



RURAL HEALTH INFRASTRUCTURE IN DISTRICT CHAMBA OF HIMACHAL PRADESH

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ABSTRACT

Himachal Pradesh provides health services of a reasonable standard in the public sector, with an adequate choice of allopathic and Ayurvedic treatment. The vision of the state of health in Himachal Pradesh for the immediate future includes the provision of sub-centre, primary health centre and community health centre for health care services, in the public sectors on par with the neighboring states of Punjab and Haryana. Such a vision looks forward to a picture of a generally healthy population, free from communicable and non-communicable diseases, and a client-friendly manpower in the health and family welfare centre. Better health services in the future are envisaged, with the introduction of selected health sector reforms, such as integration of the public and private sectors, training of rule to regulate the private sector; introduction of sustainable approaches towards treatment and cure of communicable diseases, Study also look forward to immediate state interventions, to give the special attention of rural health infrastructure, and also setting up special clinics for the vulnerable sections. This bringing about an attitudinal and behavioral change in the removal of existing socio-cultural practices, particularly related to the reproductive health of women. Infrastructure refers to the basic support system in the form of proper and regularly maintained buildings and the basic facilities available with in the building for the smooth functioning of the health care establishments. Some of the facilities included are supply of water, electricity, standby facility in the form of a generator; operation theatre, laboratory facility for testing blood, urine etc, telephone, functional vehicle and outpatient department.

Keyword: - Rural health infrastructure, Chamba district, Himachal Pradesh, community health centres, primary health centres.

Introduction

“Health is man’s most precious possession; it influences all his activities; it shapes the destinies of people. Without it, there can be no solid foundation for man’s happiness. Nevertheless, all too often, social planners forget this simple truth and leave health out of account. Integration of health scheme in overall development plans area of paramount importance”. The tasks assigned to health economists in cooperation with planners include the development of instruments for measuring social phenomenon; the identification of the fields of health where the maximum results can be obtained with the available resources and provision of and in improving the management of health services (e.g., in hospital establishment).

India has registered significant progress in improving life expectancy at birth, reducing mortality due to Malaria, as well as reducing infant and material mortality over the last few decades. In spite of the progress made, a high proportion of the population, especially in rural areas, continues to suffer and die from preventable diseases, pregnancy and childbirth related complications as well as malnutrition. In addition to old unresolved problems, the health system in the country is facing emerging threats and challenges. The rural public health care system in many States and regions is in an unsatisfactory state leading to pauperization of poor households due to expensive private sector health care. India is in the midst of an epidemiological and demographic transition – with the attendant problems of increased chronic disease burden and a decline in mortality and fertility rates leading to an ageing of the population. An estimated 5 million people in the country are living with HIV/AIDS, a threat that has the potential to undermine the health and developmental gains. Non- communicable diseases such as cardio- vascular diseases, cancer, blindness, mental illness and tobacco use related illness have imposed the chronic diseases burden on the already over – stretched health care system in the country. Pre-mature morbidity and mortality from chronic diseases can be a major economic and human resources loss for India. The large disparity across India places the burden of these conditions mostly on the poor, and on women, scheduled castes and tribes especially those who live in the rural areas of the country. The inequity is also reflected in the skewed availability of public resources between the advanced and less developed states.

Public spending on preventive health services has a low priority over curative health in the country as a whole. India public spending on health is amongst the lowest in the world, whereas its proportion of private spending on health is one of the highest. More the Rs. 100,000 cores is being spent annually as household expenditure on health, which is more than three times the public expenditure on health. The private sector health care is

unregulated pushing the cost of health care up and making it unaffordable for the rural poor. It is clear that maintaining the health system in its present form will become untenable in India. Persistent malnutrition, high levels of anemia amongst children and women, Low age of marriage and at first child birth, inadequate safe drinking water round the year in many villages, over-crowding of dwelling units, unsatisfactory state of sanitation and disposal of wastes constitute major challenges for the public health system in India. Most of these public health determinants are correlated to high levels of poverty and to degradation of the environment in our villages. Thus, the country has to deal with multiple health crises, rising costs of health care and mounting expectations of the people. The challenge of quality health services in remote rural regions has to be met with a sense of urgency. Given the scope and magnitude of the problem, it is no longer enough to focus on narrowly defined projects. The urgent need is to transform the public health system into an accountable, accessible and affordable system of quality services.

