PROFILE OF VILLAGE HEALTH WORKERS

A case study of three non-governmental organisations of Dudu and Chaksu blocks of Jaipur District, Rajasthan

Dissertation submitted to the Jawaharlal Nehru University in partial fulfilment of the requirements for the award of the Degree of MASTER OF PHILOSOPHY

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List of Non-English words used in the dissertation

Ajwain A kind of aromatic seed

Anganwari Creche run by ICDS

Ayurveda A kind of Indian medicinal system

Badale ka Rog Local name (in study area) for pneumonia

Bhoodan A movement of donating land in the leadership of Vinoba

Bhave

Bigha A unit of land-measurement (equivalent to one-fourth of

a hectare)

Brahmin A priestly caste in Hindu hierarchy

Dai Traditional Birth Attendant

Dhani Hamlet

Dhundhari A dialect of Rajasthani spoken mainly in Tonk, Swai-

Madhopur and parts of Jaipur and Aimer Districts

Dibba A box (in the context of this dissertation

medicine box)

Ghatti Hand stone mill for grinding

Gramdan Movement led by late Vinoba

Bhave implying gift of the village land by

landlords

Gujjar A caste whose traditional occupation was sheep and goat

keeping

Khadi Hand spun cotton yarn

Kumawat/Kumhar A caste whose traditional occupation is

pottery

Mahila-Mandal Women's circle (at village level)

Mahila-Vikas Programme run by Government for

development of women

Mala A female contraceptive pill

Mamata-kit A kind of maternity kit used by trained mid-wife

Mukhya/Pramukh Group leader of the village level health workers in

Saheli CECOEDECON

Nai A caste whose traditional occupation was hair-cutting and

domestic services

Neem The margosa tree

Nirodh A male contraceptive

Palana Ghar Creche

Panchayat Samiti An elected representative body at the level of a block of

villages

Panijhara Typhoid

Pradhan Chief of the Panchayat Samiti

Praudha-Shiksha Adult Education

Raabadi Gruel made of millet

Rajasthani A language spoken in Rajasthan

Rawana Rajput The caste whose traditional occupation under feudalism was

domestic work

Saad/Nath/Goswami A priest of lower order who used to survive on alms

Saheli Female village level health under MFWC

Sathin Village level social worker under the Mahila Vikas

Programme

Shekhawati A dialect spoken mainly in Jaipur and Sikar Districts of

Rajasthan

Swasthya Mahila Village Level Health Worker in GSMI

Tehsil An administrative unit, mainly in North India

T-1:	A	- annumetica aveca silasod am	
Teli	A caste whose traditional	occupation was oilseed cri	asning

Thali A kind of plate used to eat as well to ring at happy times

Thar Desert in the western Rajasthan

Unani A system of medicine originally from Greece

Acronyms

AFPRO Action for Food Production

AM Auxiliary Mid-wife,

ANM Auxiliary Nurse Mid-wife

ASFR Age-specific Fertility Rate

ASMR Age-specific Mortality Rate

ASMFR Age-specific Marital Fertility Rate

BDO Block Development Officer

CBR Crude Birth Rate

CDR Crude Death Rate

CECOEDECON Centre for Community Economics and Development Consultants

CHC Community Health Centre

CHV Community Health Volunteer

CHW Community Health Worker

GFR General Fertility Rate

GOI Government of India

GSMI Gram Seva Mandal Idan-ka-bas

HFA Health for All

ICMR Indian Council of Medical Research

ICSSR Indian Council of Social Science Research

IMR Infant Mortality Rate

Ir Irrigated Land

JRHDT Jaipur Rural Health and Development Trust

MCH Maternal and Child Health

MFWC Mini Family Welfare Centre

MHA Ministry of Home Affairs

MMR Maternal Mortality Rate

MO Medical Officer

MOHFW Ministry of Health and Family Welfare

MPW Multi-purpose Worker

NGO Non-governmental organisations

NIHFW National Institute of Health and Family Welfare

NMHP National Mental Health Policy

OBC Other Backward Classes

ORS Oral Rehydration Solution

PHC Primary Health Centre

RVHA Rajasthan Voluntary Health Association

SRS Sample Registration System

Tl Total Land

U-5MR Under-Five Mortality Rate

VHC Village Health Communicator

VHG Village Health Guide

VHV Village Health Volunteer

VHW Village Health Worker

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CHAPTER I: INTRODUCTION

1.1 Evolution of the concept of community Health Worker in India

The idea of community participation in the rural health care is not new to India. The National Planning Committee of the Indian National Congress was set up in 1938. At that time the President of the Congress Subhash Chandra Bose, nominated Jawaharlal Nehru the Chairman of the Committee. This Committee set up a Sub-Committee on National Health with Colonel Santok Singh Sokhey of the Indian Medical Service as its Chairman. It submitted an interim report in 1940, however its final report was submitted only in 1948.

The gist of the committee's thinking on CHWs can be gaused from the following lines:

"The huge task that faces us could never be solved on a routine or bureaucratic basis. Thus the cornerstone of the scheme we recommend is a health worker. The health worker will be one of the villagers themselves, only somewhat better trained. He will not appear to the villagers as the alien imposer of a strange system but as one of their own kith and kin who desire to help them. These health workers should be given elementary training in practical community and personal hygiene, first aid and simple

medical treatment".1

In 1943, the British Government, governing India, appointed the health survey and development committee with Sir Joseph Bhore as Chairman². The Bhore committee published its report in 1946, which provided the blue print for India's health policy and planning. The committee report included in its recommendations the idea of community participation which is very much in use these years all over the globe. The report says: "No permanent improvement of the public health can be achieved unless the active participation of the people in the local health programme can be secured. We have therefore suggested the establishment, in each village, of a health committee consisting of five to seven individuals, depending on the size and population of the village. The members of the committee, who will of course be voluntary workers can, after suitable training, help to promote specific lines of health activity.... we consider that the development of local efforts and promotion of a spirit of self-help in the community are as important to the health programme as the specific services which the health official will be able to place at the disposal of the people"

While many recommendations of Bhore Committee were put into practice this recommendation of the Bhore committee was not put into practice by Indian planners.

¹ Quoted in Carstairs (1983) and Cassen (1978).

Government of India, Health Survey and Development Committee (Bhore Committee), Report, Manager of Publications, Delhi, 1946.

It is only after Alma-Ata declaration of Health for All by 2000 AD. and ICMR and ICSSR committee (Health for All) that the role of the participation by the community is increasingly realized. The idea of appointing health committee at village level as recommended by Bhore committee was incorporated in the Seventh plan.

The Mukherjee committee appointed to review staffing pattern and Financial provision under Family planning programme in 1966 recognized the role of voluntary agencies³. The committee felt that keeping in view the size and nature of the family planning programme, voluntary organisations must be induced to play an increasing role in its implementation. The committee report says:- "voluntary agencies should include those of trade and industry, of labour, local authorities going right down to the village panchayat level". The committee further recommends that two conditions should be fulfilled by a voluntary agency to qualify for participation in the programme, apart from their being trustworthy and capable of doing the work they intend taking up, viz-(1) they should have a defined objective which is acceptable as a good and useful objective to promote for the purpose of family planning programme, and (2) the agency should have a level status, permitting the entrustment of public funds to it. But the role of voluntary sector was visualized primarily for the family planning

Government of India, committee on Staffing Pattern and Financial Provision under Family Planning (Mukherji Committee), Report Ministry of Health and Family Planning, New Delhi, 1966.

In between 1973 and 1975 both UNICEF and WHO specified their doctrines on basic social service and the participation of the population. In 1975 the Report of the Group on medical education and support manpower presided by Dr.J.B.Srivastava proposed the basis of a new health policy⁴; in 1976 the Indian medical research council organised a large symposium on alternative health service development systems. These internal efforts had no effects during the Emergency. But these developments definitely provided a background in which Community Health Workers scheme was launched in India.

In the year 1977, Ministry of Health and Family Welfare (name 'Family planning' was changed to Family welfare in 1977) inaugurated the rural health scheme in 777 blocks in the country on October 2, the birth anniversary of Mahatma Gandhi. Under this scheme a Community Health Worker was a volunteer chosen by and from the community and was given necessary training. This community health worker was expected to be handling minor ailments, serving as link between primary health centre and the community and providing the much needed education to the village population as a whole. The scheme was symbolized by the slogan- "peoples health in peoples hands"

Government of India, Group on Medical Education and Support Manpower (Srivastava Committee): Health Services and Medical Education: A programme for Immediate Action, Ministry of Health and Family Planning, New Delhi, 1975.

This idea of community health workers in India's health Policy was influenced by success of the China's bare foot doctor scheme. The training of volunteers for rural health care by some of the non-governmental organisations also provided inspiration for the CHW scheme in India⁵. Under this scheme up to 1978, one-third of the country was covered and it was expected that the entire country would be covered by the year 1982-83⁶ In January 1980, there was a change of government and the CHW scheme was renamed as Village Health Guides 's Scheme. It was expected that each village would have one trained village health guide, and one trained dai (traditional birth attendant).⁷

A document prepared under joint auspices of the Indian Council of Social Science Research (ICSSR) and Indian Council of Medical Research (ICMR) published in 1981, stated that an alternative approach to health care has become imperative and that top-down and elite-oriented approach of the existing services be replaced by one "based on or rooted in the community and then rises to specialized referral services at the district and regional levels⁸."

Chatterji, M. Community Participation in Health Care. In M. Chatterji(ed.) Implementing Health Policy, Manohar, New Delhi, 1987.

Annual Report 1978-79. Ministry of Health and Family Welfare, Government of India, New Delhi, 1979.

Annual Report, 1979 - 1980 MOHFW, Government of India, New Delhi, 1980.

Indian Council of Social Science Research and Indian Council of Medical Research. Health for All: An Alternative Strategy - Report of a Study Group Set up Jointly by ICSSR and ICMR, Indian Institute of Education, Pune, 1981.

1.2 Role and Responsibilities of a CHW

According to the guidelines provided by the Ministry of Health and Family Welfare, the purpose of the CHW scheme is to provide adequate health care to the rural people and to educate them in matters of preventive and promotive health. The scheme emphasized the provision of simple medical aid within reach of every citizen. The CHW, a kith and kin of the villagers, was expected to serve the health needs of all. He/She would bridge not only the geographical gap between the community and the health services but also the cultural and social gap.

One Community Health Worker was envisaged for one village of approximately 1,000 population. In order to have uniformity in the load, it was expected that smaller villages would be grouped according to the requirements and larger villages broken up into sectors, each having a population of 1,000. The village community was expected to select a CHW and a three months' training could be organised at the PHC or subcentre level.

The activities of the CHW under the scheme included:

- * Treatment for minor ailments
- * First aid in emergiencies

- * Identification of cases of malaria, smallpox and other communicable diseases.
- * Assistance to paramedical staff in work related to communicalbe diseases, immunization, family planning, maternal and child health (MCH), nutrition and mental health.
- * Promotion of interest among the community in problems of environmental sanitation and personal hygiene, and assistance to the paramedical staff in carrying out relevant activities in these fields.
- * Participation in activities related to health education.

The evolution of community health worker scheme and the roles and responsibilities of CHWS' under the scheme have been dicuused so far. There are hardly any studies for their counterparts in non-governmental organisations.

CHAPTER II: HEALTH SITUATION IN RAJASTHAN

Introduction

This chapter starts with the description of Indian scene as a context for the situation in Rajasthan. Then the health situation in Rajasthan is discussed in the context of the government targets of "Health for All by 2000 AD".

2.1 Current Health Situation in India

India is a country with social, cultural and economic diversity. Despite this diversity there are factors which are common - at least in rural India - unemployment, poverty, hunger and disease. Health and disease are closely linked with standard of living, therefore the problems related to poor status of health cannot be addressed without bringing into focus the overall development. As Dr. V Ramalingaswami¹ says "Health and development are closely intertwined and inseparable. Good health is both a major pathway to development as well as an end product". Similarly GM Foster (1982) comments that community development and primary health care are remarkably

Ramalingaswami, V. Health Dimentions of Developmental Activities. In the second Vikram Sarabhai memorial lecture under auspices of ICSSR, New Delhi, Sept. 12, 1980

similar². Accordingly, health services in rural areas have been accepted as an integral part of the wider concept of rural development.

The Ministry of Health and Family Welfare, Government of India evolved a National Health Policy in 1983 keeping in view the national commitment to attain the goal of "Health for all " by the year 2000 A.D. The policy lays stress on the promotive, preventive and rehabilitative aspects of health care and points to the need of establishing comprehensive primary health care services to reach the population in the remotest areas of the country, the need to view health and development as an important component of overall integrated socio-economic development, decentralised system of health care delivery with maximum community participation along with individual and community self reliance.

In this background, the question arises-where are we with respect to the goal of "Health for All by the year 2000 AD"? The following table shows a comparison of the specific goals to be achieved by 2000 AD. and the current health situation with respect to selected indicators for health and Family Welfare-

Foster, G M. Community Developmentand Primary Health Care: Their conceptual similarities. Medical Anthropology, 6 3;183-195,1982.

Table 2.1: Current Health Situation with respect to targets for 2000 A.D.

S.No. INDICATOR		CURRENTLEVEL		GOAL
1.	Infant Mortality Rate	c 79.0	60.0	
		r 85.0		
		u 53.0		
2.	Crude Birth Rate	c 29.9	21.0	
		r 30.9		
		u 23.1		
3.	Crude Death Rate	c 10.1	9.0	
		r 10.9		
		u 7.0		
4.	Maternal Mortality Rate	3.0	< 2.0	
5.	Life Expectancy at Birth	58.0	64.0	
6.	Couple Protection Rate	37.5	60.0	
7.	Net ReproductionRate	1.6	1.0	
8.	Annual Growth Rate	2.1	1.2	
9.	Family Size	4.5	2.3	

Source: SRS 1991 and SRS 1992

2.2 Health status in Rajasthan

Rajasthan is one of the most backward states of India. One facet of this backwardness is manifested in the poor health status of the people of Rajasthan. Rajasthan, along with Bihar, Madhya Pradesh and Uttar Pradesh is part of the belt that demographer Ashish Bose has characterised as BIMARU (sick). The reasons for low health status

^{*} c, u and r stand for combined, urban and rural rates for the given indicator.

of the people of Rajasthan lie in socio-economic and cultural conditions. More specifically poverty is the main cause for very low health status of the people of Rajasthan. Adding to it is social deprivation of the backward classes in the feudal society of Rajasthan and exploitation of women and injustice done to them.

The 'Thar Desert' which is in the western part of Rajasthan receives very low rainfall and rest of the state is also semi-arid. The normal annual rainfall of the state is 58.6 cms. and in the 'Thar' it is less than half of this.

2.2.1 Level of Poverty

The level of poverty is very high in Rajasthan which is (as said earlier) the main reason for the poor status of health in the State. The per capita state domestic product in 1990 was Rs. 1651/- at constant (1980-81) prices and Rs. 3219/- at current prices.³

The work participation rate (39 Percent) is also higher than the national figure (37.5 Percent). It ranks twelfth in daily employment of factory workers per lakh population and eleventh in terms of per capita value added by industries. In terms of per capita consumption of electricity it ranks eighth. It has the highest average size of land

Government of Rajasthan. Rajasthan at a glance,1991, Directorate of Economics and Statistics, Jaipur, 1992.

holding whereas in food grain production it is ranked eight and in terms of consumption of fertilizers per hectare of cropped area it ranked sixteenth. In 1991 there were 32 employment exchanges with 9,15,018 applicants on the live register the no. of placements in 1990 was just 7,720.

In terms of health status Rajasthan is a very backward state. The first most important indicator is infant mortality rate (IMR) which is heavily under reported for Rajasthan. It was reported to be 114, 96 and 77 in 1987, 1989 and 1991 respectively. The figures for 1992 showed a rise in IMR to 90. The mortality rate of the children in the age

Table 2.2: Health status in Rajasthan with repect to the targets to be achieved by 2000 A.D.

S.No.	Indicatorsidentified for HFA 2000 AD	Target to be achieved by 2000 A.D. (National level	Year	Present Status in Rajasthan
1.	Infant Mortality Rate	<60	1993	82
2.	Crude Death Rate	9	1992	c.10.5 r 11.1 u 7.5
3.	Mortality (1-5 Years)	10	1989	176
4.	Maternal Mortality Rate (MMR)	< 2	-	-

5.	Life Emperature Dint			!
3.	Life Expectancy at Birth (Yrs.)			
	Male	64	1986-90	55.2
	female	64	1500 50	56.2
			1991-96	60.6
				61.7
6.	Low Birth Weight (LBW) % Age	10	1991	33.0
7.	Crude Birth Rate(CBR) per	21	1993	34.0
	Thousand		1992	c 34.9
				r 36.4
				u 27.7
8.	Effective Couple Protection (% age)	60	1989	28.9
9.	Net ReproductionRate	1.0	1991	2.45
10.	Growth Rate (Annual)	1.2	1991	2.50
11.	Family Size	2.3	1991	6.00
12.	Antenatal Care to pregnant Mothers (%age)	100	-	N.A.
13.	Deliveries by Trained Birth Attendants(%)	100	1989	16.1
14.	Immunization(%) Infants			
	BCG	85	1992	79.72
	DPT	85	1992	79.63
	OPV	85	1992	84.26
	Measles	85	1992	81.90
	Tetanus Toxoid			
i	to mothers	100	1992	82.72
	10 Years	100	1992	N.A.
	16 Years	100	1992	N.A.
15.	% of Leprosy Cases Discharged	80	1992	58
16.	% of TB cases assisted out of those detected	80	1992	84.70
17.	Incidence of Blindness	0.3	1992	2.24

Source: Sample Registration System (SRS) 1991,1992

^{*} c, u and r stand for combined, urban and rural rates for the given indicator.

^{**} list of other sources is given in the chapter on methodlogy.

group of one to five years was 176 in 1989 and it has to be brought down to 10 by 2000 AD. The health scenario in Rajasthan is quite discouraging if we see the present situation in comparison with the targets for the nation to be achieved by 2000 AD.

