to demonstrate their loyalty and in turn were allowed autonomous control over their territories before 1730s. After the decline of the Mughal empire, the region was taken over by the Marathas who pushed the Gonds from the plains into the forests. Non-Gonds were settled in the lands abandoned by the Gonds. Some communities lost their livelihood and these events may have led to the political and social marginalisation of the Gonds. Defeat of Gonds in subsequent battles with the Marathas resulted in the former sovereign chieftains being demoted to the status of 'large landowner' (zamindar). The Gonds were able to retain their zamindari or landowner status in the hilly tracts and took refuge in the forests from Maratha dominance in the plains. A class conflict also appeared between the Gond zamindars and their subjects due to plundering of villages by armies of the zamindars. Prasad links it to the tribute the zamindars had to pay to the Maratha king in Nagpur. At the same time the peasants were forced to pay tribute to the zamindars. The zamindars allowed the villages some control over their own resources and allowed collection of forest produce as long as they paid some due or worked in the zamindar's fields for some hours. At the beginning of the 19th century, the British established control in the region. The British too viewed the land occupied by the Gonds as economically

very profitable. The defeat of the Gonds at the hands of the British was the final chapter in the process of marginalisation of the Gonds from fertile areas to the hills of Satpura and Vindhyachal. With British control, the Gond zamindars were permanently settled in hilly inaccessible and marginal tracts and a centralised control of natural resources was created. The malguzari and raiyatwari revenue systems that was introduced further pauperised the Gond peasants who had marginal tracts of land (Prasad, 2003).

Historically, the malguzari system of revenue collection was in force in this area. Under the Marathas, the malguzar was merely a revenue farmer, usually a person of wealth or influence who had been given the task of collecting revenue. The British bestowed proprietary rights on the malguzar and he was held responsible for the payment of revenue. The farmer who collected revenue was originally called 'mukaddam' but after 1855, the title of malguzar was used. The malguzari revenue system was abolished in 1950 (Patel, 1995). The traditional headman in Peepalkheda is even today called mukaddam.

Settlement pattern in the village

Like most villages in India (except hills and desert), the village settlement pattern is made up of homesteads clustered together and fields surround the residential settlement. However, unlike most multi-caste villages in India, the settlement pattern of the village Peepalkheda is not divided along caste lines. In some multi-caste villages, households of the same caste or those at the same level in the social hierarchy are clustered together in hamlets and often, many such hamlets of different castes together make up a village. In other multi-caste villages, households of a caste are concentrated in a particular ward or street. In most villages, even if the village settlement is not along caste lines, scheduled castes live at a distance from other Hindus. However this is not the case in the village of Peepalkheda. Peepalkheda does not have segregated neighbourhoods or lanes where people of a particular community reside. In Peepalkheda, Adivasis, Raghuvanshis, Kalars, Lodhis, potter, washerman, Muslims and even Chamars live side by side. In Peepalkheda there are three Schedule Caste households, of which two households live on one of the main streets. Their next-door neighbour on one side is Raghuvanshi house and on the other side a Lodhi house. All houses in the village leave about two feet at least on each side of the house. The only time when this is not done is when the existing house is divided among the relatives. The main square of the village has a peepal tree in the centre where all public meetings, except those

that take place in the panchayat office, are held. The square is called the 'market square' (*bazaari chowk*) because of a single shop there. The house of the traditional headman is situated in the square. The Muslim families, though clustered together, live in the centre of the village in the main village square opposite the traditional headman's house. Other houses in the main square are those of Raghuvanshis, Lodhis and a potter.

This mixed settlement of households of different castes is partly due to the history of the village. While it is not possible to say when the village came into existence, it can be said with assurance that the village has existed for at least 150 years. The village was very small originally. The initial inhabitants of the village, according to old Adivasi residents, comprised of Adivasis and a few scheduled caste families. Lodhis, Kalars and Muslims came after that, but have been residing in the village for at least 150 years. The population of the village has grown considerably in the last 60 years. This increase is partly a result of the general increase in population all over the country. The second reason is due to in-migration in large numbers of Raghuvanshi families into the village. The main communities in the village before the Raghuvanshis settled here were the Lodhis, Kalars and Adivasis. Of these the Kalar community was the smallest but the traditional headman of the village is from this community. Lodhis are present in large numbers in the neighbouring villages too. The social composition of the village began to change when two Rahuvanshi families came to the village from the districts of Betul and Chhindwada in 1952. They came as the land here was cheaper. They sold whatever little land they had in that region and bought larger tracts of land in the village. The first two Raghuvanshi families who came to the village continue to be, along with the traditional Kalar headman, the largest landowners in the village. It should be pointed out that these two Raghuvanshi families were not related to each other, and the status quo continues. After these two families, other Raghuvanshi families started to come to this region and along with them, their extended families too migrated to this village. Most of the Raghuvanshi families migrated in the last 40 years and the last Raghuvanshi family came about 10 years ago. Migration is an on-going process in the village. In the last ten years, migrants to the village have been Adivasis, Lodhis, a blacksmith, a Brahmin and a Muslim household. But now agricultural land is no longer cheaper here than other districts.

As mentioned earlier, the village has grown both in size and density as a result of two developments. First is due to the general increase in population that has led to division of households. When households divide, the initial division is within the existing homestead.

The rooms within the house are distributed between the sons or additional rooms are built in the courtyard of the existing house. If space is not available, then additional space is looked for in the village, usually in barren land or in a corner of the family's fields. The second reason for expansion of the village is inward migration. Migrants to the village are of four types. The first are those who have very close relatives, usually natal family or siblings living in the village and are looking for livelihood. Most of these are women who grew up in the village and have come back to live in the village with their husbands and children, or those women who are widowed or separated and have returned to be close to their natal families. This is an important reason for migration in the last 15 years. In some cases the women have inherited agricultural land which acts as a strong pull. The second category of migrants is of those who have distant relatives living in the village, but basically came looking for livelihood opportunities. The third category is of those who were invited to the village because of the specialised services they could provide, such as the *dai* (midwife) who was invited to settle down 25 years ago and the blacksmith who came to the village eight years ago. The last category of migrants are those who do not have any relatives in the village, but live here as their source of livelihood is in Talgaon and they are unable to find accommodation there. Migrants who do not have natal family or siblings in the village initially start out by renting a room, and then build a house on a piece of barren land in the village. However, most of the barren land in the village has been occupied.

In the survey, 63 (31%) of the households reported that their forefathers had always lived in the village, these households have been listed as original settlers. Of these households 37 (58.7%) are Adivasi, 1 (1.6%) is SC and 25 (39.7%) are OBC. (The block as well as the district has a high proportion of scheduled tribe and other backward class population.)

Table 3.1: Number of households by caste category that consider themselves original residents

ST	SC	OBC	General	Total
37 (58.7%)	1 (1.6%)	25 (39.7%)	0	63 (100.0%)

Social stratification

The most pervasive form of social stratification in India has been based on caste (*jati*). Caste refers to a 'hereditary, endogamous, usually localised group, having a traditional association with an occupation, and a particular position in the local hierarchy of castes' (Srinivas, 1962, pp3).Traditionally among Hindus, relations between castes are governed by notions of purity and pollution in such a way that the castes lower in the hierarchy are considered polluting by those higher, and therefore touching a person from a lower caste would make the higher caste person impure. The corollary of this is that food would be accepted from castes at the same level in the hierarchy or from those above. While the caste system is based on Hindu theology, castes are found among other religions in India, though notions of purity and pollution are considerably weaker. In fact in most villages, when people mention the various castes that are resident, they will also include people from other religions as a caste group. In this region of Madhya Pradesh, the term *samaj*[1] (community) is used instead of *jati* to refer to caste groups.

I have used the government's classification – scheduled castes (SC) or Dalits, scheduled tribes (ST) or Adivasis, other backward classes (OBC) and general – to describe the caste structure of the village. However, within these categories, I use the classification as is practised in the village, as there are differences in the social classification as per village norms and the government classification.

Table 3.2: Number of households by caste category

Caste Category	Households	Percent
ST	68	34.2
SC	3	1.5
OBC	63	31.7
General	65	32.7
Total	199	100.0

[1] *Samaj* in Hindi can be translated as community, society and assembly, depending on the context.

The Adivasis (Scheduled Tribes)

The Scheduled Tribes who refer to themselves as Adivasis are among the original inhabitants of the village. The Adivasis in Peepalkheda comprise - Bhois, Pardhans, Gonderia-Ahir and Gond Lohar. An Adivasi resident who is politically active put forth this explanation, 'we are all sons of the same mother, but like all fingers of the hand are not the same, so too with us. These differences among Adivasis are due to the different works that people did.' The Bhois, Pardhans, Gonderia-Ahirs and Gondaria-Lohar have commensal relations with each other but do not intermarry. The Bhois are also called Rajgonds or just Gonds. They have the highest status amongst the Adivasis. Other castes are also aware of them as being highest in status and treat them accordingly. I once heard my host (a Kalar) remark about a Pardhan, who he thought was being very uppity, "he is only a Pardhan but calls himself a Gond, if he calls himself a Gond let him get a Gond alliance for his son". However, the term Gond is used as a general term for all Adivasis by non-Adivasis mostly in urban areas. There is evidence of usage of the term Gond for all Adivasis living in Gondwana region even in the 19th century (Prasad, 2003). The Pardhans are also known as Rajmukasi, but no one in the village could say whether the Pardhans had a traditional occupation other than agriculture or whether they came from a different area. The Gonderia-Ahir were cattle grazers and some original households still take cattle to graze. The sole Gondaria-Lohar household does not practice the occupation of a blacksmith.

The Bhois, Pardhans and Gond-lohar in the village said that they had scheduled tribe (ST) status. The group that faces a problem of categorisation are the Gonderia-Ahir, also known as as Gond-Gowari. Gondaria-Ahir have been categorised as other backward classes (OBC). The Gonderia-Ahir claim that this happened due to problem of nomenclature during a census conducted by the Madhya Pradesh Government in 1976. Ahirs are traditional cowherds and the Gonderia-Ahirs are also cowherds but from the Adivasi community and are different from the Ahir caste. During the listing of communities by the state government, the Gonderia-Ahirs were noted down as Ahirs. As a result of which they were clubbed with Ahirs and not given the ST status. The Gonderia-Ahirs/ Gond-Gawaris are regarded by other Adivasis and also by non-Adivasis as being Adivasi. They have commensal relations with other Adivasis, share the same surnames, and participate in rituals and festivals with other Adivasis. But in official records they are not regarded as a scheduled tribe. As a result they are not able to utilise the benefits given to STs but only those given to OBCs which are fewer. They also

feel at a disadvantage when competing with other OBCs, as the OBC groups are economically better-off and more powerful than them. For the past thirty years, the Gonderia-Ahirs have been running a campaign to get themselves reclassified as ST. Two persons in the village complained that the lack of a ST status had made things difficult. Both were landless. The first was the NGO worker, Suraj, who had made my stay possible in the village. He was applying for employment in a government project where, special emphasis was being given to recruitment of Adivasis. He said that since Gonderia-Ahirs were not given ST status, he was at a disadvantage. The other case was of a girl who had completed her 12th, and was also from a landless family. She told me that if the community had the ST status she could have joined college because she would have got a scholarship which would have covered most of costs of college education.

I was told that the Madhya Pradesh Administration (*M.P. Samanya Prashasan Vibhag*) had issued a circular in September 2009 which listed the Gond-Gowari as a scheduled tribe in the state. However people involved in the campaign reported that ST certificates had not been issued.

Dalits (Scheduled Castes)

The Dalit (schedule castes) in the village comprises three Chamar (leatherworker) households. The Chamars in the village are of two types – those who skin animals and make leather shoes; and those who play the *dhol* (drum) and their wives are called to carry out deliveries (*dai*). The dai was brought to the village about 25 years ago by the earlier traditional headman as there was no dai in the village. Of the two leather working Chamar households, one household skins animals, while the other household works as shoe maker.

Other Backward Classes (OBCs)

The OBC category comprises of the Kalars, Lodhis, Nai, Kumbhar, Lohar and Dhobi among Hindus and the three Muslim groups in the village – Khan, Momin and Mughal. The Kalars are divided into two sub-castes, Rai and the Deharwal of which the Rai consider themselves superior. The Rais and Deharwals eat together but do not intermarry. The traditional headman of the village is a Deharwal, to whom villagers still go for arbitration when there is a dispute in the village. The Deharwals are traditional oil pressers and one household also brews liquor. The Rais do not work as oil pressers. Other castes refer to the Deharwal Kalars as *teli* (oil

pressers). The Rais would always refer to themselves as Rais and not as Kalar to differentiate themselves from the Deharwals, while other castes always referred to them as Kalars. The Rais are finding it difficult to get brides from their own sub-caste these days and have therefore started to take brides from the Daharwals, though it is still not preferred and no one in the village has done it.

The Lodhis are found in large numbers in most of the surrounding villages. Before the Raghuvanshis came to the village, the Lodhis were influential due to their numbers. Even today, in terms of numbers, Lodhis are the second largest group after the Raghuvanshis, albeit a distant second. Some of the influential people in the village are from among the Lodhis. There is one Dhobi (washerman) household in the village, three potter families, two Lohar (blacksmith), but only one household engages in that work. There are four Muslim households in the village. These are Momin, Khan, and Mughal by caste. Of these the Mughal household has recently come to the village, about two years ago when they decide to break away from the husband's family in Talgaon. The other Muslim households have been residing in the village since the beginning.

General category

A single Brahmin family and the Raghuvanshis make up the general category. The Brahmin family came to the village about eight years ago. The man gives religious discourse and is called to conduct ritual worship (*puja*) in the neighbouring villages, though he is not invited much by households in Peepalkheda to do the same. Nor is he in any way connected with any of the temples in the village. The Raghuvanshis started to came to this village in the 1950s and today are the largest caste in terms of number of households. Of the 199 households, 64 are Raghuvanshi households and the Lodhis are a distant second with 36 households. The Raghuvanshis claim Kshatriya status. Their higher social status, economic power and large numbers make them the dominant caste of the village. However, the Raghuvanshis are still regarded as outsiders and the rest of the village is united in their resentment against them.

Table 3.3: Households of different castes in the village

Caste	Number of households	Percentage of households
Raghuvanshi	64	32.2
Lodhi	36	18.1
Kalar	15	7.5
Bhoi	19	9.5
Pardhan	26	13.1
Gonderia-Ahir	22	11.1
Chamar	3	1.5
Kumbhar	4	2.0
Lohar	2	1.0
Brahman	1	.5
Momin	2	1.0
Dhobi	1	.5
Khan	1	.5
Mughal	1	.5
Gond Lohar	1	.5
Nai	1	.5
Total	199	100.0

Table 3.4 : Religion of households

Religion	Households	Percent
Hindu	195	98.0
Muslim	4	2.0
Total	199	100.0

Ninety-eight percent of the households are Hindu, this includes Adivasis. The Adivasis in this area identify themselves in terms of religion as being Hindu. The term Hindu in this area is contextual. Adivasis and Dalits use the term Hindu to refer to non-Adivasi and non-Dalit

caste Hindus. When specifically asked which god do they worship, the Adivasis said Mahadev. According to Prasad (2003) Mahadev or Shiv is originally the God of the Gonds. I was told by socially and politically influential Adivasis in the village that in terms of religion all Adivasis in this village will fall in the Hindu category.

Economic stratification in the village

The other type of hierarchy is the class position based on a household's situation in the village economy. The economy of the village revolves around land mainly and those who carry out agricultural activities. At the top of this hierarchy is the large landowner and at the bottom is the landless labourer. The vertical ties in the village are ties of dependency between the landowners who are the source of employment and the landless who work as labourers. Those who are not able to make a living from the land migrate to cities to work as wage labourers. There are few others in the village who provide other services such as barber, carpenter, tailor, etc; but even for them, agriculture is the main source of livelihood. As of now, land is the most important indicator of economic position. Though a government job is an important way of improving economic status.

The National Sample Survey (NSS) has examined changes in agrarian structure on basis of size class operational land holding. The categories of household operational holding are landless, marginal, small, semi-medium, medium and large. The NSS report shows that since the 1960's, the percentage of households that are landless or have marginal holdings have gone up while those in other categories have decreased (NSSO, 2006).

Beteille (1974) has argued that those studying rural economic problems or even tenancy have paid lesser importance to class relations or 'institutional factors' than to technological issues or productivity. The study of social class, Beteille points out is about problems of distribution and about interrelations and surveys focus largely on the distribution aspect. The distribution of classes that one gets from surveys and census refer more to 'statistical convenience' than 'sociological relevance'. Beteille has maintained that the structure of rural classes in India have to be studied in localised rather than globalised terms. In India ownership and control of land and other property is more significant than occupational or income categories, and therefore if we define classes in terms of ownership, control and use of property, it will help

us understand important features of those societies where land ownership is the fundamental basis of social divide (Beteille,1974).

The households in Peepalkheda on basis of their land holdings and labour status can be divided into five categories - big landowners, farmers, small farmers, share croppers and landless. At the top of the hierarchy are the big landowners who do not work on the land themselves but distribute the land to various sharecroppers. The big landowners are able to farm throughout the year. All the landowners have land close to the river. They have dug wells in those pieces of land that did not have any irrigation previously. Though the landowners do not cultivate personally, they are involved in everyday supervision of agriculture and are also seen doing tasks like taking the produce in a bullock-cart or helping in loading. The most striking characteristic of landowner households is that the wives are not involved in agricultural work at all. All big landowners carry out small manual tasks like feeding their own animals. The women of the households do minor agricultural tasks in the house.

The second category comprises farmers who work on the land themselves and also hire labourers at specific times. These farmers have parcels of land that may be irrigated and non-irrigated. The third category is that of smaller farmers who have small parcels of land or non-irrigated land and primarily use family labour. What differentiates the third category from the second is primarily the size of holdings. Rarely do the small farmer households (3rd category) hire labour, and when they hire it is mostly for transplanting paddy. Most of these households have lands that do not have irrigation and hence grow only the kharif crop.

The fourth category is that of sharecroppers, who may or may not own small parcels of land, but whose main source of livelihood is sharecropping. Sharecropping (*adhiya-batiya*) can only be done by those who own a pair of bullocks. Those households that do not own bullocks subsist on wage labour. The division of produce depends on the type of land being cultivated. If the land is irrigated, the landowner pays for the electricity bill of the bore-well, and two-thirds of the investment in terms of seed and fertilizer. The owner gets two-thirds of the produce. The share-cropper puts in his labour, implements, animals and one-third of seed and fertilizer and subsequently receives one-third of the produce. For non-irrigated land, the division is half and half. The owner pays for fifty percent of seed and fertilizer and receives fifty percent of the produce. The sharecropper has to put in his labour, use his animals and

implements, contribute half the seed and fertilizer, and receives half of the total produce. The share croppers have to do everything from tilling the land to harvesting the crop. Certain tracts of land are handed over to a particular person. His whole household then works on that piece of land as labour. A frequent complaint among sharecroppers is that this system does not give more than wage labour. Share-cropping is done on a yearly or half yearly contract (for kharif), usually commencing on the festival of *akshya tritiya*.

The fifth and lowest in hierarchy are those who work as labourers, the majority as casual labourers. In contrast to sharecropping, casual labour is either on a day to day basis or for very short periods of time at certain times of the agricultural cycle, and therefore involves a high degree of uncertainty of employment. Casual labour (*bani majdoori*) is done by the landless, though some may own homestead land; and by marginal farmer households. For female headed landless household, this is the only form of employment in the village. However people complain that availability of wage work has reduced considerably. Now the only time that work is available is during sowing and harvesting. Earlier labour used to be hired for weeding, but that has stopped as most farmers now spray weed-killers in their crops. Male labour is used for ploughing the fields, while paddy transplanting is done by women. Full employment is available only for two months in a year – July and August. A few work on a yearly basis as servant (*naukar*) and have to do all types of work. Though this does not pay much it ensures a steady source of income.

Many labourers (*banihar*), especially men preferred working in neighbouring villages rather than in Peepalkheda. They would often say that the landowners in the village do not pay well. Often they would refer specifically to Raghuvanshi landlords. Women of poor households among Lodhi, Kalar, Adivasi, Chamar, Lohar and potter castes are found to be working as casual labour whenever they get work. In fact the usual complaint is that now work is not available. Women also go to work in neighbouring villages as wage labour. The landless among Raghuvanshis do not work on anyone else's land in the village. Any sharecropping that they do is done in other villages or will take up a different kind of work outside the village like road construction, etc.

In the last fifteen years, Raghuvanshi women have stopped doing casual labour in the village. When the Raghuvanshis came to the village, their women also used to work as wage labourers in other people's fields. In fact Raghuvanshi women who are over sixty years of

age would tell me how poor they were when they came to the village and have acquired land by dint of hard labour. In many a poor Raghuvanshi households, women said that because they are Raghuvanshi they cannot do wage labour as no Raghuvanshi woman does it now. However, Raghuvanshi women will work on a reciprocal basis in the fields of other Raghuvanshi households at the time of transplanting paddy. At this time women of one household will work for another Raghuvanshi family with whom the family has good relations, and the women from that household will reciprocate when needed. There was one Raghuvanshi woman who had returned to her natal home with her minor son. This woman had no other source of income except wage labour, but even she would work for other Raghuvanshis as much as possible. Restrictions on women working as labourers is not, as of now found among other castes (except the Brahmin family).

When agricultural work is unavailable, men from poor families migrate out of the village. For short periods of time, men are employed in digging farm wells in the district or adjoining districts, especially in summers. Agricultural labourers are also in demand in Maharashtra. The city of Nagpur provides wage work for most, especially in the construction sector. A few go to Bhopal too. When men migrate for longer periods, they usually take the family or part of the family with them.

The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) has made a difference in terms of availability of work for a few months. Typically, MGNREGA works are started in April and May and in winters in the months of January and February. At other times, some amount of agricultural work is available. But all labourers complain that the availability of days of non MGNREGA work has decreased. Earlier women used to get Rs.20 and men Rs.40 for a day's work. The wages for non-MGNREGA work has gone up to Rs.40 for women and between Rs.50-60 for men (2009). For 26 days of work this works out to Rs.1040 for women and 1560 for men, however these many days of work are only available during the months of July and August. During fieldwork (January 2010), the MGNREGA wage rate went up from Rs.91 to Rs.100. Even so, many labourers find that after evaluation of the work, they only get Rs.70. As the wage rate in Nagpur and other parts of Maharashtra is higher, people prefer to work in Maharashtra. More women in the village go for MGNREGA work than men.

Rearing of animals

Most households kept either cattle or goats or hens. In poor households, this is an important source of income. Households without even a few hens are few and represent the destitute. However, even the poorest among the Raghuvanshis will not own hens or goats. This a mark of status for the Raghuvanshis. The only exception is when a goat is sacrificed to the field deity. In this case a goat is looked after the family for three years after which it is sacrificed in the field.

Households of other castes too stop rearing hens and goats as they acquire wealth. This is seen when a household tries to improve its social status. None of the large landowners in the village irrespective of caste owns any hens or goats. Keeping buffalo is economically remunerative while milk from cows is only for household consumption and a mark of status.

The cattle are taken to graze to the forests by traditional cattle grazer households (Gonderia-Ahir) that collect animals from different households. This is the primary occupation for these households. Goats on the other hand are taken to graze by household members to whom they belong, often by children.

Lending and borrowing in the village

Another type of vertical economic tie that binds households is that of creditor and debtor. Given the paucity of cash available in the village, money-lending is a very profitable activity. If a person borrows a small sum of money (Rs.500 - 1000) and returns it within a week, no interest is levied. But in all other cases, interest is charged. Small amounts are loaned by many but the two biggest money lenders are Raghuvanshis. These money lenders are not the largest landowners but have the ability to tackle defaulters, and easily use physical force.

The first source of credit is the extended family, neighbours and friends. For the landless, often these sources are insufficient as they are in the same economic situation and are unable to provide credit. In most cases, for small sums of money people, casual labourers try to payback on the payday of the week. If the family in need of money is working as servant (*naukar*), then the employer is also often approached. The money-lender is the last and least preferred option.

Money lending is done mostly by Raghuvanshis and a few Lodhi and Kalar families. Since the two Raghuvanshi families are the main money lenders, the rate they have fixed prevails. Interest rates in the village are between two and ten percent per month, and varies with caste and economic position. If a Raghuvanshi takes between Rs.1000-3000, then rate of interest is five percent per month. If the amount borrowed is between Rs.5000-3000 it is three or four percent, up to Rs.10,000 it is three percent, and beyond Rs.10,000, the interest charged is below three percent. The Raghuvanshis give loans to middle castes like Lodhi and Kalar at a rate between five and seven percent per month, and for Adivasis the rate is fixed at ten percent per month and does not vary. The rate of interest depends on the amount given and the ability to repay. Those who take large amounts (except for Adivasis for whom the rate is fixed at ten percent) pay a lower rate of interest. The interest charged is less if the borrower has the ability to pay back. The rate of interest is also less, if the loan is taken for a shorter time. If the loan taken is for more than six months, then the interest goes up. This policy is followed by the two main money lenders, and by and large by other smaller money lenders. What this means is that the poor (due to fewer assets that can be used as collateral) and Adivasis have to pay the maximum interest on any loan taken. According to some villagers, the interest rate in other villages is less, between three and five percent. In case of an emergency, the borrower has to take money at any rate that is fixed. In one case in the village, money was given at 15 percent per month.

There are others from the Raghuvanshi community who give loans at lower rates, but they do not give large amounts. For the smaller money lender, giving credit is not a major economic activity. The biggest landowning families do not give much loans, and give only to their workers. The biggest landowning family in fact gives very little loans and that too at two percent only. Nobody in the village gives for less than two percent.

There are other ways of borrowing too. Those who have been working for a certain landlord for some years, do take loans from them at a lesser interest or at times even for no interest and it is repaid by working without salary till the loan amount is returned. These are people who work as ‘servant’ (*naukar*) on a yearly basis with the landlord for a fixed amount.

Raghuvanshis in the village have a reputation of being aggressive and this was borne out in an incident that happened five years before field work. In the case of one of the two biggest Raghuvanshi money-lenders in the village, a servant who had been working with them for

many years had borrowed some money and in return his son was to work as servant. But the son refused to work. Hearing this, the sons of the moneylender, tied their old servant to a tree and beat him mercilessly. He was beaten so badly that he was unable to work again. He left the village and went to live with his daughter and died a couple of years later. The son still lives in the village with his family. No police complaint was filed.

In case of an emergency, the money lender is the only option. If the household has gold or silver jewellery, jewellers in Seoni are another source of credit. There they deposit their jewellery and get loan at a rate of two and a half or three percent per month.

It is not as if people don't try and save but have been defrauded. One private financial company has done this across villages in the block. The company printed savings books and sent agents to various villages. The villagers were happy to be given savings book. The agents collected money from households every month. The poor landless people deposited as much as they could per month, many deposited Rs. 200-300 per month. After about a year the person stopped coming and most people lost between Rs.2000-4000. Most people still had their savings book. The person stopped coming in 2008. (Subsequently the company PACL Ltd. was taken to court. Whether anyone in the village got back their money is not known).

Towards the end of 2009, one resident in the village started to distribute booklets on domestic violence and collected Rs.10 per booklet. This was being sold as an insurance against domestic violence for women for a period of six months. The booklet said that if a woman faced domestic violence she would be given Rs.10,000. The cover looks like a government booklet, with Pandit Deen Dayal Sharma's picture in the centre. The government health insurance card is also called the Deen Dayal card and has a picture of Deen Dayal Sharma in the centre. Most people in the village were unable to make out what it was and paid up Rs.10.

Push-back against Raghuvanshis

There have been attempts to stand up to the Raghuvanshi moneylenders. There was an attempt on part of all the non-Raghuvanshi castes to form an association (*sangathan*) eight years before the fieldwork. People decided that they would not take loans from the Raghuvanshis hereafter. It was decided that all families will contribute Rs.10 and a fund should be made. And this did happen. But the attempt to boycott the Raghuvanshis and not take loans from them did not last very long. My informant alleged that the Raghuvanshis got

to know of the situation very quickly and started to break the sangathan. The first one to move out of the sangathan was the former sarpanch of the Lodhi caste, who was himself a big landowner. The Raghuvanshis convinced others that the funds collected would not last long and would not serve everyone as they weren't enough. They argued that in the end everyone would have to come to the Raghuvanshis. The attempt to boycott the Raghvanshis fizzled out. Eight years after this happened, no one else was willing to speak about it, more so because I was still seen as an outsider.

Political authority and politics in the village

Traditional and new forms of authority co-exist in the village. The traditional form of authority exists in the form of the traditional village panchayat headed by the mukaddam where disputes are brought. Another traditional authority is the caste panchayat that is called to discuss issues pertaining to matters of that caste group in the village. The newer form of authority is the gram panchayat that functions as per the Panchayat Raj Act. The gram panchayat has been in existence since the last 20 years, but no one goes to the gram panchayat to solve village disputes.

Traditional panchayats

The traditional village panchayat referred to as samaj panchayat by the villagers is headed by the traditional village head (mukaddam). The mukaddam's family members were traditional revenue collectors till 1950 when the malguzari system of revenue collection was abolished. The other important work that the mukaddam does is to assess land holdings with the *patwari* (official who keeps land records) and the land revenue department. The family is of the Kalar caste who were traditional oil-pressers. The headship is kept in the family and keeps shifting between two households who are cousins. Even after the abolition of the malguzari system, the mukaddam continues to have the status of the village headman and arbitrates disputes in the village. The mukaddam gets both civil and criminal cases. For the villagers, in case of a dispute, the mukaddam is the first course of action for settling the dispute. Both parties present their case to the mukaddam and sort out the issue or come to a compromise and after that the agreement is written on paper. If that doesn't work out, then the unsatisfied party goes to the police. However some Adivasis feel that in case of disputes between Raghuvanshis and Adivasis, the mukkadam favours the Raghuvanshis.

Each caste also has its own panchayat, where issues regarding members of the community are discussed. When norms of the community are not followed, the caste panchayat ostracises the person or the household. Its role was visible during the gram panchayat elections. The panchayat decides upon the candidates who will contest gram panchayat elections from within the caste and it also decides which all candidates to support in panchayat elections, though not everyone follows the decision. In Peepalkheda, the caste panchayat has a decisive role to play in the politics of gram panchayat elections.

The gram panchayat

The gram panchayat became active only after the passing of the Panchayat Raj Act of 1993. Panchayats did exist before the act was passed but functioned sporadically and did not play an important role. Panchayats at all levels were constituted after the passing of this act. The gram panchayat of Peepalkheda comprises of the village of Peepalkheda which has ten wards and the neighbouring village of Aamgaon which has four wards. However as Peepalkheda is the bigger village, the gram panchayat politics are played out here. The panchayat secretary lives in Aamgaon and one of the most important person in the gram panchayat politics (Shankarlal) too lives in Aamgaon.

In 1996, the Panchayati Raj Act was made applicable to the Scheduled Areas under the Panchayati Raj (Extension to Scheduled Areas) Act (PESA). The Fifth Schedule of the Constitution applies in this block of Seoni[2]. PESA empowers the gram sabha to make village plans, manage natural resources and settle disputes in accordance with customary law. The Madhya Pradesh PESA also provides that the seats of the office bearers in the village, block and the district Panchayats in Scheduled Areas shall be reserved for the Scheduled Tribes, such reservation shall not be less than half of the total number seats in such Panchayats (PRIA, 2004). In accordance with this rule the Panchayat Secretary of the gram panchayat (a non-elected fixed post) is an Adivasi and only an Adivasi can be the Sarpanch of the gram panchayat.

[2] The Fifth Schedule of the Constitution of India deals with administration and control of scheduled areas and scheduled tribes in these areas. This covers tribal areas in the states of Andhra Pradesh, Jharkhand, Gujarat, Himachal Pradesh, Maharashtra, Madhya Pradesh, Chattisgarh, Orissa and Rajasthan. The Government of Madhya Pradesh enacted the Panchayati Raj Dwitiya (Sansodhan) Adhiniyam 1997. This Act, along with Panchayati Raj (Sanshodhan) Adhiniyam 1999 has amended the Panchayat Act of Madhya Pradesh to conform to the spirit of PESA, and to extend Panchayati Raj to the Scheduled Areas of Madhya Pradesh (PRIA 2004).

Panchayat elections

In Peepalkheda, panchayat elections are contested on basis of local ties and are devoid of party politics. These elections have an immediate effect on the people's lives and therefore personal ties are very important.

One of the most important person's in the panchayat politics is Shankarlal. Shankarlal's father was the first Adivasi gram panchayat president (*sarpanch*) after the implementation of PESA in Madhya Pradesh. In the next panchayat election in January 2000, Shankarlal decided to contest and became the sarpanch. Shankarlal's family are big landowners and are Bhois hothe highest among Adivasis in the area. One could consider Shankarlal's family as Gond zamindars. Shankarlal has two other brothers and each owns between 20-30 acres of land.

In January 2005, when panchayat elections were held, the position of the sarpanch was reserved for women. A few of the wards decided to select their own ward representative (*panch*) and avoid a contest. In wards with a substantial Adivasi population, this is the usual practice, since Adivasis like to resolve issues through discussion, I was told. Some powerful Raghuvanshis in the village suggested that the whole panchayat should be elected unopposed. (According to the Panchayati Raj Act, such a panchayat would get Rs. 100,000). Initially three ladies decided to contest for the post of the sarpanch. One of them was a young woman of about 22 years, who was propped up by Balwan Singh, the biggest money lender in the village. The other two ladies were 40 and 60 years old. The Raghuvanshis were interested in making the 22 year old woman the sarpanch as they thought that it would be easy to persuade her to do their bidding. This woman was an ideal rubber stamp as she had lost her father a few years ago and her elder brother was working in Nagpur. In addition she was not from a well-off family. In order to make this young woman the sarpanch, the 40 year old woman was persuaded to withdraw and was made a panch. The 60 year old woman was also persuaded to withdraw, but her son did not give up so easily. So he was made the deputy sarpanch (*up-sarpanch*).