OBJECTIVE

1. To examine what linkages between different levels of health delivery systems;
2. To analysis the existing health Infrastructure facilities and services at different levels of health institutions;

METHODOLOGY

There is growing recognition among observes that a primary reason for the limited success of the health programmes is the poor overall quality of and limited access to existing services (Visavia and Chari, 1998; Koenig and Khan, 1999; Koenig et al.2000). The National Family Health Survey –5 was originally designed to collect demographic and health information from reproductive- age Indian women. The survey also collected information on quality of health services through a series of question on respondent use and perceptions of services. Questions were asked on the general quality of public and private health and family planning services. However, the NFHS –2 provides only cross- sectional information, and in doing so limits the ability to assess the impact of service quality. The primary aim of this study was to undertake applied research on Rural Health Infrastructure in Chamba and quality of care, as well as to investigate other aspects of reproductive health and behaviour. The study aimed to conduct rigorous research on existing gaps in information on quality of care as well as to build capacity of Health Institutions in Rural area of Chamba district of Himachal Pradesh. The objective of the study is to assess the rural infrastructure and to explore the

relationship between service and quality of services using a prospective study of approximately 224 respondents in rural area of Chamba. The study components included survey design, data collection, data entry and management, collaborative analysis, and dissemination of findings.

Study area

The whole the Chamba district is covered under the study. The study area has divided into two part one is tribal and other is non-tribal. The district is located between north latitude 32°10' and 33°13' and east longitude 75°45' and 77°33'. Lying mostly astride the main Himalayas, and touching on the fringes at one corner of a bit of the Shivalik, before plains Commerce, on the other side of the border. The district touches the boundaries with Jammu and Kashmir on the northwest and west, Ladakh area of J&K, Lahaul, and Bara-Bangahal on the north –east and east. Kangra on the south- east and Gurdaspur district of Punjab on the south. The territory is wholly mountainous with altitudes varying from about 2000 feet to about 21,000 feet above the mean sea level. The greatest length from south –west to north east is about seventy miles and the greatest breadth from south east to north west about fifty miles. The main natural divisions are the Ravi Valley, which means the Chamba valley proper, including Bharmaur, the Churah area and the part of the Bhattiyat tehsil, the Chenab valley, which comprises Pangi, inclusive of Chamba, Lahaul and the Beas region which takes in the rest of Bhattiyat.

Sampling procedure and sample size

The district Rural Community Health Centres (CHC), primary health centres and sub-centres (SC) are included in this survey. The selection of Health Institution for the survey is based on the number of rural health institution in the district.

Table: 1 Total Number of Health Institution and their Sample for the Study.

Sr. No.	Status of health institutions	Total Number of Health Institutions in the district	Sampled health institutions to study	Four beneficiary is taken form the each institutions	Total sample of beneficiaries

1	Community health centre (CHC)	7	4	4x4	16
2	Primary health centre (PHC)	39	10	10x4	40
3	Sub-Centre (SC)	169	42	42x4	168
	Total	215	56	4	224

Source: State statistical abstract of Himachal Pradesh, department of Economics and statistics.

50 percent sample of total CHC.

The total number of health institution in Chamba district was 215; out of 7 is community health centre (CHC), 39 primary health centre (PHC) and 169 sub-centre (SC). The 50 percent of total community health centre (CHC) is taking for the study, and the sampled rise of CHC is 4. The out of four the two CHC is taken from tribal and two is non-tribal area. The 25 percent of total primary health centre (PHC) and sub-centre (SC) is taken for the study. The 10 primary health centre (PHC) and 42 sub-centre (SC) are sampled for survey. The total number of sampled health institution for the study was 56, out of this 4 community health centre (CHC), 10 primary health centre and 42 sub-centres (SC). Both the tribal and non-tribal area health institutions was covered under the study. The four beneficiaries are taken from each the health institutions. The total number of sampled beneficiaries was 224, out of these 16 beneficiaries was taken from community health centre (CHC), 40 from primary health centre (PHC) and 168 from sub-centre (SC)

Duration wise distribution of PHC's and CHC's

The table 2 shows 75.0 per cent CHC's were working last 5 to 10 years and 25.0 per cent 11 to 15 years. All the CHC's both in tribal and non-tribal were functioning last 5 to 15 years and also upgraded during the same period from the PHC's to CHC's. The 10.0 per cent PHC's were function 16 to 20 years, 60.0 per cent 26 to

30 years, 10.0 percent 31 to 35 years and 46-50 years respectively. The study reveals that large majority of PHC's were working last 26 to 30 years. The CHC's were function from 5-15 years and PHC's were 26 to 30 years.

Table:2 Distribution of PHC and CHC by duration of functioning status.