2.2.2 Fertility Indicators

Crude Birth Rate (CBR) is the most commonly used measure of fertility. CBR is expressed as annual number of live births per 1000 population. The CBR depends on both the level of fertility and age distribution of population. Other things being equal, the larger the proportion of population in high fertility age - groups, higher the CBR. According to the Sample Registration Scheme, the CBR for Rajasthan in 1991 was 34.2. General fertility Rate (GFR) is the number of live births per thousand women in the reproductive age group of 15-49 years in a particular year. As per 1989 SRS, GFR was 151.5 (rural 159.2 and urban 119.4)

Some of the important fertility indicators are given in the table below:

Table 2.3: Fertility data for Rajasthan (per '000)

S.No.	Fertility Indicators	Combined	Rural	Urban	Year/ Source
1.	Crude Birth Rate	34.9	36.4	27.7	1992/SRS
2.	Still Birth Rate	5.2	5.2	4.8	1992/SRS
3.	General Fertility Rate (GFR)	147.9	156.0	112.0	1992/SRS
4.	General Marital Fertility Rate	179.2	186.0	146.3	1992/SRS
5.	Total Fertility Rate	4.5	4.8	3.3	1992/SRS
6.	Total Marital Fertility Rate	5.4	5.6	4.6	1992/SRS
7.	Gross Marital Fertility Rate	209	N.A.	N.A.	1989/SRS
8.	Gross Reproductive Rate	2.0	2.2	1.5	1992/SRS

Source: Sample Registration system 1992

Age specific Fertility Rate (ASFR), i.e. the number of live births per thousand women of a particular age group, is at the highest level in the slab of twenty to twenty four year age group. In the case of age specific marital fertility (ASMFR), which is the number of live births per thousand married women of a particular age group, also reaches its highest level in the age group of twenty two to twenty four years. In the total reproductive age group 15-49 years, ASFR and ASMFR are shown in the following Table.

Table 2.4: Age Specific Fertility Rate and Age Specific Marital

Fertility Rate

Age Group in years	ASFR per 1000	ASMFR per 1000
15-19	100.2	227.0
20-24	287.3	329.0
25-29	214.5	223.5
30-34	155.6	159.6
35-39	85.0	88.8
40-44	36.0	38.9
45-49	19.6	22.3

Source: Sample registration system (SRS), 1992.

Very small proportion of births in rural areas of Rajasthan (1.9 percent) is by institutional attendence, while 83.9% are attended by untrained health workers.

2.2.3 Mortality indicators

Crude Death Rate (CDR) is the most commonly used index of mortality level. CDR is defined as annual number of deaths per thousand population. The CDR is very common in use but it does not give much insight, so for better understandingit should

be supplemented by age specific mortality. CDR for Rajasthan in 1991 was 9.8.

Infant Mortality rate reported to be declining sharply

Infant Mortality Rate (IMR) is considered to be very important and sensitive index. In Rajasthan it is declining very sharply since 1987.

There are no obvious reasons to believe this sharp decline in IMR. If we look at the district-wise IMR, Jaisalmer, Barmer and Jalore have IMR of 86, 102 and 104 respectively. These are the districts with female literacy of 11.28, 7.68 and 7.75 Percent respectively.

While districts of Ajmer, Kota and Jaipur have IMR of 125, 112 and 108. The female literacy in these districts is 34.5, 37.56 and 31.84 Percent respectively. Analysis of information available on Rajasthan has proven that the level of education of rural women definitely depresses the IMR. The IMR was found to be 2.5 times higher when the mothers were illiterate than when they had received primary education.⁴

Mortality in the age group of 1-5 years is still 176 (1989 SRS) even if we accept the

Singh K.K., Social Profile of Children in the Arid Zone of Rajasthan, NIPCCD, New Delhi, 1983.

govt. figures, there are vast differences in the rural and urban patterns of mortality and also there are vast variations among the districts. The following table presents the vast gap in the rural and urban indexes for mortality pattern.

Table 2.5: Rural Urban Differences in mortality pattern in Rajasthan

S.No.	Type of mortality index	Combi- ned	Rural	Urban
1.	Crude Death Rate (CDR)	10.5	11.1	7.5
2.	Infant mortality Rate (IMR)	90.0	94.0	65.0
3.	Peri-natal mortality Rate	48.2	50.2	36.0
4.	Neo-natal mortality Rate	55.7	58.3	39.2
5.	Post-natal mortality Rate	34.4	35.7	26.2

Source: Sample Registration System, 1992

infant mortality rate (IMR) and under - 5 mortality rates (U-5MR) show vast variations in Rajasthan, - the following table will show some of the districts with very high IMR and U-5MR.

Table 2.6: District-wise IMR and U-5 MR

S.No.	Districts	IMR(q')	U-5MR
1.	Ajmer	125	205
2.	Alwar	128	204
3.	Banswara	108	167
4.	Baran	112	178
5.	Barmer	102	157
6.	Bharatpur	147	236
7.	Bhilwara	140	225
8.	Bikaner	62	89
9.	Bundi	125	196
2. 3. 4. 5. 6. 7. 8. 9.	Chittorgarh	135	218
11.	Churu	81	116
12.	Dausa	108	162
13	Dholpur	147	236
14.	Dungarpur	111	169
15.	Gangnagar	82	119
16.	Jaipur	108	162
17.	Jaisalmer	86	126
18.	Jaiore	104	156
19.	Jhalawar	124	196
20.	Ihunjunu	92	138
21.	Jodhpur	86	131
22.	Kota	112	178
23	Naguar	96	147
24.	Pali	130	218
25.	Raisamand	120	189
26.	Swai Madhopur	141	227
27.	Sikar	95	145
28.	Sirohi	121	186
29	Tonk	148	233
30.	Udaipur	120	189

source: Bose A. Demographic Zones in India, B.R. Publishing Corporation, 1994.

2.2.4 Morbidity/Mortality Pattern in Rajasthan

The data provided by the survey of causes of Death (rural) published by the Registrar General's office and mortality pattern based on the latest available survey of causes of death (SRS) data gives a good account of the disease patterns in Rajasthan.

Communicable diseases like tuberculosis, malaria, leprosy, guinea worm are major problems in Rajasthan. In 1992 New TB patients were 36535. The number of malaria slides tested in 1992 was 3833881. The number of malaria (vivax) positive cases was 121499 and cases of positive plasmodium falciparum was 41,727. The malaria epidemic in Western Rajasthan during 1994 is discussed in the next sub-section. The blindness rate in Rajasthan was 2.24 per 1000. The number of new leprosy patients was 1252 and the number of patients of leprosy discharged was 580. Guinea worm is still prevalent in Rajasthan, though the rate is declining. In 1992 there were 13 districts with 1310 villages affected by Guinea worm. These villages had a total 1712 patients as reported in the Annual Report, 1992 of Medical and Health Department.⁵

Government of Rajasthan, Annual Report 1992-93, Directorate of Medical and Health.

Major cause groups of deaths in Rajasthan



First group of diseases taking the highest toll in Rajasthan is Coughs (diseases of respiratory system, e.g.. Asthma and TB of lungs, pneumonia, whooping cough and others), accounting for 29.8 Percent of deaths in Rajasthan in 1990. It was 31.1 Percent in 1989 and 26.3 Percent in 1988. Therefore diseases of respiratory system are the greatest killer in Rajasthan in 1988, 1989 and 1990.

Senility is the second cause for deaths. It has caused 23.1, 20.3 and 22.8 percent of all the deaths in 1988, 1989 and 1990 respectively.

Causes peculiar to infancy (prematurity, respiratory infections of new born cord infection, congenital malformation, birth injury etc.) is yet another alarming factor which is coming third highest percentage of deaths in Rajasthan. One out of every ten deaths is due to the causes peculiar to infancy. Out of five infant deaths two are due to prematurity and one due to respiratory infection and one due to diarrhoea, and one due to other reasons. The deaths due to infancy

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Office of the Registrar General, India (Vital Statistics Division). Sample Registration System (SRS), Annual Report, 1988, 1989,1990, Ministry of Home Affairs.

related reasons have increased from 10.1 Percent in 1988 to 12.9 Percent in 1989 and it was 11.9 Percent in 1990 (SRS,1990). Other major cause groups are - Diseases of Circulatory System, Fever (Typhoid, Malaria, Influenza and others), Accidents and Injuries, other clear symptoms, Digestive Disorders, Disorders of Central Nervous System and the last and tenth group under causes of death is Child Birth and Pregnancy.

These figures are important but do not present the real picture of the health situation in Rajasthan because these are the data which are gathered from the hospitals and health centres while quite a large number of people do not (or cannot) go to the health institutions because of various reasons. Therefore those who are dying without availing the health facility go unnoticed.

2.2.5 Malaria Deaths in Western Rajasthan in 1994

Malaria was widespread in the four Western districts of Rajasthan - Barmer, Bikaner, Jaisalmer and Jodhpur. The myth created by National Malaria Eradication Programme that this killer disease has been "fully contained" (if not completely wiped out) is now broken by

the malaria epidemic of this year.

The false impression that malaria is "fully contained" led to laxity in the Union Health Ministry and Health Department of the State Government to keep up its preventive measures and the net result was the outbreak of malaria in Barmer, Bikaner, Jaisalmer and Jodhpur districts of the Western Thar desert. There are two reasons which are being put forward to explain the current malaria epidemic are as follows:

Some reports say heavy rains last year (in July-August 1994) in the four districts created potential breeding places for mosquitoes. There was reported to be a big lake created near village Gudi in Jaisalmer and other 32 small ponds and over 1,000 khudis (small water tanks) came into being which provided breeding grounds for mosquitoes.⁷

The Rajasthan Voluntary Health Association (RVHA), a group of NGOs with Urmul Trust, Gramin Vikas Samiti, School of Desert Sciences, Hadi Samiti, Bunkar Vikas Samiti and Society to Uplift Rural

Sethi Lokpal. The Hindustan Times, Report: Shattered Myth, Suffering people, Patna Edition, October 30, 1994.

Economy (SURE), working in this area raised the point that the Indira Gandhi Canal Project (IGNP) has created water logging problem in vast areas and unless drastic steps were taken to contain it, the growth of mosquito population could not be checked.

Adding to these reasons, the factor which precipitated the situation was that there were no preventive measures taken to check the situation. Even there were no sufficient stocks of DDT, BHC and essential antimalarial drugs. In July 1994, the state government had asked for 1200 MT of DDT and 1185 MT of BHC, but till October end it received only 400 MT of DDT. Similarly against its demand of 175 lakh antimalarial tablets, it was provided with only 71 lakh anti-malarial tablets.

To cover up this fatal mistake of not taking proper preventive measures in fighting back malaria, government is over emphasising, more than average rains and some other reasons for outbreak of malaria in the 'Thar Desert'.

There are varying claims over number of deaths. The State government is accepting only 255 deaths (up to 24 October 1994) whereas NGOs claim over 4000 casualties. According to the statistics maintained by the

Health Department of the State Government there were 50 deaths in 1990, 10 in 1991, 55 in 1992, 19 in 1993 and 255 in 1994 (up to 24-10-94) due to malaria, the total number of deaths since 1990 according to the Health Department is 389. While contradicting it, statistics prepared by the death and birth department of Directorate of Statistics, maintains that on average about 3000 deaths due to malaria were recorded in the state since 1990. On the other hand the statistics by Ministry of Health and Family Welfare Government of India give the following figures:

Table 2.7: Positive cases of malaria and malaria deaths in Rajasthan

Year	No. of positive cases of malaria	Malaria-deaths
1988	104109	2
1989	112316	1
1990	114689	65
1991	77573	10

Source: Health information of India, CBHI, Diretorate General of Health Services, 1992.

There are great differences among NGOs, the press and the government

regarding the estimates of spread of malaria and the deaths due to it.

Notwithstanding these, it is generally accepted in the health circles that it was a widely spread disease for which people were not getting necessary medical attention.

There are vast gaps between the government targets of "Health for All by 2000 AD" and the ground situation. The goal of health for all seems to be a distant dream in the light of the achievements so far, specially in rural areas.

Introduction

The concept and practice of Health Workers at village level in the small scale Non-Governmental projects is also based on the similar assumptions as were in the Community Health Workers' scheme (or Village Health Guide Scheme). The literature reviewed here includes the studies done on CHW scheme in large national programmes, as there are very few studies which are done on the CHWs in non-governmental organisations. The last sub-section of this chapter reviews the literature on the CHWs programme in NGOs.

3.1 Development of the Community Health Workers scheme

As a response to the increasing gap in the World Health situation, the Thirtieth World Health Assembly meeting in May of 1977 declared the "attainment by all the citizens of the world by the year 2000 of a level of health that will permit them to lead socially and economically productive lives as their 'principal social target'" The vehicle through which this goal is to be achieved is primary health care (PHC). In September 1978, a major united nations conference, jointly sponsored by the World Health Organisation (WHO) and UNICEF, was convened in Alma Ata, USSR, to consider the goal of

'Health for All by the year 2000' (HFA/2000) and recognized the national governments as the responsible agents for developing and implementing the PHC plans. An important corollary to the concept of PHC is the village Health Worker or community Health Worker (CHW). There are different terms used to refer to this health worker but all mean essentially the same thing: a health worker who serves as the 'interface' between the formal health care system and the community.

Before this, there had been programmes but they were evolved in different settings, receiving different kinds of training. There were attempts on small scale for which the literature includes examples that date back as early as 1900. The large scale national level programmes were also there much before the Alma-Ata declaration. In Peru, the scheme of 'Health promoters' started as early as 1940s (Berman et. al. 1986, Enge et. al.1984)

In Tanzania 'Village medical helper's scheme started in 1960s (Heggenhougen et al 1987) The China's famous 'Bare foot doctor' and 'rural health aides' was firs started in 1968 (Berman et at 1987; Koplan et al 1985; Rosenthal & Greiner 1982).

In India CHW scheme was started in 1977. In 1970s CHW scheme was started in many other countries as well, though under different names, for example, in Botswana it started in 1973 named as Family Welfare Educator, in Burma in 1978 as 'Community

Health Worker' and as 'Auxiliary Nurse' in Indonesia in 1976-77 started in name of 'Nutrition Leaders' and village Health Development worker.

In 1980 there had been an attempt to include all these CHWs in one global concept. In 1980 first inter-regional workshop on CHWs was conducted. The report draws on the experiences of the programmes in different participating countries, including India, and gives a list of guidelines for the use of CHWs.

There are various definitions used for Community Health Workers (CHWs). One Such attempt was made by Ofosu-Amaah. He writes that a community health worker is "a person from the community who is trained to function in the community in close relationship with the health care system".

3.1.1 Community Health Workers - Pillars of 'health for all'

There have been studies which are very much optimistic about role of CHWs in primary health care. One such document is by Ofosu-Amaatiu (1983), which was first WHO document to draw together experiences of various national CHW programmes. The author looks at the issues like tasks, selection, training, remuneration, career prospects, attrition rates and support services. Over all this is an optimistic report,

which described CHWs as bridges between communities and health services.

CHWs were described as pillars for 'health for all' in a WHO report on inter-regional meeting organized jointly by the Japan shipbuilding Industry Foundation and WHO, and hosted by the government of Cameroon (1987). In this meeting 15 countries (including India) presented reports about their CHW programmes. The report has four major themes-the context and characteristics of an effective district health care system; the promotion of health and specific health care interventions by CHWs; and mobilization of communities and selection, training, supervision and working conditions of CHWs.

Bender and Pitkin (1987), describe village health care model. The authors mention the importance of VHW in the following words "The VHW provides necessary link between the health care system and the community, a link that is of major importance in meeting the goals set for primary care at Alma-Ata". The authors discuss the role of village health committee in selection of the village Health Worker, the training of the health workers, and also upon the important issue of payment for the VHW. The paper cites specific reference to the VHW scheme in Costarica, Nicaragua and Columbia the three Latin American nations which had adopted PHC model.

3.2 Evaluation of community Health Workers Programme in India

There are a few studies on the evaluation of CHW programme in Indian context where findings vary from appreciation of some aspects of the programme to their radical criticism.

National Institute of Health and Family Welfare, New Delhi, carried out three collaborative studies for Evaluation of the Community Health Workers scheme. The earliest of these studies was carried out nine months after launching of the scheme. The second and the third evaluation studies were carried out in 1979 and 1984 respectively. The major objectives, methodology and findings of the three studies are reviewed here.

The following were the main objectives of the first evaluation study by NIHFW:

- * to determine organisational feasibility and acceptability of the scheme;
- * to know selection process of CHW, including the Community participation and involvement;
- * to study the attitude towards and perception of the scheme by community; and
- * to assess the administration and management of the scheme including inputs and logistics.

To achieve the above objectives, fourteen schedules containing structured, unstructured

and multi-choice items were developed to cover knowledge, attitude and reactions of different categories of respondents. 77 out of 777 PHCs (where the scheme was launched) and 61 district headquarters were selected on ten percent basis from 21 states and union territories.

The results indicated massive support for the scheme from more than four-fifth of all sections of respondents. All the respondents, except BDOs and MOs, perceived treatment of minor ailments as the most important responsibility of CHWs. BDOs and MOs felt that emergency first-aid and assisting health centres in immunization against smallpox and tuberculosis are important activities. More than three-fourth of CHWs approached sarpanch / village pradhan for their selection. A overwhelming majority of community leaders expressed satisfaction with the selection of CHWs and almost all of them (96 Percent) expressed satisfaction with the selected CHWs who were residents of the same village as spelled out in the guidelines. Among various systems of medicine Allopathic system was covered in all the training programmes. The coverage of Ayurveda and Unani systems was 64 and 30 percent respectively. Majority of the trainers were satisfied with the training given to CHWs and emphasized the need for refresher courses.

A second collaborative study by NIHFW was carried out almost a year after the first study (Kumar, Deodhar and Maru, 1979). To assess the perceptions, reactions and

degree of satisfaction of community and their opinions about the continuation of the scheme; levels of performance by the CHWs in terms of range, quality and quantity of services provided by them; selection process of CHWs; training level of knowledge of CHWs, inter-member perceived roles and responsibilities of CHWs by PHC staff and the CHWs themselves and administrative aspects of the scheme in terms of honoraria and medicines were the main objectives of the study. The study was carried out in two phases and a set of 13 instruments was developed and administered to various categories of respondents. 75 PHCs were chosen in the first phase and 78 PHCs in the second phase by stratified random sampling technique. The data were collected through survey, interview and case study methods.