When the young woman Sumi Bai[3] became the sarpanch, for the first year she did exactly as she was asked to do. But soon she too learnt the ropes. After a year she started to do as she

[3] Despite several attempts, the *sarpanch* was not willing to talk to me.

wished. This is when the Raghuvanshis became angry with her and some Raghuvanshis tried to create trouble by asking 'awkward' questions in the gram-sabha. (No one was ready to tell what were the awkward questions). She filed complaints against them under the Prevention of Atrocities Against Scheduled Tribes Act. The Raghuvanshis had to pay a hefty bribe to the police to get out of it. This happened three times. After that, I was told, the Raghuvanshis stopped asking awkward questions or creating problems.

The up-sarpanch was always opposed to Sumi Bai, since his mother was forced to withdraw her candidature for the post of sarpanch. The up-sarpanch narrated two incidents of opposing Sumi Bai. First she had given a contract to build the kitchen shed in the school. But the construction was not up to the standards prescribed by the government. The contractor had used the existing school boundary wall as the 4th wall without re-enforcing it. The up-sarpanch told the contractor that he would not allow the construction to proceed if the construction was so shoddy. Ultimately the work on the kitchen shed was redone. The second incident was regarding the contract of digging the lake in the village. The contract was given by the sarpanch to a Raghuvanshi family. The workers were employed from the village. But the contractor did not give the workers two days wages. The up-sarpanch got the workers together and went to the block office. When they reached there, before they could meet any body, the panchayat secretary came to the block office and told them not to complain and assured them that they would get the remaining wages. Everyone returned to the village and got the remaining wages. Later on when the sarpanch stopped doing according to the Raghuvanshis' bidding, the Raghuvanshis approached the up-sarpanch to complain against the sarpanch. Since the up-sarpanch was already opposed to her, he started to make complaints against her. But he soon realised that the Raghuvanshis were using him. One elderly person in the village advised him not to complain as it was a matter of the prestige of the village.

No one in the village was happy with Sumi Bai as sarpanch. The Raghuvanshis were unhappy that she did not do according to their wishes after the first year. The Adivasis were upset as she was seen as siding with the Raghuvanshis initially and did not do anything for Adivasis. Across castes, people were upset with her as she did not carry out any developmental work on her own. All the developmental work that was undertaken during her tenure had been initiated by the previous sarpanch Shankarlal. She and the panchayat secretary were known to be corrupt. During her tenure she asked for money (Rs.500) to make

ration cards, give proof of residence, etc., which turned the poor against her. The panchayat secretary was party to all of this. Other allegations against her were that she called for five trolleys of mud to be put on the roads of the village while the bill was ten times higher.

Panchayat elections 2010

The panchayat elections were held in Madhya Pradesh in January 2010 while I was doing my fieldwork. This time the post of sarpanch was no longer reserved for women. A month before the nominations were to be filed, all caste groups had their own meetings regarding whom to support. Within the Adivasi community, it was also a matter of who all will contest for the post of sarpanch as the Fifth Schedule is in force here. Two persons from Peepalkheda decided to contest, the first was Shivprasad, who is part of the 'first' family among Adivasis. He is a Bhoi and it is in their house that food is cooked for all the invited Adivasis when there is a wedding in a non-adivasi household. The second was Chunnilal who is a Pardhan. Both have about 4-5 acres of land. Shivprasad was propped up by Balwan Singh Raghuvanshi, who had made Sumi Bai the sarpanch earlier and is the biggest money lender. There were some murmurs that Shivprasad will again become a puppet of the Raghuvanshis. Shivprasad is also known to be a soft spoken person. Balwan Singh had told Shivprasad that if he contested, not only would he put the money, but would also get the Raghuvanshi votes.

Of the three contestants, Shankarlal has the most money. He comes from a traditionally affluent family. He also has good rapport with many families across castes. For the post of deputy sarpanch, Shankarlal selected a 30 year old Raghuvanshi, who is related to Balwan Singh. It soon became apparent that the Raghuvanshi votes would get split. Balwan Singh initially did try to garner support for Shivprasad but realised that it was not working and did not support him monetarily.

For the panchayat elections, each voter was given Rs.100 by Shankarlal. The new up-sarpanch after elections told me that of the total number of people who are given cash, it is expected that 50% will vote for them. Liquor and mutton was distributed especially in Adivasi households. The other two candidates could not match this large scale distribution of money. On the last day for withdrawal of names Shankarlal also made a deal with the other two candidates that he would give them both 25000, each if they withdrew their names. Both agreed, and they were supposed to meet at the election office, but at the last moment

Chunnilal did not turn up. Seeing this Shivprasad also went back without withdrawing his name. In the elections, Shivprasad got 13 votes, Chunnilal got 21 votes and Shankarlal got over 500 votes. The panchayat elections are not fought on party lines. Shankarlal himself is a staunch Congress party supporter while many of his co-ordinators (people who distribute liquor and money) support BJP. However in the panchayat elections in Peepalkheda, this did not make a difference. The elections are fought entirely along inter-personal ties in the village.

Attandence in gram sabha meetings

According to the Panchayat Raj Act, gram sabhas i.e. meeting of the entire village electorate, are to be held at least twice a year. Many villagers say that the gram sabha has not been held in the past two years. However others say that it has been held regularly. The traditional policeman (*kotwal*) in the village usually does the public announcement (*munadi*) in the village by going to different lanes in the village and announcing. He usually stands at the beginning of the lane and shouts out the issue. Most of the poor households say that either they don't get to know about the gram sabha or that they do not have the time. Residents of *pahadi mohalla*, where most of the landless labourers and recent migrants live, complained that they never get to hear the announcements. This is also because it is at one end of the village and on top of a hill. Few people attend the gram sabha. Often the quorum is not full. At other times the gram sabha is usually attended by the influential people of the village or those who have some work in the panchayat. The celebration of 26th January is treated as gram sabha. On this day there is a programme put up by children and most of the village turns up to watch, As 15th August falls during the peak agricultural season, it is not an event in the village.

The important people in the village can be judged by who sits at the table along with the mukkadam when the Republic Day is celebrated in the school. This is celebrated in the main primary school with a cultural programme presented by children of both primary schools in the village. The mukkadam is the guest of honour and is seated at the centre of the table. By his side are seated all the important men of the village, those who have a certain social standing in the village, across castes. All are the head of their households. Most are from families who have been residing for generations in the village and had a high social status. Some of these families have split-up over generations and may have lost economically, but

are still regarded as important. They are also the ones who are often called to settle disputes. Others are from families who are economically well-off. Two people in the village had recently made an entry to the group at the table. One was a Kalar household who had over the last five years bought land and increased their land holding to 15 acres and had become friends and important co-ordinators for Shankarlal who was re-elected as sarpanch. The other was an Adivasi household, where the man was very active in the Adivasi Sushasan Sangh - an Adivasi forum initiated by a NGO working in the area. The person had taken part in many rallies with the NGO that was trying to mobilise Adivasi women to join the forum. His son had recently got a job as a school teacher in another village, which had raised the household's economic status. Thus for a household to be socially significant in the village, they have to be traditionally important or, be politically active and economically stable. Both families are 'original residents' of the village.

Changing patterns of social interaction

Patterns of interactions between castes in the village are changing. It is most apparent in matters of commensality. The changing trends fit in with what M.N. Srinivas (1966) calls 'secularisation'. The traditional rules of not taking cooked food between castes is breaking down. The change is seen more amongst men than women, and in the younger generation than the older generation. The change is gradual and is happening in stages. One can see strict adherence to caste rules in certain contexts and a break from tradition in other situations. Most people, especially teen-aged boys and young men do not follow caste rules when they go out of the village. The further one has travelled in terms of kilometres from the village, the lesser are the caste rules followed. There are of course differences in the degrees of adherence in different households.

Traditionally, the higher castes like Raghuvanshis would not touch water of Adivasis but now everyone drinks from other houses, except from the Chamars. Even Adivasis do not take water from a Chamar. Earlier the Chamars would stand apart till others had filled at the handpump, or if a Chamar was filling at the handpump others would stand apart till the Chamars went away. Then they would pour water over the handpump and wash it ritually, before using the pump. Now everyone stands together and fills water. Villagers told me that earlier all castes in the village would not take water and cooked food from other castes, even if the caste was higher. Another change that has come about is that tea is taken from all castes

except the scheduled caste and Muslim households in the village. Brahmins eat in Raghuvanshi homes in the village.

Often the traditional commensality rules are followed in public, but will not be followed in private. The traditional norm is that whenever there is a wedding in the village and people of various castes have been invited, then the family who has invited gives raw ingredients (*sidha*) for cooking to various castes. These ingredients are handed over to certain households of different castes where the cooking is done. All Adivasis would cook together in a designated household, Kalars in one household, and so on. The households where the feasts for different castes are cooked are usually socially and economically one of the highest within the particular caste. There is also a practical element to it, that the economically well-off will have the space and the utensils to do the cooking, while ladies from other households help in cooking. Now things have started to change. In most cases when people of other castes are invited for a feast, usually the men go. If the invited family is particular about caste rules then either no one goes or young unmarried men will represent.

In private, people of different castes do eat in each other's house, if they have similar economic status, except with the Dalits. Adivasis, Raghuvanshis, Lodhis and Kalar eat with each other in case of friendships. In my Raghuvanshi host's house, their Lodhi friend's daughter would come at times to help in the household work and cook for everyone. In this house, the lady (in her mid-forties) would also eat in Lodhi and Kalar households with whom they were friends. In some cases, where the friendship is more between men than women, the men and unmarried daughters in the family eat in other caste households when invited for a feast, but married women do not. Daughter-in-laws will eat only if the mother-in-law does so. Children currently in school interact with other children of various castes and do not follow these rules in school. In school if someone gets something to eat, it is shared by friends across castes.

People in the village are well aware that people in cities do not follow many of these dining rules. They themselves told me of instances when they have visited people in cities and seen different eating styles in weddings. Everyone is aware of buffet style feasts and have even eaten there. In the village, one politically active person who has ties with people across castes (including scheduled castes) and across religion arranged a buffet style feast which is also

considered a somewhat secular space. ‘In the past few years, different communities have been eating in each others’ houses when invited, except the Chamars’, I was told.

The village community of Peepalkheda is stratified along caste and class lines. Caste and class stratification also overlap leading to cumulative inequalities. The upper castes tend to own larger tracts of land while most of the Adivasis are landless. Caste identity is the most important group identity in the village. Membership of the caste also impacts other economic relations within the village. For instance, while taking credit from a money lender, the caste of the borrower decides the amount of interest that will be charged. The social and economic status of the household impacts access to resources as well as the household’s negotiating power over many issues. Within the caste group there is a lot bonding social capital but socially and economically low castes are unable to translate this capital into economic capital. At the same time, while caste and class divisions still remain, social interactions between different castes is also increasing. The question that remains is whether community participation will be able to address the needs of the marginalised sections.

CHAPTER 4

HEALTH SERVICES FOR THE PEOPLE OF PEEPALKHEDA

This chapter looks at the various types of health services available to the residents of Peepalkheda. There is a diversity of health care providers available. The variety of health services that people use includes different systems of medicine. While the allopathy practitioners are both in the private and the public sector, other systems like ayurveda are only in the private sector around Peepalkheda.

The public health system

The public health system extends from the village to the district hospital and beyond to government tertiary hospitals in cities outside the district. While the public system in many places does include other systems of medicines such as ayurved, homeopathy, etc., no practitioner of any other system had been appointed in this block.

The Chief Medical Officer is in charge of all health services and programmes implemented in the district. In the district, the District Hospital headed by the civil surgeon cum hospital superintendent is the largest and technically most advanced health facility with some specialised services. Seoni district is divided into eight blocks. Of the eight blocks, five are tribal bocks, i.e. have a sizeable Adivasi population which has implications for staffing and provisioning of health services. Peepalkheda village is part of such a block. Each block has a Community Health Centre (CHC). It has been stipulated that there will be one CHC for 80,000 population in tribal/desert/hilly areas and for a population of 120,000 in the plains. The Block Medical officer is in charge of all health programmes in the block and the CHC. The Block is further divided into sectors, and each sector has one PHC. The block in which village Peepalkheda is situated is divided into four sectors. Ideally there should be one PHC for a population of 20000 to 30000. Each sector is further divided into sections and each section has one sub-health centre (henceforth sub-centre). There is at least one auxiliary nurse mid-wife (ANM) in each sub-centre who provides preventive health services and in some places, a male multi-purpose health worker (MPW) is also posted. It has been stipulated that there is to be one sub-centre for a population of 3000 in hilly/desert/tribal/remote areas and for 5000 persons in the plains. All ANMs and MPWs visit villages to provide immunisation and ante-natal services and inform people about camps for sterilisation, and cataract removal.

At the village level, the NRHM has instituted the post of an accredited social health activist (ASHA) who is a community level worker living in the village. The ASHA is the first level of contact with the government health system for the people.

Community level health services

The NRHM reintroduced the community health workers in the form of ASHA but the concept of the community health worker (CHW) is not new in the history of health services in India. The mukaddam of the village himself was a community health worker in 1980. According to the mukaddam, "the emphasis was on malaria prevention, then. If anyone in the villages under me had fever, I used to make a blood slide and send it to the district malaria centre for testing. If the person had malaria, the malaria testing centre would inform me. They used to send a post card. I would go to the person and would give him the malaria medicines. If the person had malaria, I used to give him four tablets. Now people go to Seoni, but they must have Rs 400 in the pocket, only then will your malaria get better. You have to give all the money to the doctor now. Where as we used to make them better by giving just four tablets."

In 1995 the Madhya Pradesh government started a community health worker scheme called Jan Swastha Rakshak (JSR) scheme. The objective of the scheme was to provide a health worker in the village who could treat basic illnesses and give first-aid. The health worker would also assist in the implementation of government health programmes. The JSR scheme was different from earlier CHW schemes in that the training duration was longer, honorarium was provided during training but not afterwards and the workers were to give only curative services for illness mentioned in the training manual and charge money from patients for these services (Community Health Cell, 1997).

Manoj, the village barber's eldest son became the Jan Swasthya Rakshak (JSR) in 1995. "At that time no one else had studied up till class X in the village which was a requirement. There was no secondary school nearby. The schools were only up till 8th class. I had stayed with my uncle near Seoni and studied up to 10^{th} class. When the government started this scheme, the *kotwal* did a *munadi* (public announcement) in the village and I filled up the form for Jan Swasthya Rakshak. No one else from the village filled up the form. We were given six months training in the block. It used to be held six days a week. In those days we used to get

Rs.500 a month during the training. But the training was not that good. We did not get good training in our batch (*hamare batch mein achchhe se prashikshan nahin hua*). It was done more as a duty. In the training we were told about '*prathamik upchar*' (primary care). They only used to give paracetamol tablets. After the training at the Block, we were given a kit. The kit had a thermometer, scissors, scissor-tongs, metal tap to open the mouth, torch, small basin, forceps and a weighing machine. As Jan Swasthya Rakshak we were not paid any honorarium. The idea was to earn money from the public (*janta se kamao aur janta se khao*). In the beginning we even didn't get any medicines. They told us –"buy medicines yourself and sell it to the people". I had hoped that I would be able to set up a practice but that didn't happen. Later, for the malaria programme, they had to select one malaria link volunteer from among the JSR, but they didn't take me. They took someone from another village. He has to look after seven villages." However Manoj continued to be associated with the pulse polio campaign and the tuberculosis programme from 1995 till the time the ASHA was selected.

Those in the health department felt that Manoj had a different idea about the training as JSR. The health department expected the JSR to work towards implementing government programmes but for Manoj implementing government programmes was not a priority since he was not being paid for it. What emerged was that the role of the JSR was mired in confusion. On the one hand the JSR was to charge money from patients and treat them for simple ailments and on the other, their training was geared towards implementing government programmes.

The ASHA

The NRHM instituted the ASHA as the new community health worker in 2005 and this is an important part of the communitization process. While the ASHA was appointed nothing was done about the already existing JSR. The ASHA has been placed in context of the reproductive health programme. The ASHA for Peepalkheda was appointed in May 2006. Anju Bai, the ASHA is a 25 year old Raghuvanshi lady. Her husband is associated with a NGO that runs self-help groups for micro finance in the village and also collects milk from various villagers and supplies it to a dairy. When the government had advertised, Sumi Bai the sarpanch asked Anju Bai to fill the form. The sarpanch was her husband's classmate in school. Her husband was also a *panch* at that time. Anju Bai herself was not too keen but the sarpanch sent an application in her name and she was selected. Anju Bai was the only one

who fulfilled all the criteria for the post of ASHA, she was 25 years old, married and had studied up till 12th class while the requirement was 8th class. The other candidates were not educationally qualified. The post for the ASHA had been publically announced in the gram sabha, but people were not very interested as there was no salary. Before being appointed as ASHA, she had been working in a NGO about eight kilometres from the village. Her job in the NGO was to get children who had dropped out, back into school. After her appointment as ASHA, Anju Bai was given 15 days training, seven days initially, then two trainings of four days each.

When asked what her main duties were, the ASHA said – "we have to do pulse polio, I look after pregnant women and new mothers. For immunisation I go from house to house to call people. I tell people about family planning. I look after the village - how many are ill, how many are healthy, (*gaon mein kaun bimar hai aur kaun theek hai*). I am the DOTS programme depot holder." The ASHA sees guiding people about contraceptives as an important duty. "I give condoms along with pills to whichever woman asks for pills. No woman says no to the condoms. The problem is that some women do not want to take pills, they prefer to have an abortion. They say that pills cause problems." With the institution of the ASHA, many of the duties of the ANM and MPW are now carried out by her.

In the village, the responsibility of ensuring that children are immunised is that of the ASHA. She informs households about immunisation being carried out by the ANM in the village. Since the appointment of the ASHA, the ANM does not go around the village anymore and therefore has limited contact with the community. Across the village, households with older children said that since the ASHA goes round the village to inform them, all children are getting immunised now as compared to earlier years. In many instances I was told that the older children had not received any vaccination or had incomplete vaccination. Earlier they would not get to know whether the ANM had arrived. Often mother's would take children and the ANM would not be there.

While the public health system is of the opinion that the lack of immunisation coverage is due to the reluctance of the community in getting children immunised, in one case in Peepalkheda, the ANM refused to immunise a child on the grounds that the pregnancy was not registered with her. In this case, the family had moved from Vidisha (also in Madhya Pradesh) and the lady's pregnancy was registered there. The parents wanted to get the child

vaccinated but the ANM refused to vaccinate the child as the pregnancy was registered in Vidisha, even though the child was born in Seoni. The family had been living for four months in the village before the child was born. The ANM said that as the lady had not brought the health card along, she would not do any vaccination. With the great difficulty the ASHA managed to get the child one vaccination (the ASHA could not remember but thought it was DPT). The ANM argued that the parents would go back to Vidisha and were not going to stay in Peepalkheda, therefore she would not vaccinate the child. The ASHA feels that the ANM is arrogant. In this case the ASHA strongly felt that "the ANM should have given the vaccination to the child, since anyone who is an Indian has a right to it". The family was still living in the village when the fieldwork was completed and the child was about a year old.

This is in contrast to the attitude during the National Pulse Polio campaign. India was declared officially free of poliomyelitis in March 2014 by the World Health Organisation. Prior to that, the pulse polio campaign was conducted several times in a year so that no child was left out. Under the National Pulse Polio campaign even children visiting the village for a few days (such as a wedding in the family) were administered the drops. The primary responsibility to get the children to the polio booth was that of the ASHA, for which the ASHA would inform the mothers whenever she met them in the village but would not go to their homes to call them. According to the ASHA very few people would come to the booth on pulse polio day. The two days following the pulse polio day were designated as follow up days for which the AWW and the ASHA would go from house to house to administer polio drops. The ASHA felt that since people knew that the ASHA and AWW would come to their house in any case, they would not bother to come to the booth.

In popular perception, the ASHA is associated with the Janani Suraksha Yojana (JSY) (going to government facility for delivery) and immunisation of pregnant women and children every month. People also know that she takes women for sterilisation. Some people in the village are aware that she does have some medicines and contraceptives, but this is not well-known.

In Madhya Pradesh, the JSY can be availed by all women, irrespective of their economic status for the first two children. From 2006 to March 2010, under the JSY, recipients were getting Rs.1650 and the ASHA was given Rs.350 in rural areas. In urban areas, Rs.1000 were given to the recipients and Rs.200 to the ASHA. As the ASHA is in constant touch with pregnant women, she is prepared for the number of deliveries to expect at any time. Women

in the village have three options for delivery – the district hospital, the CHC of the neighbouring block and the CHC of the block where the village is located – and the ASHA takes them to the place of their preference. Most villagers prefer going either to the district hospital or to CHC in the neighbouring block as it is the closest and very easily accessible. The CHC of the neighbouring block is also on way to the district hospital, in case complications arise. The van for taking the patient can be called from any of the three places and the charge is the same for all the places, but the driver from the district has started asking for Rs.500 while the said amount for transportation is Rs.250. If the patient is referred to the district hospital in case of complications, the cost of transportation has to be borne by the patient.

The ASHA feels that there are many in the village who really need her help in the hospitals. "The poor especially don't know their way about (*unko yeh pata nahi hota kahan jana hai, kya karna hai*). I think the facilities in government hospitals are good enough. My own son was born in the District Hospital (before the JSY started). Though here are some who think that private facilities are better, but I feel that the government hospitals are good."

The ASHA's presence does help in the hospital especially if it is a difficult case. In one case, as narrated by the ASHA – "It was a first delivery and it took three days. The lady had a bit of bleeding so the family called the ambulance and took her to the CHC of the neighbouring block which is close by. But she did not have any pains. The doctor there said that they should wait. A senior nurse in the CHC, who was said to be very knowledgeable said that they could not hear the heartbeat of the child. Next day the doctors checked with the machine and could not hear the heartbeat either. When the mother-to-be was asked the first time whether she could feel the movement of the child she said yes, but later she panicked and said that she could not feel any movement. The next day the doctor suggested it was better to go to the district hospital so all went to Seoni. I was with them all this while. In Seoni too, the doctor said that the heartbeat could not be heard. Then a senior doctor came and said that the heart beat was there. The next day the child was delivered normally." The ASHA was with the family for three days in the hospital. She went back to her house with the family only after the child was delivered.

While the ASHA was busy with the above case, another lady (about 20 years old) in the village who had separated from her husband had reached full term and started to have labour

pains. Though she started having them early in the morning, she did not tell anyone in the house till 10.am. The girl's mother rushed to the ASHA's house only to be told that the ASHA had not been home for the past three days as she was busy with a case. The ASHA's husband offered to take them to the District hospital as he was going there to see his wife. So the ASHA's husband took the pregnant lady and her mother to the District Hospital which is about 27 kilometres away, on his motorcycle. They reached the hospital at noon and the ASHA was there to receive them. The baby was born half an hour after they reached the hospital. The other lady for whom the ASHA had been in the hospital had her baby soon after this child was born and both came back together the next day. The lady who had gone to the district hospital with the ASHA's husband, paid him the amount that is given for conveying patients to the hospital. Under the JSY, the patient receives Rs.250 for coming to the hospital by ambulance. But the ambulance charges Rs. 500 (in 2009-10) since it is a to and fro drive for them. Many a times the ambulance is not available or is unwilling to come due to the distance. As a result people make their own arrangements to transport the patient to the hospital. Usually people hire the 'commander' from Talgaon who charges Rs.500 too, but is seen as easily available.

The only reason given by women for going to the hospital for delivery was that they get money for going there. For most people, whatever they spend in giving tips, purchasing food for attendants of the patient and transportation costs (even when more than stipulated) is covered by the money that they receive under the JSY, with some money left afterward. If the child is born at home, people have to spend from their own pocket to pay for the dai and washer woman (*dhobi*) and other expenses such as for services of the doctor who is called from Talgaon. Before the JSY was introduced, people went to the hospital only if there was a complication. In some cases if there had been a complication during an earlier delivery, then the family would take the patient to the hospital. In one case, after the implementation of the JSY, a lady went to the district hospital when her second child was to be born. When she went to the District hospital, the doctors asked her to undergo some more tests which were not available in the hospital (since the equipment was not functioning). One of the tests was a sonography. As a result she ended up spending a substantial amount on the tests. The lady subsequently had a normal delivery. But the lady felt that going to the hospital led to more difficulties, especially with the additional tests involved and they could not save any money by going to the hospital. She felt that having the second child at home would have been better.

The ASHA also has the responsibility of recruiting people for sterilisation operation. When a sterilisation camp is organised, the ASHA goes around the village checking with women who she thinks would be interested, especially those women whose children are two years old. Since the family planning campaign has been going on for many decades and sterilisation camps are held regularly, most people are aware of sterilisation as a contraceptive method. Since the ASHA is in constant touch with women who have young children, it is easy for her to identify potential targets. Like everywhere else in India, the burden to undergo sterilisation falls on the woman, since there is no discussion regarding male sterilisation. Since 2008 the ASHA also has to get cases for male sterilisation. The ASHA talks to the women and asks them to talk to their husbands. While there is a MPW posted in the village he is in no way involved in campaigning for sterilisation among men. After the International Conference on Population and Development in 1994, the Indian government is said to have brought about a 'paradigm shift' in its family planning programme towards a new 'target free approach'. But in reality, the health workers are still given sterilisation targets to meet. The government also organises camps for the removal of cataract usually once a year. When this happens, the ASHA goes around the village informing people about this. The surgery is held at the district headquarters.

The ASHA is also the depot holder for tuberculosis programme and she got her first case towards the end of the year 2009, three years after becoming the ASHA. Before the ASHA was appointed, the ANM, MPW and the JSR used to administer the tuberculosis DOTS. According to the ASHA, "I got to know of this case as some people in the village were talking about it in someone's house. People were saying that there was water in her lungs. She had been to many places but did not get any relief. I told the family to take her to the CHC and she went there. I could not go with her as the Pulse Polio campaign was on. There she tested positive for tuberculosis. The doctor then told her to send the ASHA. I went with them the next day for more tests. Then the tuberculosis doctor contacted me. He told me to come and take medicines for her as I am the depot holder. Now the patient comes thrice a week and eats medicines in front of me. I had told her that either she should come or I would go to her house. She said she would come. She wanted me give her the medicines but I said no, she would have to come."

During fieldwork a fourteen year old Adivasi girl was diagnosed with intestinal kochs. Her parents and older siblings were working as casual labourers in Bhopal while she with her two

younger siblings was staying in the village. The girl kept having fever and missing school. She did visit the doctor in Talgaon several times and the doctor in Talgaon advised her to go to a doctor in Seoni. On a visit to the village during the harvest season, the parents first took her to Talgaon where the doctor again suggested that they take her to the district town or Nagpur since they had relatives there. The girl was taken to the Medical College Hospital in Nagpur. She was diagnosed as having intestinal Kochs and after spending a few days in hospital was discharged and was told to contact the district hospital in Seoni and take medicines from there. The tuberculosis department in the district hospital in Seoni told her to report to the CHC in the block for her medicines. The block health office then contacted the ASHA in the village and asked her to supervise the DOTS programme. The girl had started treatment when I left the village.

The ASHA is also a depot holder for basic medicines such as fever, cold/cough, diarrhoea, etc. Earlier she also used to be given medicines for worms, but for the past two years she had not been given any. There were complaints that the ASHA did not give medicines to villagers and would say that the medicines had got over. These complaints usually came from the Adivasis, not from Raghuvanshis in her neighbourhood. On her part, the ASHA said that she is not given enough medicines by the ANM. “Sometimes I don’t have medicines. People come to me but I have no supplies. Then people say, we come but you don’t give medicines. To get the medicines either my husband or I have to go to the ANM's house. She comes for immunisation to the village but she does not bring the medicines.” While everyone at the block level and the ANM too said that there was no shortage of medicines, the ASHA said that she falls short of medicines for the village. While the block gets the allotted quota of medicines, either it is inadequate for the population or there is leakage in the system. A ‘commander’ driver who plies his vehicle from the CHC to the district town told me on his own that he had seen some ANMs sell some of the medicines to medical shops. It is not possible to say whether the shortage of medicines for Peepalkheda is due to leakage in the system at any level or whether enough medicines have not been allocated with reference to the population. Given the shortage, the ASHA gives medicines to the important people in the village, her neighbours, relatives and people of her own caste. The people who don’t get medicines are mostly the poor and Adivasis. Despite the shortage of medicines, the ASHA does not feel that the situation is of concern.

The ASHA has many other tasks but these are not a priority for the health system. Only once since the ASHA was appointed, 'potash' was given to the ASHA to be put in all wells in the village, which she handed over to the boy who manages the water distribution in the village. The village health and sanitation committee (VHSC) gets an untied fund of Rs.10,000 every year which is to be used for village works such maintenance of drains, garbage dumps, sanitary works and other village level public health activities. It can also be used in case a very poor family needs finances for health care. While bills have been submitted to the block health office regarding village level works, there is no evidence that anything has been done at the village level. And it would be wrong to attribute all the blame to the ASHA, since it would not be possible for her to do this without the connivance of the sarpanch. The bank account of the VHSC is operated jointly by the ASHA and sarpanch and all works carried out by the VHSC are to be noted in a register and scrutinised by the ANM and sarpanch.

Regarding problems she faced, the ASHA said that she had problems about not receiving payments. She had not received the payments for April and May 2009. For the month of June she had not worked at all and had informed the office about it. When she had asked the supervisor for the money, he said that he would give it later. The next time she had met him, he had said that it was not his work to go to everyone's house to give it to them, at which she replied that he was getting his salary so it was his duty to give everyone their payment. The ASHA had said that she was only asking for her due for the work that she had done. The next time she had asked for payment for the months of April and May, he had asked her to take it for October 09, and scolded her for not taking it earlier. Then the ASHA decided that they would need to have a confrontation. All the staff meet at the block on the first Thursday of every month. She took all her records there. She complained to the block accountant who asked both to come together. She called the supervisor to the accountant's room saying that she had some work with him and then said in front of him that 'I have not received the payment for April and May 2009'. The supervisor said that in the records that he had with him, the AWW had brought all the cases for the delivery and not the ASHA. The accountant asked her whether she had any proof that she had brought the cases. The ASHA had taken all the records. The ANM had signed that the ASHA had brought all the cases. Later the supervisor gave her 200 of the 300 that she was supposed to receive. The ASHA said that she did not fight for the remaining 100 rupees, since she felt that 'at least she had got something'.

Health and nutrition day

The health and nutrition day is an important part of health service communitization. The health and nutrition day is held on every second Tuesday of the month where activities of the health department and the integrated child development scheme (ICDS) (which focuses on the nutritional status of children) are held together. The Anganwadi Worker (AWW) who runs the ICDS observes the Mangal Diwas programme on that day. On Mangal Divas, infants and children up to six years of age are weighed. Infants below one year of age are given uncooked *dalia* as take-home nutritional supplement and older children are served *kheer-puri*. In case of pregnant women, their weights are also taken and are given supplements.

On the health and nutrition day, the MPW who lives in the district town picks up the vaccines from the CHC of the neighbouring block (by special permission for this section) which is closer to the village and is on the way from Seoni to this section. For picking up the medicines, the MPW is paid Rs.50 every time. On reaching the village, he hands over the vaccines to the ANM, he sits around for a while, chats with the school teachers and then goes off into the village to visit other households. His visits to the households are not for professional reasons. The ANM also reaches the village around the same time. She sends word to the ASHA about her arrival, who then goes around the village to households with infants and pregnant women informing them about the arrival of the ANM. The ANM's role is restricted to giving immunization to children and pregnant women.

On the health and nutrition day, it was observed that all the emphasis was on immunization and weighing of the children. The ASHA, ANM and AWW were concerned about tallying records of the children most of the time. I was told that there are no malnourished children in the village. Verbal instructions have also been given to the AWW that grade III and grade IV undernourished children should be reported. To the pregnant women, the ANM gave the anti-tetanus vaccine. No counseling was done and no health education was provided to any mothers or pregnant women who had come that day. However the weight of pregnant women was taken. The AWW would read out the weight and it would be noted by both the ANM and AWW. Only once did the ANM physically examine one pregnant woman in an advanced stage of pregnancy. No physical examination of anyone else was done. Nobody’s blood pressure was taken as the sphygmomanometer was not functioning. Randomly the ANM took blood samples of two pregnant women. One woman was in the seventh month of

pregnancy and the other was in the eighth month of pregnancy. For both women, she made slides (without marking them in any way to identify the person) and also tested their haemoglobin. For testing haemoglobin the ANM was given a kit called 'Copack' which had strips for absorbing the blood and a colour scale for matching the colour of the blood. The scale was marked – 4, 6, 8, 10, 12, 14, 16. Each marking had a different shade of red and a punched hole under which the blood strip of the woman was placed for comparison. (At times I felt that it woman's haemoglobin was between 10 and 12 (more like 11) but the ANM felt it was 12, and normal.) Another woman had haemoglobin of 10. According to the ANM low haemoglobin is not a problem in this region since nobody has haemoglobin lower than 10.

Generally the ANM's behaviour was that of unconcern. She was impatient. One pregnant woman had come with a complaint of constant fever. She was four months pregnant. The ANM asked her whether she had been to a doctor, when the woman said yes, the ANM told her to go back to the same doctor in Seoni where she had gone earlier. The woman said that the medicines were not working. The ANM told her to tell the same to the doctor who had given the medicines (*jis ne dawa di hai, usko ja kar bolo ki dawai kaam nahin kar rahi*) While the ANM was right in telling the woman to go back to the doctor who had prescribed the medicines, it was said extremely rudely. The ANM did not feel it was her duty to even suggest to the lady to meet the doctor in the CHC or go to the district hospital, or at least meet the doctor who comes on the market day under the Deendayal Chalit Aspatal (mobile clinic scheme).