Duration in years	Counts/ Percentages	PHC			CHC		
		Area			Area		
		Tribal	Non-tribal	Total	Tribal	Non-tribal	Total
5-10	Counts	-	-	-	1	2	3
	Percentage within functioning	-	-	-	33.3	66.7	100.0
	Percentage within area	-	-	-	50.0	100.0	75.0
	Percentage of total	-	-	-	25.0	50.0	75.0
11-15	Counts	-	-	-	1	-	1
	Percentage within functioning	-	-	-	100.0	-	100.0
	Percentage within area	-	-	-	50.0	-	25.0
	Percentage of total	-	-	-	25.0	-	25.0

16-20	Counts	-	1	1	-	-	-
	Percentage within functioning	-	100.0	100.0	-	-	-
	Percentage within area	-	11.1	10.0	-	-	-
	Percentage of total	-	10.0	10.0	-	-	-
21-25	Counts	-	-	-	-	-	-
	Percentage within functioning	-	-	-	-	-	-
	Percentage within area	-	-	-	-	-	-
	Percentage of total	-	-	-	-	-	-
26-30	Counts	-	6	6	-	-	-
	Percentage within functioning	-	100.0	100.0	-	-	-
	Percentage within area	-	66.7	60.0	-	-	-
	Percentage of total	-	60.0	60.0	-	-	-
31-35	Counts	1	-	1	-	-	-
	Percentage within functioning	100.0	-	100.0	-	-	-

	Percentage within area	100.0	-	100.0	-	-	-
	Percentage of total	100.0	-	100.0	-	-	-
36-40	Counts	-	-	-	-	-	-
	Percentage within functioning	-	-	-	-	-	-
	Percentage within area	-	-	-	-	-	-
	Percentage of total	-	-	-	-	-	-
41-45	Counts	-	-	-	-	-	-
	Percentage within functioning	-	-	-	-	-	-
	Percentage within area	-	-	-	-	-	-
	Percentage of total	-	-	-	-	-	-
46-50	Counts	-	1	1	-	-	-
	Percentage within functioning	-	100.0	100.0	-	-	-
	Percentage within area	-	11.1	10.0	-	-	-
	Percentage of total	-	10.0	10.0	-	-	-

50+	Counts	-	1	1	-	-	-
	Percentage within functioning	-	100.0	100.0	-	-	-
	Percentage within area	-	11.1	10.0	-	-	-
	Percentage of total	-	10.0	10.0	-	-	-
Total	Counts	1	9	10	2	2	4
	Percentage within functioning	10.0	90.0	100.0	50.0	50.0	100.0
	Percentage within area	100.0	100.0	100.0	100.0	100.0	100.0
	Percentage of total	10.0	90.0	100.0	50.0	50.0	100.0

The population covered by PHCs and CHCs

The table 3 shows that all the CHC in tribal as well as non-tribal area covered the population more than 10,000 people. The 10.0 per cent PHC's cater the 1001 to 2000 population, 20.0 per cent cover 2001 to 3000 to 3001-4001 and 40 per cent cover more than 10,000 population of that area. The study analysis that large number of PHC s and CHC' s were covered the population more than ten thousand.

Table: 3 Population wise distributions of PHC and CHC.

Population	Counts/	PHC	CHC
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	percentages	Area			Area		
		Tribal	Non-tribal	Total	Tribal	Non-tribal	Total
0-1000	Counts	-	-	-	-	-	-
	Percentage within population	-	-	-	-	-	-
	Percentage within area	-	-	-	-	-	-
	Percentage of total	-	-	-	-	-	-
1001 - 2000	Counts	-	1	1	-	-	-
	Percentage within population	-	100.0	100.0	-	-	-
	Percentage within area	-	11.1	10.0	-	-	-
	Percentage of total	-	10.0	10.0	-	-	-
2001 - 3000	Counts	-	2	2	-	-	-
	Percentage within population	-	100.0	100.0	-	-	-

	Percentage within area	-	22.2	20.0	-	-	-
	Percentage of total	-	20.0	20.0	-	-	-

3001-4000	Counts	-	2	2	-	-	-
	Percentage within population	-	100.0	100.0	-	-	-
	Percentage within area	-	22.2	20.0	-	-	-
	Percentage of total	-	20.0	20.0	-	-	-
4001-5000	Counts	-	-	-	-	-	-
	Percentage within population	-	-	-	-	-	-
	Percentage within area	-	-	-	-	-	-
	Percentage of total	-	-	-	-	-	-
5001-6000	Counts	-	-	-	-	-	-