The study reported that 57 percent respondents contacted CHV for health problems. 87 percent of the respondents sought treatment from CHWs. An overwhelming majority (92 Percent) of those who sought treatment were satisfied and stated that CHWs provided services to all irrespective of caste, creed, and economic status. Nearly 69 Percent of CHWs perceived treatment of minor ailments as their primary function. 22 percent thought family welfare work was their main function. A higher proportion of Community leaders was not willing to support the scheme in terms of payment of honorarium. 70 Percent of them showed willingness to exercise control. However, reluctance in supporting the scheme (by way of cash and kind) was confirmed from the responses of a vast majority of community leaders. Sixty Percent of the CHWs reported

that they approached someone for their selection. Sixty Percent of CHWs interviewed in phase II were between 20-29 years whereas the guidelines stipulated the minimum age of 30 years. All the CHWs interviewed reported that they were taught allopathic medicine. 53 Percent said they were taught Ayurvedic medicine. The higher proportion of the respondents from Himachal Pradesh, Pondicherry, Rajasthan and Gujarat reported that they were taught Ayurvedic medicine. Apart from the above-mentioned, there were other findings which mainly related to various aspects of training of the community health workers.

The third NIHFW evaluation study entitled 'A Collaborative Study of Health Guide Scheme' was done in 1984. The objectives were to assess the role and performance of Health Guides, their relationship with other health functionaries; to assess the role and functioning of third Medical Officer appointed under the scheme; to assess the extent of involvement and participation of Community and Village Health Committee in the working of the scheme; to assess the extent and degree of acceptability of scheme, administrative and management aspects and bottlenecks in the scheme were among the major objectives of this evaluation study. This study was based on a representative sample of 170 PHCs drawn from 10 states.

The relevant major findings of the 1984 study will be discussed in this paragraph. The mean age of Health Guides (HGs) included in the study was 31.9 and 30.3 years for

males and females respectively. In all States except Rajasthan honorarium was paid through MO/PHC. In 50 Percent of the PHCs the honorarium was distributed on monthly basis. However, irregularity in payment was found to be more prevalent in Andhra Pradesh, Madhya Pradesh, Orissa and Rajasthan. Most of the community members (90 Percent) perceived treatment of minor ailment as the primary responsibility of the health guide. Two-thirds of the respondents perceived the responsibility of HGs as providing emergency first-aid, advising community on family planning and assisting health worker in control of communicable diseases. However, referral of pregnant women to Dai, educate community about nutritional diet and storage and supply of Nirodh were perceived to be the lowest responsibility of health guides. The proportion of the community members utilizing the services of health guides was much higher (72 to 73 Percent) in Assam, Himachal Pradesh and Rajasthan while it was significantly low in Haryana, Uttar Pradesh and West Bengal. According to this study 89 Percent of community members expressed satisfaction with health guide services. A smaller proportion of community members (4 Percent) paid in cash or kind to health guides for services. However, the proportion was greater in Assam (10.4) Percent), Haryana and Rajasthan (13 Percent each). The preference for male health guide was highest in Madhya Pradesh (70 Percent), while preference for female health guide was highest in Rajasthan (70 Percent). The good points of VHG scheme reported by 4,653 community members were availability of health services at the doorstep, free health care, early detection and identification of notifiable diseases. The perceived bad

points were: no care of Community, interest in minor ailments only, and charging for medicine reported by 1098 community members (a total of 5,440 community members were interviewed). Nearly 36 percent of the community leaders reported formation of committees in their villages. The percentage was found to be much higher in Assam (71 Percent) and less in Haryana, Himachal Pradesh and Rajasthan and least in West bengal. Most of the health guides (78 Percent) reported that the health functionaries sought help from them in field work. 72.2 Percent Health Guides attended more than five monthly meetings at PHC during the last one year and on an average referred 3.7 and 4.6 cases per month to male and female health worker respectively.

Maru (1983) was one of the members of a joint working team that evaluated the scheme in 1979. Maru begins by giving a brief description of the CHW's scheme and the evolution of PHC in India and the major changes in structure and manpower till late 1970s Maru points out that the multipurpose worker (MPW), which was a new concept to PHC introduced in 1975, was not able to cope with his work load and was also unable to involve communities. In 1977 the community health volunteer (CHV) came into being. The evaluation showed that CHVs were involved in predominantly curative work and maternal and child health work was neglected. The study also revealed that on the whole CHVs were serving all socio-economic groups. There were difficulties in mobilizing the communities for public health tasks, and limited material support was available. But the majority felt the CHV was fulfilling a vital role. The

author concluded with some optimism that despite these problems, the scheme is bringing health care to the rural poor.

Bose and Desai (1983) edited a volume entitled 'Studies in Social Dynamics of Primary Health Care' which is based on the field study done by Population Research Centre of the Institute of Economic Growth to assess the working of the Rural Health Services (CHW) scheme. The study was conducted in a few districts of Punjab and Haryana. The field work was taken up by the Institute in early 1978. This was one of the earliest attempts to study and assess the CHW Scheme. The study took up two districts each in Punjab and Haryana and a total of 29 PHCs in these districts.

The methodology of investigation included participant observation and unstructured interviews. The topics of investigation were: perception of the health situation and needs by the people; perceptions of the CHWs of their roles, their views on the adequacy and usefulness of training in performing their role, their performance during the initial short period of three months and their expectations about their own future and the future working of the Scheme; the attitudes and views of the medical and paramedical personnel at the PHC, district and state level.

The findings more relevant for the present study are those pertaining to perceptions and role of the CHWs, since the present study mainly aims at understanding the profile of

the CHWs. Only 8 out of 94 CHWs of the first batch were females. The CHWs, as a group, were fairly representative of the social composition of the village population in terms of caste, despite a slight under-representation of the scheduled caste. The modal age group was 25-29 years. All the 8 female CHWs 7 were currently married and 1 widow.

All the 94 CHWs had reported that they had a main occupation, the females among them reporting household work as their main activity. 57 of the 86 male CHWs were engaged in agriculture and 13 were shopkeepers. The rest were drawn from a variety of occupations. Out of the total 94 CHWs, 80 reported that they belonged to households of the land owners, showing an over-representation among the CHWs of those owning land. The study also examined two more batches of CHWs, only two differences occurred in their characteristics subsequent batches. In the latter two batches there was some improvement in female representation and a substantial reduction in the proportion of CHWs belonging to large land-owning sections of the population. With respect to their work several CHWs claimed that they had assisted the MPWs in chlorination of wells, immunization work, maternal and child health (MCH), family planning and the school health programmes. However the authors could not get any quantitative measurement of their participation in these activities.

With respect to their perception of health conditions prevailing in their villages, 3 of the

94 CHWs could give no specific answer. It is significant to note that 48 of the remaining CHWs considered health conditions to be fairly good in their villages. The remaining 41 CHWs considered the health conditions in their villages to be unsatisfactory. When these CHWs were asked to identify the major diseases afflicting the people in their own villages, 86 of them mentioned malaria; 71 scabies; and 24 coughs and colds. The only other affliction reported by a sizeable number of CHWs was boils. The difficulties that may arise in the working of CHWs due to rural social structure included division of the society based on caste, persistence of traditions inhibiting free mixing of the sexes, and the intrusion of partisan politics in rural society. However, the authors observe after discussions with the CHWs that in the field of health these factors may be overcome in course of time. The authors observe that the Scheduled Caste CHWs have been able to carry out their work without any great hinderance. The non-scheduled Caste CHWs, in general, have not avoided treating the Scheduled Castes for minor ailments. The authors also observed problem because of the dual control of the CHWs' work by the PHC staff (on technical and professional matters) and the village community (in supervising their work on a continuous basis). The MPWs used to shift some of their routine work on CHWs. On the whole, the authors mentioned that the CHWs laid emphasis on medical treatment and failed to show an adequate appreciation of the diversity of public health problems that need attention for improvement in the health status of the rural people.

Gupta et al (1984) studied 90 village Health Guides (VHGs), 360 community members and 81 paramedical staff, using observation and interview methods. They found in their evaluation that more than half (67 percent) of the community members did not know of the VHG scheme. Those who knew VHGs claimed they gave both medicines and injections and 25 percent complained that they charged a fee for this service. The main advice sought from VHGs was for the treatment of fever, cough and gastrointestinal disorders. The VHGs registered between 6-30 new cases. per week, seeing an average of about 17 cases per week. This is a short paper which does not give enough statistical information to buttress the conclusion of the authors that in general the performance of the VHG is better than earlier studies.

There are other papers which are very critical of the village Health Guide's scheme in India. One such criticism of the VHG programme was made by Agarwal (1979), who also reviews one of the early evaluations of the programmes. Agarwal points out that health planners failed to appreciate "how great an impact the high rate of unemployment in Indian villages would have on the 2selection process. Though the CHW honorarium was kept deliberately small to attract only motivated people, even this sum of money has aroused the interest of many unemployed young educated people, particularly sons and nephews of dominant farmers". He further says that the evaluation of CHWs revealed that many of the CHWs thought that the health programme was basically a job-creation scheme and that with such experience they

would probably get the employment in the primary health centre itself. Madan (1987) has also made a similar observation, Agarwal concludes that CHWs are "pill-pushers" and not "community mobilizers". According to him CHWs are "... an extension of the medical bureaucracy, a kind of second grade village technocrat..." This is one of the early papers that raised many problems which were proved in the 1980s.

Oadeer (1985) carried out an evaluation of the CHW scheme in 1983-84 to study the impact of the rural, social and economic realities on performance of the scheme. In her study, she looks into the social and economic stratification in rural population, the links the CHWs had with different strata of the village, and the links between village strata and health services personnel. The study was conducted in 34 villages in a block with a population of 39,642 in Shahdol district of Madhya Pradesh. The study covered 3743 households for this purpose. An intensive 1-2 month study was conducted in six selected villages, using observation and interview methods. Qadeer describes vividly the strong inter-class differences. CHWs were mostly from the dominant castes, although 60 percent of those surveyed were not working that hard as they were working earlier. Qadeer concludes that CHWs were themselves selected through patronage and therefore tended to ignore the poor, concentrated on curative tasks, and were treated with contempt by health professionals. She gives description of the complexity of social relationships influencing.

Jobert (1985) in his paper 'populism and health policy: the case of community health volunteers in India', examines historical, bureaucratic and political influences that affected the formulation of the community Health Workers programme in India. The paper is based on secondary sources. The author mentions the construction of India's health system since independence, the crisis in India's health care system and attempts to correct it in 1970s. The author gives description of the Emergency period, followed by description of the Emergency period which in turn is followed by description of the evolution of CHW programme in the background of international developments and national debates in that period. The author critically analyzes the bureaucratic motives behind the Health and Medical Education committee presided by Dr.J.B.Srivastava which proposed the basis for new health policy. He describes the decision-making process and the implementation of the programme, tracing the change that the plan underwent from being a community participatory policy to being one which in effect reinforces the existing hierarchical system. The paper also mentions the implementation of this programme which was although 100 percent financed by the Centre but three state of Kashmir, Kerala, and Tamil Nadu refused to accept the programme. The author highlights the process of selection and training of the CHWs, and demonstrates how various influences have altered the original objectives and priorities of selection and training. Jobert says that this has also led to other distortions, such as curative care taking precedence over preventive care.

Miles (1985) makes a commentary on the Jobert's paper and adds that there are comparable power games and personality conflicts in the global field of disability prevention and community based rehabilitation.

Leslie (1985) considers the conflicting interpretations put on this programme at the time of implementation. It was introduced very quickly amidst opposition. Leslie takes a personalized, anecdotal approach and compares the opinion of a number of well known Indian specialists, Madan, Banerje and others. Asked why the programme was initiated, opinion varied ranging from questioning the sanity of the instigator, to suggesting that it was a 'medical placebo' to sustain a system of exploitation. The author describes how the indigenous medical systems have been neglected. This paper is similar to one by Jobert discussed above.

Berman et al.(1985) review the information on issues relating to the effectiveness, especially the cost-effectiveness, of community based workers in six large scale programmes, the countries studied are China, Indonesia, India, Peru, Thailand and Jamaica, chosen for the availability of data. The study looks particularly at the tasks performed, the quality of care, coverage and equity, cost efficiency and health impact.

Berman points out certain faults in the quality of care by these programmes. However,

Leslie, C. What Caused India's Massive Community Health Worker Scheme: A Sociology of knowledge. Social Science and Medicine, 21 8; 923-930, 1985.

he also highlights some positive aspects of these programmes. Berman's study brings out five important conclusions about large scale Community Health Workers programmes - (i) CHWs have reached more people than clinic-based services. Their services have positive bias towards low income and remote beneficiaries, making CHWs a powerful vehicle for extending basic services to those who previously received little or no service. (ii) CHW services generally have a lower average cost than comparable clinic-based services. (iii) CHWs in most of programmes have strong tendency to emphasize the simple, symptomatic, curative tasks demanded by their clients and to neglect the preventive and promotive activities included in their training. (iv) The quality of care of CHW activities was poor. According to Berman, this can be ascribed to failures of training, supervision and logistics. (v) Authors could not find any substantive evidence of large scale health impact of CHW programmes till the date the study was conducted. They could not draw any firm quantitative conclusions about cost effectiveness from available data. The studies suggest low cost and low effectiveness of CHW programme.

Bang and Patel (1982) edited a collection of articles for Medico Friends Circle under the heading 'Health Care: which way to go' The areas covered in this book include water supplies, pharmaceutical, oral rehydration solutions, traditional medicine, dai training, and the training and utilization of community health workers. Important contributions are those by Rani Bang who writes about women in health care as nurses and health workers. She points to the problems they face in being exploited both professionally and sexually.

Binayak Sen also writes about the community Health Workers. Sen strongly criticizes the omissions in planning, considering the problem of training where there are no adequate trainers. He also brings into focus the problem of selection where there is no village level democracy.

Madan (1987) in his article 'Community involvement in health care: socio-structural and dynamic aspects' writes a social anthropological critique of the concept of community participation. He points out that the notion of community is numerically defined in Indian health planning. He distinguished between the 'community of kin or caste' and a 'territorial community', the later is the one present in Indian villages. The author further stresses how the varied socio-cultural and structural influence 'community participation'. To quote Madan, "The settlement pattern, level of literacy occupational structure, traditional health beliefs, character of available health services and the range of control of the available media are some of the critical variables in respect of community involvement in the public health programmes". The author points out the problems with CHW scheme. He observes that many persons chosen as community Health workers thought they had become government employees.

Carstairs (1983) also mentions the evolving concept of community Health worker, and its importance in bridging the gap between 'Western' medicine and the local community. Carstairs comments; "Even a village worker can bring them relief, and in many cases cure their condition, and even a basic health care worker can become as familiar as any doctor with the treatment of common local illness".

3.3 Organisational aspects in CHWs programmes

The studies reviewed in the previous section concerning evaluation of the CHW programme were more concerned about the broader social and political conditions and their linkages with the CHW, programme. For example, the unemployment in the rural India and its impact on CHW programme (Agarwal, 1979), the social and economic strata in rural India and its links with CHW's scheme (Quadeer, 1985), prevailing political situation in India and the launching of CHW's scheme (Jobert, 1985, Leslie, 1985). None of these studies looked into the personal conflicts between the staff at PHC and the CHWs and its subsequent impact on implementation of the spirit of community participation.

Taylor (1978,84) has noted that the roles and values of health centre staff, in general, are antithetical to the egalitarian ideology of the primary health care movement.

Rueschemeyer(1972) has argued of medical professionals:

"...people act and think to a very limited extent with respect to ultimate social values.

The norms and values that actually guide man are those incorporated in the more immediate institutional arrangements and role expectations".

Good (1957,60) gave a psychosocial theory pertaining to occupational-professional group behaviour, which have a bearing not only for CHWs but for other members of PHC staff as well. The theory implies that individual in a system confronted with overdemanding role obligations need to equilibrate role relationships and role sets through continual bargaining and consensus with other actors in the system to reduce role strain.

Banerji (1974) also highlights the lack of team spirit in the PHC staff. He points out"The ideal of the primary health centre exists only in name ... The team leader of the
PHC (the doctor who is the pivot of the institution) not only lacks the qualities needed
to provide leadership but he is also most reluctant worker having interests which are
often diametrically opposed to the interest of the PHC".

Paul Brearley et al (1978) in 'social context of Health Care' mention the importance of team work at the PHC level. They make the following observation:

"It is not enough to assume that merely putting a group of professionals together in a health centre with appropriate facilities will create a team in the sense of cooperative working. The role of communication and appreciation for the roles of other team members is very important. Therefore there is always a need for regular meetings".

Nichter (1986) observes the 'primary health centre' as a social system' and focuses on the social relations within it. Nichter's thesis is that health programmes which do not pay credence to the professional identity and social status of health staff may well end in promoting conflict in the name of team work and community participation. Nichter observes about two south Indian primary health centres that two or three medical officers prohibited their ANM staff from administering even the simplest of curative or palliative medication, even though they were concerned that nurse-midwives should not become 'quacks' or be diverted from preventive tasks. Nichter suggests that actually their reasons were more economic-disallowing competition, than symbolic or ethical.

On the aspects of training and selection of CHW Nichter writes about an example of Karnataka village where one medical officer of a health centre was presented with a list of names of 'community representatives' by elected official of the local panchayat not the community at large. After selecting 'suitable candidates' from them, He departed training focusing on first-aid, the time of vaccinations and family planning methods. Avoiding the topics such as health education, community hygiene (where he was

untrained), the doctor lectured on those topics with which he was most familiar. The author also gives insights into the important areas such as interaction between different professionals at the health centre and their role conflicts, as well as the conflicts created by setting of targets. The Indian case study is compared with Sri Lanka, and the different issues of status and role integrity between public health nurses, family health workers and health educators. Nichter's study touches upon issues which are often missed in other purposes.