The MPW was hanging around in the village. He had no role to play except for getting the vaccines. The MPW has not been doing any counseling on male sterlisation. He has also not been supervising the disinfection of water resources. The disinfection is done by the boy who operates the water system for the village who said that the ASHA had given him ‘medicine to put in the water’.

The health system at the community level provides two main services – immunisation of children and registration of pregnant women. On the ground, the health system is completely focused on immunisation of children. Registration of pregnant women is done to ensure safe pregnancy and delivery, for which ante-natal services are provided by the ANM. But this seems to be second to immunisation of children on the ground. India has had high rates of

infant, child and maternal mortality consistently and reducing this has been a priority in successive health policies. The ANM's contact with the residents of Peepalkheda is minimal. When the government had started the Deendayal Antyoday Upchar health scheme for households below the poverty line (BPL), she had called the NGO worker and handed over the cards to him to fill up for all BPL people in the village.

The sub health centre at Taalgaon

The sub health centre (sub-centre henceforth) for Peepalkheda is in Talgaon. The sub-centre 'section' covers nine villages catering to a population of 8500. The population covered is far in excess of the 5000 population that a sub-centre is meant to cover. In hilly, remote and tribal areas, a sub-centre is to cover a population of 3000. While the district as a whole is not considered tribal, five of the seven blocks, including this block has been designated tribal. The sub-centre has an ANM and a MPW posted there, but it is the ANM who does most of the work as was observed in the village. The sub-centre is situated at an obscure place in Talgaon since no one in the village was willing to give land for it. The sub-centre is never open and only some old files are kept there. The ANM's house is located on the main road and she keeps medicines with her in the house. The ANM has been in service for the last 30 years, of which 20 have been spent in this section.

When asked about the main duties of her job, the ANM said "vaccination; temporary contraceptive methods; female and male sterilization". Despite the claim about the 'paradigm shift' in India's family planning programme after the Cairo Conference in 1995, health workers are still given targets for sterilisation. They have to get seven cases per 1000 population either male or female sterlisation. This is the pooled target for the ASHA, ANM and MPW together. For their section which has a population of about 8500, they were given a target of 56, but now it has been increased to 70. According to the ANM, the difference is that earlier they used to stop the salary if the health worker was unable to meet the target. However, there is still a lot of pressure on the health staff to meet the targets. When asked specifically whether the targets for contraception have changed or should change, especially whether the targets should be reduced the ANM said that since the same number of people are getting married and the same number of children were being born as before, hence there was no difference. In February 2010, a camp for male sterilisation was organised for which the ASHA distributed pamphlets to women in village. "But it is difficult for us to talk to the

men. I give the pamphlets. The MPW can talk to the men and discuss and clear the doubts and problems with the men."

As regards health problems in Peepalkheda, the ANM said that the main health problem is vomiting and diarrhoea during the monsoon. However no record of the health problems is kept by the ANM. "This is not a hospital, so we don't keep a record of who came for what treatment. I have a record of how much supply of medicines I got in a month and how much I distributed." In case there is some health problem that the ANM feels that she cannot handle, she refers the patient to the CHC. Even when asked specifically, the ANM didn't report any problems that she faced. After some thought she said, "earlier people would not understand when I used to tell them to have the delivery in the hospital. Now the ASHA takes them." The ANM did not feel there was a shortage of vaccines, though her complaint was that the MPW did not get them to the village on time.

The MPW joined the service in 1993 and was posted in this area in the year 2000. His role is limited to getting the vaccines to the villages. He does not go to the sub-centre either. He said, "the key of the sub-centre is with the ANM". When asked about his main duties, he said, "My main duties are immunization. The vaccinations that we do are - BCG, DPT, HB (he did not know what HB stood for), polio, measles, and TT (tetanus toxide) to children from five years to ten years. We also look for TB patients and when we get to know, we refer them to the block. We tell people about eye camps. For malaria we make slides and send them. We also give medicines, one primaquine with two tablets of chloroquine of 1000 mg each and one tablet of chloroquine of 500 mg. We look for leprosy patients, but there aren't any in this village. I also do family planning- NSVT, VT, LTT and TT. TT involves 4 stitches (*char tanke wala*). TT is done when the woman has had children through Caesarean section or if the earlier sterilisation operation failed. In such cases the woman has to admitted in hospital for seven days."

When asked if he faced any difficulty in meeting targets for family planning, the MPW said, "We don't have any such problems, we are able to meet 90% of the targets. Targets are decided on basis of population. As the population is growing, the targets are also growing."

Regarding male sterilization he said, "the SDM had given targets for NSVT to each health worker, AWW, ASHA, patwari and panchayat sachiv. But people say that it is not possible for us men to go as we do farming, we will send our women instead." When I asked the sector supervisor whether having a male health worker made a difference in getting more

males for vasectomy, I was told, “the maximum of NSV – 24 were in this section, and all the cases were brought by the ANM. There has not been any recruitment of MPWs in the 20 years, people are retiring but no recruitment is taking place.”

When the MPW was asked about the problems he faced, he said, “If the ASHA doesn’t collect the people, then we have to go to call them.” The MPW denied that they faced any problem regarding supplies of medicines or other material, or payments not coming in time, even when specifically asked. With reference to health problems in the village, the MPW said, “I have given the telephone numbers of the CMO, the Janani Surksha Yojana van and the PHC to villagers.” When specifically asked about epidemics in the area he said, “There have been no epidemics in the village. Ten years ago there was vomiting and diarrhoea. If there is a problem in the area, we first tell the supervisor who informs the block. If necessary, we can also call the BMO directly. The seniors are co-operative, We don’t have any problems with them.”

Deendayal chalit aspatal

The Deendayal Chalit Aspatal (DCA) is a mobile clinic started in 2007-08 under the RCH programme. Each mobile clinic has one doctor, one nurse, one pharmacist/compounder and one driver of the van. Under this programme, each of the five tribal blocks in the district was allotted one van. The mobile clinic visits different areas of the block where the main weekly markets are held once a week, except Saturday and Sunday. Under the RCH programme the main issues are ANC, PNC and malnutrition for children under two. In addition the mobile clinic is meant for below the poverty line (BPL) population.

The van is stationed in the block health office. All the staff comes from Seoni to the block. According to the doctor, “the tender for the DCA is given out in Bhopal. Since I am here, this block has a doctor. In other places, though on paper there is a doctor, in reality someone else goes in the van. We get promotional allowance to go with the van. I have been here for the last two months and I am bored. Fourteen doctors have come and gone in the last two and half years.”

The doctor is supposed to see a minimum of 75 patients in a day and the doctor usually exceeds that. The patients who come to the mobile clinic are usually not very seriously ill.

"We get patients who can walk and come to us. We don't get very serious patients, they come for the weekly bazaar and then drop in. Though the van is meant for the BPL, we treat everyone. We don't even ask for the BPL card. Most people don't get it with them in any case. We provide symptomatic treatment. Amongst women, most cases are of dysmenorrhoea and leucorrhoea. The main health problems are 1) malnutrition (anaemia and vitamin deficiency) 2) leucorrhoea 3) ARI (acute respiratory infection) in children 4) skin conditions-scabies/psoriasis/eczema 5) constipation/gas and 6) arthritis."

The main problem that the doctor faced was, "I am not able to follow-up. This is because the patients do not bring the previous prescription. Initially I used to give many prescription slips, but now I don't. People are very casual. As they have come to the market, they just pick up some medicines. (*log chalet phirte aa jate hain, haat aaye hain to chalo gadi se dawayi lelo*). I refer severe cases to the district hospital."

The other problem that the doctor faced was that of limited medicines given in the van. Part of the problem is that the mobile clinic is under the RCH programme, therefore the number of medicines are limited. But even with regards the RCH programme, there were insufficient medicines according to the doctor. People do not go to the mobile clinic for RCH issues only since people do not know that it is meant for only for a particular purpose. "We have no anti-rabies, no anti-venom, nothing for hyper-tension, or for epilepsy. We don't have vaccines as we can't have a cold chain. The most used antibiotic is amoxicillin and I give salbutamol for asthma." The doctor felt that the limited medicines allotted are not sufficient to treat the variety of cases that come there. However within the limited medicines, the quantity given was said to be adequate. This mobile clinic is a standalone entity. There is no link with the ANM of the area even though it is under the RCH programme. The ANM does not refer cases of complications in pregnancy or illnesses among children to the mobile clinic, she refers them to the block.

The mobile clinic comes regularly on every Thursday which is the market day in Talgaon at about eleven and leaves by three in the afternoon. The mobile clinic receives a steady flow of patients. When the number of patients reaches 75, the van goes back to the block. As is the case with most public health facilities, patients who visited the mobile clinic in the bazaar were not the 'well-off'. The doctor had a friendly attitude in his dealing with patients but was thoroughly bored. His general attitude was a bit casual. He was recently out of medical

college. The doctor recognised some patients who had come earlier and asked them about their progress even though they had not brought the earlier prescription. Generally the time taken per patient was 2-3 minutes. There was never a long queue, but neither was the doctor idle. Everyone who came was given some medicines or some ointments. He also wrote out prescriptions for extra medicines to be purchased. During the two hours that I was there, only in three cases did he examine extensively. All such cases were either chronic or serious and all patients were referred to the district hospital in Seoni. The pharmacist, nurse and doctor were all sitting in the small area. There was only a small stool for the patient to sit. The person accompanying the patient had to stand.

While the doctor feels that patients treat the mobile clinic casually, there are people in Peepalkheda, especially the elderly (even among the well-off) with chronic ailments who go every week to get medicines. Some find it difficult to walk long distances, but still go two kilometres to the market to visit the mobile clinic. These elderly were quite satisfied with whatever medicines they got, especially as they are free. For the elderly, since all are either dependent on their children or get a very small old age or widow pension of Rs.235 to 250 a month (year 2009-2010), the mobile clinic is highly appreciated.

Health services at the block level

The block health office looks after the various health programmes and is headed by the Block Medical Officer (BMO) who is in charge of both the Community Health Centre (CHC) and the health programmes. A new building to house the CHC was built around 2006 when the NRHM was initiated. It is much larger than the old building from where the PHC used to function. Now the old building houses the Malaria and TB laboratories. The new building has on the first floor a male ward, a female ward and an operation theatre. All the rooms were locked. There is a proper ramp to the first floor. In the OT there was an operating table, lights and other infrastructure lying unused and some of it had started to rust. Heavy rains had also caused some damage to the walls on the first floor. On the ground floor there is a female ward with ten beds which is used for deliveries under the JSY. The BMO explained that the operation theatre had never been used as there isn't any electricity most of the time. As a result, not even sterilisation camps have been held in the CHC.

The biggest problem in the running of the CHC is the shortage of personnel, including doctors, technical staff and even sweepers. The block medical officer (BMO) had recently been shifted to this block. In the CHC, there is only one full time doctor who is also the BMO. A lady consultant comes from Nagpur who takes care of all delivery cases. Since there is no surgeon or anaesthetist in the CHC, no surgeries take place. There is also a shortage of medicines in the block. The block did not have any anti-rabies vaccines, not even to give to BPL families, and there is a shortage of anti-venom. Since the area has lots of forest and snakes, there is a constant need for anti-venom. According to the BMO, "we send the request to the district, they send it further to the state capital. It takes 1-2 months. In the meanwhile we have to buy anti-venom from retail shops."

The BMO complained that they didn't get enough time for treatment as a lot of time is spent on other issues. "Most of the time is spent in attending court for medico-legal cases, in post-mortems and in field-visits. I also have to get buildings made and follow the protocol when VIPs visit the area. The Pench National Park falls under this block so we have many VIPs coming to this block and I have to go and meet them."

Observations in the CHC

A few patients were there to see the doctor in the morning OPD. No major case came up at any time that I had visited the CHC. While the CHC is on the highway that goes towards Nagpur and is very well linked, it is surrounded by dense forests. There are very few villages and hardly any commercial or industrial activity in the area. So few patients come the CHC. Medicines are given free of cost to all patients. Outside the CHC was written – 'Patients above the poverty line and below the poverty will be given medicines for free (*A.P.L/B.P.L ko nishulk dawa di javegi*). The nurses I spoke to said that they have most of the medicines, and in case of the few medicines that are not there in the CHC, they ask the patient to buy it from private sellers.

Health services at the district

The district hospital in Seoni is the one where most people are referred to or prefer to go when the ailment is considered serious or requires in-patient care. Many of the specialists in the district hospital also have their private practice in the town. Often the patient may go to the district hospital but later may follow it up in the doctor's private clinic. While the district

hospital is supposed to have all important diagnostic tests, patients are often told to get the tests done from private diagnostic laboratories. Patients also report having to buy many of the medicines from private shops. In case the doctors in the district hospital feel that the case is too complicated, they officially refer the patient to Jabalpur Medical College, but the patient is also told that if they have the resources, they should go to Nagpur in Maharashtra.

On the ground, the public health system is oriented towards providing preventive services and within that, it is focused on immunization of children and ante-natal checkups. The public health system has for decades put a lot of emphasis on family planning which continues even today. The NRHM also has put a lot of emphasis on the Janani Suraksha Yojana to facilitate institutional delivery. The ASHA spends most of the time on these activities. The ASHA also supervises the national tuberculosis programme DOTS regime of patients in the village. What the two TB cases in the village reveal is that the patients did not have any knowledge of the tuberculosis programme. They had been to various places before they got to know about the TB programme. There is only the government mobile clinic for curative services for the villagers. For all other curative services they have to depend on private practitioners.

Private health services

The private health services available is an amorphous category comprising of highly qualified specialist doctors practicing allopathy at the one end and unqualified practitioners at the other end. This category also includes medicine shops that dispense medicines and private practitioners of other systems of medicine. For curative services people are dependent on private practitioners since the public health system is unable to provide even the most basic services.

For the residents of Peepalkheda, the nearest health providers are those who practice in Talgaon two kilometres away. Whenever someone falls ill, most people first go to a practitioner in Talgaon. The practitioners here dispense allopathic medicines but do not have qualifications to do so. And they are a varied lot in terms of educational attainments. While one of the practitioners has a masters in zoology, another has a degree in electro-homeopathy. In case the practitioner feels that he cannot handle the case, the patient is advised to go to Seoni or to Nagpur in Maharashtra if the patienttientndle the case, the patient is adv the

family has the resources to go to Nagpur. If the situation does not improve, the doctor in Talgaon asks the patient to go to Seoni or Nagpur. Most people then go to Seoni.

If things do not improve at Talgaon, people also go to other private practitioners in other towns where they have relatives, or where someone from the village has been to for the same ailment. Talgaon is the preferred first place of treatment not only because it is close, but also because the doctors there are willing to give credit. The doctors said that these days 50% of the people are able to pay immediately, which is an improvement from earlier times. Dr. Kumre who has a masters degree in zoology is the preferred doctor when the patient is a child. He has been practicing in the area for the last 20 years. His father before him used to practice. The other doctors are relatively recent, i.e. have been practicing for five to seven years.. Except for Dr. Kumre, there is a high turnover of non-degree doctors in the area.

Seoni town has many private health practitioners of various types. Within the allopathic system there are single doctor run clinics and single doctor run clinics with in-patient facilities of a few beds. Among the single doctor run clinics are allopathic practitioners as well as non-degree practitioners. Among the qualified, some are doctors who work in the district hospital. Seoni also has specialists who come from Nagpur once or twice a week. Patients who can afford to, also visit private practitioners in Nagpur which is two and a half hours away.

Folk healers

Around Peepalkheda, there are different folk healers whose services people use. At one end of the spectrum of folk healers are those who work in the magico-religious realm and at the other end are specialist folk healers who treat particular types of health issues such as snake bite, and dais who conduct deliveries. In the magico-religious realm are those who practice *jhada* or the removal of the malevolent spirit that causes humans or cattle to fall ill. Often the ailment is seen as being caused by the 'evil eye' of someone who is envious or wants to create trouble for the person or the family. The removal of the malevolent spirit is seen as vital when someone who was perfectly healthy suddenly falls sick or someone who keeps falling sick repeatedly. This is more so in the case of children. In the village there are some people who are known to have an 'evil eye', whose visit to your house is considered dangerous. There are about seven people in the village Peepalkheda who are known to

remove the malevolent spirit that is believed to cause a person or animal to fall sick. People in the village go to the doctor in the biomedical system for treatment and at the same time have the malevolent spirit removed through *jhada*. The process of *jhada* includes doing *puja* and giving offerings to a deity.

At the other end of the spectrum are the specialist folk healers who treat only certain kinds of ailments. For certain ailments, the folk healer provides an alternative to the formal medical system due to its inaccessibility, and in some cases because the formal systems have not been able to provide a cure. In case of certain ailments like paralytic stroke/palsy (*lakwa*), people believe that only folk healers will be able to help them. All folk healers in the region, apart from the dai, give medicines and also recite *mantras* and do *pujas* to remove the effect of the malevolent power that caused the ailment.

There are three other folk medicine specialist practitioners in the village; the dai (traditional birth attendant), the healer who cures snake bites and a third healer who is most known for curing pain in the jaw.

The dai

The dai was brought in the 1980s to the village by the earlier mukaddam as there was no dai to conduct deliveries. The dai used to be called for all most all deliveries in the village. And that was the main source of income for her household. The work of midwifery in this region is traditionally done by women of the Chamar caste which is a Dalit caste. For every delivery she would be paid in grain or cash, and would be given clothes. She would be paid more if a boy was born. The dai did not use the religious mantras in her work. The dai had also received training under an earlier government programme that used to train dais to conduct safe deliveries. But with the implementation of the NRHM, the emphasis has shifted to institutional deliveries and the livelihood of all dais has been affected. In Madhya Pradesh, all women can avail the Janani Suraksha Yojana (JSY) for institutional delivery of two children. The implementation of the JSY had already reduced the earnings of the dai in Peepalkheda, and it stopped entirely one day when during a quarrel she was pushed and she fractured her leg. Since then she has not been able to walk on her own and has completely lost her livelihood.

Tejpal Raghuvanshi - Pain in the jaw

Tejpal Raghuvanshi is most known for treating jaw ache (*daadh ka dard*), and treatment of fever on alternate days (*ektarai bukhar*) and removing the influence of an evil eye cast on a person or cattle. For pain in the jaw and fever on alternate days people come to him from a radius of five kilometres. To remove the influence of the evil eye, most people are from the village itself. Apart from this he also cures conjunctivitis of the eye (*ankh ana*), dry itching (*sookhi rakas/sookhi khujli*), skin irritation due to spider (*makadi jo moot deti hai*), swelling of the face and body which some people get when they stand under the *bilma* tree (little boils erupt all over the body) and scorpion bite. People often come to him when other cures have not worked.

For Tejpal this is religious work. He does not charge for it. But he charges money for the ingredients that have to be bought from Seoni. Uttering the mantra is part of the cure. Different ailments have different mantras. Tejpal had once cured the daughter of a doctor who had itchiness. The doctor learnt from Tejpal how to make the potion and now charges money for it. Tejpal also removes the evil eye cast on people.

For treating fever on alternate days (*Iktarai*) Tejpal ties a small piece of cloth on the wrist of the person. In the cloth is tied a piece of paper with a 'Muslim' alphabet on it. They say the mantra when they tie the cloth. The hand of the person is put over an incense-stick (*agarbatti*). If the fever gets better, the patient offers a coconut in a temple or to a Muslim saint (*pir baba*). In *iktarai*, the fever comes on alternate days. You have to come the third time you have fever. As medicine he gives two and a half leaves of the *Ber* tree along with jaggery (*gud*). For treating scorpion bite and boils due to standing under a *Bilma* tree, only a mantra is repeated till the pain goes away or the boils subside in case of *Bilma* tree. For dry itchiness or itchiness caused by a spider, he makes a potion.

Case of the lady with pain in the jaw (witnessed by me) February 2010: the lady had come from Chhindwada district. She had been having pain in the right jaw for the past 4 days. She had heard about Tejpal from her sister who lives in Talgaon. She was staying with her sister. On the first day she came with her nephew very early in the morning, everyone was having tea. She was also given chai. After talking to her – where she lives, since how many days was she having the pain, etc., Tejpal went to the fields to get the leaves from the shrub/grass. He got the leaves home- about 10-12 leaves, crushed the leaves and took out the juice from the

leaves by squeezing the leaves between his fingers directly into the ear of the lady on the side she was having jaw ache. She was asked to lie down on her side when the juice was put in her ear. Tejpal uttered the mantra while pouring the juice in the ear. After a minute she was asked to move her head so that the juice could pour out of her ear. A leaf (as large as the palm of the hand) was placed below her ear so that the juice that flowed out could be collected in the leaf. Along with the juice, three worms came out with the juice. The worms were wriggling in the juice. The worms were about half cm to ¾ cm. They were as thick as two sowing threads put together. The worms were white in colour. She was told to come the next morning for another session again, as she lives far away in another district. The lady came the next morning again and the same procedure as the previous day was carried out. This time only one worm came out. In January 2010, four people had come in the month, while usually one or two people come per month. (This cure for pain in the jaw has been reported in rural areas in other states too. While doing an internet search, a similar incident was reported by the New Strait Times, Kuala Lumpur. 11 Nov, 2011.)

Puranchand Raghuvanshi – Snake bites

Puranchand Raghuvanshi started curing people for snake bites in 1984. People come from a radius of about six kilometers around Peepalkheda. Most cases come during the monsoon months, from July to October. He cures both people and cattle of snake bite. So far in his life there have been only two cases of people and one of a buffalo that he could not save. He feels that the one who gives life and the one who takes life is the one above. He does not treat people who have already been to another healer who has tied a sacred thread and said a mantra. (*Agar kisi ne bandhane ka mantra karaya ho to mein kuch nahin kar sakta*). He learnt this mantra of curing snake-bite from his father-in-law who used to remove snake venom from the body of the person who was bitten.

Puranchand does not charge any money for removing snake venom from the body because this is seen as religious work (*yeh dharm ka kaam hai*). He goes with anyone who comes to him for help. When a person has been bitten by a snake, Puranchand says the mantra and makes the person drink water. There are rules regarding the water. If the water is brought from the hand-pump, the person should use only the right hand to pump the water and lift the bucket with that hand. And if the water is fetched from the river, the water should be filled in the direction the river is flowing. He makes the person drink a whole bucket of water, one *lota* at a time slowly. The venom is believed to move up slowly from the legs to the heart and

then in the throat. It is believed that the venom goes up and the blood comes down and when the venom goes up, it thickens the blood. Drinking large amounts of water is said to bring the venom in the throat. According to Puranchand, when there is too much poison, the person becomes unconscious, or froth comes from the mouth and the body becomes stiff. Even in such conditions he makes the person drink water and removes the venom. If the person is unconscious, then he opens the mouth with a spoon and gives water. According to Puranchand, the venom makes the blood thick. As the venom goes up from the legs, it is believed that it pushes the life (*pran*) out of the head. The reason for making the person drink water is to make the blood thin and drinking water is also supposed to prevent the venom from going above the neck, because the venom will push the *pran* out of the head. According to Puranchand, "when the venom goes up (*upar chadta hai*) the person becomes unconscious, can't see anything, and cannot recognise people. The vision becomes hazy. When the venom reduces, the person starts recognising people, becomes conscious and the vision becomes clear." Puranchand also narrated the case of an electricity lineman being bitten by a snake Talgaon some years ago. Some people took Puranchand there and he removed the venom. Before Puranchand reached, the lineman had already informed his office that he had been bitten by a snake and after he had removed the venom, a vehicle came from the Block headquarter to take the lineman to the hospital. But the lineman did not go to the hospital. The next day a doctor came to meet Puranchand and asked him to keep an injection and give it to people. But when Puranchand was told that he would get money for it, he told the doctor that he would not work for money.

One case of snake-bite happened when I was in the village. Sunita was bitten by a snake when she was transplanting paddy at about 11. am. The bite was between her ankle and her knee. Her brother brought her to Puranchand Raghuvanshi who is considered the best for dealing with snake bites. Puranchand's daughter told me, "he removes the evil power and also removes the venom. People come to him from distant places." (*Woh jhada karte hain aur zahar bhi nikalte hain. Log unke pass, dur-dur se ate hain*). Sunita was given *neem* leaves to eat to see whether she could feel the bitter taste of the leaves. The wound was also cleaned with kerosene. There were three puncture marks and a scratch mark on her leg, the snake had not dug its fangs deeply. A bucket of water was placed in front of Sunita. The water was 'special', on which a *mantra* had been uttered (*jahde ka paani*). She was told to keep drinking the water as much as she could. She was given *neem* leaves to chew every 15 minutes. She would chew them and spit them out. According to Puranchand as the venom

spreads, the *neem* leaves do not taste bitter (*jab zahar chadhta hai, neem ke patte kadwe nahin lagte*). If the *neem* leaves start to taste sweet, it means that the poison has spread. When the venom spreads, the person is given a dry chilli to eat for conformation. The chilli also tastes sweet and not spicy. After eating of the chilli confirms that the poison has spread, the patient is given lots of water to drink. Puranchand's daughter told me that when the poison spreads, a person is able to drink a bucket full of water, which an ordinary person cannot. In Sunita's case, the venom did not spread. The belief is the more slowly it spreads, the more slowly it decreases. After more than two hours she was sent back home as the healer felt that the venom was not spreading.

Indigenous medicine for paralytic stroke/palsy

In the case of paralytic stroke/palsy (*lakwa*) people believe that only indigenous medicines – *jungle-jantar*- work and that the biomedical/allopathic system is of no use (*is pe to jungle-jantar hi kaam karta hai*). Jungle refers to special medicines made from plants that grow in the forest which only a specialist would know about and *jantar* refers to the magico-religious rituals that are carried out to remove the evil spirit. As part of home remedy, people believe that consuming a small cup of kerosene that is being used to light a lamp is also good. This is what they do immediately. Kerosene that has been in the lamp for a long time is considered better. No one who cures paralytic stroke resides in Peepalkheda. There are some folk healers who do the ritual of removing the influence of the evil eye (*jhada*) for the patient suffering from lakwa near the village but a couple of patients in the village who had visited one of them said that it did not work for them. Four of the six people who had suffered from it in the last five years had gone to a well known healer for lakwa who is quite far from the village. He is very well known in the area and his treatment is expensive. I was told that very well-off people from as far as Nagpur also come to him for treatment. This practitioner says a 'mantra' and does jhada for which people have to give coconut, agarbatti, sindoor and turmeric. In terms of medicines, the patient is given some medicines which he makes himself and some are branded ayurvedic medicines available in any pharmacy selling ayurvedic medicines. The treatment went on for many months. All who went to this healer were cured.

The lack of public curative services

The public health system is not known for providing curative services at the village level. Though the ASHA in the village and the ANM at the sub-centre level are supposed to have

some basic medicines, they are insufficient for the population covered. And most people do not think of contacting them for simple ailments. The PHC is supposed to provide curative services, but the post of the doctor was vacant and the PHC is located out of the way for most of the villages it serves. The CHC does not play a major role except for national disease programmes such as tuberculosis for which the patient is registered there. Even in the case of diseases where there is a national programme in place, people reach the public system after they have been diagnosed elsewhere.

Thus the people is the village have no other option but to turn to private service providers for curative services. When people decide to seek treatment, they first go to the non-degree allopathic practitioners in Talgaon who are close by, available in the evening and also give credit. The few who don't get better with treatment in Talgaon go to Seoni to the district hospital or to a private facility if they can afford it. And Seoni is 27 kilometers away, for which the last bus leaves at 3.pm. Even the weekly mobile clinic leaves by 3.pm. Given the difficulty in accessing public health services, people turn to non-degree allopathic practitioners, traditional and folk healers in the community who are more accessible.

Since people go to various types of private health practitioners for curative services, the public health system does not have substantial information on the health needs of the community. The assessment of health needs of the community has to be constructed from the prevailing health status, and expressed and unexpressed health needs. The following chapter looks at the health needs of the community and the places where people go for treatment.

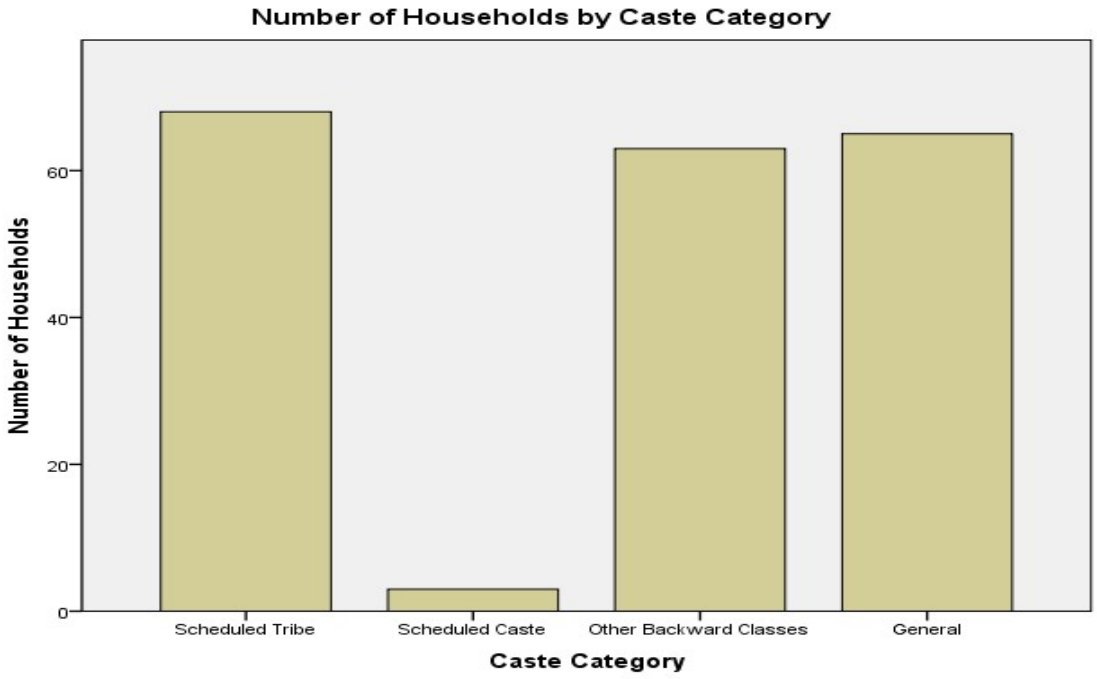
CHAPTER 5

HEALTH NEEDS AND UTILISATION OF HEALTH SERVICES IN PEEPALKHEDA

The chapter looks at the health needs of the residents of Peepalkheda and their access to services. Health needs and access to health services both are closely linked to the gender of the individual, and the socio-economic status of the household and community to which they belong. This chapter analyses the health needs of the village, both expressed and not expressed. Access to health services has been determined in terms of utilisation.

Profile of the village

Figure 5.1: Number of households by caste category



Demographic characteristics

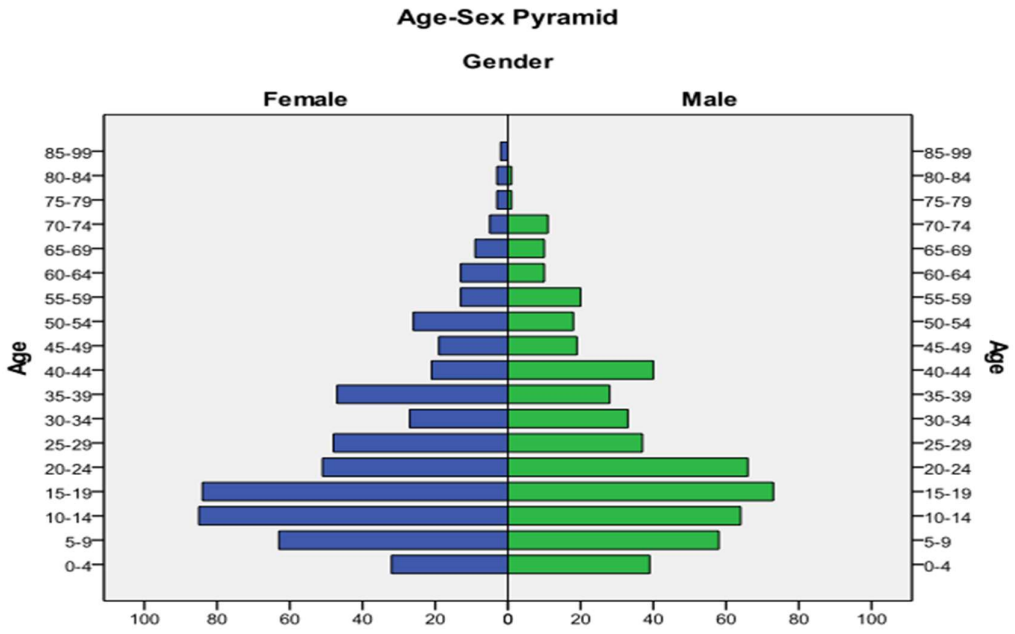
The study is based on the census of the village of Peepalkheda. The census includes 199 households. A household has been defined as comprising all those who share a common kitchen. Of the total households, 68 are of the scheduled tribes (ST), three are of the scheduled castes (SC), 63 are of the other backward castes (OBC) and 65 are of the general category. For purposes of analysis, the SC households have been clubbed with the STs. The

OBC category also includes Muslim households. Ninety-eight percent of the households in the village are Hindu, which also includes ST households and two percent are Muslim. Fifty-seven percent of the households are nuclear, comprising the couple only or the couple with children, single parent with children or single individual only. Over twelve percent of the households are female headed. No household is without a woman, however, 2% households do not have any male member.

Table 5.1: Total households, religion of households, households, female headed households, gender distribution, total sex-ratio and sex-ratio 0-6 years by caste category.