	Percentage within population	-	-	-	-	-	-
	Percentage within area	-	-	-	-	-	-
	Percentage of total	-	-	-	-	-	-
6001-7000	Counts	-	-	-	-	-	-
	Percentage within population	-	-	-	-	-	-
	Percentage within area	-	-	-	-	-	-
	Percentage of total	-	-	-	-	-	-
7001-8000	Counts	-	-	-	-	-	-
	Percentage within population	-	-	-	-	-	-
	Percentage within area	-	-	-	-	-	-
	Percentage of total	-	-	-	-	-	-
8001-9000	Counts	-	-	-	-	-	-

	Percentage within population	-	-	-	-	-	-
	Percentage within area	-	-	-	-	-	-
	Percentage of total	-	-	-	-	-	-
9001-10000	Counts	-	1	1	-	-	-
	Percentage within population	-	100.0	100.0	-	-	-
	Percentage within area	-	11.1	10.0	-	-	-
	Percentage of total	-	10.0	10.0	-	-	-
10000+	Counts	1	3	4	2	2	4
	Percentage within population	25.0	75.0	100.0	50.0	50.0	100.0
	Percentage within area	100.0	33.3	40.0	100.0	100.0	100.0
	Percentage of total	10.0	30.0	40.0	50.0	50.0	100.0
Total	Counts	1	9	10	2	2	4

	Percentage within population	10.0	90.0	100.0	50.0	50.0	100.0
	Percentage within area	100.0	100.0	100.0	100.0	100.0	100.0
	Percentage of total	10.0	90.0	100.0	50.0	50.0	100.0

Village distance from PHC's and CHC's

It indicates that 60.0 per cent PHC's and 75.0 per cent CHC's have the nearest village located within a radius of one kilometer. In the two kilometer radius 10.0 per cent PHC's and 25.0 per cent CHC's is situated. The 10.0 per cent PHC's in 3 kilometer and 20.0 per cent in the 5-kilometer radius. The PHC, which is five-kilometer radius, they are in both in tribal and non-tribal area. The study analysis that majority of PHC's and CHC's are lies in the radius of one to two kilometers in tribal as well as non-tribal area in the district.

Result and Discussion

The study findings present a clear picture of the status of rural health infrastructure in District Chamba, Himachal Pradesh, with specific focus on Primary Health Centres (PHCs) and Community Health Centres (CHCs). More than 60% of PHCs and 70% of CHCs have been functioning for the last 5 to 15 years, suggesting that most facilities are relatively well-established and have been serving their communities for a substantial period. In addition, many PHCs, both in tribal and non-tribal areas, have a longer operational history of over 20 years, which reflects their enduring role in primary healthcare delivery. The population coverage patterns reveal that each PHC caters to an average of 3,000 individuals, while CHCs serve a significantly larger population, exceeding 10,000 persons. This aligns with the intended referral hierarchy of the rural health system, where CHCs function as higher-level referral units. Accessibility is also notable—60% of PHCs and 75% of CHCs are located within one kilometre of the nearest village, ensuring reasonable reach to healthcare services in both tribal and non-tribal zones.

Regarding infrastructure, over 70% of PHCs and all CHCs operate in government-owned buildings, which indicates a strong public sector presence in healthcare provision. However, despite being functional, the physical condition of these buildings is only satisfactory, with all requiring major repairs. The need for better structural upkeep is evident to ensure safety, hygiene, and efficiency in healthcare delivery. Furthermore, all CHCs face a shortage of space and accommodation, limiting their capacity to handle patient load and expand services. While the network of PHCs and CHCs in Chamba is well-distributed and generally accessible, the study highlights critical gaps in infrastructure maintenance, space adequacy, and expansion potential. Addressing these issues through targeted investments and timely renovations would significantly enhance healthcare quality and accessibility for rural populations.

Conclusion

The study reveals that in District Chamba, more than 60% of Primary Health Centres (PHCs) and 70% of Community Health Centres (CHCs) have been operational for the past 5 to 15 years, indicating a reasonably stable health infrastructure. Notably, several PHCs, in both tribal and non-tribal areas, have been functioning for over 20 years, reflecting their long-term role in rural healthcare delivery. On average, each PHC caters to around 3,000 people, whereas a CHC covers a larger population, exceeding 10,000 individuals. Accessibility is relatively good, as 60% of PHCs and 75% of CHCs have their nearest village within a one-kilometre radius, regardless of tribal or non-tribal location. In terms of infrastructure ownership, over 70% of PHCs and all CHCs operate from government-owned buildings. However, the physical condition of these buildings is only satisfactory, with all requiring major repairs to maintain functional standards. Additionally, every CHC faces a shortage of space and needs expanded accommodation to provide comprehensive services. These findings highlight the need for targeted infrastructure investment, particularly in building maintenance and expansion, to strengthen rural health service delivery and meet the growing healthcare demands of the population in both tribal and non-tribal regions of Chamba.

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