3.4 Experiences of other countries in CHW scheme

As mentioned earlier, there had been small scale as well as large scale projects of CHWs in some of the countries even prior to the Alma-Ata declaration but after the global commitment of 'Health for All by 2000 AD', CHWs programmes got wide recognition world wide and emerged as a global concept.

In peru 'Health Promoter Programme' started over 60 years ago in Puno with the training of "rijchari" (awakeners). An evaluation study was done by MOH, Peru with K.Enge as the main evaluator. The evaluators asked - why, given a long history, did different attempts fade away with so little durable trace. The results from the evaluation under taken in 16 areas in 8 selected regions of the country, and covering 283 promoters, suggests that health promoters are relatively inactive, express a clear preference for curative work and are inadequately supported and supervised, although these findings varied from are to area. The detailed evaluation show that CHW programmes cannot be considered in isolation from primary health care, and overall policies on health care.

In China the barefoot doctor's policy was announced by Mao-Tse-Tung in 1965. In 1979 changes were introduced: barefoot doctors were allowed to be "upgraded"; two levels of barefoot doctors were introduced; the original preventive health worker and

"assistant doctors". By 1981 moves were take to consider paying barefoot doctors a fee for service, with full time clinical work. (Rosenthal and Greiner, 1982)

This change in China's 'barefoot' doctor's scheme may be because of a change in its health needs at the time of creation of this system and after so many years now (Hasio,1984) Koplan et.al (1985) in their study on Shanghai county in China, points out that after introducing the changes the programme has more emphasis on curative skills. Tension between the curative and preventive aspects continue but the authors conclude that in Shanghai the system is adapting positively to the changing patterns of social, political and economic structures, and should survive.

In Thailand 'village health communicator ((VHC) and village health volunteer (VHV) programme started in 1977. Hongvivatana et. al (1987) reviewed the scheme looking mainly at the attrition rates among VHCs in particular. In 1986 about 62 percent of VHCs throughout the country had either dropped out of the programme or from active service. Smaller villages have better results than larger villages. Attrition rates were found to be lower (25 percent) for VHVs but their performance is poor. The final section gives a number of policy suggestions.

Chauls (1982-83) mentions in his study that community health worker and Auxiliary Midwives (AMs) programme is working well in Burma. The author describes the

factors which according to him, have contributed to the success of the programme. He begins by mentioning briefly the culture in Burma, based as it is on Buddhism and socialist political ideology. It is mentioned how the CHWs and AMs fit into the health system with specific reference to selection and training. Supervision is by salaried nurse midwives who visit at least twice a month. Remuneration is by the community i.e. village people's councils are involved both in selecting workers and organizing any remuneration and drug supplies. According to the author, the Buddhist traditions make the voluntary work respectable, and the political support for the system is high. Another reason the programme works is because it focuses on what villagers consider important: drugs to cure illness, babies to be born healthy.

3.5 Community Health Workers in NGOs

The most of the available documents on large scale governmental CHW programmes have criticized one or the other aspect of these programme, but the most of literature reviewed till now does not compare or study the small scale projects. How well are the Community Health Workers (may be addressed differently in different NGOs) doing in small non-government projects? This question was almost unaddressed (with one or two exceptions) in the literature reviewed here so far. There are only a few studies which have evaluated the CHWs in small non government projects.

Werner (1978) in his now famous article - 'The Village Health Worker: Lackey or Liberator' which is based on his twelve years' experience of being involved in training of local village health workers in remote area of Western Mexico and his visit to forty governmental and non-governmental health projects in nine Latin American countries with his co-workers, gives very insightful conceptualization about village health workers. The author specifically chose to visit those projects which were making use of modestly trained, local health workers or which were reportedly trying to involve people more effectively in their own health care. David Werner writes, "While in some of the projects we visited people were in fact regarded as resources to control disease, in others we had the sickening impression that disease was being used as a resource to control disease, in others we had the sickening impression that disease was being used as a resource to control people." The different programmes and functions in the health projects visited were looked upon as where they laid on a continuum between two poles community - supportive and community oppressive. Werner further notes that - "It is disturbing to note that, with certain exceptions, the programmes which we found to be more community - supportive were small non - government efforts...". According to Werner, primary health workers fall into two major categories - Auxiliary nurses or health technicians and health promoters or village health workers. Werner mentions that the most promising work with village midwives took place in small non governmental programmes. Werner also compares village health worker with medical professionals, placing them firmly within the political context.

Berman (1987) in his famous study of 6 large scale programmes in China, Indonesia, India, Peru, Thailand and Jamaica have mentioned about the CHWs in small projects. But this was more of an observation based on literature review rather than a conclusion based on empirical evaluation. Berman says - "... review of literature suggests that there is ample evidence that CHW's in small scale well managed projects can be effective. In other words the potential contribution of the CHW approach has been demonstrated". According to Berman many of the initial CHW projects that first gained attention were initiated by local dedicated health workers who were unsatisfied with the inadequacies of the clinic based services.

One of the good review of early CHWs projects at small scale was presented in the book edited for WHO by Newell (1975), namely "Health by the People".

Antia (1986) critically looks at the CHWs scheme which is imposed from the top. He is of the view of making the people playing the central role with the others helping them. "what we need is a little respect and faith in our poor and their remarkable ability and resilience in the face of overwhelming odds. The private sector and public sector services have not succeeded in ensuring health for all. Now at least we should give a fair trial to people's sector. Instead of oppressing the poor if we only let them mobilize their own resources and help them with simple knowledge and tools together with necessary supportive services, they can surely solve their own problems". Antia

draws support for his conclusions from the success with the CHW scheme achieved by several small scale projects in India, particularly those at Mandwa, Kasa, Miraj, Jamkhed and Vadu.

Madan (1987) mentions details about success story of Kasa and Jamkhed, both situated in western India. The author concludes that the leadership role exercised by certain unusually gifted individuals, who are urban born and highly educated, must be recognised in the success of these two projects. According to the author these success stories point out the fact that participating communities are 'made', they are not born.

Dayal Chand and Soni (1987) mention about Pachod Health Programme, a non-governmental scheme which involved communities in the decision-making process from the outset. The authors focus on the problems faced during training of dais (local mid wives or traditional birth attendants). The authors present the results of programme evaluation not only in quantitative terms (in terms of birth and death rates) but also in terms of social change: the dynamics of the community and self confidence of the workers.

Faruque (1982) in his document points out some of the problems of the small scale projects lesson in the context of 14 such projects. According to the author

(a) small scale projects often have little or no accurate data about their real

achievements.

- (b) their coverage in the face of reality is negligible. and
- (c) they are usually a focus of attention and run by charismatic and enthusiastic leaders.

The author also suggests seven lessons, out of them one lesson relevant here is that "para-professionals can provide good appropriate health care".

3.6 The need for the present study

There are relatively good number of studies available on the evaluation and analysis of community Heath Workers' scheme launched in 1977. The scheme was engulfed in many problems. CHW was expected to depend on the PHC staff for technical guidance and professional advice. Therefore the CHWs were seen primarily as extending the services of static facilities.

Many of the NGOs involving CHWs started in India around the same time as national programme. But there is a vast gap in knowledge about these small scale non-governmental efforts in rural health care through CHWs. There are hardly any empirical studies which have explored the CHWs' performance in non-governmental organisations in the light of the government run CHW scheme.

One recent book, edited by Saroj Pachauri (1994), based on the twelve case studies of NGO projects earlier published by Ford Foundation as Anubhav series, has included one article 'Community Health Workers' (Koblinsky M A, 1994). This paper attempts to explore present picture of CHWs in several NGOs in India and contrasts them with their counterparts in government service, This paper is based on the 'Anubhav series' case studies and site visits to five of these twelve projects. The methodology used included interviews with project directors and field managers; observation of clinics and staff meeting; observation of home visits by CHWs in one project.

The methodology is questionable because community health workers were observed only in one project, and also it is not clear whether any structured interview schedule was used for this purpose. Therefore the generalizations about the work of community health workers on basis of impressions at one project cite interviews with project officers (whose perceptions are different from those of CHWs). The results are more impressionistic and less objective.

There is a need for an empirical study to address the questions: who are the CHWs in non-government organisations? What is their socio-economic background? What are the roles, responsibilities and problems of these village health workers in NGOs, as they perceive them? The present study attempts to address these questions.

Introduction

Rajasthan, being one of the four BIMARU, states with poorest performance in terms of health indicators, was selected for the study. In Rajasthan Jaipur district has the maximum concentration of NGOs, therefore, Jaipur district was selected. Information and addresses of all major NGOs in Jaipur district were taken from the Directory of NGOs in Western Zone. Six major NGOs in the field of health care were selected after discussions with the officials of Rajasthan Voluntary Health Association (RVHA). But out of them two were giving specialized services for the leprosy patients and physically handicapped people. Out of the remaining four, three NGOs were working in Dudu and Chaksu blocks while the fourth (Bal Rashmi) was working in Bassi. Because of the time constraint, it was difficult to cover three blocks, otherwise the quality and productivity of the study could be influenced. Therefore Gram Seva Mandal Idankabas (GSMI), and Jaipur Rural Health and Development Trust (JRHDT) in Dudu and Centre for Community Economics and Development Consultants (CECOEDECON) in Chaksu were selected for the present study. The investigator had a good knowledge of the local language, cultural practices and traditions.

4.1 Sample selection

For the present study total of 35 workers were interviewed (7 from GSMI, 8 from CECOEDECON and 20 from JRHDT). These workers were working in 35 villages of the Dudu and Chaksu blocks.

4.2 Framing of the interview-schedule

Keeping in view the objectives of the present study and interview schedule was structured. As the study is based on qualitative aspects, open-ended questions were preferred in framing the interview schedule. The questions were framed to collect information on the following aspects of the village level health workers.

- * Age
- * Marital status
- * Number of children
- * Educational, religious, economic and caste background
- * Total land holding and irrigated land holding
- * Total number of villages that a worker is serving, their population and distance from the main village
- * Work experience earlier to the present job and the stay present job
- * Monthly honorarium, Job satisfaction and expectation
- * Antenatal care, role at the time deliveries, postnatal care
- * Role in family welfare programme

- * Perceptions about major diseases and health problems and role in their treatment
- * Knowledge and perceptions about indigenous treatment and home remedies
- * Knowledge and perceptions about the functions performed by the Exorcists
- * Perceptions about village communities role in CHW's workers functioning and
- * Perceptions about causes of poverty

4.3 Method of data collection

- * Deep probing interview with the village level health workers (with the help of an interview schedule).
- * Interview and discussion with a few ANMs on the similar lines.
- * Discussion with the heads of organisations, staff of the RVHA,

Doctors and staff at Dudu CHC.

- * Observation of the village level health workers at the work site.
- * Focus-group interviews with villagers in a few villages.
- * The records wherever they were maintained by the village level health worker or the NGO office.

4.4 Sources of data collection

The data for the present study is collected through primary and secondary sources.

The primary sources are:

- * 'Swasthya Mahilas' in GSMI, 'Sahelis' and 'Mukhya Sahelis' in CECOEDECON and village Health Guides in JRHDT.
- * ANMs in five sub-centres.
- * Project in-charge and the Heads of the NGOs.
- * Interview with officer concerned at Rajasthan Voluntary Health Association.
- * Focal groups in certain villages.

The secondary sources are:

* Directory of the Voluntary Organisations in Health Care

statistics, Government of Rajasthan, Jaipur, 1992.

* For Health situation in Rajasthan, the following documents were consulted- SRS, Annual Reports (1988,1989,1992); Survey of causes of death (Rural)Annual Reports (1988,1989,1990); child Mortality and Fertility, Rajasthan, Office of Registrar General MHA, 1987; situation Analysis of women and children in Rajasthan, Institute of Developmental Studies, Jaipur, 1990, Rajasthan at a glance,1991, Directorate and

4.5 The process of data collection

The investigator contacted the three NGOs in the last week of January, where the workers were to be studied, but did not get much time from the organizational heads, because they were busy in the Panchayat elections. Therefore a week's time was utilized in availing resources at Rajasthan Voluntary Health Association and Indian Institute of Health Management Research (IIHMR), Jaipur. This time was also utilized for the pre-testing of the schedule and accordingly the necessary corrections were made.

When the investigator reached Gram Seva Mandal Idankabas (GSMI), Dudu and started working, he was confronted with another difficulty. Many of the village health workers were busy in the fields, as this was the harvesting time. In spite of these difficulties, the study was conducted successfully, because the surveyor got in rhythm with the respondents, understood their problems and managed his work accordingly.

Another problem which came in the way of the process of data collection was when the first worker approached by the investigator on the first day of the work was not seen very keen on being interviewed. This problem was also resolved successfully when an informal discussion was carried out with this health worker and during the course of discussion investigator told her about his birth in a small village in the neighbouring area and the whole talk was carried out in the local dialect (of which the investigator has good fluency and command). When good rapport was established with this worker and she was convinced about the aims and intentions of the work she herself told that

the reason for her initial disinterest in giving the interview was because she was suspicious about the researcher's background and aim in interviewing her. This incident is cited in detail here because it proved very significant in establishing rapport with rest of the workers.

While using the interview schedule, the initial long talk was meant mainly for establishing the rapport. Once the good rapport was established with the investigator, they were asked if the small tape recorder could be used. The reasons were explained to them for using the tape recorder, and it was used only if the workers allowed its use. Only a few objected its use and it was not used in case of these respondents.

4.6 Control of the situational variables

An effort was made to control certain situations which could significantly affect the responses and were in reach of the investigator. One of these controls was that the supervisors or project officers were requested not to be around during the interview. The second control used was that an effort was made to take interviews at the time convenient to the respondents (usually morning or evening). The third control was to avoid gathering of the woman folk around the respondent as far as possible, but sometimes it was not possible.

4.7 Actual conduct of the interviews

The interview schedule was in Hindi but in most of the cases the questions were asked in Dhundhari or Shekhavati the local dialect of Rajasthani, spoken in the study area. An effort was made to make the questions understandable and to avoid confusion. On an average around 30 minutes were taken by the respondents (most of the questions being open ended, in some cases even one hour was taken). Least interventions were made during the time they were giving a particular reply. Any clarification if needed was sought after they finished their reply on a particular question, so as not to break the free flow of their ideas. The use of tape recorder largely facilitated in this aspect because they were not interrupted merely for the sake of writing the responses, when they were speaking fast. The schedule being quite detailed, and covered almost all functions which were commonly performed by them.

4.8 Limitations of the Present study

Because of the time and resource constraints, the following limitations of the study are worth mentioning:

(a) the study being an exploratory, does not address the issues of equity, quality and coverage by the community health worker in NGOs;

- (b) although focal group interviews were conducted, they were not very representative of the community regarding the community perception about the community health workers;
- (c) the non-governmental organisations in rural health care differ in many aspects such as size, approach, and emphasis. The findings of the present study based on three NGOs provide insight about the CHWs in NGOs but there are obvious limits to generalisations;
- (d) the spread of the CHWs (one village had only one village health worker!) and transport bottlenecks, only 35 workers could be interviewed; and
- (e) lack of transparency in showing records and unavailability of any baseline data on the NGOs presented another limitation.

CHAPTER V: NON-GOVERNMENTAL ORGANISATIONS OF THE PRESENT STUDY

Introduction

The goal of the present chapter is to introduce the NGOs that were studied for the present dissertation

5.1 Gram Seva Mandal Idan-Ka-Bas, Dudu

The gram seva mandal Idankabas is a non-profit making registered institution registered under the Rajasthan Societies Act, 1958 and the Foreign Contribution (Regulation) Act, 1976 by the Ministry of Home Affairs, Government of India for accepting foreign contributions.

GSMI was established in 1960 in order to initiate integrated development programmes in the rural areas of Dudu and Johner blocks of the Jaipur district of Rajasthan. It especially aimed to support 10 local Gramdan villages which were donated in the Bhoodan and Gramdan (land gift) movement of the late Vinoba Bhave. Idankabas was the first of these 10 villages to be proclaimed a Gramdan village.

The main activities of the organisation started in 1988 in response to the worst drought that hit Dudu block this century. In the initial two years the organisation concentrated on setting up of the medical work, job creation by spinning and weaving, the Kindergarten at Dudu and small scale water projects.

The Dudu block can be divided into three zones, with different geological features and commensurately different water problems. The initial work of the organisation was mainly focused in the sandy zone where hand dug wells could provide much needed irrigation water. The organisation realized that the really critical problem was in the 100 villages with little or no drinking water. The GSMI approached OXFAM and got one rock blasting unit from each of them. At the same time contact was made with AFPRO-Action for Food Production which worked in close contact with Gram Seva Mandal Idankabas. AFPRO survey found water in the areas where no water has ever been found, and also worked in well deepening.

The basic aim of GSMI is to create a non-violent self sufficient society based on love and to provide equal opportunities for everyone without consideration of caste, colour or race. The main activities of GSMI, under its constitution are the following:

- * Basic Education;
- * Propagation of Khadi and village industries (land, spinning and hand weaving);

- * Agriculture and small scale irrigation projects;
- * Medical care, children and women welfare and drinking water; and
- * Different constructive programmes for rural uplift.

5.1.1 Health Care at GSMI, Dudu

Nearest main hospital facilities are at Jaipur or Ajmer-more than 60 kms from Dudu. Dudu is an important place situated on the main national highway between Jaipur and Ajmer. Highway no. 8 is the most crowded and busiest highway in Rajasthan and owing to this heavy traffic many accidents occur. The organisation had two ambulance cars donated by Fr. R. Ehrat from Switzerland. But it takes two to three hours to reach the main hospital. When patients need immediate emergency care this is not available at Dudu, and patients sometimes die on way to Jaipur or Ajmer. To address this problem the institution has constructed a trauma hospital at Dudu. It is planned that the hospital will provide all kind of necessary services for the cases of accidents; This trauma hospital is proposed to run round the clock. The staff salary will cost approximately 2.06 lakhs of Rupees It is proposed to create resources of 5 lakhs of Rupees per month.