	ST and SC	OBC	General	Combined
Households	71 (68 + 3) 35.7%	63 31.6%	65 32.7%	199 100%
Religion				
Hindu households	71 (100%)	59 (93.7 %)	65 (100%)	195 (98%)
Muslim households	0	4 (6.3%)	0	4 (2%)
Nuclear households	41 (57.7 %)	31 (49.2%)	42 (64.6%)	114 (57.3%)
Female headed household	9 (12.7%)	13 (20.6%)	3 (4.6%)	25 (12.6%)
Gender				
Females	191 (50.1%)	189 (52.2%)	171 (50.9%)	551 (51.1%)
Males	190 (49.9%)	173 (47.8%)	165 (49.1%)	528 (48.9%)
Total	381 (100.0%)	362 (100.0%)	336 (100.0%)	1079 (100.0%)
Sex ratio 0%) household households,	1005	1092	1036	1043
Sex ratio, 0-6 years females/1000 males	885	667	1154	867

Figure 5.2: Age–sex distribution pyramid



The total population covered in the survey is 1079, of which females comprise 51 percent. The total sex-ratio is 1043 females per 1000 males, and for the 0-6 years age-group, the sex-ratio is 867 females. The largest population is in the age group 15-19 years (14.6%), followed by the 10-14 age group (13.8%). The population in the age groups below 10 shows a decreasing trend.

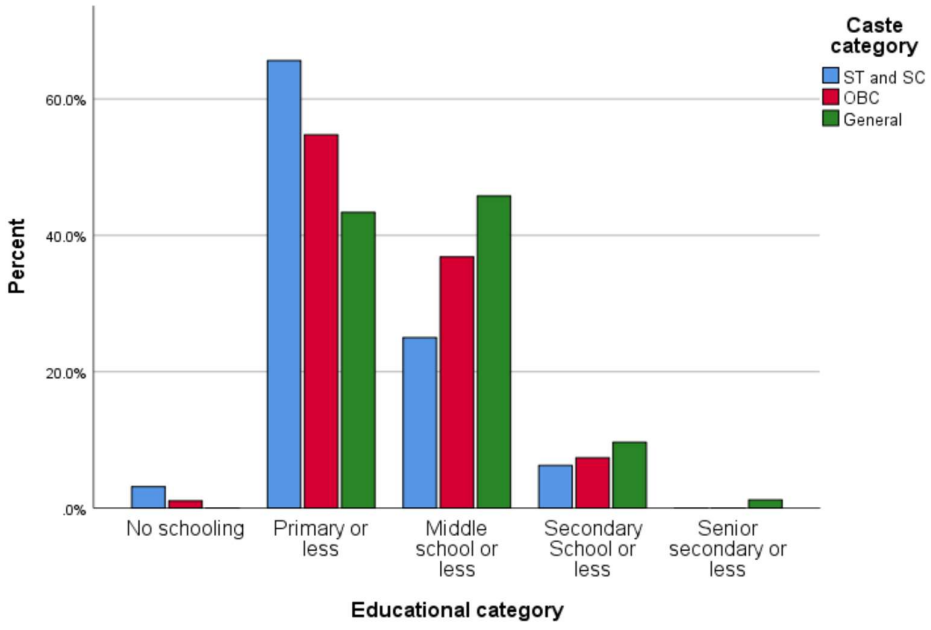
Educational characteristics

There has been an increase in the number of children enrolled in school. In the age group six to sixteen years, 1.5% of the children have never been to school, compared to 14.4% in the age group 16 years up to 26 years. The percentage of those who have never been to school increases with increase in age. Educational attainment also has a relationship with caste category. In those aged 16 years and above, the largest percentage without any schooling is in the ST and SC category. The percentage who have been to middle school or more is higher in the general category.

Table 5.2: Educational status by current age

Educational status	Current age				
	6 to 15.9 years	**16 to 25.9 years**	**26 to 45.9 years**	**46 or more years**	**Total**
No schooling	4 (1.5%)	39 (14.4%)	120 (44.0%)	111 (68.1%)	274 (27.9%)
Primary or less (Class 1-5)	151 (55.1%)	54 (19.9%)	90 (33.0%)	41 (25.2%)	336 (34.3%)
Middle school or less (Class 6-8)	97 (35.4%)	84 (31.0%)	31 (11.4%)	8 (4.9%)	220 (22.4%)
Secondary school or less (Class 9-10)	21 (7.7%)	50 (18.5%)	16 (5.9%)	3 (1.8%)	90 (9.2%)
Senior secondary or less (Class 11-12)	1(0.4%)	26 (9.6%)	8 (2.9%)	0	35 (3.6%)
Graduation or less (Years of college)	0	15 (5.5%)	3 (1.1%)	0	18 (18%)
Post graduation	0	3 (1.1%)	5 (1.8%)	0	8 (0.8%)
Total	274 (27.9%)	271 (27.6%)	273 (27.8%)	163 (16.6%)	981 (100%)

Figure 5.3: Education by caste category for age 16 and above



Occupational Characteristics

In terms of primary occupation, 39% of the population reported farming or related activities as their primary occupation, 29% of the population reported themselves as students. 13% said household duties and 11% of the population are dependents. The dependents include the elderly who are unable to work on a regular basis and children below 6 years.

Table 5.3: Primary occupation of the population

Primary occupation	N	Percent
Farming and related activities	425	39.4
Animal grazing	17	1.6
Construction and road construction	6	0.6
Transportation	6	0.6
Household industry (brick making)	6	0.6
Other specialized activity (washerwoman, tailor, barber, carpenter, cobbler)	13	1.2
Trader/retail trade	7	0.6
White collar worker (teacher, ASHA, ICDS *sahayika, kotwal*, NGO worker)	12	1.1
NREGA	6	0.6
Household duties	136	12.6
Student	317	29.4
Dependent	118	10.9
Rentier	6	0.6
General labour	4	0.4
Total	1079	100.0

Land Ownership

About 44 percent of households in Peeplekheda are landless and 45 percent of the households have up to 10 acres (4.05 hectares) of land or less. Of the total households, 15 percent households have less than three acres, 16.6 percent have between three and five acres, and 13.6 percent households have between five and ten acres. Eleven percent of the households have ten or more acres of land. The data shows a relation between caste and landlessness. Sixty-nine percent of the ST and SC households are landless as compared to 30 percent of

OBC and 29 percent of general caste households. Only 1.4 percent of ST and SC households have ten acres or more as compared to 12.7 percent of OBC and 20 percent general caste households.

Table 5.4: Household land ownership by caste category

Land holding	Caste category			
	ST and SC	OBC	General	Total
None	49 (69.0%)	19 (30.2%)	19 (29.2%)	87 (43.7%)
Less than 3 acres	9 (12.7%)	13 (20.6 %)	8 (12.3%)	30 (15.1%)
3-5 acres	7 (9.9%)	10 (15.9%)	16 (24.6%)	33 (16.6%)
5-10 acres	5 (7.0%)	13 (20.6%)	9 (13.8%)	27 (13.6%)
10-20 acres	1 (1.4%)	6 (9.5%)	8 (12.3%)	15 (7.5%)
20 or more acres	0	2 (3.2%)	5 (7.7%)	7 (3.5%)
Total	71 (100%)	63 (100%)	65 (100%)	199 (100%)

Vehicle Ownership

The motorcycle is the most important mode of private transport in rural India. It is more affordable than any four-wheeler, and is able to go over difficult terrain easily unlike other types of two-wheelers. The motor cycle is also a marker of a well-off household. And having a motorcycle makes a lot of difference in accessing health services. Only one percent in the ST and SC category, while 24 % of OBC and 28% of general category households have a motorcycle. The bicycle is the other form of transport, especially for the poor. Forty-two percent of ST and SC, 63% of OBC and 43% of general households have one or more bicycles. The ownership of bicycles has gone up since the Madhya Pradesh government started to distribute bicycles to girls in the middle school who live at least three kilometres away from the school. Twenty percent of ST and SC, 46% of OBC and 48% of general households own one or more bullock-carts.

Table 5.5: Ownership of vehicles by caste category

Vehicles	Caste category			
	ST and SC (71)	OBC (63)	General (65)	Combined (199)
Bicycle (1 or more)	30 (42.3%)	40 (63.5%)	28 (43.1%)	98 (49.2%)
Motorcycle	1 (1.4%)	15 (23.8%)	18 (27.7%)	34 (17.1%)
Bullock-cart (1 or more)	14 (19.7%)	29 (46%)	31 (47.7%)	74 (37.2%)
Tractor	0	3 (4.8%)	2 (3.1%)	5 (2.5%)
Trolley	0	2 (3.2%)	2 (3.1%)	4 (2.0%)

Household Infrastructure

The majority of households have electricity connection. Seventy-three percent of ST and SC, 78% of OBC and 85% of general households have electricity. Piped water from the bore-well that had been laid out by the *gram panchayat* is used by 43% of ST and SC households, 57% of OBC households and by 71% of general households. Latrine has been constructed by three percent of ST and SC, eight percent of OBC and six percent of general households. The majority of households are *kutcha* houses with mud walls and terracotta roof tiles. The maximum percentage of houses with brick walls are in the general category, followed by OBC households and the least among ST and SC households. The majority of households have one or two rooms. ST and SC have on average smaller houses and the general caste has bigger houses.

Table 5.6: Household infrastructure by caste category

	ST and SC 71	**OBC** 63	**General** 65	**Combined** 199
Electricity	52 (73.2%)	49 (77.8%)	55 (84.6%)	156 (78.4%)
Potable water source				
Piped water from hand-pump	30 (42.9%)	36 (57.1%)	46 (70.8%)	112 (56.6%)
Hand-pump	40 (57.1%)	25 (39.7%)	19 (29.2%)	84 (42.4%)

Other	0	2 (3.2%)	0	2 (1.0%)
Latrine	2 (2.8%)	5 (7.9%)	4 (6.2%)	11 (5.5%)
Type of walls				
Brick and cement	0	7 (11.1%)	7 (10.8%)	14 (7.0%)
Brick and mud	9 (12.7%)	7 (11.1%)	12 (18.5%)	28 (14.1%)
Mud	58 (81.7%)	49 (77.8%)	46 (70.8%)	153 (76.9%)
Bamboo and cane	1 (1.4%)	0	0	1 (0.5%)
Other	3 (4.2%)	0	0	3 (1.5%)
Type of roof				
Concrete	1 (1.4%)	4 (6.3%)	3 (4.6%)	8 (4.0%)
Terracotta tiles	62 (87.3%)	58 (92.1%)	61 (93.8%)	181 (91.0%)
Thatched	3 (4.2%)	0	0	3 (1.5%)
Other	5 (7.0%)	1 (1.6%)	1 (1.5%)	7 (3.5%)
Number of rooms				
0	1 (1.4%)	0	0	1 (0.5%)
1	26 (36.6%)	19 (30.2%)	9 (16.9%)	56 (28.1%)
2	26 (36.6%)	18 (28.6%)	13 (20.0%)	57 (28.6%)
3	12 (16.9%)	12 (19.0%)	13 (20.0%)	37 (18.6%)
4	5 (7.0%)	6 (9.5%)	17 (26.2%)	28 (14.1%)
More than 4	1 (1.4%)	8 (12.7%)	11 (16.9%)	20 (10%)

Access to welfare schemes, insurance and savings bank account

Ninety percent of the households have a ration card. There are three types of ration-cards given in Madhya Pradesh. *Antodaya* card is for the poorest of the poor, a below poverty line (BPL) card and an above poverty line (APL) card. Of those who had a ration card, 45 percent among ST and SC households had the *anatodaya* card and 42 percent in the general category had the APL card. Fifty-seven percent households have a bank account and ten percent have

an account in the post office. Many of the bank accounts were opened as it was mandatory for getting employment under MNREGA. Seventy-nine percent of households have a MNREGA card but only the poor take up employment under it. Some of the poor also said that though they needed the employment given under MNREGA, they could not take it up as they could not afford to put Rs.500 to open a bank account. When asked if the household had any health insurance, 46% households referred to the Deendayal card which gives households below the poverty line free treatment in government hospitals. Nobody had bought any health insurance on their own. Nineteen percent households reported taking life insurance.

Table 5.7: Membership in welfare schemes and savings by caste category

Welfare Scheme	**ST and SC 71**	**OBC 63**	**General 65**	**Combined 199**
Have ration card	62 (87.3%)	55 (87.3%)	62 (95.4%)	179 (89.9%)
Type of ration card				
Antodaya (poorest)	28 (45.2%)	9 (16.4%)	4 (6.5%)	41 (22.9%)
Below Poverty Line (BPL)	30 (48.4%)	31 (56.4%)	31 (50.0%)	92 (51.4%)
Above Poverty Line	2 (3.2%)	15 (27.3%)	26 (41.9%)	43 (24.0%)
*Mixed**	1 (1.6%)	0	1 (1.6%)	2 (1.1%)
Other#	1 (1.6%)	0	0	1 (0.6%)
Having bank account	32 (45.1%)	37 (58.7%)	44 (67.7%)	113 (56.8%)
Account in post office	11 (15.5%)	8 (12.7%)	0	19 (9.6%)
Have health insurance/ Deendayal card for Govt. hospital	46 (64.8%)	25 (40.3%)	20 (30.8%)	91 (46.0%)
Having Life insurance	4 (5.6%)	17 (27.0%)	17 (26.2%)	38 (19.1%)
Enrolled in MNREGA	58 (81.7%)	50 (79.4%)	50 (76.9%)	158 (79.4%)

*The household had reported themselves as two different households in official records and had two different types of ration-cards. #Has antodaya card but names of rest of family members not included though staying in the village

Environmental health needs

Fluorosis

In India 85% of the rural population is dependent on groundwater and fluoride in excess of the permissible limit of 1.5mg/litre or ppm in the groundwater is found in 19 states of India (CGWB, 2012). Seoni district is an endemic fluorosis area (Susheela, 1999). Here the condition has been caused due to excess amounts of fluoride in groundwater that is used for drinking. The ground water in the district has high concentrations of fluoride beyond the permissible limits of more than 1.5 mg/l. Studies have shown that fluorosis occurs in hot and arid areas even when the fluoride content in water is within permissible limits (Susheela, et.al 1993, Teotia,1999). This is because more water is consumed in warm weather. In rural areas of Seoni, as per the 2011 census, 52.76 percent of households use hand-pumps or bore-holes as the main source of drinking water. Iron and nitrate are also found in the ground water beyond the desirable limits but within the permissible limits.

Excess consumption of fluoride leads to dental, skeletal, and non skeletal fluorosis caused by long term ingestion of excess fluoride. More than 90 % of the ingested fluoride is absorbed from the gut, of which about 50 % of the fluoride absorbed is deposited in the bones and teeth and the remaining is excreted in urine, and of the fluoride retained in the body about 99 % is stored in the mineralised bones and teeth due to its affinity for calcium phosphate (Teotia, 2004). Dental fluorosis is considered an early biomarker of fluorosis and manifests as discoloured teeth and in late stages teeth may be pitted or chipped. Dental fluorosis occurs in children who are exposed to high intake of fluoride before completion of dental mineralization (12-14 years of age), and while permanent teeth are mainly affected, it may occasionally affect primary teeth (Teotia, 1999). Dental fluorosis may even start intra-utrine when tooth germ emerges (Susheela, 2015). Dental fluorosis may also have other repercussions such as psychological effects among children due to discolouration and loss of teeth and edentulous people may suffer nutritional deficiencies as they are unable to chew (Srivastava, et.al.2011).

Skeletal fluorosis clinically manifests as stiffness, rigidity, restricted movements at the spine and joints, and pain in bone and joint among those residing continuously for more than six months in a flourosis endemic area and in severe cases causes deformities of spine, joints, metabolic bone disease, muscle wasting and neurological complications. (Teotia, et.al. 2004)

In endemic fluorosis areas excess fluoride in drinking water may lead to foetal or neonatal skeletal flourosis (Teotia,et.al. 2004). Rickets, osteomalacia (softening of bones), secondary hyperparathyrodism and regional osteoporosis are associated with skeletal fluorosis. (Teotia, et.al. 2004)

Non-Skeletal flourosis is an early marker of flourosis but its manifestations are non-specific and may overlap with other diseases, and therefore the health complaints may be ignored (Susheela, 2015). Gastrointestinal complaints such as loss of appetite, abdominal pain, nausea, flatulence, constipation and intermittent diarrhoea are found in fluorosis endemic areas and are early signs of fluorosis and the complaints disappear within two weeks when safe water is provided (Susheela,1993). Fluoride can be absorbed in considerable amounts from the stomach which is why gastric and intestinal disorders are noticed in most cases of osteofluorosis (Susheela,1993). Other non-skeletal symptoms of fluoride toxicity include polyurea (tendency to urinate more frequently), polydipsia (excessive thirst), muscle weakness, fatigue, anaemia, abortions or still-births in an endemic area, male infertility and low testosterone levels in an endemic area, thyroid gland malfunction and neurological disorders, tingling sensation in fingers and toes, nervousness and depression (Susheela, 2002, 2015; Directorate General of Health Services, 2014).

The effect of fluoride depends on the concentration of fluoride in drinking water, the daily intake of fluoride, the continuity and the duration of exposure, under-nutrition, dietary deficiency of calcium, Vitamin D, Vitamin C, age and hormonal profile of the person (Susheela 1993, Teotia 2004). In advanced stages both dental and skeletal fluorosis cannot be reversed. Flourosis can be prevented and controlled by providing safe drinking water and through nutritional supplementation and supplements of calcium, Vitamin C, E and anti-oxidants. (Susheela, 2000, 2015)

While fluoride toxicity has been seen in humans and cattle since the 1930s, it was in 1986 that the technology mission on safe drinking water and a sub-mission on control of fluorosis was initiated in 1987 where water supply and health agencies were linked together (Susheela, 2002). In order to prevent and control fluorosis cases in the country, the Government of India initiated the National Programme for Prevention and Control of Fluorosis (NPPCF) during 11th Five Year Plan in 2008-09 in a phased manner in 100 districts of 17 states and extended it in 95 new districts during the 12th Plan. However Seoni is not one of the districts where the

NPPCF is being implemented. (Directorate General of Health Services (2014)) There is also no discussion about fluorosis either at the district level or at the block level in Seoni. None of the forms that collect data on the health status of the population emphasise fluoride toxicity. The ASHA revealed that flourosis was not discussed in her training either.

In Peepalkheda all households use ground water for cooking and drinking. There are seven handpumps in the village and one bore-well that was dug five years ago under the *Swajal Dhara Yojana* to provide drinking water to all households in the village. The Public Health Engineering Department had checked for the quality of water in the village in 2002. The department had taken samples from all hand-pumps to check fluoride levels. However not all the hand-pumps in the village are in use. As some stopped working, new ones were installed at different locations which have never been tested. Also, fluoride levels do not remain constant and are known to change as water leaches from the surface. The new policy of the department has been to hand-over the monitoring of fluoride levels to the village panchayat.

In February 2010, I had collected water from all seven hand-pumps and the bore-well that supplies water to the whole village. It was tested by the Public Health Engineering Department in the district. Fluoride in the water samples ranged from 0.6 to 5.7 ppm/litre. Of the seven hand-pumps, four had fluoride levels less than 1 ppm/lt (desirable limit), two hand-pumps had between 1.1 and 1.5 ppm/lt (permissible limit), while one hand-pump has fluoride level of 5.7 ppm/lt. The bore-well has fluoride level of 5.5 ppm/lt.

The issue of concern is that the bore-well that supplies water to the majority of households has a fluoride content of 5.5ppm, way beyond the permissible limit. Most households use this water for drinking, cooking and as drinking water for cattle. As mentioned earlier, the panchayat had to dig twice before they could reach the groundwater and subsequently spent a lot of money in laying pipes in the village. Therefore closing this source or finding another site is not an option. This supply has also freed women and young girls of the village from the drudgery of fetching water from hand-pumps and from other far away sources, especially in summers. When I spoke of high fluoride levels with some people in the village, the general attitude was that they would rather take water from this source than go to certain hand-pumps to fetch water. Moreover, the effects of excess fluoride in the water are not yet visible in the village.

There were children between the ages six and ten years from a few households clustered together, who had discoloured teeth which one of the mothers' attributed to the water in the school hand-pump. The said hand-pump however did not have fluoride beyond the permissible limits when tested. Then again, the level of fluoride in the water from the hand-pumps does vary, so it is not possible to attribute it to a particular hand-pump. I later got to know that there used to be another hand-pump near these households that was removed since it stopped working which could also have been the cause of discolouration of teeth. All the children belong to landless *adivasi* households.

Sanitation

Only 11 out of 199 households have a toilet in the house. In Peepalkheda, there is enough space around the habitation in the form of farm and forest land for open defecation. Most people in the village said that they do not like using the toilet and prefer to go out in the open. I was repeatedly told that this was one problem they faced when they went to urban areas, as they do not like toilets. Even in households where there are toilets, they are not used by all members. The toilets are used more by women than men, and used most during the monsoons when the fields are sown and the rains make it difficult to go out to the forest area. The unpopularity of the toilet is associated with traditional ideas of purity and pollution according to which, defecating is a highly polluting activity that must be done as away from the living space as possible. Most households do have space to build the toilet away from the main house, but it is becoming difficult as families expand. In Peepalkheda, toilets also have the potential to create conflict with other residents. The barber in the village has built two toilets in his house which is at the entrance of the village. The water from the toilets often overflows into the rain-water drain along the street, spreading foul smell all around. The neighbours are constantly complaining that they are unable to sit outside in the courtyard of their own homes due to the smell. The neighbours feel that the depth of the drain pipes and septic tank is not sufficient, hence this problem.

The government had introduced a scheme for the construction of toilets for which households were given Rs.1500 through the panchayat. But villagers complained that they needed a minimum of Rs. 8000 to build a proper toilet with a proper septic tank in 2009. Therefore there were not many takers for this scheme. Another cost associated with using a toilet is getting enough water for flushing and keeping it clean. This requires building a storage tank

and also filling it regularly. Fetching water and keeping it clean is done by women as part of domestic work.

The greatest need for the toilet occurs during the monsoon when it is often impossible to go out to defecate. Teenage girls told me that often they eat less so that they may not have to go out. This district is among the top five rainiest districts of Madhya Pradesh. Many of the well-off households build a temporary toilet during the monsoon which is basically a pit. It is not as if people are not aware of the need of a toilet and that disease can spread as a result, but is not considered a priority. There has been a diarrhoea-vomiting-dehydration (DVD) epidemic in the village in the past during the monsoon.

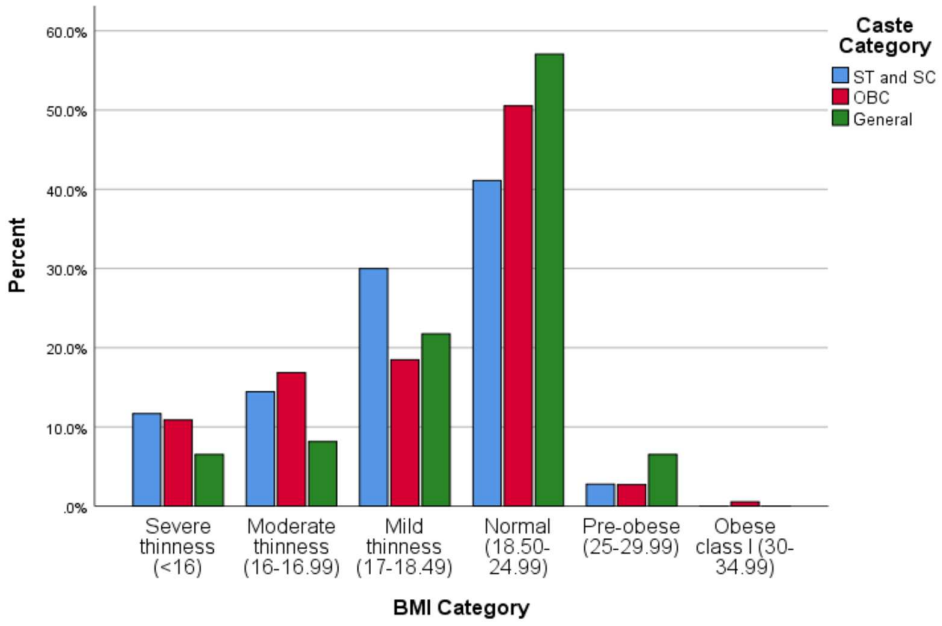
Nutritional status

The heights and weights of all residents in the village was recorded in the survey to calculate the body mass index (BMI). The BMI is an indicator of the health status of the people. Regarding adults above 19 years of age, 50% of the population has normal BMI, while 46% range from mild to severe thinness. If one looks at BMI in different caste groups, the general category has the largest percentage of people with normal BMI and the ST and SC form the largest group in the severely thin.

Table 5.8: Body mass index of adults (above 19 years)

BMI	Frequency	Percentage
Severe thinness (<16 BMI)	53	9.7
Moderate thinness (16-16.99 BMI)	72	13.1
Mild thinness (17-18.49 BMI)	128	23.4
Normal (18.50-24.99 BMI)	272	49.6
Pre-obese (25-29.99 BMI)	22	4.0
Obese class I (30-34.99 BMI)	1	0.2
Total	548	100.0

Figure 5.4: Body mass index of adults by caste category



An examination of heights of adults shows that the median heights for both females and males is lowest in the ST and SC population and highest in the general caste category. A very large percentage of females amongst the ST and SC have very low heights, i.e. 135-144.9 centimetres as compared to OBC and general castes. Very low heights i.e.145-154.9 centimtres, among men is also the highest among ST and SC. One can summarise that chronic under nutrition resulting in lower heights has been there for generations among ST, SC and OBC population. It is interesting that there is no link between caste and the tallest heights for both females and males.

Table 5.9: Median heights (cms) by caste category for females and males above 19 years

	ST and SC	OBC	General	Combined
Females	151	152	154.5	152
Males	162	164.5	166	164

Figure 5.5: Heights of females above 19 years by caste category

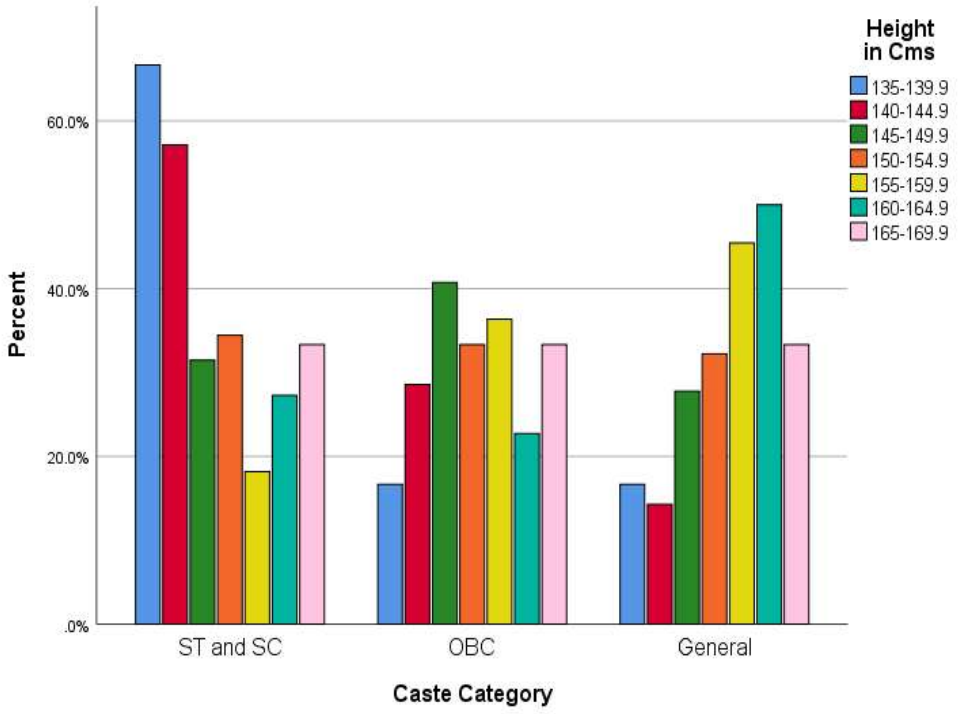
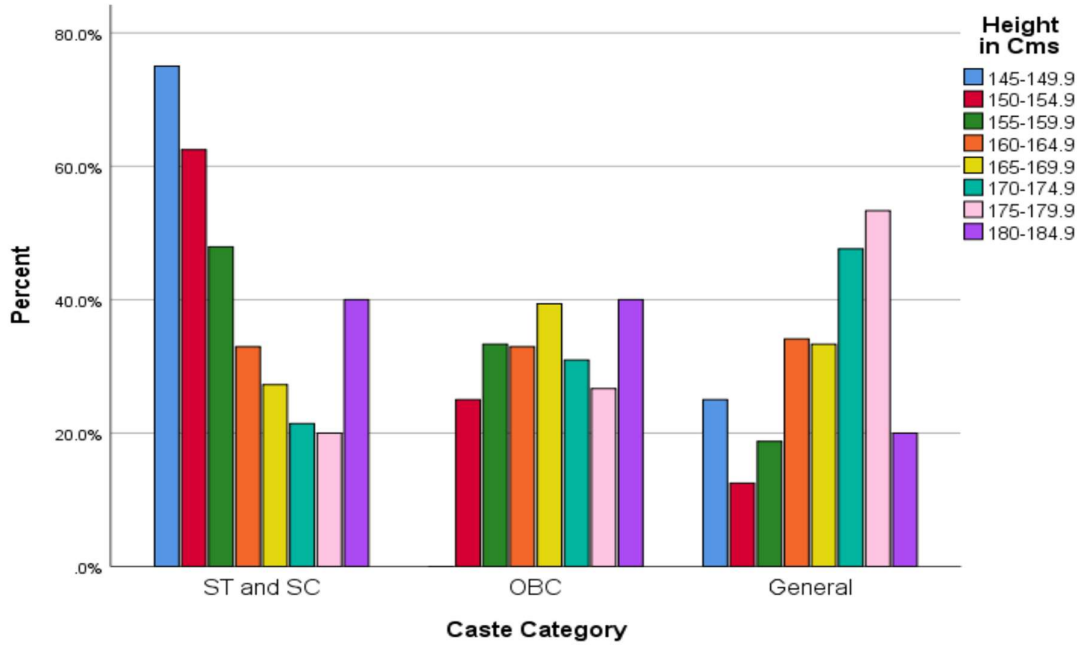


Figure 5.6: Heights of males above 19 years by caste category

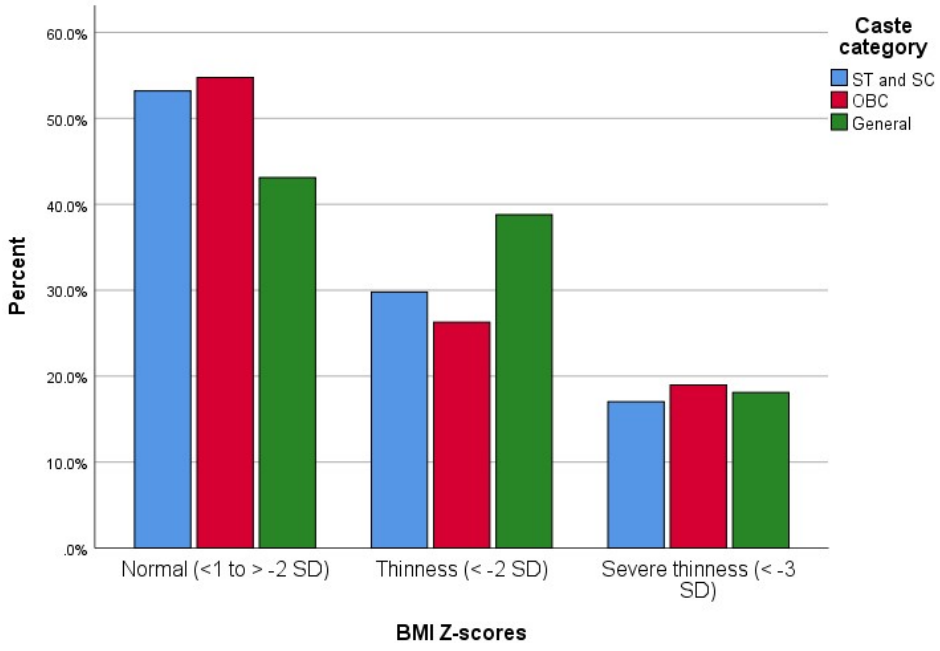


For children and teens in the 6 to 19 years age group, 51% have a normal BMI, 30% are in the thin category and 19% are severely thin. In terms of caste, those belonging to the general category have slightly lower BMI. But there doesn't seem to be any major association between caste and BMI in this age group.

Table 5.10: Body mass index of children and teens, 6 to 19 years

BMI based on Z-score	Frequency	Percentage
Normal (<1 to > -2 SD)	189	51.1
Thinness (< -2 SD)	111	30.0
Severe thinness (< -3 SD)	70	18.9
Total	370	100.0

Figure 5.7: BMI of children and teens, 6 to 19 years by caste category

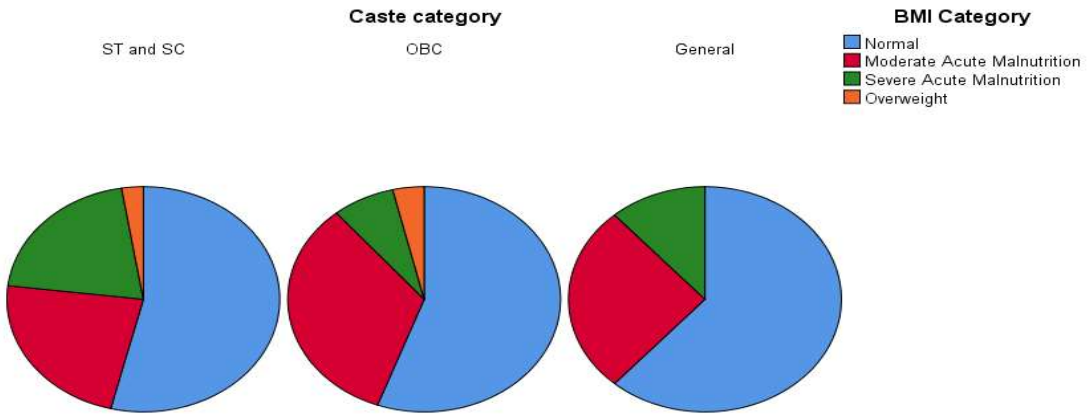


Fifty-seven percent of children ages 5 years or less have normal BMI, 27% have moderate acute malnutrition and 14% have severe acute malnutrition. In terms of caste, the ST and SC caste group has the largest percentage of children with severe acute malnutrition and the largest percentage of children with normal BMI are in the general caste category.

Table 5.11: Body mass index of children 0-5 years

BMI based on Z-score	Frequency	Percentage
Normal	52	56.5
Moderate Acute Malnutrition	25	27.2
Severe Acute Malnutrition (SAM)	13	14.1
Overweight	2	2.2
Total	92	100.0

Figure 5.8: Body mass index of children 0-5 years by caste category



Expressed health needs of the community

The following health needs are based on the ailments that residents of Peeplekheda expressed during the household survey. The survey has endeavoured to build a picture of the various health problems expressed by the residents. This comprises 1) current illness, 2) chronic and repeated illness in the last five years, 3) hospitalisations in the past five years, 4) disability and 5) mortality in the past five years in the household. The places of treatment, if taken were also recorded. The aim of the survey was not to measure incidence or prevalence of diseases.

Current illness

In order to understand patterns of seeking treatment, the survey tried to capture what people do as an immediate measure when someone falls ill. The respondents were asked ws anyone in the household unwell today?' The responses brought up ailments that had started recently and also those that had been affecting them for a long time. For purposes of analysis, the focus in the current illness category is on illnesses of duration of less than 21 days. Ailments of longer duration have been included in chronic and repeated illness. Of the 78 current ailments, fever (33.3%), respiratory ailments (33.3%) and musculoskeletal ailments (12.8%) were the most commonly reported ailments of duration less than 21 days.

Table 5.12: Current illness less than 21days* and symptoms within type of ailment

Type of Ailment	**N (Percent)**	**Symptoms within type of ailment**	**N (%)**
Respiratory	26 (33.3%)		
		Cold, cough, fever	*18 (23.1%)*
		Tuberculosis	*3 (3.8%)*
		Pain in the chest (pasli mein dard)	*2 (2.6%)*
		Pneumonia, heaving (pasli chalna)	*2 (2.6%)*
		Breathlessness	*1 (1.3%)*
Fever	26 (33.3%)		
		Fever: non specific	*24 (30.8%)*
		Fever reported as malaria	*2 (2.6%)*
Musculoskeletal	10 (12.8%)		
		Body ache, pain in limbs	*5 (6.4%)*
		Pain in back/shoulder/neck	*4 (5.1%)*
		Pain in joints, swelling in knees, pain in shoulder arms	*1 (1.3%)*
Gastrointestinal	5 (6.4%)		
		Diarrhoea and/or vomiting	*2 (2.6%)*
		Constipation	*2 (2.6%)*
		Inflammation	*1 (1.3%)*
Neurological	4 (5.1%)		
		Headaches	*2 (2.6%)*

		Giddiness	*2 (2.6%)*
Injuries	2 (2.6%)		
		Minor wound	*2 (2.6%)*
Oral health	2 (2.6%)		
		Pain in teeth, jaw	*1 (1.3%)*
		Blisters in the mouth	*1 (1.3%)*
Gynaecological	1 (1.3%)		
		Pain during periods / dysmenorrhoea	*1 (1.3%)*
Weakness	1 (1.3%)		
		Weakness hoeaeriods /	*1 (1.3%)*
Dermatological	1 (1.3%)		
		Boils	*1 (1.3%)*
Total	78 (100%)		*78 (100%)*

*Based on number of ailments reported. Some people reported more than one ailment.

When current ailments (less than 21 days) are disaggregated by gender, the ailments most reported by females were respiratory (38.2%) followed by fever (23.5%) and neurological (8.8%). In case of males, fever (40.9%) was the most frequently reported followed by respiratory (29.5%) and musculoskeletal (20.5%). No woman above the age of 55 has reported any current ailment less than 21 days. This could be a reporting bias where older women may not be reporting ailments till they become chronic. The maximum ailments among females (41.2%) were reported in the 5-15 years category, 20.6% ailments were reported by the 45-55 age group and 14.7% by the 15-25 age group. Among males, the largest percentage of ailments (31.8%) was also reported in the 5-15 years age group, 15.9% by the 35-45 years age group and 13.6% in the below 5 years age group. When asked ‘is anyone unwell today’, more ailments were reported by females than males, but for ailments less than 21 days, ailments reported by males out-number those reported by females.

Table 5.13: Type of ailments* (duration less than 21 days) reported by females by age categories

Type of Ailment	Age Category						
	Below 5 years	**5-15 years**	**15-25 years**	**25-35 years**	**35-45 years**	**45-55 years**	**Total**
Respiratory (n)	1	8	1	0	1	2	13
% within age category	*33.3%*	*57.1%*	*20.0%*	*0.0%*	*33.3%*	*28.6%*	*38.2%*
Fever (n)	0	4	0	1	1	2	8
% within age category	*0.0%*	*28.6%*	*0.0%*	*50.0%*	*33.3%*	*28.6%*	*23.5%*
Neurological (n)	0	0	1	1	0	1	3
% within age category	*0.0%*	*0.0%*	*20.0%*	*50.0%*	*0.0%*	*14.3%*	*8.8%*
Gastrointestinal (n)	1	0	1	0	0	0	2
% within age category	*33.3%*	*0.0%*	*20.0%*	*0.0%*	*0.0%*	*0.0%*	*5.9%*
Injuries(n)	0	2	0	0	0	0	2
% within age category	*0.0%*	*14.3%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*5.9%*
Oral (n)	0	0	0	0	1	1	2
% within age category	0.0%	0.0%	0.0%	0.0%	33.3%	14.3%	5.9%
Musculoskeletal (n)	0	0	0	0	0	1	1
% within age category	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*14.3%*	*2.9%*
Gynaecological (n)	0	0	1	0	0	0	1
% within age category	*0.0%*	*0.0%*	*20.0%*	*0.0%*	*0.0%*	*0.0%*	*2.9%*
Weakness (n)	0	0	1	0	0	0	1
% within age category	*0.0%*	*0.0%*	*20.0%*	*0.0%*	*0.0%*	*0.0%*	*2.9%*
Dermatological (n)	1	0	0	0	0	0	1
% within age category	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%
Total (n)	3	14	5	2	3	7	34
Total %	8.8%	41.2%	14.7%	5.9%	8.8%	20.6%	100.0%
% within age category	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

*Based on number of ailments reported. Some people reported more than one ailment.

Table 5.14: Type of ailments* (duration less than 21 days) reported by males by age categories

Type of Ailment	Age Category								
	Below 5 years	5-15 years	15-25 years	25-35 years	35-45 years	45-55 years	55-65 years	65 and above	Total
Fever	3	8	2	1	1	1	2	0	18
% within age category	50.0%	57.1%	66.7%	33.3%	14.3%	33.3%	50.0%	0.0%	40.9%
Respiratory	2	6	0	1	2	1	0	1	13
% within age category	33.3%	42.9%	0.0%	33.3%	28.6%	33.3%	0.0%	25.0%	29.5%
Musculoskeletal	0	0	1	1	4	0	1	2	9
% within age category	0.0%	0.0%	33.3%	33.3%	57.1%	0.0%	25.0%	50.0%	20.5%
Gastro-intestinal	1	0	0	0	0	1	0	1	3
% within age category	16.7%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	25.0%	6.8%
Neurological	0	0	0	0	0	0	1	0	1
% within age category	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	2.3%
Total	6	14	3	3	7	3	4	4	44
Total %	13.6%	31.8%	6.8%	6.8%	15.9%	6.8%	9.1%	9.1%	100.0%
% within age category	100%	100%	100%	100%	100%	100%	100%	100%	100%

*Based on number of ailments reported. Some people reported more than one ailment.

Table 5.15: Current illness, current illness less than 21 days, treatment not taken and percent of ailments for which treatment not taken, by gender

	Those reporting current ailments*	**Those reporting ailments* less than 21 days of duration**	**Those reporting ailments* for which treatment *not* taken (< 21 days)**
Female	92 (55.1%)	34 (43.6%)	15 (44.1%)
Male	75 (44.9%)	44 (56.4%)	19 (55.9%)
Total	167 (100.0%)	78 (100.0%)	34 (100.0%)

Table 5.16: Current illness, current illness less than 21 days, treatment not taken and percent of ailments for which treatment not taken, by land ownership

	Ailments* reporting ill today	**Ailments* less than 21 days of duration**	**Treatment *not* taken (< 21 days duration)**
Below 5 years	9 (5.4%)	9 (11.5%)	5 (14.7%)
5-15 years	32 (19.2%)	28 (35.9%)	9 (26.5%)
15-25 years	17 (10.2%)	8 (10.3%)	5 (14.7%)
25-35 years	16 (9.6%)	5 (6.4%)	1 (2.9%)
35-45 years	32 (19.2%)	10 (12.8%)	4 (11.8%)
45-55 years	24 (14.45)	10 (12.8%)	5 (14.7%)
55-65 years	17 (10.2%)	4 (5.1%)	3 (8.8%)
Above 65 years	20 (12%)	4 (5.1%)	2 (5.9%)
Total	167 (100.0%)	78 (100%)	34 (100.0%)

*Based on number of ailments reported. Some people reported more than one ailment.

For ailments less than 21 days, the maximum ailments (41%) were reported by ST and SC households. Of the ailments for which treatment was not sought, 55.9% were reported by STs and SCs, 29.4% by OBCs and 14.7% by general castes. When analysed by land-ownership, the maximum ailments (41%) were reported by the landless and similarly 50% of the ailments for which no treatment was taken was reported by the landless.

Table 5.17: Current illness, current illness less than 21 days, treatment not taken and percent of ailments for which treatment not taken, by caste

	Those reporting current ailments*	**Those reporting ailments* less than 21 days of duration**	**Those reporting ailments* for which treatment *not* taken (< 21 days)**
ST and SC	58 (34.7%)	32 (41%)	19 (55.9 %)
OBC	56 (33.5%)	23 (29.5 %)	10 (29.4 %)
General	53 (31.7%)	23 (29.5%)	5 (14.7%)
Total	167 (100.0%)	78 (100.0%)	34 (100.0%)

*Based on number of ailments reported. Some people reported more than one ailment.

Table 5.18: Current illness, current illness less than 21 days, treatment not taken and percent of ailments for which treatment not taken, by land ownership

	Ailments* reporting ill today	Ailments* less than 21 days of duration	Treatment *not* taken (< 21 days duration)
No land	63 (37.7 %)	32 (41.0 %)	17 (50.0 %)
Less than 3 acres	31 (18.6 %)	15 (19.2 %)	6 (17.6 %)
3-5 acres	33 (19.8 %)	19 (24.4%)	7 (20.6 %)
5-10 acres	21 (12.6 %)	6 (7.7%)	2 (5.9 %)
10-20 acres	13 (7.8 %)	3 (3.8%)	2 (5.9 %)
20 or more acres	6 (3.6 %)	3 (3.8 %)	0%
Total	167 (100.0%)	78 (100%)	34 (100.0%)

*Based on number of ailments reported. Some people reported more than one ailment.

In the case of current illness of less than 21 days also, a few people had been to more than one source of treatment. Regarding current illness, the informal practitioners at Talgaon are the most popular choice (56%). This is followed by private practitioner in Seoni (15%) and going to the chemist (10%). The category of private practitioners cannot be clearly defined as a few of the respondents could not tell if the doctor was MBBS or not, or even tell the name of the doctor. The well-off households go to qualified allopathic private doctors in Seoni.

Table 5.19: Sources of treatment for illness less than 21 days (multiple responses)

Sources of treatment	N	Percent	Percent of cases
District Hospital - OPD	1	2.1%	2.3%
Seoni private - OPD	7	14.6%	15.9%
Deendayal gadi (mobile clinic)	1	2.1%	2.3%
Informal practitioner Talgaon	27	56.3%	61.4%
Home remedies	2	4.2%	4.5%
Chemist	5	10.4%	11.4%
Self medication	2	4.2%	4.5%
Other private - OPD	2	4.2%	4.5%
Other	1	2.1%	2.3%
Total	48	100.0%	109.1%

Chronic and repeated illness in the past five years

The survey also recorded chronic or repeated illnesses and any illness with symptoms persisting for more than three weeks in the last five years. The largest percentage of ailments reported were musculoskeletal (15.7%) and gynaecological (15.7%) followed by gastro-intestinal (10%), neurological (9%), fever (8.7%) and respiratory (8.4%).

Table 5.20: Chronic and repeated illness and symptoms within type of ailment

Type of ailment	**N (Percent)**	**Symptoms within type of ailment**	**N (Percent)**
Musculoskeletal	56 (15.7)		
		Body ache, Pain in limbs, thighs, spasm from hip to ankle	*18 (5.1)*
		Pain in back, shoulder, neck	*17 (4.8)*
		Pain in joints, swelling in knees; stiffness in leg	*10 (2.8)*
		Pain, numbness, tingling sensation	*9 (2.5)*
		Hernia	*2 (0.6)*
Gynaecological	56 (15.7)		
		White discharge	*17 (4.8)*
		Excessive periods, frequent periods	*16 (4.5)*
		Scanty periods, irregular periods	*8 (2.2)*
		Reproductive tract infections	*5 (1.4)*
		Prolapsed uterus	*4 (1.1)*
		Pain during periods/dysmenorrhoea	*4 (1.1)*
		Post sterilisation complication	*2 (0.6)*
Gastro-intestinal	35 (9.8)		
		Gas, acidity, gastritis	*16 (4.5)*
		Pain in stomach	*8 (2.2)*

		Liver problems	*5 (1.4)*
		Diarrhoea, vomiting	*3 (0.8)*
		Cannot digest food, blockage of oesophagus	*1 (0.3)*
		Stone	*1 (0.3)*
		Inflammation	*1 (0.3)*
Neurological	32 (9.0)		
		Headaches	*11 (3.0)*
		Paralysis al food, b	*6 (1.7)*
		Sciatica	*3 (0.8)*
		Tingling, burning on soles- problem with nerve endings	*3 (0.8)*
		Paresis below the waist es- problem with nerve endings le ailment	*3 (0.8)*
		Giddiness	*2 (0.6)*
		Shaking of the head, the whole left side has become stiff	*2 (0.6)*
		Unspecified (chakkar aa kar behosh)	*1 (0.3)*
		Fits	*1 (0.3)*
Fever	31 (8.7)		
		Fever, non-specific	*7 (2.0)*
		Fever reported as malaria and suspected malaria	*7 (2.0)*
		Typhoid	*6 (1.7)*
		Combined febrile diseases	*4 (1.1)*
		Chikangunea	*3 (0.8)*
		Chicken pox	*2 (0.6)*
		Hepatitis/jaundice	*2 (0.6)*
Respiratory	30 (8.4)		
		Breathlessness	*12 (3.4)*

		Tuberculosis	*5 (1.4)*
		Pneumonia, heaving (pasli chalna)	*4 (1.1)*
		Pain in the chest (pasli mein dard)	*3 (0.8)*
		Suspected TB (pasli mein paani) water in the chest/lungs. Diagnosis not given,	*3 (0.8)*
		Cold, cough, fever	*2 (0.6)*
		Congestion in chest	*1 (0.3)*
Injury	16 (4.5)		
		Fractures	*9 (2.5)*
		Sepsis	*4 (1.1)*
		Eye injury	*2 (0.6)*
		Head injury	*1 (0.3)*
Cardio-vascular	14 (3.9)		
		Hypertension	*8 (2.2)*
		Hole in the heart	*1 (0.3)*
		Palpitations	*3 (0.8)*
		Cardiac failure	*2 (0.6)*
Dermatological	13 (3.7)		
		Boils	*6 (1.7)*
		Itching	*4 (1.1)*
		Skin peeling off from hands	*2 (0.6)*
		Vulval infection	*1 (0.3)*
Eye	11 (3.1)		
		Inflammation of the conjunctiva	*8 (2.2)*
		Problem with optic nerve, has lost vision	*1 (0.3)*
		Cross-eyed	*1 (0.3)*
		Hypermetropia, age related refractive error	*1 (0.3)*

Mental health issues	10 (2.8)		
		Anxiety/sleeplessness	*9 (2.5)*
		Psychosis	*1 (0.3)*
Oral	10 (2.8)		
		Pain in teeth, jaw	*7 (2.0)*
		Discolouration of teeth	*3 (0.8)*
ENT	8 (2.2)		
		Sepsis in the ear	*3 (0.8)*
		Pain in ear, swelling	*2 (0.6)*
		Middle ear disease	*1 (0.3)*
		Water in tonsils, itchiness on the tongue	*1 (0.3)*
		Pain, hard of hearing	*1 (0.3)*
Weakness	5 (1.4)		
		Weakness	*5 (1.4)*
Hormonal disorders	5 (1.4)		
		Sugar diabetes	*2 (0.6)*
		Leg swells while working in the fields	*1 (0.3)*
		Growth deficit	*1 (0.3)*
Urological	5 (1.4)		
		Stone	*2 (0.6)*
		Swelling in Kidney	*1 (0.3)*
		Kidney failure	*1 (0.3)*
		Burning sensation	*1 (0.3)*
Pregnancy	4 (1.1)		
		Vomiting	*1 (0.3)*
		Hypertension/swelling	*1 (0.3)*
		Paralysis (lakwa) during pregnancy	*1 (0.3)*
		Spontaneous abortion	*1 (0.3)*
Unspecified	4 (1.1)		

		Pain in chest	*2 (0.6)*
		Faints while crying	*1 (0.3)*
		Obstruction in the throat	*1 (0.3)*
Malaise	3 (0.8)		
		Malaise	*3 (0.8)*
Vascular	2 (0.6)		
		Haemorrhoids	*2 (0.6)*
Auto-immune disorders	1 (0.3)		
		Scales on hands and legs, hands, arms have stiffened	*1 (0.3)*
Male reproductive health problems	1 (0.3)		
		Not attained physical maturity	*1 (0.3)*
Blood disorder + vascular + hepatitis	1 (0.3)		
		Anaemia, haemorrhoids and jaundice	*1 (0.3)*
Blood disorders	1 (0.3)		
		Anaemia	*1 (0.3)*
Gynaecological + vascular	1 (0.3)		
		Gynaecological + vascular	*1 (0.3)*
Burns	1 (0.3)		
		Burns	*1 (0.3)*
Total	356 (100)	*Total*	*356 (100)*

Amongst women, gynaecological ailments were the most reported (22.8%), followed by musculoskeletal (14.6%), gastro-intestinal (8.9%), neurological (8.5%), fever (6.9%) and respiratory problems (6.9%). Amongst men the ailment most reported was musculoskeletal (18.2%), fever (12.7%), respiratory (11.8%) and gastro-intestinal (11.8%) and neurological (10%). More females (69.1%) reported chronic or repeated illness in the last five years. Similarly of those who reported not taking any treatment, 77.5% were females. In terms of age categories, the maximum, 22.5% chronic ailments were reported by the 35-45 years age

category, followed by 19.1% in the 25-35 years. The maximum untreated ailments – 22.5% - were reported by those in the 35-35 years and 15-25 years age group.

Table 5.21: Type of chronic ailments* reported by females by age categories

Type of ailment	Age category								
	Below 5 years	5-15 years	15-25 years	25-35 years	35-45 years	45-55 years	55-65 years	65 and above	Total
Gynaecological	0	0	11	22	15	7	1	0	56
% within age category	0.0%	0.0%	26.8%	38.6%	22.7%	18.9%	6.3%	0.0%	22.8%
Musculoskeletal	1	0	6	5	12	7	2	3	36
% within age category	14.3%	0.0%	14.6%	8.8%	18.2%	18.9%	12.5%	23.1%	14.6%
Gastrointestinal	1	1	1	5	5	4	5	0	22
% within age category	14.3%	11.1%	2.4%	8.8%	7.6%	10.8%	31.3%	0.0%	8.9%
Neurological	0	1	2	6	2	5	3	2	21
% within age category	0.0%	11.1%	4.9%	10.5%	3.0%	13.5%	18.8%	15.4%	8.5%
Respiratory	3	2	2	3	3	2	2	0	17
% within age category	42.9%	22.2%	4.9%	5.3%	4.5%	5.4%	12.5%	0.0%	6.9%
Fever	0	1	7	2	3	1	0	3	17
% within age category	0.0%	11.1%	17.1%	3.5%	4.5%	2.7%	0.0%	23.1%	6.9%
Cardio-vascular	0	0	0	3	2	3	2	2	12
% within age category	0.0%	0.0%	0.0%	5.3%	3.0%	8.1%	12.5%	15.4%	4.9%
Eye	0	1	1	1	3	1	1	1	9
% within age category	0.0%	11.1%	2.4%	1.8%	4.5%	2.7%	6.3%	7.7%	3.7%
Mental health	0	0	0	2	6	1	0	0	9
% within age category	0.0%	0.0%	0.0%	3.5%	9.1%	2.7%	0.0%	0.0%	3.7%
Dermatological	1	0	3	0	4	1	0	0	9
% within age category	14.3%	0.0%	7.3%	0.0%	6.1%	2.7%	0.0%	0.0%	3.7%
Injuries	0	0	1	2	1	1	0	1	6

% within age category	0.0%	0.0%	2.4%	3.5%	1.5%	2.7%	0.0%	7.7%	2.4%
Weakness	0	1	1	1	2	0	0	0	5
% within age category	0.0%	11.1%	2.4%	1.8%	3.0%	0.0%	0.0%	0.0%	2.0%
Oral	0	2	0	0	1	1	0	1	5
% within age category	0.0%	22.2%	0.0%	0.0%	1.5%	2.7%	0.0%	7.7%	2.0%
Pregnancy	0	0	3	1	0	0	0	0	4
% within age category	0.0%	0.0%	7.3%	1.8%	0.0%	0.0%	0.0%	0.0%	1.6%
Unspecified	1	0	0	1	2	0	0	0	4
% within age category	14.3%	0.0%	0.0%	1.8%	3.0%	0.0%	0.0%	0.0%	1.6%
ENT	0	0	1	0	1	1	0	0	3
% within age category	0.0%	0.0%	2.4%	0.0%	1.5%	2.7%	0.0%	0.0%	1.2%
Malaise	0	0	0	1	1	1	0	0	3
% within age category	0.0%	0.0%	0.0%	1.8%	1.5%	2.7%	0.0%	0.0%	1.2%
Auto-immune	0	0	0	0	1	0	0	0	1
% within age category	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.4%
Urological	0	0	0	0	0	1	0	0	1
% within age category	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	0.0%	0.0%	0.4%
Blood disorder + vascular + hepatitis	0	0	1	0	0	0	0	0	1
% within age category	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%
Hormonal disorders	0	0	1	0	0	0	0	0	1
% within age category	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%
Blood disorders	0	0	0	0	1	0	0	0	1
% within age category	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.4%
Gynaecological + vascular	0	0	0	1	0	0	0	0	1
% within age category	0.0%	0.0%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.4%

Burns	0	0	0	1	0	0	0	0	1
% within age category	0.0%	0.0%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.4%
Vascular	0	0	0	0	1	0	0	0	1
% within age category	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.4%
Total	7	9	41	57	66	37	16	13	246
Total %	2.8%	3.7%	16.7%	23.2%	26.8%	15.0%	6.5%	5.3%	100.0%
% within age category	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

*Based on number of ailments reported. Some people reported more than one ailment.

Table 5.22: Type of chronic ailments* reported by males by age categories

Type of ailment	Age category								
	Below 5	5-15 years	15-25 years	25-35 years	35-45 years	45-55 years	55-65 years	65 and above	Total
Musculoskeletal	0	0	3	1	1	5	4	6	20
% within age category	0.0%	0.0%	16.7%	9.1%	7.1%	23.8%	40.0%	37.5%	18.2%
Fever	2	0	7	0	3	0	1	1	14
% within age category	25.0%	0.0%	38.9%	0.0%	21.4%	0.0%	10.0%	6.3%	12.7%
Respiratory	1	1	1	1	3	4	0	2	13
% within age category	12.5%	8.3%	5.6%	9.1%	21.4%	19.0%	0.0%	12.5%	11.8%
Gastrointestinal	1	2	1	4	1	3	0	1	13
% within age category	12.5%	16.7%	5.6%	36.4%	7.1%	14.3%	0.0%	6.3%	11.8%
Neurological	1	3	1	1	1	1	1	2	11
% within age category	12.5%	25.0%	5.6%	9.1%	7.1%	4.8%	10.0%	12.5%	10.0%
Injuries	0	0	2	1	2	3	1	1	10
% within age category	0.0%	0.0%	11.1%	9.1%	14.3%	14.3%	10.0%	6.3%	9.1%
ENT	2	2	0	0	0	0	1	0	5
% within age category	25.0%	16.7%	0.0%	0.0%	0.0%	0.0%	10.0%	0.0%	4.5%
Oral	0	1	0	1	1	2	0	0	5
% within age	0.0%	8.3%	0.0%	9.1%	7.1%	9.5%	0.0%	0.0%	4.5%

category									
Dermatological	1	3	0	0	0	0	0	0	4
% within age category	12.5%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%
Urological	0	0	0	1	1	0	1	1	4
% within age category	0.0%	0.0%	0.0%	9.1%	7.1%	0.0%	10.0%	6.3%	3.6%
Hormonal disorders	0	0	0	1	1	1	1	0	4
% within age category	0.0%	0.0%	0.0%	9.1%	7.1%	4.8%	10.0%	0.0%	3.6%
Cardio-vascular	0	0	1	0	0	0	0	1	2
% within age category	0.0%	0.0%	5.6%	0.0%	0.0%	0.0%	0.0%	6.3%	1.8%
Eye	0	0	1	0	0	1	0	0	2
% within age category	0.0%	0.0%	5.6%	0.0%	0.0%	4.8%	0.0%	0.0%	1.8%
Mental health	0	0	0	0	0	1	0	0	1
% within age category	0.0%	0.0%	0.0%	0.0%	0.0%	4.8%	0.0%	0.0%	0.9%
Male reproductive health	0	0	1	0	0	0	0	0	1
% within age category	0.0%	0.0%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%
Vascular	0	0	0	0	0	0	0	1	1
% within age category	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.3%	0.9%
Total	8	12	18	11	14	21	10	16	110
Total %	7.3%	10.9%	16.4%	10.0%	12.7%	19.1%	9.1%	14.5%	100 %
% within age category	100%	100%	100%	100%	100%	100%	100%	100%	100%

*Based on number of ailments reported. Some people reported more than one ailment.

Table 5.23: Chronic and repeated illness by gender and treatment not taken

Gender	Chronic and repeated ailments*	Treatment *not* taken
Female	246 (69.1%)	55 (77.5%)
Male	110 (30.9%)	16 (22.5%)
Total	356 (100%)	71 (100.0%)

*Based on number of ailments reported. Some people reported more than one ailment.

Table 5.24: Chronic and repeated illness by age categories and treatment not taken

Age categories	Chronic and repeated ailments*	Treatment *not* taken
Below 5 years	15 (4.2%)	1 (1.4%)
5-15 years	21 (5.9%)	7 (9.9%)
15-25 years	59 (16.6%)	16 (22.5%)
25-35 years	68 (19.1%)	15 (21.1%)
35-45 years	80 (22.5%)	16 (22.5%)
45-55 years	58 (16.3%)	9 (12.7%)
55-65 years	26 (7.3%)	4 (5.6%)
65 years and above	29 (8.1%)	3 (4.2%)
Total	356 (100%)	71 (100.0%)

*Based on number of ailments reported. Some people reported more than one ailment.

In terms of caste, the maximum chronic ailments (39.95%) were reported by those in the general caste category. Of the total ailments for which treatment was not sought, 40.8% were reported by the general category, followed by 36.6% by STs and SCs. In terms of land ownership, the maximum ailments (42.7%) were reported by the landless. Of the total ailments for which treatment was not taken, 50.7% were reported by the landless.

Table 5.25: Chronic and repeated illness by caste and treatment not taken

	Chronic and repeated ailments*	**Treatment *not* taken**
ST and SC	107 (30.1%)	26 (36.6%)
OBC	107 (30.1%)	16 (22.5%)
General	142 (39.95%)	29 (40.8%)
Total	356 (100%)	71 (100.0%)

*Based on number of ailments reported. Some people reported more than one ailment.

Table 5.26: Chronic and repeated illness by landownership and treatment not taken

	Chronic and repeated ailments*	**Treatment *not* taken**
No land	152 (42.7%)	36 (50.7%)
Less than 3 acres	56 (15.7%)	9 (12.7%)
3-5 acres	56 (15.7%)	12 (16.9%)
5-10 acres	50 (14.0%)	6 (8.5%)
10-20 acres	31 (8.7%)	7 (9.9%)
20 or more acres	11 (3.1%)	1 (1.4%)
Total	356 (100%)	71 (100.0%)

*Based on number of ailments reported. Some people reported more than one ailment.

For most chronic ailments, people had been to multiple sources of treatment. Since these are chronic ailments, the range of treatments includes hospital admissions on the one hand and going to the spiritual health on the other. Sources of treatment also include taking indigenous medicines, self-medication and taking medicine on advice of the chemist. The private OPD practitioner is an amorphous category that includes qualified allopathic doctors as well as those whose qualifications could not be determined. The poor are often not able to tell. Among the qualified doctors, many are employed in the district hospital and some specialists travel from Nagpur to Seoni once or twice a week.

The table below shows the various sources of treatment people accessed for chronic ailments. In case the patient went to two private practitioners in Seoni, it is counted as two. The most popular source of treatment has been private practitioners in Seoni (31%) followed by informal practitioners (21.5%) in Talgaon.

Table 5.27: Sources of treatment for chronic and repeated illness (symptoms more than 21 days) (multiple responses)

	N	Percent	Percent of cases
District hospital OPD	22	4.5%	7.7%
District hospital IPD	28	5.8%	9.8%
Seoni Private OPD	148	30.6%	51.9%
Nagpur government OPD	4	0.8%	1.4%
Nagpur Private OPD	43	8.9%	15.1%
Deendayal gadi	4	0.8%	1.4%
Nagpur govt IPD	13	2.7%	4.6%
Nagpur private IPD	7	1.4%	2.5%
Informal practitioners-Talgaon	104	21.5%	36.5%
Home remedies	7	1.4%	2.5%
Chemist	4	0.8%	1.4%
Jhada/spiritual healer	17	3.5%	6.0%
Desi Davai/indigenous medicine	20	4.1%	7.0%
Ayurved	2	0.4%	0.7%
Hakim	1	0.2%	0.4%
Self medication	2	0.4%	0.7%
Other private nicine	29	6.0%	10.2%
Other private nici	3	0.6%	1.1%
Charitable OPD	3	0.6%	1.1%
Type unspecified	1	0.2%	0.4%
Various places unspecified	4	0.8%	1.4%
Other government hospital gaonon	5	1.1%	1.8%
Other government hospital – IPD	3	0.6%	1.1%
Seoni private vate nt	4	0.8%	1.4%
CHC vate va	4	0.8%	1.4%

CHC vate v	1	0.2%	0.4%
Other	1	0.2%	0.4%
Total	484	100.0%	169.8%

Hospitalisation in the past five years

The most common reason for hospitalisation was complications during pregnancy (15%). This includes hospitalisation because a caesarean-section was required due to complication. However deliveries under the government *janani suraksha yojana* programme and where the family took the decision to go to a hospital for delivery have been categorised separately. The second most common reason for hospitalisation was gastro-intestinal problems (14%). The other reasons for hospitalisations were fever (10%) and delivery (10%). The most common place of hospitalisation is the district hospital in Seoni (61%), followed by admission in a government hospital in Nagpur (12%).