5.1.2 Rural Health Care by GSMI

The organisation had two health projects, one in 15 villages and the other in 17 villages. So total 32 villages were covered by the organisation. Each village had one village health guide (named 'Swasthya Mahila'). Swasthya Mahila is women from the same village, who is being paid an honorarium of 200 Rupees per month. They are middle-aged women accountable to the health project in-charge who is a doctor in Ayurvedic medicine. A total amount of 18,000 Rupees is being spent on the health projects currently, Out of this amount a sum of 5000 Rupees per month is allocated for the stock of medicines (Ayurvedic) provided to these 'Swasthya Mahilas' and 8,600 Rupees are being spent on salary of the staff i.e. on one in-charge and 32 village level workers. The details of the functioning of the community health workers will be discussed while analyzing the data.

Apart from the services being given by CHWs, there is also a mobile unit which covers these villages. The mobile unit has got Ayurvedic medicines and Ayurvedic doctor. The organisation has got an ambulance for taking the difficult labour cases to the hospital but remote villages cannot avail this facility, because it is sometimes rather difficult to call the ambulance.

5.2 Jaipur Rural Health and Development Trust (JRHDT), Jaipur

JRHDT is a no - profit making organisation which was established in 1983. The organisation was registered in the year. 1985. The organisation has its main office in Jaipur and has its other major field offices in Mahalan, Champapura and Phagi. Mahalan has Rural Family Welfare Centre.

The main objectives of the organisation (as claimed by the organisation) are the following:

- * provision of the medical facilities to rural people through health services
- * family welfare services
- * provision of sanitation
- * medicine and treatment
- * development of infants
- * socio economic uplift of the community.

To achieve the above mentioned objectives, the main objectives of the organisation are

- * curative and preventive services.
- * care of the disabled
- * health care delivery
- * maternal and child health
- * health education to the community
- * propagation of Indian system of Medicine (ISM).

JRHDT, which is a state level organisation is affiliated to a number of agenices, some of them are CAPART, New Delhi, Canadian Embassy, N.D.D.B., Health Department (Rajasthan) and Department of Women and Child (Rajasthan).

The main achievements of the organisation include village health guide programme, feeding centres programme of supplementary nutrition, income generation programme, running of ICDs programme, contstruction of low cost houses.

The organisation at present is running Village Health Guides programme and NORADE funded 'Gram Saheli project' as its major health project.

There are five main field units of the organisation, where the village health workers have to come to attend the meeting once in a month. These field units are - Dudu (Mahalan), Phagi, Sirsi, Bhagrota and Champapura.

The Village health guide (VHG) programme is a government programme which is being supervised and run by the organisation. The guidelines for the VHG are the same as are in case of government run VHG's programme. The major difference is in the amount of honorarium, which is 100 Rupees in JRHDT, out of which 50 Rupees are being paid by the government and 50 Rupees by the organisation.

The major sources of funding for the organisation include - income from endowments, membership fees, fees from services, donation from public, foreign grants and grants from state government, central government and local bodies.

5.3 Centre for Community Economics and Development Consultants (CECOEDECON), Jaipur

CECOEDECON has declared itself a non-profit, non-political research and development agency. It was registered on June 19, 1982 as a society under Rajasthan Societies Registration Act 1958. CECOEDECON aims to operate for specific target groups, adopting indigenous and innovative approaches as well as appropriate technologies. The main activities of the organisation include child development, women's development, development of nomads, agricultural promotion along with ecologically sustainable development through scientifically devised programmes of land reclamation, soil and water conservation, social forestry and alternative forestry, surface water management, drought prevention etc.

The organisation (CECOEDECON) claims that it involves people at different stages of planning, decision making implementation and evaluation. The organisation also declares that one of the important feature of their modus-operandi is co-ordination with other voluntary and governmental agencies to avoid resource wastage and multiply

developmental benefits in accordance with the participatory style of development.

CECOEDECON started its action programmes in the Chaksu tehsil but soon expanded its operational area to six eastern districts.

The organisation claims that in more than twelve years time they have been able to create an infra-structural and institutional base which is development oriented. They consider it to be a real achievement in a short span for quantitative targets had not been their sole concern. CECOEDECON declares that it has sequentially implemented programmes of relief, rehabilitation, welfare, organisation and development. The following are the main project the organisation is engaged in:

- (i) People's awareness programmes which included ATMA project (Awareness, training, motivation and action), AGP (awareness generation programme) and family, life education.
- (ii) Ecological regeneration work: A multi-pronged approach for ecological regeneration of the area through various soil and water conservation activities like construction of concrete gravity dams, Gully plugs, farm-field bunding, reforestation and fodder grass development.
- (iii) The Girl Child: In response to the SAARC year of the Girl Child, CECOEDECON launched a campaign for creating awareness among the rural people regarding socio-cultural and economic discrimination against girl child.

- (iv) Nomad development: In earlier phase CECOEDECON helped the Guvaras (wandering shepherds) and then they worked for the Gaduliya Lohars (Wandering Black smiths). The main emphasis in this project was on non-formal education for all ages, health facilities and immediate economic support for purchase of raw materials, fuel and legal aid in acquiring land for housing.
- (v) Crasches for pre-school Children: The organisation is running twelve Crasches for pre-school children, where nutrition is provided. There were no vehicles to take children from the nearby hamlets, so all the children were from the same village. For example, the crasch at 'Shilki-doongari' where the main office of the CECODECON is situated, was visited on 18th February. It had 32 children on its rolls but none of them was from the nearby dhanis (hamlets) which were just at a half to one Kilometre distance from the main village. The cratch centre did not have any child from Scheduled Caste or Schedule Tribe families.

5.3.1 Health Project: Mini family Welfare Centre (MFWC)

This is a project funded by government of Rajasthan. It covers 25 villages, It mainly aims at motivating people for accepting family welfare programme. Grassroots level workers, in this project were also all females. They are termed as 'Sahelis'. Each village had one Saheli. These villages were divided into five blocks or field units. From of each block of five sahelis, one is nominated supervisory head or group leader. Hence, This

group leader is called 'Pramukh Saheli' or 'Mukhya Saheli'. This way out of twenty five village level workers there are five group leaders who are supervised by 2 permanent health workers.

CHAPTER VI: ANALYSIS OF THE DATA

Introduction

The workers interviewed, in fact all employees, in the three Non-governmental organisations (NGOs) studied, were all married females. The data are analyzed separately for the three organisations wherever needed, as the organisational variables varied in the three.

The designations given to these workers were different in the three NGOs. In Gram Seva Mandal Idankabas (GSMI), they were named 'Swasthya Mahilas'; in CECOEDECON, they were named 'Sahelis'; and in Jaipur Rural Health and Development Trust (JRHDT), they were called 'village Health Guides' (VHGs).

6.1 Demographic profile

The 'Swasthya mahilas' in the sample of GSMI were in their 30s and 40s, except one who was 55 years old. The average age of these workers in GSMI Dudu was 39 years. The reported age of the eight Sahelis in CECEODECON was in 30s, except one of 45 years and another of 20 years. The average age of the 'Sahelis' in this organisation was 33 years. The average age of the VHGs (including one 'Gram saheli') was 33 years.

Seventeen out of the twenty workers interviewed in this NGO were in their 20s and 30s, except two in their 40s and one in the 50s.

An interesting observation regarding their age is that it may not be their real age, this is based on how old they feel about themselves. Most of them when asked about their age, used to discuss with someone (if around) and then used to reach at a mutually agreeable age. Most of them (24 out of 35) reported their age in multiples of five. One reason for not being aware about their real age may be that birth of a girl is not an occasion for celebration in rural society of Rajasthan, while contrary to it, on birth of a son, there is a tradition of ringing 'thali'. Therefore the birth of a girl child, in a male-dominated society, is a painful event which is not usually remembered by the parents.

Number of Children

The three NGO projects studied laid emphasis on family welfare. Especially, in CECOEDECON's Mini Family Welfare Centre (MFWC) run 'saheli' programme heavily emphasized on family welfare programme. The village health workers in these NGOs persuade women for sterilization and advise them to adopt use of contraceptives. These women can be role-model only if they themselves adopt the small family norm. These workers were asked about their number of sons and daughters. The average number of sons of the health workers of GSMI was about three (2.7) and average

number of girls was one. The average number of children was about four (3.7) Average number of children of the 'Sahelis' interviewed in CECOEDECON was also about four (3.62). Similarly average number of children of the VHGs of JRHDT was also about four (4.3).

One of the workers in Chaksu Block, working as a 'Saheli' admitted she produced six children because of a desire for a son, as she had five daughters successively and the only son being the youngest among all.

Education

Most of the village health workers interviewed in the three NGOs' were below primary education. The information collected was not much reliable because the organisations required a minimum primary level of education of the community health workwers. So many of them replied in affirmative, when asked about their educational background. Caste Background

Out of the 35 village health workers interviewed, 34 were Hindus and one muslim. The caste system is not a feature of Hindus alone, it is almost equally prevalent among Muslims (at least in Rajasthan) and further stratifies the village community. In Gram

Seva Mandal Idankabas (GSMI), out of the seven workers interviewed, 6 were Brahmin by caste, and one was Rawana Rajput which comes under OBC.

In CECOEDECON, seven out of eight 'Sahelis' working in MFWC were Brahmin while one was Kumawat (potter, who comes under OBC). While in JRHDT, of the total 20 workers who were interviewed nine belonged to higher caste Hindus, 10 were from Other Backward Castes (1 Nai, 3 Rawana Rajput, 1 saad, 1 Nath, 1 Goswami, 1 Kumhar, 1 Teli and 1 Gujjar) and one Muslim (Musalman Teli).

6.2 Economic Status

To know what kind of economic background these workers were coming from, three variables were used - regular monthly income of the family (excluding honorarium); total land and irrigated land.

In GSMI, Dudu block, two workers had better economic background than rest of the workers, one had a regular income of 5,000 Rupees in her family, while the other had 3,000 Rupees as regular monthly income. Out of the seven GSMI workers interviewed, five reported that they do not have any other source of regular monthly income than the honorarium they received. Each women was getting an honorarium of 200 Rupees, which is not included in the above mentioned regular monthly income. One

worker who is the senior most in the organisation was getting Rs.600 (Rs.400 for Mahila Mandal).

Table 6.1: Regular Monthly Income of the family in Rupees in the three NGOs

S.NO.	Income Group	GSMI	CECO- EDECON	ЛЯНОТ	Total	%
1.	No regular income	5	3	14	22	62.85
2.	Up to 500	-	1	1	2	5.71
3.	More than 500 to 1000	-	1	2	3	8.57
4.	More than 1000 to 1500	-	1	-	1	2.86
5.	More than 1500 to 2000	-	2	2	4	11.43
6.	More than 2000 to 2500	-	-	-	-	0
7.	More than 2500 to 3000	-	•	-	-	0
8.	More than 3000	2	-	3	3	8.57
		7	8	20	35	

Most of the workers of GSMI interviewed had a landholding of less than 10 bighas, except one who had 25 bighas of land out of which 12 bighas had access to irrigation. Out of the remaining six workers, three had landholding of ten bighas each, one had seven bighas and two had two bighas each. None of these six had any irrigable piece of land.

In the Mini Family Welfare Centre (MFWC) Project of CECOEDECON each 'Saheli' was getting Rs.100 the 'Mukhya Saheli'Rs.175. Two of the eight 'Sahelis' were given charge of the cratch (Shishu Palana Ghar) run by the CECOEDECON in their villages. One said she was getting Rs.370 for the creche centre, while another reported she was getting Rs.450 for the job. One other worker in Saligrampura village was getting Rs.400 for the Anganwadi work. Five out of the eight workers had some other regular income apart from what they were getting from the organisation, while three did not have any other regular regular monthly income.

None of these eight workers had any land asset more than twenty bighas. Three had land between 15 and 20 bighas, four had less than five bighas, and one was landless.

Only two had irrigated land. The remaining six did not have any irrigated land.

In Jaipur Rural Health and Development Trust (JRHDT), each village health guide was getting an honorarium of Rs.100 per month and one 'Gram Saheli' was getting Rs.250 per month. Fourteen out of the 20 workers interviewed replied in negative for 'any other regular monthly income'. The other monthly regular income of the family varied from Rs.500 per month to as high as Rs.5000 per month. Three out of the twenty workers studies in JRHDT were landless, while seventeen had some landholding. The landholdings from four bighas to 200 bighas. Out of the seventeen who had land, ten did not have any irrigated land, i.e., only seven workers had irrigated land for their

families which ranged from seven bighas to forty bighas (refer Table 4.2).

Table 4.1 shows that a great majority of these workers (62.85 Percent) did not have any 'regular monthly income'. The Table 4.2 and Table 4.3 on the next page show the number and percentage respectively of the subjects in the different slabs of landholding.

Table 6.2: Number of people in each land group for total land and irrigated land

S.NO.	Land Group	GSMI	CECOEDECON	JRHDT	Total workers
	in Beghas				Tl Ir
		Ti Ir	T1 Ir	Ti Ir	
1.	Landless	- 6	1 6	3 13	4 25
2.	Up to 10	6 -	4 1	4 4	14 5
3.	More than	- 1	3 1	7 1	10 3
	10 to 20				
4.	More than	1 -		3 1	4 1
	20 to 30				
5.	More than			1 1	1 1
	30 to 40				
6.	More than 40 to 50			1 -	1 0
7.	More than				0 0
	50 to 100				
8.	More than				o 0
	100 to 150				
9.	More than 150			1 -	1 0
	•	7 7	8 8	20 20	35 35

Table 6.3: Percentage of village health workers under different land-groups

s.no.	Land Group	% of workers having
	in Behgas	
		TI Ir
1.	Landless	11.43 71.43
2.	Up to 10	40.00 14.28
3.	More than	28.57 8.57
	10 to 20	
4.	More than	11.43 2.86
	20 to 30	
5.	More than	2.86 2.86
	30 to 40	
6.	More than	2.86 0
	40 to 50	
7.	More than	0 0
	50 to 100	
8.	More than	0 0
	100 to 150	
9.	More than 150	2.86 0

6.3 Time of service as health worker in the village

In GSMI, health workers were in their present job for three years, except the workers of 'Palu Kalan' and 'Palu Khurd' villages, who were there for one year and one and a half year respectively. In CECOEDECON most of the workers were there for eight months, except one who was there for five months in Narharipura village and another with one year and eight months in Barkheda village. Out of the 20 workers interviewed in JRHDT, two workers were working there for two years and another three since nine, ten and eleven years in Malan, Raseeli and Dantari Kila villages respectively. Out of the remaining 15 health workers, nine were doing their current job for eight years in the organisation and six since four years. The average time of work of the 20 workers was 6.5 years.

Some of the workers reported to be doing similar work either in some other health project by some other NGO in the area or in Anganwari, or as a Sathin in the Mahila Vikas. Some of the workers were doing one of these works along with Village Health Worker's job. In GSMI, two workers had previous work experience. One of the workers in GSMI had worked in JRHDT for six years before joining the project. When she was asked for the reason of leaving her earlier job in JRHDT, she replied that they were paying just Rs. 100 per month and record-keeping work was more in JRHDT (the

earlier organisation she worked with). She is a very senior and experienced worker in GSMI, who has emerged as a group leader among all the Swasthya Mahilas of the organisation. This case of shifting occupation is an example of how sometimes two NGOs come into competition with each other when both are working in the same village.

CECOEDECON's Mini Family Welfare Centre (MFWC) project was relatively a new project but four workers had previous experience along with the present job. One worker in Barkheda village had worked in the Kumarappa Institute for Gram Swaraj. She joined her present job after the previous project was completed. In Saligrampura village (Chaksu block), the 'Saheli' working their had a long experience of 14 years as Anganwari in-charge. she had also worked in Praudha Shiksha for two years and in Mahila Vikas for two years. Two other workers were running 'Palana Ghar' in the same village for five and six years, one out of them in Yarlipura village also had a one year experience in Kumarappa Institute as a Village Health Worker. Four workers had either previous experience or are currently engaged in some other developmental work.

In JRHDT, one worker had a previous experience in non-formal education in Nirman Sansthan Khandela (another NGO). The project completion was the reason to leave her previous job. Another worker who was the only Gram Saheli interviewed from JRHDT, was also working as a Sathin in the same village (a programme by Mahila Vikas,

Rajasthan Government).

6.4 Villages and population covered

In GSMI, Dudu workers were not doing the village population survey so the exact population of the villages was not given by them. In GSMI, they were covering the nearby villages also. In addition to the main village, they were also working in one to four other villages. For example, a Swasthya Mahila of Mangalawada village, who is 55 years old, is working additionally in the four nearby villages, out of which two were at four kilometres distance. Similarly, health worker (Swasthya Mahila) of Palu Khurd village was working for GSMI in other two villages. She was also working in Mahila Vikas in seven villages.

The population of the villages covered by CECOEDECON (where sahelis were interviewed) varied from 300 in Jujharpura to 989 in Barkheda. But most of the Sahelis had to take care of the hamlets near the main village (called 'Dhani' in local language). The Saheli of Jujharpura was also giving services to a nearby small village Dadanpura, having a population of 300. The Mukhya Saheli, who is a leader over other four Sahelis in nearby villages, had to hold meetings to supervise them.

In JRHDT, the village Health Guides interviewed were working

in relatively larger villages. Seven out of the 20 VHGs were working in the villages with a population of less than one thousand. Three out of the seven villages had a population between 900 and 1000. The other 13 villages which had more than one thousand people, varied in population from 1048 in Padasoli to 3247 in Rajadi village. These workers in JRHDT reported that they were not working in other than their own village. The average population in these twenty villages was 1303. As the survey of population was conducted in these villages, the exact population could be known.

6.5 Functions performed by the Village Health Workers

6.5.1 Health education regarding diet of pregnant women

In GSMI, the workers replied that food items such as cabbage, gram, Khichadi, carrot, green vegetables milk. should be taken during pregnancy. When asked about the things which are prohibited during pregnancy, they mentioned that warm things (Garam cheeje), whey (Chhachh), curd (Dahi), etc., were not to be taken. Some of the workers failed to reply when asked about recommended restrictions on diet.