Table 5.28: Reason for hospitalisation

Type of illness	**Percent**	**Symptoms within type of illness**	**Percent**
Respiratory	13 (9.0)		
		Pain in chest (pasli mein dard)	*2 (1.4)*
		Pneumonia, heaving (pasli chalna)	*5 (3.5)*
		Breathlessness	*1 (0.7)*
		Tuberculosis	*2 (1.4)*
		Congestion in the chest	*1 (0.7)*
		Suspected Tuberculosis (water in the lungs) Diagnosis not given	*2 (1.4)*
Neurological	9 (6.3)		
		Headaches	*4 (2.8)*
		Paralysis- all kinds	*1 (0.7)*
		Fits	*2 (1.4)*
		Sciatica	*1 (0.7)*
		Tingling, burning on soles	*1 (0.7)*
Gastro-intestinal	20 (13.9)		

		Diarrhoea, vomiting	*12 (8.3)*
		Gas, acidity, gastritis	*4 (2.8)*
		Cannot digest food, blockage of oesophagus	*1 (0.7)*
		Liver problems	*2 (1.4)*
		Inflammation	*1 (0.7)*
Musculoskeletal	4 (2.8)		
		Back pain, pain in shoulder, pain in neck	*1 (0.7)*
		Hernia	*1 (0.7)*
		Pain, numbness, tingling sensation in limbs, neck, chest	*2 (1.4)*
Gynaecological	7 (4.9)		
		Excessive. frequent periods, hysterectomy	*6 (4.2)*
		Reproductive tract infections	*1 (0.7)*
Eye	12 (8.3)		
		Cataract	*8 (5.6)*
		Problem with optic nerve due to which has lost vision	*1 (0.7)*
		Unknown cause for loss of vision with surgical intervention	*2 (1.4)*
		Pterygium	*1 (0.7)*
ENT	1 (0.7)		
		Sepsis in the ear	*1 (0.7)*
Cardio-vascular	2 (1.4)		
		Cardiac failure	*2 (1.4)*
Fever	15 (10.4)		
		Fever: non specific	*1 (0.7)*
		Fever reported as malaria and suspected malaria	*5 (3.5)*
		Typhoid	*6 (4.2)*
		Hepatitis /jaundice	*1 (0.7)*
		Combined febrile diseases	*1 (0.7)*
		Chicken pox	*1 (0.7)*

Injuries	13 (9.0)		
		Fractures	*8 (5.6)*
		Sepsis	*3 (2.1)*
		Road traffic accident-major	*1 (0.7)*
		Minor wound	*1 (0.7)*
Delivery	15 (10.4)		
		Janani Suraksha Yojana	*9 (6.3)*
		Family decision	*6 (4.2)*
Weakness	1 (0.7)		
		Unspecified weakness	*1 (0.7)*
Urological	5 (3.5)		
		Stone	*2 (1.4)*
		Swelling in kidneys	*1 (0.7)*
		Kidney failure	*1 (0.7)*
		Unspecified	*1 (0.7)*
Mental Health problems	1 (0.7)		
		Attempted suicide by poisoning	*1 (0.7)*
Pregnancy	21 (14.6)		
		Heavy bleeding before delivery	*3 (2.1)*
		Hypertension/swelling	*8 (5.6)*
		Caesarean-section (reason not given)	*5 (3.5)*
		Paralysis (lakwa) during pregnancy)	*1 (0.7)*
		Foetal distress tress cy)anc	*1 (0.7)*
		C-Section, pregnant with twins, previous C-section	*1 (0.7)*
		Spontaneous abortion 2-4 months	*1 (0.7)*
		Was not eating during pregnancy	*1 (0.7)*
Male reproductive health problems	1 (0.7)		
		Not attained physical maturity	*1 (0.7)*
Unspecified	1 (0.7)		

		Pain in chest	*1 (0.7)*
Blood disorder + vascular + hepatitis	1 (0.7)		
		Blood disorder + vascular + hepatitis	*1 (0.7)*
Blood disorders	1 (0.7)		
		Anaemia	*1 (0.7)*
Poisoning	1 (0.7)		
		Poisoning	*1 (0.7)*
Total	144 (100)	*Total*	*144 (100)*

Table 5.29: Places of hospitalisation

	N	**Percent**	**Percent of cases**
District hospital Seoni	99	61.1%	68.8%
Nagpur government hospital	19	11.7%	13.2%
Nagpur private hospital	15	9.3%	10.4%
Other private	4	2.5%	2.8%
Other government hospital	4	2.5%	2.8%
Seoni private hospital	13	8.0%	9.0%
Community health centre	8	4.9%	5.6%
Total	162	100.0%	112.5%

Trajectory of treatment seeking behaviour

As in all rural areas, in Peepalkheda also distance to the health service and mode of transport are major determinants of health service utilisation. Most people do not go to the doctor immediately on feeling unwell. Usually there is a waiting period of two or three days. At this time they may try some home remedies. Some also get a painkiller from the grocer which he sells at one rupee per tablet. The waiting time is much less in case of children. For the majority of people, the first place of seeking treatment are the non-degree practitioners in Talgaon. Not only are they the closest in terms of distance, but also give the option of staggered payment. In Talgaon there is a non-degree practitioner who is considered the best for children by people in surrounding areas. The well-off households that own a motor-cycle often go to Seoni to a private qualified physician immediately. Those who go Talgaon as the

first place of seeking treatment go to Seoni only when this does not work. At times, the practitioner himself will recommend that the patient goes to Seoni. In case of accidents, injuries or sudden severe events, people go directly to a qualified doctor in Seoni.

Seoni has the district hospital as well as many qualified physicians who practice privately. Some of these private physicians are employed in the district hospital and work there in the mornings. This is allowed in the state of Madhya Pradesh. The poor tend to go to the OPD in the district hospital, while the well-off go to private practitioners. The boundary between the public and the private is not clearly demarcated. At times, the patient who goes to the private practice of a doctor may get admitted in the district hospital if required. There have also been instances when the patient has been to the OPD in the district hospital and has been told to go to the doctor's private practice for follow-up visits.

In case the ailment does not get better in the town of Seoni, patients are advised to go to Nagpur in the state of Maharashtra. If the patient has been taking treatment from the district hospital, she will be referred to Jabalpur Medical College hospital. However, all doctors verbally recommend going to Nagpur if the patient can afford it, due to its superior health facilities. Most go to Mayo Hospital or the Medical College Hospital in Nagpur for treatment. Those who have been seeking treatment in private facilities are also recommended to go to doctors in Nagpur in case of complex situations. Those unable to go to Nagpur, go to other private and public facilities in different towns in the district or neighbouring districts recommended to them by relatives and other villagers. The trajectory is the same in case of hospitalisations. The patient is first admitted in Seoni and if the doctor recommends the patient is shifted to Nagpur. The poor go to public facilities like the Mayo hospital or the Medical College hospital. Those who can afford, seek admission in private facilities.

For chronic and repeated ailments, it was seen that people visit multiple health providers to get relief. This includes visiting practitioners of different systems of medicine. Many suffer from aches and pains for which people visit various health practitioners. People use a mixture of private and public services, especially as the duration of the ailment increases. For some ailments such as paralysis or facial palsy, everyone in the village who had suffered from it, relied on indigenous and ayurvedic medicines after visiting various health practitioners, including qualified practitioners of allopathic medicine and spiritual healers. People visit any

health practitioner in any village or town they get to know, if they have relatives or acquaintances with whom they can stay.

Even for diseases that fall under the national programmes, people either reach the government facility in the end or never at all. All patients who had tuberculosis in the village, had visited various types of private practitioners before it was diagnosed correctly. In case of many patients it was diagnosed by a private practitioner or at a government hospital in Nagpur. After diagnosis they were told to contact the ANM or government health facility where they lived. Most people had already spent thousands of rupees before they contacted the government health system in the district. In the case of malaria, no one in the village had taken any treatment from the government health services in the last five years. All had visited private practitioners who had treated it as malaria, and a blood test had been done in very few cases. At times I was told that their malaria had developed into typhoid. Since people go to private practitioners (whether qualified or not) for treatment, the government data under-reports malaria cases in the area.

Disability

The definition of disability used here also includes long term disability caused by illness and old age. Visual disability (30%) and physical disability (30%), followed by hearing disability (27%) and mental retardation (8%) are the most common disabilities.

Table 5.30: Type of disability

Type of disability	Percent	Symptoms within type of disability	Percent
Mentally retarded	5 (7.8)		
		Since birth, can do basic tasks	*5 (7.8)*
Mental illness	1 (1.6)		
		Psychosis, cannot do basic tasks	*1 (1.6)*
Old age	2 (3.1)		
		Weakness, can do basic tasks	*1 (1.6)*
		Senility, soils clothes, totally dependent for basic tasks	*1 (1.6)*
Visual	19 (29.7)		

		Vision not clear/cannot see at a distance, can do basic tasks	*11 (17.2)*
		Cannot see at night, can do basic tasks	*1 (1.6)*
		Totally blind	*2 (3.1)*
		Blind in one eye due to injury	*3 (4.7)*
		Foggy vision, can do basic tasks with difficulty	*1 (1.6)*
		Cannot see at night, less vision during the day due to eye injury	*1 (1.6)*
Ear	17 (26.6)		
		Hard of hearing, age related, can do basic tasks	*8 (12.5)*
		Hard of hearing due to high fever, can do basic tasks	*4 (6.3)*
		Hard of hearing, non-specific, can do basic tasks	*5 (7.8)*
Physical disability	19 (29.7)		
		Limbs, leg twisted due to accident, cannot do heavy work - does basic tasks	*4 (6.3)*
		Pain below waist	*1 (1.6)*
		Can't stand straight -does basic tasks	*1 (1.6)*
		Gangrene- foot amputation	*1 (1.6)*
		Unable to lift weights due to weakness of arm muscles rk - does basic tasksaused by	*1 (1.6)*
		Paralysis of arm/shoulder and arm, can do basic tasks	*3 (4.7)*
		Difficulty in walking due to paralysis – can do basic tasks	*1 (1.6)*
		Cannot lift right arm, congenital ysis – can do basic	*1 (1.6)*
		Pain in joints, cannot walk at times s – can do basic tas	*1 (1.6)*
		Does not have two fingers/fingers burnt can do basic tasksd	*2 (3.1)*
		Leg paralysed, pain in leg n in leg leg ingers burnt can do b	*1 (1.6)*
		Fracture in thigh leg leg ingers burn	*2 (3.1)*

Speech	1 (1.6)		
		Cannot talk clearly	*1 (1.6)*
Total	64 (100.0)		*64 (100.0)*

Mortality in past five years

In the last five years before the survey, the largest cause of death was neurovascular ailments (20%), followed by death due to respiratory ailments (12.5%). Diarrheal diseases (10%) and old age (10%) were the other notable causes of death.

Table 5.31: Mortality in past five years

Cause of death	Frequency	Percent
Neurovascular	8	20.0
Respiratory	5	12.5
Diarrheal diseases	4	10.0
Old age	4	10.0
Unknown	3	7.5
Still birth	2	5.0
Unspecified infant death	2	5.0
Neonatal death	1	2.5
Congenital heart disease	2	5.0
Rheumatic heart disease	1	2.5
Congenital vascular	1	2.5
Typhoid	1	2.5
Liver diseases	1	2.5
Fever	1	2.5
Cancer	1	2.5
Liquor related death	1	2.5
Major accident	1	2.5
Injury followed by disability and malnutrition	1	2.5
Total	40	100.0

Table 5.32: Age at death

Age categories	Number of deaths	Percent
Still birth	2	5
Neonatal death (within 28 days)	1	2.5
Below one year	4	10
Below two years	2	5
2-4.9 years	0	-
5-14.9 years	2	5
15-24.9 years	1	2.5
25-34.9 years	0	-
35-44.9 years	2	5
45-54.9 years	4	10
55-64.9 years	11	27.5
65-74.9 years	8	20
75 years and above	3	7.5
Total	40	100

Preventive health services

The health department carries out various activities for the prevention of spread of disease. Only 3.5% of the households reported that any health worker had contacted them in the past three months. In all cases people mentioned the ASHA who had come to inform them to get the infant for vaccination. Thirty-one percent reported that the wells had been chlorinated in the last one year. But there is a recall error in this, since chlorination of wells had been done two years prior to fieldwork according to the ASHA. Only 2.5% of the households said that something had been sprayed for the prevention of malaria.

Table 5.33: Preventive health measures

Preventive measures	Number of households	Percent
Has any health worker contacted you in the last three months	7	3.5
Did any government department spray anything for prevention of malaria in the village in the last one year	5	2.5
Has anyone from the health department sprayed lime along drains and water sources in the village in the last one year?	0	0
Has anyone from the government done chlorination of the wells in the village in the last one year	62	31.2

Health camps

Forty-three percent of the households also reported knowing of at least one health camp that was organised for villagers. Five percent of the households reported that someone from the household had attended these camps. Respondents were also asked about the type of health camp that had been organised (multiple responses). Camp for cataract was reported by 52%, followed by 37% who knew about sterilisation camp.

Table 5.34: Knowledge about health camp organised

	Number of households	Percent
Has any health camp been organised for the village in the past one year	86	43.2
Did anyone in the household attend it	11	5.5

Table 5.35: Type of health camp that was organised (multiple response)

Type of health camp	Number of households	Percent of households	Percent of cases
Eye	56	52.3%	60.9%
Sterilisation - Female	40	37.4%	43.5%
Medical camp	6	5.6%	6.5%
School health camp	2	1.9%	2.2%
Other	3	2.8%	3.3%
Total	107	100.0%	116.3%

This chapter has tried to develop a picture of health needs of the people living in the village of Peeplekheda. In terms of environmental needs, excessive amounts of fluoride in the ground-water is a cause of concern. Despite the district being recognised as a fluorosis endemic area, the health system at the district level is not equipped to deal with the situation. There is no official data on the extent of fluorosis. In terms of nutritional status, the BMI of persons above 19 years shows that thinness is more prevalent in ST and SC households. In the 6-19 years age group, 19% is in the severely thin age group. In the 0-5 years category, 14% of the children suffer from severe acute malnutrition. Despite the ICDS, malnutrition

continues to be an issue in the village. This could be due a gap in reporting. The survey recorded ailments that people were suffering from that day and also chronic ailments. Except for the district hospital, the public health system is unable to address the curative needs of the community. People have to rely on private doctors for services. The majority first visit the non-qualified doctors near the village, and if it does not get better here, most people go to Seoni to the district hospital or private doctors. In very complex cases or ailments that need tertiary services, most people go to Nagpur.

CHAPTER 6

COMMUNITY PARTICIPATION IN HEALTH RELATED MATTERS IN PEEPALKHEDA

This chapter looks at the way community participation in health related matters takes place in the village. There are two modes for participation. The first is through various fora mandated by the Constitution or government, and the second is when residents come together in the village based on need at a particular time, which is largely based on interpersonal ties.

The formal fora for participation

The formal forms of participation as mentioned earlier are through 'invited spaces' (Cornwall 2004) which are institutionalised spaces created by the state for participation. These are in contrast to organically created spaces through forms of collective action. These invited spaces which facilitate people's participation may seem to advocate a politics of participation, but in reality have become administrative spaces devoid of any political agenda. With regards to formal forms of participation there are two types of fora. The first is a constitutional space – the panchayat - local democratic spaces from the village to the district created by the 73rd Amendment to the Constitution of India. Though panchayats comprise elected representatives, these serve as 'invited spaces' since their ability to take independent decisions is limited and their sphere of influence is determined by the central government's Ministry of Rural Development. The second type of invited spaces are the various committees created by the health department where 'community members' are invited to discuss health issues affecting their area. These are the village health and sanitation committee (VHSC), the district health society (DHS) and at the health facility level the rogi kalyan samiti (RKS) or patient's welfare committee which are to be formed in the, primary health centre, community health centre (at the block level) and in the district hospital. At the village level, the panchayat and the VHSNC are meant to interact with each other.

The Role of Panchayats

The 73rd Amendment to the constitution established the three tier panchayat system across India to enable people's involvement in development activities. The panchayats have been given power to monitor health facilities and health related services. At the village level the functions of the gram panchayat include monitoring the working of the sub-health centre and

primary health centre if located in the gram panchayat, availability of drinking water, sanitation, issues relating to women and child development, family welfare and social welfare of the physically and mentally challenged. In Madhya Pradesh, according to the Panchayat Raj Act, the gram panchayat has powers to regulate public health facilities, dangerous trade, use of water, slaughter of animals, maintain sanitation, conservancy, drainage, waterworks, sources of water supply and environmental issues. An amendment in the Act in Madhya Pradesh has made the gram sabha the decision making body and each gram sabha would have standing committees for discharging its duties.

The panchayat's role in providing drinking water

One of the big projects that the panchayat was given was to supply water directly to the households in the village. The Constitution of India gives all citizens the right to potable water and gives the ownership of all water resources to the government. The provisioning of water is a state subject. An impetus was given to supplying potable water in rural areas with the launch of the National Rural Drinking Water Supply Programme in 1969 with technical support from UNICEF when 1.2 million bore wells were dug and 17,000 piped water supply schemes provided (Khurana and Sen, n.d.). Due to the tardy progress made in providing safe drinking water in rural parts of India, the central government has been providing support since the early 70s. The Government of India introduced the Accelerated Rural Water Supply Programme (ARWSP) in 1972–73, to support states and union territories with financial and technical assistance in implementing drinking water supply schemes in those villages where there was a problem of coverage. From 1981-1991 this programme was given more thrust when India became party to the International Drinking Water Supply and Sanitation Decade (1981- 1990). In 1986 the National Drinking Water Mission was launched which was later renamed after the late prime minister Rajiv Gandhi. A national water policy was formulated in 1987 which gave priority to the supply of drinking water and emphasised that ground water should not be exploited beyond recharging possibilities (GOI, 1987).

A shift in policy happened in 1996 when the Swajal project was launched on an experimental basis (based on ARWSP guidelines) in Uttarakhand and Bundelkhand where the community was to share capital costs, and be responsible for all costs of operation and maintenance (Cullet 2009). This was taken forward with the introduction of the Sector Reforms Project in 1999, that brought about a paradigm shift in policy from a government driven 'supply' oriented approach to a community based 'demand' driven approach where 10% of the capital

costs are to be borne by the community on a pilot basis in 67 districts and the whole country as Swajaldhara in December 2002 (GoI, 2010). In the Swajaldhara programme, the gram panchayat is seen as the lowest unit for implementing the reforms. With the introduction of Panchayat Raj in India, supplying drinking water was one of the subjects of the Eleventh Schedule that was given to panchayats, hence it was easy to involve the panchayats. The policy recommended the transfer of responsibility of management and financial liability of water supply to the gram panchayat, and within the panchayat to the village water and sanitation committee. According to the Swajaldhara guidelines, the Government of India's contribution is 90% and the community provides 10% of the capital costs for the water supply scheme that provides 40 litres per capita per day (lpcd); and for up to 55 lpcd. the Government of India would contribute 80% of capital costs. The Swajaldhara Guidelines state that water can no longer be treated as a social right, it should be treated as a socio-economic good.

"The conditions under which people would be willing to pay capital cost partially and operate and maintain water supply schemes are (a) if they own the assets, (b) if they have themselves planned and installed the systems and been actively involved throughout in the process, (c) if they have been trained to do simple repairs, (d) if they know the Government will not maintain the asset, (e) if they have sufficient funds for maintenance, and (f) if they have to pay for operation and maintenance of the systems. Hence, it was considered necessary to institutionalise community based rural drinking water supply programme with the Panchayati Raj Institutions and local communities to generate resources and equip them to plan, implement, use, maintain and replace water supply schemes themselves" (GoI, 2003).

Thus under Swajaldhara, the government has no responsibility of providing water after the initial setting up of the water supply scheme. Swajaldhara has two types of water supply schemes - Piped Water Supply Scheme (PWSS) to cover larger populations, multiple villages, where the terrain is difficult and also where there is a need of proper treatment of raw water; and second, the Spot Source Water Supply Scheme (SSWSS) meant for a smaller population and also where the raw water requires no or minimum treatment. In 2005-2006 the Government of India started the Bharat Nirman Programme under which the National Rural Drinking Water Programme was put. Under this programme all the 55,067 un-covered and 3.31 lakh slipped-back habitations are to be covered; and 2.17 lakh quality-affected

habitations are to be addressed by 31 March 2009[4] (GoI, Annual Report 2007-08). The Eleventh Plan proposes that the allocations by the Twelth Finance Commission (setup in 2002 and covered the period 2005-2010) for maintaining water supply by local bodies should be implemented and handed over to panchayats. The plan also mentions that the states could contribute in part for the operation and maintenance cost of panchayats as a support for first few years before the local bodies become self-sustainable.

Peepalkheda panchayat received Rs.4 lakhs in 2004 under Swajaldhara to supply tap water to households in the village based on SSWSS which was 90% of the capital costs as calculated by the government. The additional 10% was not collected from the community. While there are two villages that fall under the panchayat -Aamgaon and Peepalkheda - only Peepalkheda was covered as it is by far the larger of the two villages. Both the secretary and Shankarlal, who was Sarpanch at that time resided in Aamgaon. When I asked the secretary as to why Aamgaon was not included, he pointed out that Aamgaon was a small village and it had a good water supply through hand-pumps installed there.

The only way to supply water to the whole village throughout the year for the panchayat was by drilling a bore-well. Shankarlal was the Sarpanch at that time and the work was initiated during his tenure. An engineer was hired from Jabalpur to supervise the drilling. Initially a bore was dug to a depth of 650 feet near the lake in the village, however no water could be got from there. This cost Rs.50,000. The second time a bore was drilled near the school and water was attained at 550 feet. As the panchayat was short of Rs.50000, cement pipes had to be bought which are less durable. However before Shankarlal could finish the work, panchayat elections were held in 2005 and Sumi Bai was elected Sarpanch unopposed. Most of the work such as digging a bore-well and buying of pipes was done by Shankarlal, but the actual laying of pipes was completed in Sumi Bai's term.

The panchayat laid out pipes along all the streets in the village on both sides. Initially common taps were put at a distance of 50 meters, but there were many fights over filling of

[4] Uncovered habitations are those where households have less than 10 litres per capita per day (lpcd), partially covered habitations are those with 10 but less than 40 lpcd. Fully covered are those where households get at least 40 lpcd and the water source is within the habitation or 500metres, or takes less than 30 minutes to fetch water. (Ref: Frequently Asked Questions – NRDWP http://rural.nic.in/sites/downloads/our-schemes-glance/FAQsNRDWP.pdf (Accessed 04 Jan, 2016))

water. Some people took the taps home. Then a meeting was called in the panchayat and some people in the meeting suggested that households should be given individual taps for a payment. But some people did not take individual taps. The panchayat members thought that if the chains from the handpumps were removed then everyone would take a tap connection. But people started opposing this vociferously. So the panchayat had to provide individual connections, though all households have not taken it.

When there is electricity supply, the person in charge starts the pump and the water flows through the pipes. There is a tap that controls the flow of water in various lanes. Different parts of the village get water by turns based on availability of electricity. Those homes who want this water get it in front of their homes. For this facility, households pay Rs.30 a month to the panchayat. The secretary of the panchayat told me that at the rate of Re.1 per day even the poor should be able to afford it. The households who have not opted for this supply are either very poor, live in a mohalla which is at an elevation where the water cannot be pumped, or the household has a hand-pump or other source of water very close by. The money that is collected is used to pay the electricity bill for pumping water.

When Shankarlal became the Sarpanch again in January 2010, he found that half the households in the village had not paid the water bill, some had never paid it since the water pipes were installed five years ago. This included the out-going sarpanch Sumi Bai. Those who had not paid were across castes and class. And when he asked people to pay, many delayed the payment. Subsequently Shankarlal announced that until people paid up they would not be allowed to buy grain or kerosene from the PDS shop. He also announced that he would complain in the *janpad* or block that people in Peepalkheda had not paid the water bill for the past two years. In fact he stood at the PDS shop and only allowed people who had paid the electricity bill to take kerosene and grains. His argument was that if people had money to buy from the PDS shop they could also pay the water bill. Some people paid promptly. But there were others who didn't pay up. Then Shankarlal announced that there would be no water supply till all the remaining people paid up. So there was no water supply from the pipeline for three days during which people had to fill water from the hand-pumps. After this a meeting was called.

All meetings in the village are called at 8.pm. The meetings usually start at around 9.pm and continue till 1.00 am. These public meetings are an all men event, and never is there a woman

present. When I got to know of this meeting, I asked some of the important people including the Sarpanch whether it would be possible for me to attend the meeting. Everyone said that I could. I had been told that nothing much would happen initially because people sit around till 1.am. I reached at about 8.30 pm. I was the only woman in the meeting – a woman and an outsider. People kept coming and others were called from their houses. The sarpanch came to the meeting and then he went off somewhere on his motorcycle. The meeting was attended by the mukaddam, Sarpanch, all newly elected male panchs, and former panchs and some important people of the village. The meeting was held in the main square under the peepal tree. Those who attended were important people of the village and from important families of most castes/communities. Some people left the meeting place to call people from their homes who were considered important. They were considered important due to their social standing in the village, or because they were politically active. The two biggest landowners in the village who are not active also came for the meeting. This meeting was attended by a mix of people who had paid and others who had not. During the time that I was there, I got to know that many of the panchs and important people too hadn't paid up. I waited till 10.pm, at the meeting place and nothing had happened till then, not even the sarpanch had returned, so I went home. The next day I got to know that everyone had been given 15 days time to pay the bills.

It was paradoxical that the meeting about water supply for domestic use, which is a woman's responsibility in the household did not have any women in the meeting. In fact there is absence of women in all public meetings. Even women panchayat members do not attend panchayat meetings beyond the first two or three meetings. After the initial meetings, their husbands go for panchayat meetings. Part of the reason for this is that panchayat meetings are usually held around 8.00 pm and only those women who live close by attend. Women attend gram sabha only when they need something from the panchayat and when there is no male member to do so. Public meetings in the village are a gendered space attended by men even though the issue may concern women. However, Adivasi women in the village attend their own samaj/caste meetings. But in the context of the whole village, even Adivasi women do not attend those meetings where non-Adivasi women do not come. This has to be seen in terms of women's and men's roles and the way spaces have been carved out. The domestic sphere is seen as women's space and public spaces are men's spaces.

This lack of women in public decision making brings to mind Bourdieu's (1977) concepts of 'habitus'. Habitus refers to systems of durable and transposable dispositions and structured practices that are regulated but at the same time not a product of obedience to rules. It is a set of practices without a particular aim that are "collectively orchestrated without being the product of the orchestrating action of the conductor" (Bourdieu, 1977, pp.72). Homogenisation of group practices results from homogeneity of common conditions of existence leading to practices without referring to any norms. Habitus is the internalisation of objective structures that shape practices. It is a product of history that leads to individual and collective practices that perpetuates itself. Thus non participation by women in public meetings is habitus without any restrictions on women's participation. Bourdieu (1977) uses 'officialising strategies' for those practices that convert private and particular interests into disinterested, collective, legitimate interests. In situations where there is a lack of political institutions with monopoly of legitimate violence, Bourdieu argues, political action is possible only through officialising. This officialising presupposes the capital of authority (socially recognised) to manipulate the collective definition of a situation to make it official in order to mobilize the largest group possible and thus universalizing a private incident. The non-payment by some households was converted into a collective issue and could be resolved only through an officialising strategy of the whole village having to bear the brunt of not having piped water and then calling a meeting to sort it out.

Making the water scheme sustainable without government support is difficult. In Peepalkheda, the amount of money collected per household for water supply was not sufficient to pay the electricity bill. This is because the electricity department has been charging commercial rates from the panchayat for the meter attached to the bore-well even though the water is for domestic use. As a result there was a hefty bill to be paid. As Shankarlal explained, the problem is that the panchayat has no source of revenue. Those villages which have an important place of pilgrimage or have weekly markets are able to generate sufficient revenue. The panchayat did think of introducing house tax and light tax, but people were unwilling to pay for those. The issue was still not resolved at the end of my fieldwork.

According to the Madhya Pradesh Panchayat Raj Act, among the obligatory taxes that a gram panchayat is to collect includes property tax on house or land of a high capital value, private latrines when cleaned by the gram panchayat, light tax if arrangements have been made by

the gram panchayat, tax for carrying out a professional service or trade and fee on registration of cattle sold in any market. It is interesting though that the government does not tax rich farmers but expects the panchayat to collect the light tax which will affect the poorest of the poor. It has been observed that panchayats find it difficult to collect tax from the community. The Swajaldhara guidelines prohibit substituting community contribution with any other funds such as contributions from community based organisations or panchayat funds and specifically prohibits the use of other government funds such as contribution from Member of Parliament Local Area Development Scheme (MPLADS) or Member of Legislative Assembly Constituency Development Scheme (MLACDS). Any other contribution is to be regarded as a supplement to community contribution. Cullet (2009) notes that in not allowing the panchayats to use any other funds, Swajaldhara guidelines force individuals to pay for the scheme irrespective of whether they can afford it, and also undermine the democratic nature of panchayats.

Water quality

Another issue that concerns water supply is the quality of water. The quality issue was acknowledged even by the Swajaldhara programme in 2002. The Swajaldhara guidelines state that the project is ideally suited for small village based schemes, while in some districts due to quality problems like excess fluoride, arsenic, brackishness etc; and distant location of drinking water sources, there may be need to go in for capital intensive regional multi-village scheme. However no alternate course of action was suggested for regions which have a quality issue in the Swajaldhara Guidelines.

The National Rural Water Quality Monitoring and Surveillance Programme (NRWQMSP) was launched in February 2006 and was later merged with National Rural Drinking Water Programme. Under this programme, it is recommended that all drinking water sources should be tested at least twice a year for bacteriological contamination and once a year for chemical contamination. The government had distributed field testing kits for testing to gram panchayats. Laboratories were also set up at the state and district level for water testing. At the village level, it has been envisaged that the ASHA, Anganwadi worker, gram panchayat members, teachers and social workers should be involved in monitoring and surveillance of water sources. Under the NRHM, testing of water for biological parameters can also be undertaken in PHCs, schools and colleges. But neither the Swajaldhara programme nor the

NRWQMSP provide any alternate strategy, policy or financial allocation to deal with the problem of excess fluoride in water. In the NRWQMSP it is said that the community will monitor the water quality but does not offer solutions for a region where all ground water is likely to have excess levels of fluoride in ground water.

The Eleventh Five Year Plan (2007-12) also acknowledged that water quality has been a challenge. The Eleventh Plan noted that under the Bharat Nirman programme, while progress had been made regarding uncovered habitations and slip back habitations, the report acknowledged that the states have found it difficult to make progress in habitations where there is a quality related issue because alternate sources are either too far off or not available. (GOI, 2007). The Eleventh Plan proposed that where the quality of ground water is unsatisfactory, surface water sources need to be developed and in this regard, the central government could support states with external assistance. But these proposals have remained at the policy level.

Seoni district is an endemic fluorosis area as high measures of fluoride are found in ground water here. The Public Health Engineering Department had tested the quality of water in 2002 – 03 at the time of installing many new hand-pumps in the village under the Swajaldhara programme. But as has been mentioned, since then the policy has changed, and now the emphasis is on community participation. The Department had conducted workshops for panchayat members in 2008-2009 for 645 panchayats in the district. These workshops were held for four or five panchayats together. Subsequently the task of checking the quality of water has been handed over to the gram panchayat. The panchayats were given kits to check the quality of water. The panchayat is supposed to buy the chemicals required for testing the water which, according to the staff in the public health engineering department cost about Rs.700-800 in 2010. The panchayat secretary of Peepalkheda told me that the panchayat was unable to do the testing as the panchayat did not have any source of additional income to buy these chemicals. Moreover, there is very little awareness in the region about fluorosis and the effects of fluorosis are not very visible and hence not an issue for the village community. The benefits of having water delivered at the doorstep are too great for people to think about the potential ill-effects of excess fluoride in water. The bigger issue is that since fluorosis is endemic in the district, alternate surface water sources have to be developed. It is not possible for a gram panchayat or a group of panchayats to do this without substantial and continuous funding, and technical assistance from the state and central governments. In a

neoliberal policy scenario, where the emphasis is on markets and on reducing government spending, community participation has become a convenient tool for the state to withdraw from providing basic services such as water, thus leaving communities to fend for themselves.

Water supply in the past

Providing water from improved sources[5] to all households in the village is not only a public health issue, it has many social implications. One of the ways that caste hierarchies have been maintained and perpetuated is by not accepting cooked food and drink, including water from castes considered lower. If a lower caste person touched the water of a higher caste, the water was considered polluted and would be thrown away. In the case of Dalits, they were and in many villages still are not allowed to fill water from wells used by non-Dalits castes since the water source would be considered polluted if a Dalit used it. Therefore Dalit households would have to travel longer distances or use other water sources. These were some of the methods used to suppress the Dalits. With regards other castes above the scheduled castes, while all castes used the same water source, higher castes did not take water from lower castes.

Before the water pipes were laid in the village under the Swajaldhara programme, all households in Peepalkheda used to fill water from the handpumps. There is little consensus as to when the first hand-pumps were installed. Some said that the first hand-pump was installed in front of the mukaddam's house in the early 90s, and gradually many were installed across the village. In 1999 when the department of public health engineering tested the ground water, there were five hand-pumps in the village. Since then some had stopped functioning so new hand-pumps were installed in other places. When the field-work was conducted 2009-10 there were seven hand-pumps in the village, including two in the school which are used by all in the neighbourhood. When the fieldwork was carried out, the hand-pumps were used by all in the village, including the Dalits.

Before the handpumps were installed, everyone used to take water from the two big common wells in the village except the Dalits. Now both wells have dried up. Some people also had their own private wells in the fields and at times would let others, except Dalits, fill water. If

[5] The term 'safe drinking water' has been replaced by 'improved sources' in documents of the United Nations.

the common wells dried up, then people used to walk to the river to fill water, especially in the summer months. Ever since hand-pumps have been installed, the wells are no longer used by villagers.

The Dalits in Peepalkheda were not allowed to fill water from the common wells, so they either used to fetch water from the river one and a half kilometre away or from a well near the cremation ground in summers when the river used to dry up. The cremation ground was the last resort for Dalit families. Cremation grounds are considered 'polluting areas' culturally, and having to get water from there symbolises the extremity of exclusion and violence. Women from Dalit households used to bring four vessels (*gundis*) at a time, (sometimes five) – three on the head and one in the hand from the river. That was the main source of water which was used for cooking, washing, and all other purposes. I was told that people at home used to finish all household chores in the time that women took to get water from the river. It used to take a lot of time to fill water for the day. In summers when water would be scarce, women used to dig a small pit in the river and collect water in that pit, then fill the *gundi*. The water that was got from the river used to be yellow and had to be filtered with a cloth, but it would still be yellow. In summers often other unwanted dirt, and sometimes faeces used to come into that pit. In this village, the land was owned by the Lodhi and Kalar castes (who are in the OBC category) and Adivasis before the Raghuvanshi families started migrating. Many of the wells were on Lodhi and Kalar lands but Dalits were not allowed to fill from their wells.

In Peepalkheda and the region as a whole, though all non-Dalit castes could fill water from common wells, there were strict norms regarding purity and pollution regarding water. If a person from a lower caste touched the water pitcher or vessel of a higher caste, the water in that pitcher would be thrown away and the vessel washed again. My Kalar host told me that as a child she had once touched the earthen water pot of an Adivasi, and the Adivasi had broken that pot after she touched it. In this region even though the Kalar caste owns substantial agricultural land and the traditional headman – mukaddam – of the village is a Kalar (his sub-caste is lower among Kalars), they were considered socially lower.

When hand-pumps were installed in the village, initially Dalit households were not allowed to draw water from the hand-pumps. The first hand-pump was installed in front of the mukaddam's house so that the women of that household could fill water easily. Soon hand-

pumps were installed at other places in the village. The Dalit households too started to use the hand-pumps to fill water. But one day one of the biggest land owner (who was also the first Raghuvanshi family to come to Peepalkheda), stopped the Dalit women from using the hand-pump. He started to abuse the women. The Dalit households then wrote a complaint to the police station saying that they were not being allowed to fill water from the hand-pump. The people who complained were told at the police station that they must get the letter signed by the mukaddam. This is not required but it seems the police were reluctant to register the complaint. At that time the mukaddam was the present mukaddam's older brother. He told the Dalit households not to take the letter to the police station. 'It is a matter of honour of the village' (*gaon ki izzat ki bat hai*) and said that they would be allowed to fill water from the hand-pump. The mukkadm also told the person who had prevented the Dalit households from filling water not to do so. So the Dalit households started to fill water again. When the Dalit households used to fill water, people used to wash the hand-pump after them. Even after installation of individual tap connections, if one house had finished filling water, and anyone from Dalit household went to fill from a neighbour's tap there used to be fights initially but gradually even these have stopped in the village.

Sanitation

Sanitation is another issue that is to be supervised by the gram panchayat. The Government of India had started the Central Rural Sanitation Programme in 1986 to provide sanitation facilities in rural areas but was not very successful. Low financial allocation for sanitation also did not help matters. In 1999, the government started the Total Sanitation Campaign (TSC) that was a major change from the earlier strategy. The government felt that the supply driven, subsidized and infrastructure oriented programme was not working and replaced it with a demand driven, community led programme with emphasis on awareness creation. The TSC is community based and focuses on awareness as a strategy which has been successful in some parts of the country. The TSC focuses on schools and anganwadis for creating sanitation facilities and promotes hygiene and sanitary habits among students. The objectives of TSC include eliminating open defecation and scavenging, and converting dry latrines to pour flush latrines. As the shift was to make the programme demand driven, subsidy for building toilets was replaced with providing an incentive of Rs.1500 by the central government and Rs. 700 from the state government to BPL families after they built a toilet and started using it. For non-BPL households, the programmes focused on awareness and

health education. Panchayats, women's groups, co-operatives and NGOs were involved in the awareness campaigns.

Under the Total Sanitation Campaign, the Nirmal Gram Abhiyan (mission) and Puraskar (award) was launched by the Government of India in 2005 for panchayats, blocks, districts and states that had complete sanitation and were free from open defecation. Under this panchayats were given monetary awards and high publicity.

As has been mentioned in the chapter on health needs of the village, villagers complained that the Rs.1500 given by the panchayat was insufficient to construct a basic toilet with a proper septic tank below it. The Rs.700 that was to be given by the state government had not come through. Another issue is of getting enough water to flush the latrine in rural areas where getting enough water is difficult even now. The Eleventh Five Year Plan acknowledged that sanitation in rural areas should be promoted using low water, low-cost, and eco-sanitation models to prevent more stress on water resources (GoI, 2007). However there has been no effort by the government on providing such toilets.

In Peepalkheda the majority of people use the fields and surrounding forest land for defecation. Only 11 out of 199 houses have toilets. However temporary toilets are built during monsoons. Culturally, due to ideas of purity and pollution toilets are not very popular and most people prefer to go into fields and forests. The panchayat secretary also did not consider promoting toilets a priority. The barber of the village has built two toilets and it has led to a lot of friction between him and his neighbours as the sewage water regularly overflows and there is a stink all around. As houses are close to each other and due to the positioning of the toilets, the overflow from the septic tank affects the neighbours and passersby more than the barber's house. The neighbours did complain to the panchayat secretary and the new sarpanch Shankarlal but the issue had not been resolved by the time my fieldwork ended.

Participation in the gram sabha

The survey had asked questions about participation in community activities by the household. People were asked whether anyone from the household had attended the gram sabha the last time it was held last. Thirty-eight percent households reported that someone had attended the gram sabha the last time it had been held. Among the general caste households 41.5 percent

said that someone had attended while 38 percent among the OBC and 35 percent among ST and SC households had attended. Regarding reasons for not attending, 51 percent said that they did not have time or were busy, 12 percent said that they did not have information and 7 percent said that no one listens to them or asks about the poor. Ten percent of the respondents did not answer the question.

Table 6.1: Did anyone from the household attend the gram sabha the last time it was held by caste category.

	ST and SC	**OBC**	**General**	**All**
Yes	24 (34.8%)	24 (38.1%)	27 (41.5%)	75 (38.1%)
No	36 (52.2%)	31 (49.2%)	32 (49.2%)	99 (50.3%)
Don't know	9 (13%)	8 (12.7%)	6 (9.2%)	23 (11.7%)
Total	69 (100%)	63 (100%)	65 (100%)	197 (100%)

Table 6.2: If did not attend the last time gram sabha was held, reason for not attending by caste category

	ST and SC	**OBC**	**General**	**All**
Didn't have information	6 (16.7%)	0	6 (19.4%)	12 (12.2%)
No time / busy with work	19 (52.8%)	17 (54.8%)	14 (45.2%)	50 (51.0%)
People fight	0	1 (3.2%)	0	1 (1.0%)
No one listens/ no one asks about the poor	2 (5.6%)	3 (9.7%)	2 (6.5%)	7 (7.1%)
Don't have any work there	1 (2.8%)	0	2 (6.5%)	3 (3.1%)
Am too old	0	2 (6.5%)	0	2 (2.0%)
No women goes there	0	0	1 (3.2%)	1 (1.0%)
Older brother goes	0	1 (3.2%)	0	1 (1.0%)
No interest	0	1 (3.2%)	1 (3.2%)	2 (2.0%)
Out of the village	2 (5.6%)	1 (3.2%)	0	3 (3.1%)

Never been	1 (2.8%)	0	1 (3.2%)	2 (2.0%)
Unwell	0	1 (3.2%)	0	1 (1.0%)
No answer	3 (8.3%)	3 (9.7%)	4 (12.9%)	10 (10.2%)
No body from house goes	1 (2.8%)	1 (3.2%)	0	2 (2.0%)
Total	36 (100%)	31 (100%)	31 (100%)	98 (100%)

Fora for community participation under NRHM

The NRHM put in place two new institutional mechanisms and revitalised the existing village health and sanitation committee (VHSC) to facilitate community participation. At the district level the District Health Society/Mission under the Zilla Parishad (district panchayat) was established and includes apart from the health department, all other relevant departments, NGOs, private practitioners, etc. The second is the *rogi kalyan samiti* which has been instituted in all public health facilities in the blocks and districts. And lastly at the village level is the VHSNC comprising the ANM, MPW, ASHA, anganwadi worker, panchayat representatives and other people associated with health issues in the village.

District Health Society and Rogi Kalyan Samiti

The District Health Society (DHS) has the responsibility of implementing decentralised planning by formulating district health plans and bring about inter-sectoral convergence at the district level. The DHS holds monthly meetings chaired by the district collector and is attended by the chief medical officer for the district, the district programme manager for Reproductive and Child Health, officials in charge of the national (vertical) health programmes in the district[6], district hospital superintendent, block medical officers, official in charge of Janani Suraksha Yojana and officials from other concerned departments such as engineers of the public works department, public health engineering that is concerned with water supply, woman and child development that runs the Integrated Child Development Scheme and the education department. The meeting records show that the block medical officers are not always present. Since 2008, officials from accounts and Information,

[6] National Programme for Control of Blindness, Revised National Tuberculosis Control Programme, National AIDS Control Programme, Universal Immunisation Programme, National Vector Borne Disease Control Programme (Malaria), National Leprosy Eradication Programme, Integrated Disease Surveillance Programme have district level officers in Seoni.

Education and Communication (IEC) department are also called for the meetings. However there are no elected representatives from panchayats at any level. Most of the times the NGO representatives are also not present. In the DHS meetings officials looking after the national programmes reported on the progress of health programmes to the district collector. Discussions as to why targets had not been met or task not completed was the main issue for discussion. It is to be noted that only the national vertical programmes were discussed in the meetings. Financial and infrastructure issues that were discussed are related to the provisions of the NRHM only. Local health issues outside the purview of the national programmes do not find any mention.

Rogi Kalyan Samitis (Patient Welfare Societies) have been setup in all facilities. However they exist on paper only. The block medical officer stated upfront that not a single meeting had been held at the CHC and the same was true for the PHC. The hospital superintendent of the district hospital said that there was a Rogi Kalyan Samiti in the hospital but did not divulge any further information.

The VHSNC and the role of panchayat in Peepalkheda

Among the core strategies of the NRHM are 1) training of panchayat raj institutions to control and manage health services and 2) making of the village health plan by the village health sanitation nutrition committee (VHSNC). The NRHM introduced the accredited social health activist (ASHA) in each village, who would be chosen by the village panchayat and also accountable to it. The ASHA is to be the bridge between the ANM and the village. The NRHM has also allocated Rs.10000 per annum to every village as untied fund in an account jointly managed by the ANM and Sarpanch and to be used in consultation with the VHSC.

As per the guidelines of the NRHM, the panchayat has to form a village health and sanitation committee. While village health committees have been in existence since the implementation of the Panchayat Raj Act, they got an impetus with the implementation of the NRHM. The NRHM has emphasised involving the community through panchayati raj institutions and other institutional mechanisms in the management of primary health programmes and infrastructure. The panchayat is supposed to announce about the setting up of the VHSNC in the gram sabha since the gram sabha is supposed to constitute it. This is true for all village committees as per the Madhya Pradesh Panchayat Raj Act.

There are various versions about how the VHSC was set up in Peepalkheda, but it seems that the committee was set up twice. There was no announcement in the gram sabha about setting up the committee. The Sarpanch at that time, Sumi Bai constituted a committee which consisted of a female panch –Ramkali Bai - as the chairperson of the committee. But after about a week, this committee was dissolved and the Sarpanch herself became the chairperson of the health committee.

I got various versions about when and how the VHSNC was set up. The year of its setting up ranged from 2006-7 to 2009. There was also a lot of variation regarding who set it up. Most people were reluctant to talk about the VHSNC and even those who were part of it chose not to reveal their association with it. Even the barber of the village, who was the Jan Swasthya Rakshak before the NRHM was introduced, made no mention of the VHSNC or his role in it, though he spoke freely about being the Jan Swasthya Rakshak. All the people I spoke to acknowledged that not a single meeting of the VHSNC had been held since its inception. And no one wanted to reveal the names of the persons in the health committee. Regarding the list of people in the committee, the ASHA would repeatedly say that the list is with the Sarpanch Sumi Bai. The ASHA acknowledged that the committee was formed and that she was the account operator, but she would say that she is only in name and the person who operates the account is Sumi Bai who was unwilling to talk to me. Sumi Bai the Sarpanch would say that she was busy due to her impending wedding and later left the village. Many persons were not sure as to who was the chairperson and secretary of the VHSNC.

According to the ASHA, “the VHSNC was formed around May 2009. But no meeting has been held so far. I haven’t taken any money out of it. I have heard that Rs.2500 have been given to the VHSC. The Adhyaksha (Chair person) is Sumi Bai (any female panch can be adhyaksha) and the ASHA is also a member of the VHSNC. I don’t know who all are the members. I don’t know how it was formed as I wasn’t present at that time, though I am a joint account operator.”

The ANM, when asked about the VHSNC said that the ASHA knew about the health meetings in the village as it was her job. The ANM declined any knowledge of the VHSC. The multi-purpose worker (male health worker) (MPW henceforth) was more forthcoming when asked whether there was a VHSNC in the village. “The VHSNC gets Rs.2000. If a woman is going for delivery and she doesn’t have money, then the VHSNC can give her

some money. The members of the VHSNC are ANM, MPW, AWW, ASHA, the Jan Swasthya Rakshak and a woman panch who is also the secretary of the committee. The ASHA is the chairperson of the committee. But she has never called me for a meeting till today. You better ask the ANM. The ANM lives close by in Talgaon so she would know more about the VHSNC meetings."

The Anganwadi worker (AWW) gave the following account regarding the setting up of the VHSNC. "The health committee was set up in 2007 when the ASHA was appointed. The committee gets Rs.10,000 a year. The VHSNC was constituted by the ASHA. Initially another panch – Ramkali Bai – was made the *adhyaksha* (chairperson), but later Sumi Bai the Sarpanch herself became the adhyaksha. The Sarpanch introduced a resolution and changed the chair after four days. I am not in the list of members any more. After the committee is made, the names of the members of the committee is sent to the gram panchayat for approval and then sent to the *janpad* (block) panchayat."

Suraj the NGO worker who had introduced me to the village (and a key informant) admitted in a very embarrassed way that there was a VHSNC. According to Suraj, the VHSNC was set up in 2006. Sukhram told me, "the MPW constituted a committee without consulting anyone. I had got to know that they were forming the VHSNC. One day I was at the barber's shop in Talgaon when the MPW passed by, so I asked him whether they were forming the VHSNC. He told me that he had just constituted it. In the first committee, the chairperson (*adhyaksha*) was the barber and the secretary (*sachiv*) was the ASHA. At that point I said to him, "there has not been any announcement, how can you form a committee?" The MPW did not know me well. Then the barber said, (referring to me) – "he knows a lot, we will have to take him". After four to five days, the barber said to me – "we have put your name in the committee, is it all right with you?" I replied, "you should have at least told me, but I don't have any objection to my name being added". We have never had a meeting of the VHSNC. In 2009, I heard that during the rainy season the committee had received Rs.5000. But we never have had a meeting till date." Even Suraj did not know about the formation of the committee in which the sarpanch of the village was the Chairperson. While there may have been talks of making the barber who was also the Jan Swasthya Rakshak the Chairperson of the VHSNC, it would not have been possible to make him since he was not a panchayat member then.

The VHSNC was not a priority for anyone connected with health issues in any capacity in the village. As has been discussed elsewhere, even for the health workers, the VHSNC was very lowdown in priority. Most people in the village are not aware of the existence of this committee. In contrast to the VHSNC, the *sikshak palak sangha* (parent teacher association) in the school is known to most people in the village.

In the survey respondents were asked whether a village health and sanitation committee had been set up in the village. Seventeen percent households replied in the affirmative. And only two percent households reported that someone from the household had taken part in any health related work.

Table 6.3: Has a village health and sanitation committee been set up by the gram sabha by caste category

	ST and SC	**OBC**	**General**	**Total**
Yes	10 (14.3%)	9 (14.5%)	14 (21.5%)	33 (16.8%)
No	52 (74.3%)	41 (66.1%)	42 (64.6%)	135 (68.5%)
Don't know	8 (11.4%)	12 (19.4%)	9 (13.8%)	29 (14.7%)
Total	70 (100%)	62 (100%)	65 (100%)	197 (100%)

Table 6.4: Has anyone in the household participated in any health related work in the past one year

	ST and SC	**OBC**	**General**	**Total**
Yes	0	2 (3.2%)	2 (3.1%)	4 (2.0%)

The survey also asked if anyone in the household was a member of any community based group. Thirty-two percent of households reported that someone was a member of a self-help group.

Table 6.5: Membership in any community based group by caste category.

	ST and SC	OBC	General	Total
Community based organisation	6 (8.6%)	0	0	6 (3.0%)
Co-operative	0	0	2 (3.1%)	2 (1.0%)
Mahila Mandal	4 (5.7%)	3 (4.8%)	6 (9.2%)	13 (6.6%)
Self Help Group	27 (38.6%)	16 (25.4%)	20 (30.8%)	63 (31.8%)
Other	6 (8.6%)	5 (7.9%)	9 (13.8%)	20 (10.1%)

While the majority of people in the village were ignorant about the VHSNC, when asked whether any drains had been cleaned in the village or any sanitation drive undertaken, especially during the rains, those living near the sarpanch Sumi Bai's house said that a few trolleys of mud had been put in that area to reduce the mire and firm up the ground. Ramkali Bai, who was initially made the chairperson of the VHSNC and later was replaced by the Sarpanch said, "the sarpanch had put a few trolleys of mud on the road in the rains. She called only 4-5 trolleys but got a bill made for 400 trolleys. She should have got one whole road done at least. The sarpanch should have got at least the rain drains made and got the village cleaned up. She has not done any development for the village, only for herself." While 400 trolleys seems exaggerated, it was obvious that inflated bills were presented.

On checking with the block health office, it was found that money was not being sent regularly to the VHSNC since the funds for this did not come from the district office in time. There was a lag of about six months. However money to the VHSNC had been sent from April 2007 onwards. The ASHA had also submitted bills to the block health office for sanitation works for Rs.10,000 every year, which was the total sanctioned amount for the whole year. The bills that the ASHA had submitted were for building a garbage dump, cleaning drains and minor road repairs for better flow of water. No such work had been undertaken. But the ASHA is not the only one involved in inflating the bills since the chairperson has to counter sign the bills. This also explains why the Sarpanch became the chairperson of the VHSC.

The NRHM guidelines stipulate that the ASHA should be chosen by the gram panchayat and be accountable to it. Anju bai, the ASHA was about 28 years old and had a six year old son during fieldwork in the village. She had been in the first year of collage when she had got married. After her marriage, she was working with a NGO (the same that helped me locate this village) in another village about eight kilometres away where she had to get children who had dropped out, back into school. When the post of ASHA was initiated, the sarpanch Sumi Bai asked her to fill the form. Her husband was also a panchayat member at that time and had gone to school with the sarpanch. The ASHA herself was not too keen but the sarpanch sent an application in her name and she got selected. Anju Bai also fulfilled all the criteria for the post, she was 25 years old, married and had studied up till 12th class while the requirement was 8th class. The other candidates were not educationally qualified. The post for the ASHA had been publically announced in the gram sabha, but people were not very interested as there was no salary.

The ASHA is the link between the VHSNC and the health department as represented by the ANM. She brings the bills for health and sanitation work done in the village and the block health office pays for the bills generated by the VHSNC. The functioning of the VHSNC is not an important issue for the block health office. Though the ANM and the MPW are employees of the health department, they do not report about VHSNC meetings to the department. The VHSNC is considered a matter of the village, and not that of the health department.

Making of health plans

Regarding the making of health plans, the NRHM advocated a system of transmitting information from the village to the district. The gram panchayat with the ANM, MPW and a few representative of the VHSNC would be responsible for the formulation of the gram panchayat health plan. Since the VHSC is non-functional, no gram panchayat health plan has been formulated. At the village level, the NRHM Framework for Implementation provides a format for collecting health and demographic information from households in the village which has to be carried out by the ASHA. This information has to be sent to the block where information from various villages is to be consolidated and sent to the district. The ASHA in Peepalkheda told me that soon after joining she was given training and that she had conducted a survey. But at the sub-district level the emphasis is only on the national vertical programmes, child health, family planning (though called reproductive health) and the format

does not cover other local health issues. The emphasis in the District Health Action Plan is also on national programmes. The District Health Plan reports the tasks completed under various national programmes and money spent. The emphasis is on meeting targets set by the health department rather than addressing local health issues. In this sense, the health plans fail to reflect people's health needs.

The panchayats have also been given the task of monitoring of the health status of the community and give feedback, in order to ensure accountability of the health system to the community. However as the VHSNC had not had any meetings, the health status of the village has not been discussed. As regards the single survey that was conducted by the ASHA, there has been no sharing of information with the community nor has any public hearing been held. Since there is no health facility in the panchayat area, no facility monitoring that has to be conducted.

Village Health and Nutrition Day

One programme that is not under the health ministry but focuses on child health is the ICDS programme that is run by the Ministry of Women and Child Development (which was earlier the Department of Women and Child Development). The ICDS was started in 1975 and is one of the oldest programmes of the Government of India. It was initiated to combat widespread under-nutrition among children 0-6 years of age. The ICDS programme provides supplementary nutrition, pre-school non-formal education, nutrition & health education, and teams up with the health system to provide immunization, health check-up and referral services. While the Anganwadi worker and the ANM have always been linked with the village, the NRHM has further strengthened the convergence between the ICDS and health services on the ground. The convergence was made possible due the institution of the Village Health and Nutrition Day (VHND) when the ANM does immunization and does check-ups of infants and pregnant women. All ICDS and health activities are conducted on this day. One of the criticisms about the ICDS is about its top-down approach and lack of community participation. In the ICDS, community involvement is seen in terms of bringing more families to the AWC. In Peepalkheda, while on paper there is a committee that is supposed to monitor the functioning of the AWC, the committee is not active. On the VHND, something special like kheer-puri is cooked and shared among the various functionaries present. The Anganwadi workers is also a member of the Village Health and Sanitation Committee but since it is not functional, there is no community participation at all.

Collective action by the community

In contrast to the community participation managed through invited participation, the other type of collective action is when people have organically come together to address an issue.

The most basic type of community participation in health is providing support in times of crisis, especially during catastrophic events. This type of participation derives from the ties that people have with others in the community. These are based on economic, neighbourhood, caste and friendship relations. In a village, providing support involves providing credit, human resources and other types of help to go to a doctor. Putnam refers to these ties that individuals have in a community, as social capital. This is what people in the 'ideal' community were supposed to do, i.e., help each other out in times of need. And it is this support that gives a sense of a community and defines a community. In this sense, it is participation that makes a community.

The following narratives refer to the spontaneous coming together of people to help each in times of health crisis affecting individuals. It is ironical that this community support arose out of a lack of the presence of the state. However it did not develop into anything that altered the health status of the community substantially, though in one case it did lead to better environmental sanitation. Nor did this organic coming together develop into a health movement.

Case of vomiting and diarrhoea in the village

The first case is of suspected cholera in the village. While everyone could tell about the event, the exact time period is debatable. Various people reported that it had occurred sometime between 5-9 years before the fieldwork. The outbreak had occurred during the monsoons. The major memory in the village was that doctors had come to the village and put up a camp for one or two weeks. "Many people had vomiting and diarrhoea and one or two people in the village had died. Lots of doctors came from Seoni and they had set up a camp in the school. Some people were put on the drip (*logon ko botal chadhi thi*)." The death that is remembered by most people is that of Bhawani Singh Raghuvanshi's wife, since it was this event that brought the doctors to the village.

The problem started in the month of *sawan* (July-August), when the monsoon was well established in the area. Some people in the village were having diarrhoea and vomiting, but it is seen as a normal occurrence that happens during the rains, as most people fall ill at this time. And then Bhawani Singh's wife died. According to Bhawani Singh, his wife did not have any symptoms prior to the day she died. "We had lunch and then went to the fields to do some weeding. She had been all right till then. She didn't have any diarrhoea or vomiting. After half an hour in the fields she said she was feeling uneasy (*ghabarahat ho rahi hai*). I told her to sit down under the mahua tree. After a while I went to see how she was feeling. She wasn't feeling well and we came back home. I had taken the bullock-cart to the fields and brought her home in that. When other people got to know she wasn't well, many people gathered in front of the house. After bringing her home, I gave her glucose to drink. We took her to Dr.Verma in Talgaon. Some of those who had come to our house came along with me to the doctor. Dr. Verma no longer practises there. Dr. Verma told us that she had cholera and should be taken to Seoni immediately as he could not handle it. (*Verma ne kahaa, yeh haiza hai mere se nahin sambhalega*). I said to Dr.Verma, "please do something". But he told us to take her to Seoni immediately. He said that he could not take the responsibility, but if the family wanted he could give her the drip (*bottle laga doonga*). We didn't bring my wife back home to the village. Four other people from the village had come with me. So we hired a vehicle in Talgaon and started for Seoni. About fifteen minutes after we had started my wife started to feel uneasy and vomited, and then she died right there. We could not even reach Seoni. So we brought her back home. Then some people telephoned the doctors in Seoni, in the district hospital. The next day, doctors came to the village and distributed medicines and checked in every house whether someone was ill. The doctors were here for 15 days. This happened 10 years ago." Like many other in the village, Bhawani Singh's recollection was a bit hazy. It seemed that he had not got over the shock of the sudden passing away of his first wife.

Though this was not the only death in the village, other deaths prior to this due to diarrhoea and vomiting were not remembered. The same day that Bhawani Singh's wife died, the six year old nephew of the NGO worker who introduced me to the village also died in the district hospital in Seoni. The NGO worker told me, "the cholera epidemic happened in 2001. There were four or five deaths in one month in the village. This happened in the monsoons due to water and food. The problem started after fifteen days of rain. People used to defecate on the road. All the animals also used to walk on those roads. There was a lot of mire (*kichad*). So

the disease spread. My nephew had vomiting and diarrhoea in the morning. At noon, we took him to the district hospital, but they could not control it and he died in the night. People from the health department did come to the village to check. After that there was a lot of cleaning up done in the village by the government and villagers. They told people very sternly not to defecate on the road." Neighbours of this family too did not have memories of the death being related to the spread of 'cholera' (*haiza*).

This six year old nephew, an adivasi boy was from a household of landless labourers. The neighbours and relatives of this family are also landless. This family too had other relatives living in the village, and the boy was taken to the district hospital, but his death remained a private household event. In Bhawani Singh's wife's case, relatives and neighbours had come to assist at the first sign of trouble. There were at least four people to help him. They were with him from the time they left the house and were with him when they decided to go to Seoni. With four people accompanying him, he was able to hire a vehicle quickly and also gather monetary resources. Bhawani Singh also had a small piece of land, owned a bullock cart, belonged to the Raghuvanshi caste that dominates the village and had many relatives in the village. Though not a rich man he was able to mobilise resources quickly. In this case, someone from amongst his relatives called up the health department which turned this from a private into a public issue. The difference in the reaction that the two deaths generated brings up the significance of the notion of social capital as discussed by Bourdieu. For Bourdieu, social capital is the resources that derive from membership to a group. Social capital is never independent of economic or cultural capital because social capital exerts a multiplier effect on other types of capital that any person possesses. In this case both Adivasis and Raghuvanshis had had strong interpersonal ties within their caste community but the Raghuvanshis were in addition endowed with economic and cultural capital which they could use to bring the district health services to the village.

Vomiting and diarrhoea are seen as normal occurrences during the monsoons. People could not recall whether there had been deaths due to diarrhoea and vomiting prior to that year; the answer invariably would be 'don't know'. What made the spread of 'cholera' a significant event was the coming of the health personnel to the village. However since that year, people would categorically tell you that there had not been any more deaths since then. For the people of the village, the fact that the health department thought it was serious enough to came to the village and had set up a camp, meant that it was a real problem.

As regarding the reasons for the spread of 'cholera' at that time, two reasons were provided by people. For most people in the village, the reason the disease spread was that people were eating stale food (*basa khana*). This was also the busiest time of the year in terms of work and often people cook extra at one time which frees them to work for longer hours in the field. The second reason given was that there was a lot of filth in the village, especially during the monsoons. Due to the rains, people would not go to the jungle to defecate but would do so by the roadside. Filth as a reason for the spread of cholera was given by people who were or had been associated with the government's health programme, by those associated with CBOs or NGOs, and by those who had higher educational levels.

"People used to defecate on the road and animals used to walk in the mire (kichad)."

"After that episode, everyone in the village was told not to defecate by the roadside."

"There used to be a lot of filth in the village, the government got the village cleaned when the disease spread."

"There used to be a lot of filth in the village, especially on the way to the last mohalla, where you are staying. One could not walk on that road. Now that road is quite clean."

Reaction of the health personnel

Of the government personnel providing health services today, the ANM and the sector supervisor of the health department were around at that time too. It should be noted that the term 'cholera' is no longer used in official records and discourse. The term now used is 'diarrhoea vomiting dehydration' or DVD. That diarrhoea is a regular feature during monsoons is acknowledged by all – people, government health functionaries and private practitioners.

For the health personnel, the DVD incident was history. According to the ANM, "there was dehydration on a large scale due to vomiting and diarrhoea about seven years ago. There used to be a lot of filth in the village. People used to throw dung outside the house and children used to defecate right outside the house (*bahut gandagi thi*, *ghar ke samne gobar dalte the aur bachhe ghar ke samne tatti karte the*). When this happened the SDM also came. I said to him, "how can I do anything in this filth". The SDM got the area cleaned and got drains made. I got to know when the anganwadi worker told me that a lot of people were having diarrhoea and vomiting in the village. So I informed the block health office. Some people from the village also informed the block health office on their own. I was then told by the block health office to go to the village and see the situation, and give medicines. The

diarrhoea and vomiting did not happen in Talgaon as there are a lot of private doctors there. The main problem in Peepalkheda has always been vomiting and diarrhoea during the rainy months. When the vomiting-diarrhoea happened in Peepalkheda, I used to sit in the school form 9.am to 6.pm. We could not take food or water there. So we used to eat and go and come back home and eat. This went on for 15 days. The daughter-in-law in one house died but it was not due to dehydration, she was ill due to other reasons. There were 5-6 cases of dehydration. As we were on duty it did not spread after that."

The sector supervisor said that "In 2000 there was an cholera epidemic (*haiza*) in Peepalkheda. There were one or two cases of diarrhoea-vomiting (*ulti-dast*). The Raghuvanshi community telephoned the Sub-divisional Magistrate (SDM). He came to the village immediately. The block health office also sent doctors and others to the village. Dr. A. was the block medical officer (BMO) then. We set up a medical camp in the village school. The SDM said go to every house and check and put them on drip. People wanted the 'bottle' i.e. drip. But the BMO said that we should give the drip in the school. The BMO felt that if people are sick let them come to the school. If we had given the drip at home, even those who were mildly ill would have wanted the drip. The BMO did the right thing. At first 50 people said that they had a problem but when we said that the drip will be given not at home but in the school, only five patients turned up. There were no deaths in the village after that. We went to every house and distributed medicines. People kept those medicines but did not eat them. But the doctor said that you have to eat them in front of the sister (nurse). The private practitioners did a lot of propaganda that there is a lot problem. But in reality it did not spread. The reason that this spread was that people were not having good water and were eating stale food. This problem was in other villages too but there was not such an uproar."

For the fifteen days that the health camp was set up in the village, health personnel from the BMO to the ANM were stationed in the village. The health department also sent doctors and nurses from the district hospital to the village. All staff had to put in long hours of work during that time. However people in the village pointed out that setting up a health camp in the village did not help much initially. The doctors and other personnel from the district hospital would reach the village only at 11.am, since the first bus from the district town would reach then. If someone was ill, especially during the night it would cause a lot of delay. The first bus for the district town on the other hand would leave at 8.am and families would take the ill ones in that bus to the district hospital. This happened for a few days and

then the people told the doctors and the SDM of this issue. After that the health personnel started reaching the village at 9.am.

Both the sector supervisor and the ANM who were working in the area at that time suggested that the situation had been blown out of proportion, and setting up a camp in the village was not necessary. They felt that it was a fuss created by a few villagers. Vomiting and diarrhoea was viewed by both as a normal occurrence during the rains. There was a sense of resentment among the health personnel in their manner of speaking about villagers telephoning the SDM. The incident would have put a lot of pressure on the health workers. The reaction of the health personnel also has to be seen in the context of the social distance that exists between the villagers and them. The ANM and sector supervisor both have government jobs which are permanent and get middle class salaries.

All people I spoke to – village residents and health personnel – said that the village was cleaned up after the incident. The SDM ordered a cleanup drive in the village immediately and residents were warned against defecating on the road. Rainwater drains were cleared so that water could flow out and garbage burnt across the village. Across board, people told me that the village used to be very dirty earlier, and a change occurred after the 'cholera' episode.

Interpersonal ties in the village

There are other ways in which the community participates to help each other in times of crisis. The most common form will be to provide immediate help when a health emergency occurs. At such times in most cases, the immediate neighbours or those with whom the household has good relations are the ones who provide help and resources, or give support till members of the extended family come. Those who step in often are not of the same caste but are people whom one can rely on. This reliance on others across castes also has to do with lessening of rules of purity and pollution that demarcated boundaries between castes. I discuss below some instances of when people had helped each other when a health problem had come up.

Chandrapal is one of the biggest money lender's in the village. His neighbour is an adivasi household with barely a couple of acres of land. The neighbour's elder daughter was married

and with her husband was working as a labourer in Nagpur. For about three months, the younger daughter also had gone to Nagpur to find work and had returned a few days before the incident. One afternoon, the Adivasi neighbour came to Chandrapal's house saying he needs to take is daughter to the hospital. So Chandrapal's mother went to see. She came back after a while and told me. "The girl is bleeding, so they are taking her to the district hospital. There is a lot of blood all over the house." Then she told me quietly that the girl had been living in Nagpur for the past few months. She said this to me a few more times. While the father and daughter took the bus to the district hospital, Chandrapal went on his motorcycle. On the other side of girl's house lived her uncle with whom the family was not on talking terms. There were many Adivasi houses in that row and across the street too. However the family preferred to seek Chandrapal's help for two reasons. First, that Chandrapal was a money lender and could provide cash at short notice. And second, there would have been more talk if other Adivasi families had got involved whereas Chandrapal is a Raghuvanshi. However, the girl did not spend much time in the hospital and returned home the same night.

Karwane who is a blacksmith moved to the village in 2002. Initially he came to do some work in the village as there was no other blacksmith. Later he settled down in Peepalkheda as work was easily available in the village. He had been having stomach pain for a few years before coming to the village. "Sometimes the pain would be so acute that I would stretch myself from the beam on the roof of my hut. In the January 2006 around 'sankranti' the pain increased so much that I realised that I had to go to the hospital. I went to the district hospital and was admitted for a day. At that time only my wife came with me. The doctors in the district hospital referred me to Jabalpur. I told the doctors in the district hospital that I would go to Jabalpur, but I came back home. I thought that it would be better to go to Nagpur. There are people I know who keep going to Nagpur for treatment, so it would be better."

As happens usually in a village, everyone in the neighbourhood and others for whom he worked knew about his ill-health. After being at home for two days, Karwane had very severe pain (*bahut tadak nikli*). "I said I have to go to the hospital immediately. Everyone else around said, don't go today as it is Sunday and they do not do admissions on Sunday. I said we will see what happens, but get me out of the house first. I was conscious till we reached the national highway (11 kms from the village). I have no idea how we reached Nagpur." Karwane lives in a 'kacha' house and has very little earnings. He has two teen-aged daughters and is also a heavy drinker. At that point there was hardly any money at home.

Sukhdeo a Raghuvanshi marginal farmer collected money from other farmers for whom Karwane had worked and had to pay him. Karwane gets five *kodo* grain from every house for the year (1 kodo equals 7 and half kilograms approximately). Sukhdeo told the farmers to give some money and deduct it from the grain. "Some gave Rs.50, others Rs100 and he managed to collect Rs. 5000. This was not a loan. Sukhdeo came with me and my wife to admit me in the hospital in Nagpur. He returned the same evening. I was in the medical college hospital. They operated on me the same day. The doctors said that I had ulcers. I was in the hospital for 16 days."