In CECOEDECON, the health workers gave similar replies as given by GSMI workers accept that one worker mentioned porridge(Dalia or Thuli) to be taken during pregnancy. One of the workers said that there is not much variety of food to take, so

whatever is available and accessible should be advised. Another worker emphasised on need to take more quantity of food. When asked about the food to be avoided, some of the workers said that they did not know what is to be avoided during pregnancy. The remaining workers replied that chhachh and curd should be avoided. One of the workers said that the earlier belief in villages was that women should grind wheat on Ghatti during pregnancy.

In JRHDT, the responses were not different from the workers of CECOEDECEN and GSMI, except that one emphasised on light food, another on fruits, and still another on egg and fish. One of the workers replied that women should take bananas while the womenfolk sitting around her contradicted that it is not advisable.

6.5.2 Care of Pregnant Women

Workers were asked whether there are regular check-ups for the pregnant women. Most of the workers said pregnant women are taken for check-up whenever there is any problem to them. One replied that when they are taken for vaccination, check-up is done by the ANM at that time. Some workers said that the problematic cases in pregnancy are first shown to the village Dai and if she is not there or she does not understand the case properly, it is referred to the ANM or the Doctor at PHC.

All the workers, except one, accepted that there are no regular check-ups during pregnancy. The case is referred to ANM or the Doctor only when any problem is reported.

In CECOEDECON, the 'Sahelis' interviewed for the present study gave varying replies. One of the workers claims that all women go to the ANM for check-ups during pregnancy. Another replied that the check-ups are mostly after six months of pregnancy. More common answer was that they are taken to the ANM for check-up when she comes to the village on a fixed date, once in a month for vaccination purpose. One 'Saheli' said that usually pregnant women have swelling in their feet due to anaemia so she gives iron tablets by herself when she observes such signs. She further told that if there are some other complications then they are referred to the ANM who gives more information during the meeting with pregnant women. In one village, the workers said that only Dai does check-ups.

In JRHDT, the most common reply by VHGs was that most of the times pregnant women are examined only when there is some complaint, otherwise regular check-ups are not done. Some of the workers answered that Dai examines the case. If she feels she can't attend it, the case is referred further. Only two workers replied that regular check-ups are done during pregnancy.

6.5.3 Role of Health workers at the time of deliveries

Workers were asked how do they help at the time of delivery. Some of the workers, who themselves were performing the deliveries, said that they take care of cleanliness and keep the Dai-Kit with them. Most of the workers replied that they educate women about the need for cleanliness in their vicinity and motivate them to use Mamta Kit packet during the pregnancy. In case of home deliveries, these workers asked the family for a new blade and a new thread. One of the workers said that she gives health education message to the pregnant women like: "remember five things - clean hands, clean room, clean clothes, new blade, and new thread." These workers sometimes also help the pregnant women to take them to the hospital or maternity home, if the case is serious and problematic or whenever Dai declines to conduct a particular delivery because of certain complication. Most of the workers were not conducting the deliveries themselves but a few were themselves Dais. For example, those working in Mangalwada, Jujharpura - Dadanpura, Sunadia, Ladera and Hatupura villages.

The villages where there were untrained Dais, the role of these workers was to provide mamta kit packet either to the potential mother or to the Dai. In such villages they were also educating the dais apart from educating pregnant women about taking care of cleanliness and other measures. A few workers said that they do not have much to do during deliveries as people either go to the Dais or to the ANM.

There is no transportation facility provided by the NGOs under study for taking the problematic labour cases to the nearby hospital. The ambulance facility was found in GSMI. But the workers did not report about utilisation of this facility.

Seventeen workers out of the total thirty five (about 50 Percent of the total workers) reported that the deliveries in their villages are conducted by the traditional or untrained Dais. Out of the rest eighteen, one said that in her village deliveries are conducted mostly by elderly women. The remaining seventeen workers said that in their villages, deliveries are conducted by trained Dais.

6.5.4 Care of the Mother and the Child after Birth

Traditionally, the method of caring for the mother and the child were different. The answers given by these workers reveal the following traditional ways of 'caring' for the new-born and the mother -

- (a) A few workers said that traditionally proper ventilation was not provided in the room where deliveries were conducted. This could not be confirmed:
- (b) Kitchen knife, scissors, sickle or some other iron thing were used to cut the cord;
- (c) Ghee was used on the cord and was also given in the mouth of the new-born;
- (d) at the time of deliveries, sand or ash was spread over the surface and on that a piece

of cloth was put for the mother and the new-born to sleep on;

- (e) the diet advised to the mothers by the elderly women of the house was different than what is given now. They were advised to take Jaggery, Ghee and Ajwain, etc;
- (f) the child was not given mother's milk for a few days after the birth;
- (g) the mother and the child were not allowed to take the bath for 8 to 10 days;

The methods of care for the mother and the newly born child advised by these workers are different than the above mentioned practices which were there in practice traditionally. The new intervention by the workers are different from those culturally practised in the Rajasthan villages. From the various replies given by the subjects, the following points emerged:

- (a) There should be proper ventilation in the room where the delivery is conducted. some time after the Child's birth.
- (b) Advise to use 'Mamta kit' or a new blade at the time of delivery and not to use any iron in cutting the cord.
- (c) Advise them to use tincture on the cord.
- (d) Strictly advise not to use sand or ash at the place where the mother and the child sleep.
- (e) They ask the new mothers to take vegetables and fruits in the diet.
- (f) Now the first milk is given to the child which, in earlier times was not the case.

(g) The mother and the child are advised by the village level health workers to take bath after birth, contrary to the earlier practice when they were not allowed to take the bath for a couple of days.

6.5.5 Village Health Workers role in Vaccination

The Health workers do not themselves vaccinate the pregnant and the children, rather they act as a link between the community and the ANM. In the villages where the ANM comes, there is a fixed date in a month for vaccination. The role of the village health workers is to communicate to the villagers about this date. Sometimes if there is any change in this date, the ANM communicates it to the village health worker, who in turn passes on this information to the villagers. Most of the workers had the knowledge that along with vaccination iron and folic-acid tablets are distributed to the pregnant women. The 'Sahelis' of CECOEDECON themselves were distributing the iron and folic acid tablets. In some of the villages where the sub-centre was far and the ANM does not come, these health workers ask the villagers (the pregnant women and children) to go to the nearby sub-centre, PHC or whichever government hospital is nearer. There are cases also where no one from government health services is reported to have come for vaccination. For example, in Narharipura village (covered under MFWC programme supervised by CECOEDECON), the village health worker said that the nurse (ANM) has never come to vaccinate.

The workers said that the ANM brings a 'dibba' (box) with her. Very few said that they also take care of boiling of water. One said that if the vaccine seems yellowish, it means it is unsafe.

Vaccination is one of the areas where village health workers have an important role to play in persuading and mobilising the community. Some workers in JRHDT argued that they should be trained to give 'injections', because sometimes they mobilise the pregnant women and children of the village in expectation of the ANM, but she does not turn up. They said that they feel disappointed when such an instance occurs and the community trust erodes.

6.5.6 CHWs' role in Family Welfare

Family welfare is the programme where the three NGOs studied are given the maximum thrust. Therefore the village health workers in these organisations lay maximum emphasis on achieving the targets of family welfare programme. They motivate the women in village to opt the terminal methods, when they have two or three children. They usually tried to convey the disadvantages of having more children. For example, one health worker in Mangalwada village says that she tries to motivate the women by arguing like this - "If you have 25 bighas of land and you produce five children then what will they eat"? Similarly a health worker of Narharipura village says

that she explains by telling the advantages of having a small family. In CECOEDECON Mini Family Welfare Centre (MFWC) project, sponsored by the government of Rajasthan, trained 'sahelis' for performing mainly the family welfare function in the villages. They are mainly motivating the people to adopt small family norm through spacing method for the new couples and terminal methods for the couples having two or more than two children.

The main methods for spacing are Mala (contraceptive pills) and Nirodh (condom). According to the workers, Copper-T is less common in use. But some workers reported that there is less demand for Nirodh as compared to Mala. For example, Sahelis of Dahar and Bhawanipura villages were of the above-mentioned view. In Yarlipura, the worker reported that there is an equal demand of Mala and Nirodh.

The Family Welfare programme is increasingly being accepted by the people, according to these workers. But some of the workers also reported certain limitations of this programme. One of the factors, brought out in the preceding para, is that the male acceptance of Nirodh is very low and sometimes workers reported that the women are even asked by their husbands not to use contraceptive pills. 'Gram Saheli', in Mokhampura village working for JRHDT the number of cases motivated by these workers for 'operations' varied between 'two to nine in the preceding year. Almost all women are persuaded for the 'operations'.

Although some of the workers pointed out the above mentioned constraints, the majority believed that there is good impact of this programme.

The workers themselves were asked about the number of children they had. The average number of children of the workers in GSMI, CECOEDECON and JRHDT was nearly four (3.7, 3.6 and 4.3 respectively). The objective behind asking this question was to know how effective a worker was as a role model for small family norm. In Saligrampura, the 'Saheli' working in MFWC of CECOEDECON had six children, the only son being the youngest. How can such a women be a role model for changing attitude of the villagers (even if she is not fully responsible for it)?

6.5.7 Other functions performed by village Health Workers

Though most of the activities were common to all, the workers functioning in the three organisations had different duties in certain areas.

Some workers reported that they were also doing work for awakening of the women, opposing the child marriage and encouraging education of the children, especially of the girl child. One worker in GSMI replied that she goes with supervisor from the Panchayat Samiti and gives information to the villagers about agriculture. Another worker said she persuades the villagers to in with harmony and ask them to work hard.

One of the workers told that she attends the meetings of Mahila Mandal and tell the women about cleanliness. She told how she mobilized the women of the village for digging a pond and their joint effort turned out to be a success.

In CECOEDECON's 'Saheli project', the health workers organised two meetings every month. They also organised population survey. Some of the workers in this organisation were working in the Anganwadi or creche. One of the workers told that the mahila mandals in three villages were organised into a cooperative society of twenty members.

In JRHDT, the VHGs were performing a lot of record-keeping work. They had to maintain registers for population surveys, deaths and births, number of the married couples and record of the medicines given. One of the workers, who was a 'gram saheli' and Sathin was performing other appreciable work of mobilizing the women against social evils like dowry and child marriage.

6.6 Community Health Worker's perception of Health problem

When asked about the health problems of the village, different perceptions about health problems came up.

In GSMI, the workers answered differently on this aspect but the diseases which were common among the responses given by the workers were Polio, fever, cough, and tuberculosis One worker said that cancer is also a problem in her area. One said stomach pain and malaria were the main problems. Some workers reported that pain in the teeth and joints is a common problem (which was also confirmed from GSMI, Dudu and CHC, Dudu that there is a excess of fluorides in the ground water which causes this problem.). In GSMI, one 'Swasthya Mahila' of Palu Khurd village stressed that women in the villages suffer from lot of diseases which are peculiar to the women which she puts like this-"pardeh ki bimari auraton mein jyada rahati hai" (the diseases of privacy are common in women), and dysentery (Ulti-dast) were also reported to be common by only two workers in GSMI. Swasthya Mahila, Sushila Devi sharma of Mangalwada village says "Garibi sabse badi bimari hai" (meaning that poverty is the biggest disease). One of the GSMI worker stressed too much on Tuberculosis, later on it was known that her husband died of TB and her father-in-law was also suffering from it and is in a critical condition.

In CECOEDECON, the diseases which were perceived as prevalent included-pneumonia (called 'badale ka rog' i.e. disease of the clouds), typhoid (panijhara), malaria, cough and cold, cholera and measles and phora-phumsi (boils). 'diseases of privacy' in women (Safede ka rog or parde ka rog) were reported to by all most all workers in CECOEDECON villages.

In CECOEDECON villages, most of the workers when asked whether, 'Tuberculosis' was prevalent in their area, replied in the negative.

In JRHDT, there was not much departure from the type of diseases mentioned earlier. Skin diseases were reported more by the VHGs in JRHDT. The following diseases came frequently during the discussion and interview with the twenty JRHDT-workers: tuberculosis, malaria, scabies (Khujali), bronchial diseases, pain the joints and teeth, pneumonia, and of course diseases of women (safede ka rog) were very common.

6.7 Role of Health Workers in treatment of diseases

In GSMI, the village health workers were giving Ayurvedic medicines, for the minor ailments. The organisation does not charge anything for the medicines, given to villagers, so they were coming for the medicines. Some of workers said that people now have less faith in the Ayurvedic medicines and they prefer the Allopathic medicines. Health workers (Swasthya Mahila) in Mangalwada village said that home remedies (desi Ilaj) and Ayurvedic treatment is preferred by the poor in the village, while the rich prefer the western one. The role of health workers in GSMI in the above mentioned diseases was to give the treatment in the minor ailments and to refer the cases to hospital in case of diseases which could not be treated with the medicines given to them. It was known that a few years back, the health workers were asked to give

allopathic medicines, and there were cases where the allopathic medicines caused certain side reactions in the patients.

In CECOEDECON the health workers were not trained to give any medicines, as the training given to them was of one to two weeks' time. Their main focus was on family welfare, and the curative services were not given except one or two types of tablets that they were sometimes given from the organisation. The 'Sahelis' reported that most of the people go to the private practitioners in the nearby towns. The nearby town were Shivdaspura, Chaksu, Padampura, Only one worker said that people prefer the governmental hospitals. It was very evident that 'Saheli' did not have much role to play in the times of illness. This was also revealed from the interview with some focal group interviews.

IN JRHDT, most of the workers said things contrary to what workers in CECOEDECON said about use of the private practitioners. The respondents here said that people mostly prefer to visit government hospital when they are very sick. Another difference found here was that they were giving allopathic medicine for minor ailments. But this project had a different concept of providing health service. They were making members for availing the treatment from the workers by charging Rs.10 once in a year. Because of this there was a limited membership in the villages served by the village health guides project supervised by JRHDT.

The role of these grassroots level workers in case of disease was to give treatment for minor ailments (as Ayurvedic medicines given by GSMI workers and allopathic given by JRHDT workers) or to refer them to the hospital in case of the diseases which these semi skilled health workers cannot treat.

6.7.1 Home remedies and indigenous treatment

Almost all workers accept that indigenous ways of treating diseases are still prevalent.

A majority had knowledge about different indigenous methods used by villagers in particular diseases. The following indigenous remedies are used for different diseases which came out from the responses given by the subjects in the study-

PROBLEM

TREATMENT

1) Cold

and Cough: Pepper, egg with milk, leaves of basil plant (tulsi ke patte)
with tea; a local dish prepared with millet (bajre ki
raabadi) mixed with milk, clove and dry ginger tea. For
children ajwain and rock salt mixed and given with water.

(2) Vomiting

and Dysentery: Salt and water, some local herbs,

chhach(whey), curd, lemon juice

(3) Fever: Many of the remedies used for cough and

cold are also used for fever. Neem leaves are

given in malaria fever; wet cloth is put on

forehead for lowering the fever due to

sunstroke; onion is given and its juice also

rubbed over body in such a condition.

(4) Itching and

other skin diseases: Neem leaves with boiled water, powder of the bark of neem.

(5) Pneumonia: Hot Sesame oil rubbed over the chest some

locally available herb also given.

(6) Anaemia and other diseases peculiar to women:

A special preparation from betel nut (supari), powder of water-nut (Singhara)

(7) Injuries:- Burnt leaves of neem with mustard oil

(8) Epilepsy: Onion pieces are put near nose of the

patient.

There were some other remedies, which the respondent told but sometimes there

The chart present here is based upon the responses given by different workers i.e. all the information which was collected from the respondents regarding the indigenous treatment are put together in the above chart. This shows that these workers have such a vast knowledge about the locally available and accessible treatment but this potential is not used in the job they are performing.

The respondents were asked, how they treated the children for dysentery? This was to ascertain whether ORS packets are being given to the children. It was seen that in GSMI, village health workers (Swasthya Mahila) are giving more emphasis on indigenous methods and home remedies, while in CECOEDECON the majority said they give ORS packets. In JRHDT the pattern of responses was similar to that of CECOEDECON.

6.7.2 Exorcist or Shaman (Bhopa) as a Health Institution

The health workers were asked about the kind of diseases the exorcist is dealing with.

One interesting point that emerged is that mostly people are going to the exorcist with diseases for which the allopathic treatment is either not very much reliable or in those diseases where it is not at all accessible to the villagers with low socio-economic status.

Most of the patients going to exorcists have mental health problems.

The cases of stomach pain, headache, snake-bite, pneumonia, typhoid and bronchial diseases, are seen visiting the exorcists. In these diseases the allopath at the PHC level sometimes gives only a temporary treatment, so the local people have less faith in him. Moreover treatment is very long in pneumonia and typhoid, which may not be affordable by the people and this may be the reason for their going to the exorcist.

Second major group of diseases for which local people prefer to go to a Bhopa is mental health problems. The needs for the mental problems are usually unfulfilled because of the unavailability of any institution other than the exorcist at the village level. Some of the names used by the respondents for such problems are not translated here because it is difficult to get and exact synonym in English. The cases of Ghosts (Bhoot lag jana), affliction with an evil eye (Najar lag Jane par), affliction with a witch (dakan lag jana), affliction with god (Bharba or devata lag jane par), diseases caused

due to some magical act (totaka) by others. One of the workers reported that when a child suddenly stops taking breast feed and playing he is taken to Bhopa.

Though the workers were asked to mention the diseases where an exorcist is consulted, some of the workers also expressed their views and attitudes towards the exorcist. For example, one of the workers said that exorcists do not do any good; Villagers go to them but workers ask them not to go. Another worker put it like this, " Whatever villagers say the patient believes and can go to this or that piece of stone, considering that as a god". One of the workers in CECOEDECON expressed her views about exorcist by sighting an example of a women in her village who was pregnant and started having fits. People took her to an exorcist for ihara but the health worker made her understand and sent her to a nearby hospital. These instances show how the perception and attitude of these workers is different from the village community. Still there were examples of workers who showed faith in the exorcist. One of the worker said, "Sometimes people get a disease because of a totaka in which even the doctors can not do anything". Another worker in JRHDT, "On snake bite people take the patient to Teja ji, but consult a doctor as well." There were few workers who responded that they do not know what kind of patients are attended by an exorcist.

6.8 Cooperation of the community in village health workers' functioning

Almost all workers replied that now they are getting good cooperation and support from villagers. Some of them said that they were not getting good support earlier. One of the workers said that people did not use to believe her but now they have started believing her and are fully supporting her. One of the Mukhya saheli of CECOEDECON said that she is getting good support in one village (one where she is living) but was not getting much support in another village. One of the workers shared her experiences when she just started working. Her mother-in-law abused her and her husband used to be angry with her for quite some time. One of the workers said that earlier some people used to say that she was provoking women of the village but some understood that she was doing good job. Now all are supporting her well. Another worker said that she had to face a lot of opposition from the males of the village though her husband always supported her and that is why she is now working well and getting good support from the community. One of them said that initially people even used to say that she is a bad woman ("Yeh to bigdi hui hai") some of the workers specially in JRHDT were satisfied that people call them doctors (Doctor sahib!), which raises their status within the village and they earn more respect from the villagers.

Role of the local leaders and school teachers in Village Health Workers: Cooperation, conflict or coexistence

The objective for gathering this information was to understand the links that exist between a health worker and the community leaders and the school teachers, i.e., whether they were in cooperation or in conflict with the health worker or they merely coexisted in the same village without much meaningful interaction.

Most of the workers here had one point in common in their responses which is that village leaders either did not cooperate or sometimes they opposed when they started working as health workers. Most of these workers were of the opinion that now these leaders are not opposing them and not creating trouble in their work. Rather some said that they are now appreciating what they are doing for the village. For example, one of the workers in JRHDT said that village leaders opposed her initially because she was speaking in front of males and also for not using purdah. But now most of the village leader are cooperating very well with her. Some of the workers differed in their opinion about the village leaders. According to one such worker, they meet their selfish end. One said that initially they oppose but now they do not bother wherever we go. Five workers were of the opinion that they do not get any help, cooperation or support from these leaders.

More than half of the worker said they don't get any support from the school teachers.

This shows that a teacher and a health worker merely co-exist in same village without much cooperation. Responses given by two workers of CECOEDECON, who were also running the creches, showed a bit of conflict with the teacher. According to them the school teacher think that they stop many children in the creche who could otherwise go to school. One of the workers in JRHDT said that she had earlier good relations with the school teacher who also was a female. One of the workers, who was also incharge of the Anganwadi, said that the teachers are invited in the meetings of Mahila-Mandals and on Bal-divas, and they invite her in the school on national festivals. Some of the workers in JRHDT said that they seek cooperation from the school teachers in the record keeping work and mostly in distributing the iron tablets to the school children and they give them the list of the children whom the tablets are given. A worker said that though the teachers are nice but there is hardly any cooperation or support from them.

6.9 Village Health Workers' perceptions of causes of the poverty

The workers had differences in their perceptions of poverty. On the basis of different responses given by them, the following patterns of perception of poverty emerged:

a. Economic factors such as less rains, no crop production and unemployment.

More than 50 percent of the responses fell under this category. Workers related poverty with economic factors such as less rains, water scarcity, unemployment. Some workers explained that as there are no jobs in the villages, so there is a migration to nearby cities and towns. Another worker said that it is too difficult to get a government job. In her village there were only two persons who were in government service. One of the workers said that in families where the adults (who usually are the earning members) are less, poverty is more prevalent there. So the main focus of this category is on unemployment perceived to be due to factors such as low rain falls, less productive land and small land holding.

b. Education

Some workers said that people are uneducated, Therefore, they are poor.

One of the worker in JRHDT first emphasised this point but then added that people do not have money to get education. One worker said that because of being uneducated they can not progress further and hence have to depend on land which does not give much output.

c. Population

There were a few workers who emphasised more on increasing

population and related it to poverty. An interesting fact was that most of these workers were in CECOEDECON, the project that is emphasising maximum on family welfare. This might have influenced their perception in addition to being relatively more educated which provided a different social training.

d. Males responsible for the poverty in the family

A few workers brought into focus a different aspect of poverty. According to them it is the male (husband) who is responsible for the poverty in the family. One such worker in JRHDT says like this, "They gamble, drink and go wrong ways. They do not give any money to their wives; if 15 rupees are given to her she works worth 20 rupees and moreover they produce more children, ... and it is difficult even giving clothes to the children in the limited earning. Another worker said, "Aadami kama kar nahin lata" (The husband does not bring any earning).

e. Leaders are responsible for poverty

One of the workers gave a different explanation of poverty which could not be put into any of the above mentioned categories. According to her there are so many leaders in the society that they and their sycophants get the advantage, suppressing the poor.

f. Will to earn and do work

A few workers visualised the causes of poverty somewhere within the individuals. According to them those who can not or do not earn remain poor. According to one worker, "People do not want to work, they earn two rupees and spend five and (thereby) remaining poor". According to another those who decide that they have to do something, they earn and become millionaires (lakhpati).

6.10 Job satisfaction and job expectation

Here an attempt was made to get information regarding job satisfaction in quantitative terms. The question was, " How much are you satisfied with your job?" and there were five options:

- 1. 0 Percent 2. 25 Percent
- 3. 50 Percent 4. 75 Percent
- 5. 100 Percent

The question asked them about their job satisfaction in terms of annas - chaar anna, aath anna, barah anna and solah anna to cross-examine faking and social desirability in responses to this question, next question asked was, "Will you leave this job if you get more facility and honorarium or salary in some other organisation"?

Table 6.4: Job satisfaction of the health workers

Job Satisfaction in percentage	Number of health workers in each category	responses to the question about leaving the present job given better salary/honorarium and facilities	
		Yes	No
100	7	3	4
75	10	1	9
50	10*	5	3
25	8	7	1
0	0	0	0

^{*} Two were uncertain and did not give any response.

When asked whether they will leave the present job, of the workers who said that they were hundred percent satisfied with their job, three answered in affirmative. On asking this question seven out of the eight having 25 Percent job satisfaction replied in affirmative. Out of the ten workers who had 50 Percent job satisfaction, five replied that they will leave this job, three said they would not and two were uncertain. Of the

answered in the affirmative, The remaining nine said they would leave the jobs. This shows that social desirability in the responses was more in those who said they were 100 Percent satisfied with the job, because it is contradictory in itself if one says she has 100 Percent job satisfaction and at the same time is ready to leave the current job if some other organisation offers more honorarium and facilities.

CHAPTER VII: SUMMARY AND DISCUSSION

The present study mainly attempts to draw a profile of the village level health workers in three Non-Government Organisations of two blocks, Dudu and Chaksu, of Jaipur district in Rajasthan. The study indicates that all the village health workers in the three health projects are married females. A majority of them were in their early thirties, and had, on average, four children. In GSMI, and CECOEDECON a great majority of the workers were Brahmin, while in JRHDT, about 50 Percent were higher caste Hindus and remaining belonged to backward castes. The study also attempts to analyze their economic status. For this purpose three variables were used - regular monthly income in the family except the honorarium they are receiving, total landholding; and irrigated land out of their total landholding. About 63 Percent of the workers reported that the honorarium they are receiving is the only regular income in their family. A majority had some landholding, only 11.43 Percent village health workers reported that they do not have any piece of land. Majority of the remaining workers reported their land holding between 1 to 10 bighas (40 Percent) and between 10 and 20 bighas (28.57 Percent). In terms of the third variable for economic status, i.e., irrigated land - 71 Percent of the village level health workers in these three NGOs reported that they do not have any access to irrigation.

The honorarium given to them was 200 Rupees in GSMI, in CECOEDECON, 'Sahelis' were

getting 100 Rupees as honorarium and the group leader (Mukhya Saheli) was getting 75 Rupees as extra honorarium. JRHDT Village Health Guides (VHGs) were getting Rupees 100 (Rs.50 from government and Rs.50 from JRHDT).

The duration of service as a village health worker was different in the three NGOs. In GSMI, most of the health workers were there in the current job for three years; in CECOEDECON the MFWC project was relatively new and therefore the workers (sahelis and Mukhya Sahelis) were there for eight and a half months in the current job while the JRHDT workers were most experienced having an average of six and a half years experience. Out of the 20 workers 12 had an experience of eight to eleven years of work.

Some of the workers reported to be doing similar work either in some other health project of some other NGO in the area, or in Anganwari/Balwari or as a sathin in Mahila Vikas or in non-formal education. In MFWC, run by CECOEDECON, half of the workers were currently engaged in running Balwadis or some similar jobs as mentioned above. In GSMI and JRHDT, very few workers were performing an additional job. The reason for this difference in CECOEDECON is that the guidelines for MFWC project emphasize that sahelis should preferably be selected from Anganwadi workers, Balwadi teachers or any other instructor under other child survival schemes.

Functions performed by village health workers

The health workers in the three NGOs had similarity as well as differences in the tasks they were performing. There are certain functions which were commonly performed by the Swasthya Mahilas in GSMI, the Sahelis in CECOEDECON and the Village Health Guides (VHGs) in JRHDT. One of the areas which was common to them was that all of them were giving health education to the pregnant mothers regarding diet during pregnancy and educating them regarding role of sanitation and cleanliness at the time of deliveries and educating them for diet, child care etc. after birth. Another area where there is remarkable similarity in their functioning was immunisation of children and expectant women. The role of these workers in immunisation was to convey the date of ANM's visit to the village and to mobilize children and pregnant mothers for this purpose. This is usually done once in a month. Family Welfare is the area where maximum thrust is given by these village health workers in the three organisation. The extent of emphasis on family welfare was different in the three NGOs. The CECOEDECON workers were working mainly for Family welfare, as the project was also MFWC (Mini Family Welfare centre).

In other activities, the functions performed by the village level health workers in the three NGOs differed significantly from each other. This was mainly due to different job requirements in the three NGOs.

In treatment of the minor ailments, the three NGOs differed significantly. In GSMI, the village health workers gave Ayurvedic medicines and there was also a mobile Ayurvedic dispensary. It was later on known that earlier the health workers used to give allopathic medicines but there were complains of reactions in some patients, because of the unexpertise of these workers in allopathic medicines. Therefore the organisation changed its strategy from allopathic to 'Ayurveda'. In JRHDT, where the village level health workers were given allopathic medicines to treat the minor ailments. In CECOEDECON, the workers were hardly giving any curative service. Though workers in all the three organisations were found performing referral services for the patients in serious condition including the problematic labour cases.

Difference in amount of work

In JRHDT, the village health Guides (VHGs) were doing lots of record keeping work including registration of birth and death, record of the medicines given, survey of the population, survey of the married couples, and recording the number of people taking family planning means. In GSMI and CECOEDECON, the record keeping work was less. The majority of VHGs in JRHDT, were either illiterate or up to primary educated and therefore had to face lot of difficulty in writing and record maintaining. These VHGs also showed dissatisfaction over the amount of honorarium (i.e. 100 Rupees) they are getting. This dissatisfaction of the VHGs, is sometimes, encashed by some other NGO working in the

same are. For example one of the workers shifted from the JRHDT to GSMI because of the more record keeping work and less honorarium in JRHDT compared with GSMI.

The area covered (i.e. the number of villages and distance between them) was also different in the different NGOs. In GSMI, Dudu the village health workers had to cover more area compared to the health workers in the other NGOs. Swasthya Mahilas in GSMI had to cover one to four villages in addition to the main village to which they belong. The CECOEDECON villages were relatively smaller as compared to those of JRHDT where the average population of the villages was nearly 1300. In JRHDT villages there was large variation in population size. Seven villages had less than thousand population and one had more than 3000. In CECOEDECON the 'Sahelis' had to cover the nearby small hamlets also, still population coverage in CECOEDECON villages was less than those of JRHDT villages. The less population coverage in the CECOEDECON villages was due to the fact that the guidelines for the MFWC by the Government of India clearly emphasize that in rural area population in each field unit of five villages should be 3000, i.e. each village having nearly a population of 600 while the VHGs' scheme expects a village health Guide to be covering a population of about 1000.

GSMI health workers covered the maximum area under adverse circumstances of unavailability of transportation and limitations imposed on the free movement of a woman due to relatively conservative attitudes prevailing in the study area, it is very difficulty for

'Swasthya Mahilas' to cover their entire area.

Paying for the Health Services

In JRHDT the VHGs were making membership cards in the village community on payment of Rs.10 per family once in a year. Because of this the families which were availing the services in the villageswere between 10 to 20 in most of the cases. The logic for charging flat rates for the services is theoretically alright that people should not take these services as charity, rather on payment they feel a sense of involvement and the health worker also becomes accountable to the community when the community is paying for their services. But rationale of paying flat rates for the health services poses problem of mobilizing the poor and the vulnerable strata in the village who have the greatest need for these services. The provision of rebate to the needy can be a better option.

Links between village health workers and ANM

Five ANMs were interviewed on the same interview schedule as used for village Health Workers, to understand the links between them and the village level health workers. The ANMs reported that the village health workers were cooperating mainly in immunisation. Family welfare is the area where the village health worker and the ANM are competing with each other. As both ANM and the health worker of the NGOs have their own targets for

sterilization but the number of couples in the village are constant. Therefore both are trying to motivate a women for sterilization. Since the village health worker is in close contact with the community and a part of the community itself, so she most of the times persuades a 'case' which otherwise could have gone to ANMs' credit. This brings tension in their functioning.

Since these village level health workers are getting their honorarium from their organisation, therefore they are not accountable to the subcentre or PHC. Though these workers help in the working of ANM but it is not a binding on them. Morever there are often no formal joint meetings of the subcentre or PHC staff with the village level health workers. These are the main problems which are coming in the way of team-work by grassroots NGO workers and ANM.

Links between village health worker, village leaders, school teacher and community at large

Village leaders often help when these health workers are in trouble. But village leaders did not show much interest in health workers functioning when they just started working, rather they sometimes opposed in the initial phase. Village health workers do not usually get any support from the school teacher.

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Village health workers have reported that they are getting good support and cooperation from the villagers, they were opposed in the initial phase of their work as a village health worker, mainly by their mother-in-laws, husbands and a few people from village community. The main resistance by family and other village people was because of their movement outside the family and confines of house. Sometimes they were labelled "bad women".

But slowly, the village community accepted them and even started calling them doctor ('Doctor Sahab!'), This recognition by the village community provided a positive reinforcement to these workers for performing the job.

Perceptions of the village health workers

The study also attempted to know the perception of these workers about the health problems of the area, their perception and knowledge about home remedies, their perception of the exorcists and the kind of disease pattern they are attending, and their perception of causes of rural poverty.

The diseases which these workers perceived as a threat included Fever, Cough, Pneumonia, Typhoid, Malaria, Tuberculosis and Scabies etc. One of the worker perceived that Tuberculosis as the main problem. When researcher tried to investigate reason for her

perception being different from the workers of nearby villages, it was known that her family has a history of tuberculosis. Her husband died of tuberculosis and her father-in-law was also suffering from it. This observation shows that life experiences largely determine the way one perceives the world.

The sexual and gynaecological problems were also perceived to be very common among married woman. The local names for these diseases were 'safede ka rog' or 'pardeh ka rog' (diseases such as painful and excessive manstrual discharge and other such diseases). The term 'pardeh ka rog', which means 'disease of seclusion' in women, reflects the attitude of an orthodox society towards womens' problem, where they are not free even to talk about their diseases.

According to the interviewed village health workers, the village people still practice home remedies and indigenous methods for treating the minor ailments. These workers had a good knowledge of home remedies and indigence treatments, but this knowledge remains unused by these organisations, except GSMI which trained its workers to give Ayurvedic treatment in the common ailments.

The exorcist is an important institution for mental health problems in the villages of Rajasthan. These workers reported mainly mental health problems in which people go to the exorcist(Bhopa). The another group of diseases for which an exorcist is consulted comprises medical problems in which either the allopathic treatment is not much effective (e.g.

pneumonia and other bronchial problems) or it is quite expensive in the allopathic treatment, therefore not easily accessible to the poor people. There is a need to understand rather than blaming people for going to the exorcists.

Various perceptions regarding the causes of poverty emerged from the responses given by the village health workers. A majority of the workers attributed the rural poverty to less of rains, no crop production and unemployment etc. The second pattern of perception that emerged was that poverty is due to lack of education. Those who attributed cause of poverty on population, were mainly those having more than primary education and most of them working for CECOEDECONs' Mini Family Welfare Centre (MFWC). Their educational background provided a different social training and in CECOEDECON, their work in the village is to educate people about family welfare. Therefore these workers learnt that poverty is mainly due to population growth. Other perceptions which were apparent in the responses were - males (husbands) responsible for the poverty in the family, leaders are responsible for poverty and will to earn and do work.

Job Satisfaction

When asked as to how much were they satisfied with the present job, seven out of thirty five replied they are 16 Anna satisfied (100 Percent), ten said that they are 12 Anna satisfied (75 Percent), another ten replied that they are 8 Anna satisfied (50 Percent) and eight replied

that they have 4 Anna satisfaction (25 Percent). To cross-check the faking in their responses, the next question asked was that will you leave the present job if given more honorarium or salary and more facilities by another organisation.

The findings of the present study show that the CHWs in the non - governmental organisations are also performing the similar, but not the same, job as done by CHWs in nationwide government CHW scheme. But there are differences in their personal profile. The government CHWs were reported to be from well off and landowning sections of the community (Bose and Desai, 1983, Qadeer, 1985). The findings of the present study show that only about 11 Percent village health workers were from landless section, but in terms of irrigated land 71 Percent CHWs in the three NGOs showed that they do not have any access to irrigation.

Another major difference found was that while CHWs scheme launched by government was a male dominated one the NGOs do impart training to females, this may be due to recent emphasis on MCH and family welfare. The involvement of women in the health and welfare task and their changing perceptions is not only bringing change in the personalities of these women but they are also becoming agents of social change within the village community.

But there are certain limitations, of the NGO approach to health care. Since these organisations claim to be dominated by motivation based on democracy and altruism rather

than self-interest. Therefore, in absence of proper incentives the CHWs' in NGOs may lack motivation. Another problem is that of accountability which arises mostly out of the villagers' perception of these services as charity. This was evident from the focal group interviews in certain villages.

The present work mainly intends to study the profile of the village health workers and their perceptions of certain aspects such as their functions, the diseases prevalent in the villages, their role and peoples' health behaviour in different diseases, links with the community and poverty.