In another case of an Adivasi family consisting of a couple, their three young children aged two, four and six, and the man's father; one day neither the children's father, nor their grandfather was at home. The youngest child who was two years old, fell sick. She had been having fever since morning. In the evening, the mother requested the neighbour who was a Raghuvanshi and had a motorcycle to take her to Talgaon where all the doctors have their clinics. In cases where the neighbours help to take the patient to the health facility or provider, the patients's family immediately pays for the conveyance. The ties between the households involved in this situation are of a short duration and superficial. The main issue in this situation is the patient's family's ability to pay for the transport or the assurance that payment will be done as soon as possible. In a sense this sort of helping out is also filling a gap where there is a lack of transportation services.

During fieldwork, the area around the village experienced a storm around noon in the month of February which is very unusual for the region. What was remarkable about this storm was the number of times lightening struck the ground. That day, a farmer who was working in the fields made the mistake of standing under a solitary tree and was struck by lightning. Some others who were working at a distance saw it happen and went to help. One person went to get a bullock cart to transport him home. Fortunately the storm did not last long. Everyone whose house lay on the route came to enquire. Someone also gave the injured person a glass of milk to drink. The family and a few relatives then called a jeep to take him to the district hospital.

There are other ways in which community ties help. One of the ways is in providing information about places of treatment. Studies have shown that those with good networks have access to health services due to information exchange. The same is true for people in

Peepalkheda. When going the first time to a doctor, people go to those doctors to whom someone known to them has been earlier whether a relative or someone in the village.

However community ties also can prevent people from seeking justice. In such cases it is the powerful who prevail and in most cases people give in. The first relates to the case of the only Dai in the village. The Dai of the village was one day plucking *chana* (black gram lentil) leaves from someone's field when the owner (a Raghuvanshi) came there. An altercation occurred during which the farmer pushed the Dai to the ground and the Dai fractured her leg. The Dai was at that time more than 60 years old and very frail. On seeing this others also came to the spot. Then someone fetched her husband and grandson. The husband and grandson had to call other relatives from outside the village to transport her from the fields. They borrowed a bullock cart to carry the Dai to the main road to go to the district hospital. Since the Dai is a Dalit, none of the villagers who had gathered around were willing to touch her. While the dai was taken to the district hospital, a meeting was also held in the mukaddam's house and the farmer was persuaded to pay for the treatment cost at the district hospital. (This ensured that a police complaint would not be filed.) The doctors at the district hospital referred the Dai to Jabalpur Medical College as it was a complicated fracture. The extra expense had to be borne by the family. After three days the Dai was shifted to Jabalpur and a horizontal rod was inserted which had to be removed after eight months. However the old couple did not have the money to travel to Jabalpur to get the rod removed and when I reached the village for the first time, it had been over two years since the rod had been inserted. During fieldwork one of the Dai's neighbour (a Raghuvanshi) asked me if something could be done to help the Dai. We discussed the issue and it was decided that we would collect money from all villagers. The Dai's husband went to the mukkadam with the proposal who spoke to some others. It was decided that some important people would collect the money. The neighbours of the Dai, many of whom were landless Adivasis gave big amounts in terms of percentage of their earnings, while the better off gave very little amounts. The mukkadam contributed nothing while Shankarlal, who was not the sarpanch at that time gave the maximum amount amongst the residents. With the money collected (including my contribution) the Dai was able to get the rod removed from her leg though they did not go to Jabalpur but went to a neighbouring district hospital which was known to have better infrastructure and doctors. But after removing the rod, the dai was in a more difficult situation than earlier as she was not able to stand up at all.

In another instance, the potter's son was travelling on a motorcycle pillion with another man from the village when they met with an accident due to the mistake of the man driving the motorcycle. The driver did not have any major injuries but the potter's son broke his right leg and arm. When people got the news in the village they rushed to the spot. By then Shankarlal had become the sarpanch again. Shankarlal too reached the spot and the injured boy was taken to the district hospital. The boy driving was told to pay for the cost of treatment in the district hospital. Shankarlal also advised the injured boy's father not to report the matter to the police. Fortunately it was a simple fracture that could be treated in the district hospital.

In both these cases though the injured were paid something for the medical expenses, it was insufficient. Pressure had been brought on the families in both cases not to involve the police. But the compensation paid was not enough as it did not cover all the costs of hospitalisation since patients have to buy many medicines from their own pocket. Other expenses such as transport, shifting to another hospital and costs incurred by family members who had to attend the patient, etc., had to be borne by the family of the injured. For the injured, partial compensation was seen as getting something initially. But as the expenses increased, the families felt that they had been coerced into accepting a bad deal.

Times when the village comes together

Despite the divisions of caste and class, all households across castes have come together at certain times–when rains fail or are delayed, and at times of community celebration of festivals. When rains fail, or are delayed all villagers get together to propitiate the village Goddess Maiya Dai and religious discourses are held for usually ten days. This usually happens at the end of July if the rains do not come till then. The failure of the monsoon affects all equally in the village – across class and caste.

Two of the three main festivals- Ganapati and Nau-Durga are celebrated collectively in the village. While Shivratri is also celebrated collectively, it is in the celebration of Ganpati and Nau-Durga that community participation of the village is seen. Boys in the village will collect contributions from all households, including Muslims and Chamars, though the Muslims don't attend the festivals. Dalit households also participate in these festivals, but as is the norm, they sit slightly away at the festival. These households contribute monetarily, and also eat the '*kanyabhoj*' that is served on the last day of Durga festival. In the village, Dalit

residents were seen interacting with their Adivasi neighbours, but not so much with the upper caste neighbours. I only saw a Dalit man smoking with a Muslim person in the village. In contrast, I have seen people smoking together across castes, also with Adivasis in the village.

This chapter has laid out the various ways that community participation works out in the village. On the one hand are fora created by the state where the community is invited to participate. It is believed that basic services will reach the people when the community participates in government programmes. The argument given by the government is that any scheme or programme is likely to succeed when the community becomes a partner or takes ownership of it. Community participation evolved as an issue of community empowerment but in a neoliberal context has become an issue of the community bearing the costs of basic services while the state has withdrawn from its responsibility, as has been in the case of water supply and sanitation. Under the NRHM, community participation was viewed as an important component of the programme to increase efficiency and ensure access to health services. Despite reviving the VHSNC and providing untied funds under the NRHM, the VHSNC in Peepalkheda is non-functional. Neither the health functionaries nor the people give any importance to the VHSNC. On its part, the health department also is not concerned about community participation since all emphasis is on meeting predetermined targets. Community participation is seen as a village issue, and not as a responsibility of the health department. On the part of the people, health is not a tangible community issue. Rather health is seen as a private household matter.

Outside the framework of invited spaces created by the state, people do come together on issues of health. This is mostly in terms of providing support in times of health emergencies. This sort of participation is entirely dependent on interpersonal ties. In the case of death due to cholera where the community took collective action, it was the dominant caste that could turn a private event into a collective, public issue, while the same event in an Adivasi household remained a private matter. The everyday support that people in the community provide to reach other in times of health emergencies are about transporting the patient to a health facility and providing cash at short notice and are dependent on strong ties between households. Exchange of information on places of treatment is also a way in which people support each other. In most cases when the community comes together to help each other, it remains entirely dependent on the social ties of the household. And these social ties are affected by caste and class.

CHAPTER 7

CONCLUSION

This study has examined the working of community participation on the ground and how it increases access to health services. For this, an ethnographic study was carried out in a village in Seoni district of Madhya Pradesh. The study tried to see what are the health needs of the community, and to what extent can community participation increase access to sgovernment health services to meet these needs. The fieldwork was undertaken in the years 2009-10. Due to various reasons, there was a time gap in its writing. While there has not been much policy change on this issue, in this chapter I will also examine if there are any further developments since the study was undertaken. The conclusion thus focuses on two issues, first the working of community participation within the framework of the NRHM and second, the role of community participation in increasing access to health services. Though these findings are from the ethnographic study of one village, they have relevance for the whole country.

The Working of Community Participation on the Ground

Operationalising community participation under the NRHM comprises three issues; communitization, involvement of panchayats and decentralisation. These three issues are intertwined and work together in synergy. The following section looks at the working of these on the ground.

Communitization

Communitization under NRHM is made up of five elements - community action, the VHSNC, the ASHA, the VHND and setting up of *rogi kalyan samitis*. In Peepalkheda, some of the requirements regarding involvement of the community mandated by the NRHM were in place, while some others had been completed on paper only (at the time of the fieldwork).

The ASHA - The appointment of the ASHA is one of the successful health initiatives in the village. The ASHA is positioned to be the link between the health system and the community. Her duties are focused on immunisation of children, ante-natal services, the Janani Suraksha Yojana and meeting sterilisation targets. The ASHA in the village ensures that infants are

brought to the anganwadi centre for immunization and that pregnant women come for anti-natal treatment. According to people in the village, immunisation and ante-natal services have improved significantly after the NRHM was introduced and the ASHA informs the households when the ANM arrives in the village. The ASHA is also involved in DOTS under the tuberculosis programme. She also informs villagers about any other health camps that the government organises. Since the ASHA was appointed, the ANM has limited contact with the community. The ASHA is known most for the Janani Suraksha Yojana where she accompanies pregnant women for delivery to the government facility. The ASHA has become an extension of the health system in the village. Her role as an activist who will raise awareness about healthy practices has been sidelined. This has led to the bureaucratization of the ASHA's role. One of the reasons for this is that the health department does not emphasise other public health practices.

Village health and nutrition day (VHND) - Another component of communitization is the village health and nutrition day which is held in the village once a month. This is the day that the ANM and MPW come to the village for immunisation and the AWW distributes nutritional supplements for infants (*mangal divas*) under ICDS. Immunisation and taking weights of children is the main activity. Pregnant women are given iron and folic acid tablets and their weights are taken. Adolescent health is a neglected issue.

Village health sanitation and nutrition committee (VHSNC) - The village health sanitation and nutrition committee existed on paper only. And it has not had any meetings. Its formation was also mired in controversy. The ASHA who operates the account jointly with the panchayat *sarpanch* (who was the chair of the committee) said that she had nothing to do with the VHSNC. The village health committee has an annual fund of Rs.10,000. But how it was spent is not known. According to official records work had been carried out but nothing was visible on the ground. And it would be wrong to hold the ASHA responsible since the panchayat *sarpanch* was involved. The AWW is also a member of the VHSNC, but she denied being a member. The ANM and MPW though members of it have no interest in it. Even in the village very few knew that a VHSNC existed.

Community action – Community action is about monitoring the health services and giving feedback. At the village level, the VHSNC was to supervise the village health and nutrition

day activities, monitor the nutritional status of children etc. But since the VHSNC is not functioning, no monitoring takes place.

Rogi Kalyan Samiti - The Mission also created the *rogi kalian samiti* in health facilities above the sub-centre level, whose members include community representatives amongst others. There is no public health facility in Peepalkheda. Discussions with health personnel at the PHC, CHC and district hospital revealed that though these societies have been establish they are non-functional. In the CHC and PHC, not a single meeting had taken place.

A review of the Common Review Mission (CRM) reports on the status of the working of NRHM shows that the ASHA programme remains the most successful endeavour. Many of the successes of the NRHM can be attributed to working of the ASHA programme. All subsequent health initiatives added to the NRHM such as non-communicable diseases have relied on the ASHA. The ASHAs had a pivotal role to play in the management of the Covid-19 pandemic too. The 14th CRM report too found that the VHND is about providing immunization and ante-natal care in all states and the role of panchayat representatives on this day is limited (GoI 2022). Various CRM reports note that the VHSNCs and RKS have been formed in most places, however they are not functioning as they were expected to. The 13th CRM report notes that community platforms such as VHSNC and the RKS "are yet to evolve as avenues where the voices of the community in planning and monitoring for service delivery, accountability mechanisms and addressing social determinants on health. Efforts are needed at all levels to build capacities of these platforms and for providing handholding support" (p.62, GoI 2019b).

Involvement of Panchayats

At the village level, the panchayat is not involved in the health activities in the village. No one from the panchayat is involved in any health work or comes to monitor the activities on the VHND. As mentioned earlier, the VHNSC exists only on paper. And the village does not have any health facility for the panchayat to maintain. While the panchayat does get an annual grant of Rs.10,000 for health related activities, there is nothing to show for it. The sub-centre and the PHC are to have representatives from all gram panchayats that they serve, but no meetings had been held. Enquiries at the block and the district level also showed that while the *rogi kalian samitis* had been formed, no meetings had been held.

Decentralisation

Decentralisation is a key strategy under the NRHM. The district health society (DHS) was set up which is supposed to look after public health in the district and formulate the district health plans.

Health planning - Local health planning is a neglected area under the NRHM. Health planning teams were to be set up at all levels from the village to the district. In the village, the planning team has to conduct a household survey that would be used to draw village plans. The health plan for the district was to be based on the in-puts from these surveys. But the NRHM has not carried out any health survey at any level. No training has been provided, nor have resources been allocated for this. As of now, the district plan is based on the data collected by the RCH programme and the various vertical disease programmes. As a result district health plans are made without taking into account local needs, thus missing the goal of decentralised planning. Most CRM reports are silent on village level planning. It is only with reference to the state of Kerala that village health planning is mentioned (GoI, 2014b). Baruah, Priya, and Jain (2012) point out that though health planning at the local level was carried out in various places, it was not implemented; since this would require a cadre of public health experts who would have the capacity to turn these plans into action on the ground.

Convergence – The NRHM had recognized that health indicators are affected by other factors such as sanitation, nutrition, women's empowerment etc. Thus it was envisaged that the district level health plans will be based on convergence of different departments. Some convergence has taken place between the health and ICDS in the village, as seen on the VHND. But there is no evidence of this happening with any other department. A case in point is the issue of fluorosis. Seoni is a fluorosis endemic district, however there is no convergence between the health department and the public health engineering department which has the task of monitoring the quality of potable water. None of the CRM reports mention inter-departmental convergence as having been successfully implemented. However at places there is mention of convergence of the vertical disease programmes.

Does Community Participation Increase Access to Health Services

The NRHM had envisaged that involving the community would make the health system more accountable to the needs of the people. Also the community's inputs in planning will ensure that the health services are tailored to the health needs of the community. This section looks at what factors have helped or hindered in increasing access to health services. The weak implementation of community participation mechanisms and poor functioning of health services appear to be part of an integral system that limits the access to health services. Improvements in community participation could improve functioning of health services and thereby increase access, but this is a chicken and egg problem.

Priority to some health issues over others

The public health system in rural areas is oriented towards providing preventive health services. The NRHM Framework for Implementation also states that the emphasis is on preventive rather than curative health issues. And among preventive services, access to immunization, institutional deliveries and family planning has increased. But other preventive measures such as disinfection of water sources, prevention of diseases during rainy season, tackling fluorosis etc. are neglected areas.

For analytical purposes, health needs can be categorised as 1) felt/expressed needs (irrespective of whether treatment was sought), 2) epidemiological needs and 3) state propagated needs. These three conceptual categories are not exclusive and overlap most of the time. For instance, a felt need could be an epidemiological need and could also be a state propagated need. It is possible that some of these epidemiological needs may neither be felt by the community, nor be addressed by the state. State propagated needs are those needs that the state views as being important for the country and therefore is an important part of state policy, but may not be seen as such by people themselves, at least initially. The state propagated needs form an intrinsic part of the country's development model. This categorisation of health needs enables us to understand the availability of public health services.

The study shows that the public health system emphasises state propagated health needs such as immunization, institutional delivery and family planning. Efforts at community participation are also most successful where state propagated needs are concerned since the

health system and the district administration are geared to meeting those goals. The success of the ASHA has to be seen in this regard. Government policy has been concerned about reducing fertility rates, reducing infant mortality and increasing institutional deliveries. International comparisons show that health indicators in India are not favourable when compared to countries with similar gross domestic product (GDP). In view of this, the health policy has emphasised increasing access to health services that will have an impact on these indicators.

Inadequate health services

The primary level health system is not oriented towards providing curative services. Therefore people rely on private practitioners near the village, who are not qualified. When these practitioners are unable to provide treatment, the patient goes to the district town. The well off go to a qualified private medical practitioner while the poor go to the district hospital OPD. Even at the district hospital, often the prescribed medicines are not there or the diagnostic facilities are not working due to which people have to spend money to get these services from the private sector.

People do not go to the PHC and CHC for curative services. The PHC does not have a doctor and is situated in an isolated area. The CHC also has a shortage of doctors and other staff and is not conveniently located. Even if doctors are present in the CHC, they are available only for a limited period of time in the day. Therefore if the non-qualified private practitioners around the village are not able to provide a cure, people go to Seoni. In case of more serious health issues, the patient has to go outside the district. In the village, the ASHA is given some basic medicines to keep. But villagers, especially from poor households complain that she doesn't have any when they ask her for medicines. On her part the ASHA complains that she is not given enough medicines by the health department.

As the public health system is unable to meet even simple curative needs of the community, this also affects access to vertical programmes. With regards to vertical programmes, people to not go to public facilities initially. They are able to access the vertical disease programmes like tuberculosis usually after going through a series of other doctors. Even in the tuberculosis programme, there was a gap in the supply of medicines on the ground due to

delay at the state level during fieldwork. The vector disease programme for malaria is not availed by people since most go to private doctors for curative treatment.

The public health services are mainly used by the poor who are concerned about fulfilling their subsistence needs. The poor also lack social and political capital to influence policy. So while the poor use the public health system the most, they do not have the time or resources to be involved in participatory activities. In a context where the public health system is not accessed for day to day curative health services, it is difficult to persuade people to get involved in the functioning of public health services. Until the public health system is strengthened in all aspects, and the people feel that it is beneficial to them, it will be difficult to enthuse the community about participation.

Lack of information on health needs of the community

Lack of information on health needs of the people is a barrier to increasing access. As most people go to various private practitioners, it is not possible to get an understanding of the health needs of the community from government facilities. The NRHM had envisaged that village level health surveys would be conducted which would be the basis for local health planning but this is a completely neglected issue. No training or resources have been provided for these under the NRHM.

At the same time it needs to be pointed out that felt or expressed health needs do not give the whole picture. Environmental conditions and nutritional status of the people (not just children) also needs to be taken into account. For instance, despite the district being a fluorosis endemic area, there is no information on the effects of fluorosis in the population.

Lack of feedback and response mechanisms

In the present context, there are no mechanisms for feedback from the community. Even when there is a shortage of medicines at the village level, there is no way of informing the health system. (Doctors at the CHC too reported that even they face shortage or delay in supply of medicines and have to procure them from the market.) Without a process of feedback between the community and the health system, the aims of community participation remain unfulfilled. A study by Scott, et. al. (2017) shows that where the VHSNC did bring up health issues such as lack of medicines or health workers with health officials, the people

were directed to approach higher authorities; which the authors call the 'discourse of local responsibility'. There is an urgent need for a system of quick response without which community participation cannot work.

Lack of information about services

Information has to travel from the decision makers to the community too. This is a seldom discussed aspect in participation. The health system needs to inform the community about the services that the health system provides at all levels from the district to the village. This will increase the usage of health services and demand for services where they are not functioning satisfactorily. The community should be informed of all preventive and curative services, including disinfection activities, availability of medicines, school health programmes, etc. Without adequate information it is impossible for the community to monitor the implementation of health programmes or ensure accountability from the health system.

In conclusion

Community participation needs certain conditions to be in place to be able to increase access to health services. Firstly, the government has to give more powers and resources to the district level to ensure that health plans are made according to local needs. This includes initiating health needs data collection on the ground and resources to collate it within a stipulated time. This will also require hiring professionals and capacity building of district and sub-district officials. Secondly, the government also needs to put in place a system of feedback from the community and mechanisms to address the gaps speedily. Even senior officers tell people to take their requests to higher-ups since they do not have the power to address them (Scott, et al. (2017)). Thirdly, the health system needs to be strengthened. This includes ensuring medicines, filling-up posts of medical and non-medical staff, ensuring that equipment in health facilities function, prevent leakages of medicines and other supplies, etc. Fourthly, the health system also has to give emphasis to community participation. The health staff that is in touch with the community does not participate in community based meetings because the health system does not require them to do so. For the health system, the emphasis is on providing health services and meeting health targets.

Community participation requires a reorientation of how the top down health system planning and implementation structures relate to bottom up needs. The NRHM has several

strategies for this, and yet they did not get adequately implemented. The lack of a conducive eco-system is evident within the organisational structures, the political system and the social system to express, capture and address the people, the political system and the social system action.

Community participation requires the spirit of collective action and a spirit of being together as a community if community participation is to work for people of villages such as Peepalkheda. It requires that health become a public issue rather than remaining a private issue where it is left to the household to deal with health and illness. Community participation as 'conscientisation' (Paulo Fereire) may initiate such a process and break the vicious cycle of inadequate services, inadequate expectations and demands, and the individualisation of health. But it cannot be done without the health system fulfilling its part in promoting community participation.

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Appendix

Interview schedule

Household No:	**Date:**
Moholla/ward:	**Name of head in GP listing:**

Part I

Household details

(To be canvassed to adult member of the household)

1.1 Household size: Female + Male = Total

1.2 Type of household 1.Nuclear 2.Extended

1.3 Name of head of household:

1.4 Gender of head of household: 1.Female 2.Male

1.5 Name of respondent:

1.6 Gender of respondent: 1.Female 2.Male

1.7 Religion: 1.Buddhist 2.Christian 3.Hindu 4.Muslim 5. Sikh 6.Jain 7.Other

1.8 Caste:

1.9 Caste category: 1.ST 2.SC 3.OBC 4.GEN

1.10 Since when has your family been residing in the village? Years

M.no **1.11**	Name	Age **1.12**	Sex **1.13**	Marital status **1.14**	Rela. head of HH **1.15**	Edu **1.16**	Primary occupation (max. months) (record past one year) (*probe about last 5 years*) **1.17** Secondary occupation				(record past one year) (*probe about last five years*) **1.18** Tertiary occupation				(record past one year) (*probe about last five years*) **1.19**			
							Occup **1.17 a**	Labour status **1.17 b**	Where **1.17.c**	Months **1.17d**	Occup **1.18 a**	Labour status **1.18 b**	Where **1.18c**	Months **1.18d**	Occup **1.19 a**	Labour status **1.19 b**	Where **1.19c**	Months **1.19d**
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		

*list temporary members separately -two weeks or more

Height and Weight

M.No **1.11**	Name	Height in cm. **1.20**	Weight in kg. **1.21**
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

Codes

Sex

1. Female
2. Male

Marital Status

1. Unmarried
2. Married
3. Widowed
4. Divorced/separated
5. Other

Relationship to head of household

1. Self
2. Spouse
3. Son
4. Daughter
5. Daughter-in-law
6. Son-in –law
7. Brother
8. Sister
9. Brother-in-law
10. Sister-in law
11. Father
12. Mother
13. Niece
14. Nephew
15. Other

Education

0. No schooling

1-12 class

13. Diploma
14. Doing graduation
15. Completed graduation
16. Doing post graduation and above

Part 2

General Health

2.1 Where do you usually go for treatment? (most frequently)

2.2 a Have you used any government health service in the last three months? 1.Yes 2.No

2.2 b If yes, which government facility did you use?

2.2 c What services did you use there?

Current illness in the household

Is anyone in the household ill today?

M.No **2.3 a**	Type of illness **2.3 b**	Symptoms **2.3 c**	Duration of illness/ since when **2.3 d**	What all did you do for treatment **2.3 e**	Amount spent **2.3 f**	Amount of loan taken and from whom **2.3 g**

Hospitalisation in the past five years

M.No **2.4 a**	Age at the time of illness **2.4 b**	Type of illness **2.4 c**	Symptoms **2.4 d**	Days spent in hospital **2.4 e**	Duration of illness/ since when **2.4 f**	What all did you do for treatment **2.4 g**	Amount spent **2.4 h**	Amount of loan taken and from whom **2.4 i**

Chronic and repeated illness in the past five years (any symptoms persisting for three weeks or more)

M.No **2.5 a**	Age at the start of illness **2.5 b**	Type of illness **2.5 c**	Symptoms **2.5 d**	Duration of illness/ since when **2.5 e**	What all did you do for treatment **2.5 f**	Amount spent **2.5 g**	Amount of loan taken and from whom **2.5 h**

Disability in the household

M.no **2.6 a**	Type of disability **2.6 b**	Severity of disability **2.6 c**	Since when disability **2.6 d**	What all did you do for treatment **2.6 e**	Amount spent **2.6 f**	Amount of loan taken and from whom **2.6 g**	Government assistance received **2.6 h**

Severity of disability: can do basic tasks, basic tasks with difficulty or pain, need assistance for basic tasks, totally dependent for basic tasks, totally bedridden (or cannot see any light in case of blind)

Mortality in the past five years

S.no **2.7 a**	Name	Age at time of death **2.7 b**	Sex **2.7 c**	Rela to head **2.7 d**	Cause of death **2.7 e**	Symptoms of ill health **2.7 f**	Duration of illness **2.7 g**	What all did you do for treatment **2.7 h**	Amount spent **2.7 i**	Amount of loan taken and from whom **2.7 j**

Part 3

Preventive Health Services

3.1 a Has any health worker contacted you in the last three months? 1.Yes | 2. No

3.1 b If yes, what was the reason for the visit?

3.2 Did any government department spray anything for prevention of malaria in the village in the last one year?

1.Yes | 2. No | 3.Don't Know

3.3 Has anyone from the health department sprayed lime along drains and water sources in the village? (one year)

1.Yes | 2. No | 3.Don't Know

3.4 Has anyone from the government done chlorination of the wells in the village? 1.Yes | 2. No | 3. Don't Know

3.5 a Has any health camp been organised for the village in the past one year? 1.Yes | 2. No | 3. Don't Know

3.5 b If yes, what was the camp about?

3.5 c Did anyone from the household attend it? 1.Yes | 2. No

3.6 a **Has there been an outbreak of any disease in the village in the past one year?** 1.Yes 2. No

3.6 b **If yes, what sort of an outbreak was this?**

3.6 c **When was the outbreak?**

3.6 d **Did the health department take any action?** 1.Yes 2. No 3.Don't know

3.6 e **If yes, what action did the health department take?**

Immunisation of children up to five years

HH. No	**Moholla/ward:**	**Name of HH head:**

(check immunisation card if available)

S.No **3.7**	Vaccin-ation	M.No			M.No			M.No			M.No		
		Yes-1 No -2 **3.8**	Where **3.9**	Amount Spent **3.10**	Yes-1 No -2 **3.8**	Where **3.9**	Amount Spent **3.10**	Yes-1 No -2 **3.8**	Where **3.9**	Amount Spent **3.10**	Yes-1 No -2 **3.8**	Where **3.9**	Amount Spent **3.10**
1	BCG												
2	Polio 0												
3	Polio 1												
4	Polio 2												
5	Polio 3												
6	Polio 4												
7	DPT 1												
8	DPT 2												
9	DPT 3												
10	Measles												
11	Vit.A 1												
12	Vit.A 2												
13	Hep. B												

Part 4

(To be canvassed to ever married women in the age group 15-35 years)

HH. No	Moholla/ward:	Name of HH head:

Birth histories of women

Name	
M.No	
4.1 How many children do you have?	
4.2 How many are living with you right now?	
4.3 Did you have others who did not survive?	
4.4 Were there any still births?	
4.5 What was your age when you moved to the marital home?	
4.6 How old were you when you first conceived?	
4.7 What was your age at the time of last pregnancy?	
4.8 How many pregnancies have you had?	
4.9 Were there any child deaths?	

Details of pregnancy	Membership No.					
	1	2	3	4	5	6
4.10 Did you have any difficulties during pregnancy?						
4.11 Where did the childbirth take place?						
4.12 Who carried out the delivery?						
4.13 Did you have any problems during delivery?						
4.14 Amount spent						
4.15 Did you receive any government support?						

4.16 a Do you plan to have any more children? 1.Yes 2.No

4.16 b If no, are you using any contraceptives?

4.17 Are you currently pregnant? 1.Yes 2.No

Currently pregnant women in the household

HH. No	Moholla/ward:	Name of HH head:

M.No	
4.18 How many months into the pregnancy are you?	
4.19 Has the pregnancy been registered?	
4.20 If not, what was the reason for not registering?	
4.21 How many ANC checkups have you had?	
4.22 What sort of checkups did you have?	
4.23 Where did you have these checkups?	
4.24 If no ANC done, what was the reason?	
4.25a Have you had any problems during this pregnancy?	
4.25b If yes, has anything been done?	
4.26 Where do you plan to have the pregnancy?	
4.27 If in hospital, how do you plan to get there?	

4.28 Do you plan to have any more children?	1.Yes	2.No

4.29 If no, do you plan to do anything about it?	

4. 30 a Do you know the ASHA in the village? 1. Yes | 2.No

4. 30 b If yes, have you met her in the last one year for any health issue?

1. Yes | 2.No

4. 30 c. If yes what was the reason for the visit?

4. 31 a. Do you know the swasthya karmi in the village? 1. Yes | 2.No

4. 31 b. If yes, have you met him in the last one year for any health issue?

1. Yes | 2.No

4. 31 c. If yes, what was the reason for your visit?

4. 32 a Do you know the ANM in the village? 1. Yes | 2.No

4. 32 b If yes, have you met her in the last one year for any health issue?

1. Yes | 2.No

4. 32 c. If yes what was the reason for the visit?

Part 5

Economic status

HH No:	Moholla/ward:	Name in GP:

5.1 a Do you have a ration card? 1.Yes | 2.No

5.1 b What type of ration card is it?

5.2 a Do you have a BPL card? 1.Yes | 2.No

5.2 b If no, have you applied for one or tried to apply for one? 1.Yes | 2.No

Household infrastructure

5.3 Do you have an electricity connection in the house? 1.Yes | 2.No

5.4 From where do you usually get potable water? (main source)?

1.Piped water | 2.Hand-pump | 3.Bore in school | 4.Other

5.5 Do you have a latrine in the house? 1.Yes | 2.No

5.6 How many rooms do you have in the house?

5.7 Type of roof of the house

1.Concrete | 2.Terracotta tiles

3.Thatched | 4.Other

5.8 Type of walls of the house

1.Brick and cement | 2.Brick and mud | 3.Mud

4. Bamboo/cane | 5.Other

Immovable assets

5.9 a Do you own land? 1.Yes | 2.No

5.9 b If yes, how much land do you own?

5.9 c If yes, how much of the land is irrigated?

5.10 Have you taken any land on lease? 1.Yes | 2.No

5. 11 Have you mortgaged any land for a loan? 1.Yes | 2.No

5.12 Do you own any other house? 1.Yes | 2.No

5.13 Do you own any shop? 1.Yes | 2.No

5.14 Do you own any other property? 1.Yes | 2.No

Animals *(give numbers)*

5.15 Cows	
5.16 Buffalos	
5.17 Oxen	
5.18 Goats	
5.19 Hens/ cock	
5.20 Other	

Vehicles *(give numbers)*

5.21 Bicycle	
5.22 Motor cycle	
5.23 Scooter/ Luna	
5.24 Tractor	
5.25 Trolley	
5.26 Jeep	
5.27 Bullock- cart	

Other assets

5.28	**Radio**	1. Yes	2. No
5.29	**Television**	1. Yes	2. No
5.30	**Landline telephone**	1. Yes	2. No
5.31	**Mobile phone**	1. Yes	2. No
5.32	**Cassette / CD player**	1. Yes	2. No
5.33	**Harvesting machine**	1. Yes	2. No
5.34	**Sugarcane juice machine**	1. Yes	2. No
5.35	**Threshing machine**	1. Yes	2. No
5.36	**Other**	1. Yes	2. No

Sources of household income

5.37 What is the household's main source of income?

5.38	**Land**	1. Yes	2. No
5.39	**Wage labour**	1. Yes	2. No
5.40	**Salary**	1. Yes	2. No
5.41	**Shop**	1. Yes	2. No
5.42	**Cattle**	1. Yes	2. No
5.43	**Goats**	1. Yes	2. No
5.44	**Money lending**	1. Yes	2. No
5.45	**Rent**	1. Yes	2. No
5.46	**Remittances from family member**	1. Yes	2. No

5.47 Has the household enrolled for the NREGA? 1.Yes 2.No

Savings and insurance

5.48	**Does anyone in the household have a bank account?**	1. Yes	2.No
5.49	**Does anyone in the household have an account in the post office?**	1. Yes	2.No
5.50	**Does anyone in the family have health insurance?**	1. Yes	2.No
5.51	**Does anyone in the household have a life insurance policy?**	1. Yes	2.No

Part 6

Community Participation

6.1 Is anyone in the household a member of the gram-panchayat currently? 1. Yes | 2. No

6.2 Has anyone been a member of the gram-panchayat in the past? 1. Yes | 2. No

6.3a Has anyone from the household attended the gram sabha in the last six months? 1. Yes | 2. No | 3.Don't Know

6.3b If not attended the last gram sabha, when was the last time that someone attended?

6.4 Are you aware of any health related work done by the gram panchayat?

6.5 Has a village health and sanitation committee been set up by the gram panchayat? 1. Yes | 2. No | 3.Don't Know

6.6 What has been the role of the panchayat in improving the health of the village?

6.7 Has anyone from your household participated in any health related work in the past year? 1. Yes | 2. No

6.8 Are there any other committees in the village for any other purpose?

6.9 What are the various tasks that the gram panchayat is supposed to do? (not specific to health)?

Is any one in the household a member of any of the following? (mention all that apply)

6.10 CBO	1. Yes	2. No
6.11 Co-operative	1. Yes	2. No
6.12 Mahila Mandal	1. Yes	2. No
6.13 SHG	1. Yes	2. No
6.14 Other	1. Yes	2. No

6.15 What are the common activities in the village in which everyone participates?	