The findings show the necessity for further investigation of certain aspects of the rural health care through involvement of the NGOs. How far are the CHWs in the NGOs catering to the needs of the target population? How accountable are these workers to the community? Should there be payment by the villagers for health care in order to make the CHWs more accountable? If yes, what should be the mode of payment? Are the CHWs in the NGOs catering to the needs of the needy, i.e. are they maintaining equity in giving services? What is the quality of their care?

There are certain other macro level questions. How do the NGOs select a particular area for their work? Does there exist a regional balance in NGOs? The review of the literature on health situation in Rajasthan has shown that there is relatively more concentration of NGOs

in rural health care in certain districts. Districts like Udaipur, Jaipur and Jodhpur are found to be at the top in terms of NGO strength, while districts like Bundi, Jaisalmer and Sikar have extremely low strength of NGOs.

Another important finding of the present study is that there was not much formal interaction between CHWs and PHC or subcentre. It has important policy implications. There was little co-operation among CHWs, school teachers, Ananwadi workers and formal and informal leaders in the villages. Mostly they co-exist in the village situation without much co-operation or formal links. The dream of the health services at the doorsteps of the people will not be achieved unless the different agencies at the grassroots work hand in hand in form of a team.

Another aspect which needs further investigation is how can the knowledge of these workers as well as that of community at large about home remedies and folk methods of healing, can be integrated into the work profile of these workers. This is an important resource which is still neglected.

The mental health which is an integral part of the health is still neglected. The findings of the present study show that CHWs in these NGOs were not trained to address to the mental health problems of the villagers, therefore villagers are mostly resorting to the exorcists for this purpose. The National Mental Health Policy (NMHP) of the Government of India was

started in 1982. Although mental health was included in the role description of the CHWs in government sector but they hardly addressed themselves to this aspect. In the NGOs studied, there was no effort to include this important component into their role - description. There are on an average only two to three professionals for one million population (Chandra Shekhar, 1994). Most of them are located in cities and less than 10 Percent of mentally ill are getting care through them. Hence there is a need for integrating mental health in Primary Health Care.

The present study has looked at some aspects of CHWs in NGOs working for rural health care. But there are many aspects which need to be studied in order to understand how the essential health care could be made available and accessible to the rural masses, especially the poor who need them most, through their participation and at a cost that they can afford.

BIBLIOGRAPHY

Agarwal A. Barefoot doctors: Symptom not cure. Nature 280; 716-718, 1979.

Anand N M. Setback to Rajasthan Tourism, The Hindu Busienss Line, New Delhi, October 28, 1994.

Antia N.H. Primary Health Care and the role of the community. Lecture delivered at the conference on Allocation of Health Care Resources in India and the United States, columbia University, New York, April 14-17, 1986.

Bang A and Patel AJ. Health Care: Which way to go. Medico Friend Circle. Pune, India 1982.

Banerji D. Health Behaviour of Rural populations: Impact of Rural Health Services - A preliminary communication, p.18, CSMCH, JNU, New Delhi, 1974.

Banerji D. Health and Family Planning Services in India: An Epidemiological, Socio-cultural and Political Analysis and Perspective, p.13-18, Lok Paksh, New Delhi, 1985.

Bender D and Pitkin K. Bridging the gap: the village health worker as the cornerstone of the primary health care model. Soc. Sci. Med, 24:6; 515-528, 1987.

Berman P, Gwatking D, Burger S. Community-based health workers: head start or false start towards health for all ? Soc. sci. Med, 25:5, 443-459, 1987.

Berman P. Village health workers in Java, Indonesia: Coverage and equity. Social Science and Medicine 19 4; 411-422, 1984.

Bhatnagar S, Vijayaraghavan K and Swami S. A collaborative Study of Health Guide Scheme - The Third Evaluation, NIHFW, New Delhi, 1984.

Bose A. Demographic Zones in India, B.R. Publishing Corporation, 1994.

Bose A and Desai P B. Studies in Social Dynamics of Primary Health Care, Studies in Economic Development and Planning No. 29, (General Editor P C Joshi).

Brearley Paul et al. The Social Context of Health Care. Basil

Blackwell & Mott Ltd. and Martin Robertson & Co. Ltd., Oxford, P.86, 1978.

Brekelbaum T. The use of Para-professionals in rural development. Community Development Journal 19 4; 232-245 1984.

Carstairs GM. Death of a Witch: A Village in North India 1950-1981, 1983.

Cassen RH. India: Population, Economy and Society. London, McMillan, 1978.

Chabot J and Waddington C. Primary health care is not cheap: a case study from Guinea Bissau. International Journal of Health Services. 17 3: 387-409, 1987.

Cham K, MacCormack C, Touray A and Baldeh S. Social organization and political factionalism: PHC in the Gambia. Health Policy and Planning 2 3; 214-226, 1987.

Chandra R, Saxena S, Bagga S, Srivastava U and Srivastava B. Utilization of Services of Community health worker by the rural population. Indian Journal of Medical Research. 71:6; 975-984, 1980.

Chandrashekhar CR Integration of Mental Health in Primary Health Care. Health For The Millions (Mental Health I) Health For The Millions Trust, 20 4, 5-6, July-August, 1994.

Chatterji M Community participation in Health Care in Chatterji(Editor), Implementing Health Policy, Manohar, New Delhi, 1987.

Chaturvedi TN. (Editor) The Indian Journal of Public Administration. Quarterly Journal of the Indian Institute of Public Administration. Special Number on-Voluntary Organizations and Development: Their Role and Functions. Vol. XXXIII Number 3, July-September 1987.

Chauls DS. Volunteers who work: The community health care project in Burma.

International Quarterly of Community Health Education 3 3; 249-266, 1982-83.

Claquin P. Private health care providers in rural Bangladesh. Social Science and Medicine 15B; 153-157, 1981.

Dyal Chand A and Soni MI. The Pachod Health Programme; in Fernandez and Tandon Participatory Research and Evaluation: experiments in research as a process of liberation.

Indian Social Institute, New Delhi, 1987.

Economic and Political Weekly, Pulbic Health: Missing Links, November 5 - 12, 1994.

Faruque R. Health, nutrition and family planning in India: a survey of experiments and special projects. Staff Working Paper, 507; World Bank, Washington, 1982.

Feldman S. The use of private health care providers in rural Bangladesh: a response to Claquin. Social Science and Medicine 17 23; 1887-1896, 1983.

Foster, G M. Community Developmentand Primary Health Care: Their conceptual similarities. Medical Anthropology, 6 3;183-195,1982.

Frankel S. Peripheral health workers are central to PHC: lessons from Papua New Guinea's Aid Posts. Social Science and Medicine 19 3; 279-290, 1984.

Good W. Community Within a Community: The professions American Sociological Review, 22, 194, 1957.

Good W. Encroachment, Charlatism and the emerging professions: Psychology, Sociology and Medicine, American Sociological Review, 25, 902, 1960.

Government of India, Health Survey and Development Committee (Bhore Committee), Report, Vol.IV, Manager of Publications, Delhi, 1946a.

Government of India, Health Survey and Development Committee (Bhore Committee),
Report, Vol.I, Manager of Publication, Delhi, 1946b.

Government of India, Health Survey and Development Committee (Bhore Committee), Report, Vol.II, Manager of Publication, Delhi, 1946c.

Government of India, committee on Staffing Pattern and Financial Provision under Family Planning (Mukherji Committee), Report Ministry of Health and Family Planning, New Delhi, 1966.

Government of India, Group on Medical Education and Support Manpower (Srivastava Committee): Health Services and Medical Education: A programme for Immediate Action, Ministry of Health and Family Planning, New Delhi, 1975.

Government of India, Manual for Community Health Worker, Ministry of Health and Family Welfare, New Delhi, 1977.

Government of India, Annual Report 1977-78, Ministry of Health and Family Welfare, 1978.

Government of India, Annual Report 1978-79, Ministry of Health and Family Welfare,

1979.

Government of India, Annual Report 1979-80, Ministry of Health and Family Welfare, 1980.

Government of India, Statement on Nation Health Policy, Ministry of Health and Family Welfare, New Delhi, 1982.

Government of India, Seventh Five Year Plan, 1985-90, Vol.2, Planning Commission, New Delhi.

Government of Rajasthan. Annual Report 1992-93, Directorate of Medical and Health.

Government of Rajasthan. Rajasthan at a glance,1991, Directorate of Economics and Statistics, Jaipur, 1992.

Griffiths J and Lirhunde CB. Partnership between people and professionals in selecting community health workers. Community development Journal 18 2; 139-145, 1983.

Gupta SC, Dabral SB, Maheshwari BB, Shrotriya V, Mehrotra DK and Singh G Medical care activities of village health guides. An assessment. Indian Journal of Public Health 28 3; 128-131, 1984.

Illich, I. Limits to Medicine, Rupa and Co. Bombay, 1977.

Indian Council of Medical Research and Indian Council of Social Science Research.

Alternative Approach to Health Care: Report of a symposium, ICMR, New Delhi, October 27-30, 1976.

Indian Council of Social Science Research and Indian Council of Medical Research. Health for All: An Alternative Strategy - Report of a Study Group Set up Jointly by ICSSR and ICMR, Indian Institute of Education, Pune, 1981.

Institute of Development Studies, Situational Analysis of women and children in Rajasthan, Jaipur, 3-5, 1990.

Indian Institute of Health Management Research. The Young Child in Rajasthan, 1989.

Jancloes M. Could villages do better without their volunteer health workers? World Health Forum 5:4; 296-300, 1984.

Jansatta (Hindi Daily) Report: Bundi Ke Gaon Malaria Ki Chapet mein, New Delhi Edition, October 14, 1994.

Jayarao KS and Patel AJ. Under the lens. Medico Friend Circle and Voluntary Health Association of India, New Delhi, 1986.

Jesani A, Gupte M, Duggal R. NGOs in Rural Health Care, Volume One: An Overview.

The Foundation For Research in Community Health, Bombay, March. 1986.

Jobert B. Populism and health policy: the case of community health volunteers in India.

Social Science and Medicine 20 1; 1-28. 1985.

Koplan JP, Hinman AR, Parker RL, Xou-Long G and Ming-Ding Y. The Barefoot Doctor: Shanghai country revisited. American

Journal of Public Health 75 7; 768-770, 1985.

Kumar S, Deodhar N S, Murthy Nirmala et.al. An Evaluation of Community Health Workers Scheme - A Collaborative study, NIHFW, 1978.

Kumar S, Deodhar N S, and Maru R. repeat Evaluation of Community Health Workers

Scheme - A collaborative Study, NIHFW, New Delhi, 1979.

Lalitha N V. Voluntary work in India: A study of Volunteers in Welfare Agencies, NIPCCD, 1975.

Leslie C. What caused India's massive community health worker scheme: a sociology of knowledge, social Science and Medicine 21 8; 923-930, 1985.

Madan TN Community involvement in health policy: socio-structural and dynamic aspects of health beliefs. Social Sciences and Medicines 25:6; 615-620, 1987.

Madhya Pradesh Chronicle. (English daily) Report: Diseases kill 800 Children in Rajasthan, Bhopal Edition, March 26, 1994.

Marquez LR, Brownlee A, Molzan J, and Seims LR. Community health workers: a comparative analysis of Pricor-funded Studies. PRICOR, Maryland. 1987.

Maru RM. The community health volunteer scheme in India - an Evaluation. Social Sciences and Medicine 17 19; 1477 - 1483, 1983.

Miles M. Commentary on Jobert. Social Sciences and Medicine 20:1; 27, 1987.

National Planning Committee, Sub-Committee on National Health (Sokhey Committee), Report, Vora, Bombay, 1948.

Navbharat Times, (Hindi Daily), Report: Sarkar Ne Rajya Mein Malaria Par Kabu Ka Dava Kiya. Jaipur Edition, October 24, 1994.

Newell K. Selective primary health care: the counter revolution. Social Sciences and Medicine 26:9; 903-906, 1988.

Nichter M. The primary health centre as a social system: PHC, social status and the issue of team-work in South Asia. Social Science and Medicine 23 4; 347-355, 1986.

Office of the Registrar General, India (Vital Statistics Division). Sample Registration System (SRS), Annual Report, 1989, Ministry of Home Affairs, 1992.

Office of the Registrar General, India (Vital Statistics Divison). Sample Registration System (SRS), Annual Report 1992, Ministry of Home Affairs, 1995.

Office of the Registrar General, India. Survey of Causes of Death (Rural) Series 3, No.21, Annual Report 1988, Ministry of Home Affairs, New Delhi, March 1990.

Office of the Registrar General, India. Survey of Causes of Death (Rural) Series 3, No.22, Annual Report 1989, Ministry of Home Affairs, New Delhi, December, 1990.

Office of the Registrar General, India. Survey of Causes of Death (Rural), Series 3, No.23, Annual report, 1990, Ministry of Home Affairs, New Delhi, January, 1991.

Office of the Registrar General, India (Vital Statistics Division). Sample Registration System (SRS), Annual Report 1988, Ministry of Home Affairs, 1991.

Ofosu-Amaah V. National Experience in the use of community health workers: A review of current issues and problems. Offset Publication 71, World Health Organization, Geneva, 1983.

Pachauri Saroj (Editor) Reaching India's Poor: Non-Governmental Approaches to Community Health, Sage Publications, New Delhi, 1994.

Pyle D. From projects to programme: The scaling up / implementation process of community level, integrated health, nutrition population intervention in Maharashtra, Ph.D. thesis, Dept. of Political Science, MIT, 1981.

Qadeer I. Social dynamics of health care: the community health workers scheme in Shahdol district. Socialist Health Review. September, 74 - 83, 1985.

Rajastha patrika (Hindi Daily) Report: Jodhpur Jile Mein malaria Survey ke Dauran Do Hazar Rogi Paye, Jaipur Edition, October 9, 1994.

Rajasthan Patrika, Report: Malaria upchar keliye Gram star par Swasthya Samitiyan Gathit Hongi, Jaipur Edition October 10, 1994.

Rajasthan Patrika, Report: Bikaner Prashashan Ne Malaria Se 58 Jano ka Marana Sweekara, jaipur Edition, October 17, 1994.

Rajasthan patrika, Report: Jodhpur Sambhag Mein 5 Lakh Se Adhik Malaria Rogi, Jaipur Edition, October 18, 1994.

Rajasthan Patrika, Report: Malaria Ki Sthiti Par Uchcha Stariya Samiksha, jaipur Edition, October 29, 1994.

Rajasthan Voluntary Health Association. Identification of Most Backward Districts in Rajasthan, 1994.

Rajasthan Voluntary Health Association, Proceedings of a Meeting of Voluntary Organizations of Western Rajasthan to review Malaria situation held in Jodhpur, October 18, 1994.

Ramalingaswami V. Health Dimensions of Developmental Activities, the Second Vikram Sarabhai Memorial Lecture under auspices of ICSSR, New Delhi, Septemper 12, 1980.

Ramprasad V Community Health Worker: Critique of an experience. Report of the study on the Community Health Programmes funded by Oxfam (India) Trust, Bangalore, 1985.

Rashtriya Sahara, (Hindi Daily) Report: Ajmer Sambhag Mein 14 Hazar se Adhik Malaria se Peedit Mile. Delhi Edition, October 14, 1994 (a).

Rashtriya Sahara, Report: Sikar Jile Mein panch | Hazar Log Bukhar se Peedit. Delhi Edition, October 14, 1994 (b).

Rashtriya Sahara, Report: Mukhya Chikitsa Adhikari ke Virudhha Janch, Delhi Edition, October 29, 1994.

Registrar General, India, Sample Registration Buleeting, Volume XXII, No.1, Ministry of Home Affairs, New Delhi, June 1992.

Rosenthal MM and Greiner JR. The barefoot doctors of China: from political creation to professionalization. Human Organization 41 4; 330-341, 1982.

Rueschemeyer D. Doctors and lawyers: A comment on the theory of professions. In 'Medical Men and their work' (Edited by Freidson E. and Larber J.) P.5 Aldine Press, Chicago, 1972.

Sahu, SK. Health Culture of Oraons of Rourakela and its hinterland Ph.D. Thesis, CSMCH, Jawaharlal Neharu University, New Delhi, 1980.

Sethi Lokpal. The Hindustan Times, Report: Shattered Myth, Suffering people, Patna Edition, October 30, 1994.

Singh K.K., Social Profile of Children in the Arid Zone of Rajasthan, NIPCCD, New Delhi, 1983.

Skeet M. Community Health workers: promoters or inhibitors of primary health care?

World Health Forum 5 4; 291-295, 1984.

Stark R. Lay workers in primary health care: victims in the process of social transformation.

Social Science and Medicine 20 3; 269-275, 1985.

Taylor C. Reorientation of Health Personnel to meet the peoples needs. In 'Assignment Children' Vol. 42 p.67, UNICEF, April, 1978.

Taylor C. Health Systems Research: How can it be used? World Health Forum, 4, 328, 1984.

The Hindustan Times. Report: Malaria panic grips Rajasthan Villages. New Delhi late City Edition, November 3, 1994.

The Statesman. (English Daily). Report: Rajasthan Children Victims of Malnutrition and Diseases, Calcutta Edition, June 8, 1994.

The Times of India. Report: Malaria affects entire family, New Delhi Edition, October 14, 1994.

The Times of India. Report: 11 Malaria deaths in a day in Barmer village, New Delhi Edition, October 26, 1994.

Usha Nayar. Hamari Betiyan, Rajasthan, Situational Analysis of the Girl Child, NCERT, 1989.

Wadia AB. The Role of Voluntary Organizations in Family Planning and Population Policy:

Some Practical Guidelines. Family Planning Association of India, 1985.

Werner D. The village health worker: lackey or liberator. World Health Forum 2 1; 46-48, 1981.

Wig N N, Murthy R S. From Mental Illness to Mental Health. Health For The Millions (Mental Health I) Health For The Millions Trust. 20:4, 2-4, July - August, 1994.

World Health Organization. The primary health worker 1977. Geneva: Reprinted in a new edition in as The community health worker 1987.

World Health Organization. Primary Health care. Health For All Series, 1.Geneva: 1978.