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# High Dependency on Quacks – Is There a Gap in the Public Health Care Delivery System? Reflections from a District Located in the Thar Desert (India)

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## Abstract

This paper tries to analyse the availability and role of public health care services provided by the public sector in India. In addition, it also explores the reasons behind the high dependency on quacks in the study area. Data was acquired through in-depth interviews of 610 respondents with the help of a structured questionnaire from September to December 2010. Here, an attempt has been made to probe the pattern of utilization of health care services available at public health facilities by the sample respondents. It has been assessed in relation to socio-economic and demographic characteristics of the interviewees which exert significant influence on the utilization of health care facilities. The study finds that the number of CHCs/PHCs/Sub-centres in the study area is not adequate to meet the health needs (medical advice or treatment) of entire the population. The results recommend improving the availability and accessibility of health care facilities in the area under study.

## Author's Note

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**Keywords:** public health care system, quacks, primary health centre, accredited social health activists.

## 1. Introduction

Health remains the topmost priority in every individual's life. Its importance is evident in the old saying “**health is wealth.**” Health is not only essential for an individual's well-being; it is also necessary for all productive activities in a society (Goel, 2002). Hence, it is an issue of common concern. In fact, all communities have their own concept of health as part of their culture. According to the World Health Organization (1964), health is defined as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”

The Rajasthan State Population Policy in 1999 aimed to bring in a quantum change in many health indicators by 2011 in the state of Rajasthan, the focus of the present study. The State has ensured strong delivery of health and family welfare services through a plethora of voluntary workers such as *Anganwadi* workers, Trained Birth Attendants, *Jan Mangal Couple* and ASHA (Accredited Social Health Activists). Consistent efforts are being made to provide primary health care to all, acknowledging issues of inequity, gender imbalance, accessibility, availability, affordability, and delivery of quality health care services. In order to improve the effectiveness and quality of health care delivery systems, Rajasthan Health System Development Project is being implemented in all the 32 districts of the State with financial assistance from the World Bank. The primary goal is to strengthen secondary level medical institutions.

One of the major challenges facing good medical care in India is the fact that untrained/unqualified quacks can provide medicine with impunity. Quacks generally do not possess a recognised practice in the field of medical science. Many of them have served as assistants to a doctor and thus present themselves as a qualified doctor. In the study area, a quack is a person either from the same village or nearby villages who doesn't possess any professional qualification or practice but merely knows of some fast relief medicines. Since the study area has a very strict patriarchal society with limited rights to women, women are forced to use comparatively less expensive and easily available medical assistance, which is commonly provided by quacks. In a traditional Indian society women have very few rights, particularly in rural areas (Haub and Sharma, 2006). Women get secondary position in food and nutrition as well as in health care. They are not allowed to go for modern medical help for illnesses unless the male members of the household, particularly the husband, consider the modern medical help necessary. The inadequate freedom of women limits the success of public health care delivery in the study area. Under the prevailing conditions, women are forced to consult a quack for less expensive and easily available medical help.

The right to receive medical help by a qualified medical practitioner in times of illness is one of the basic health-care rights to which all citizens are entitled (WHO, 1978). Unfortunately, it is indeed very difficult for a sick person to decide whether or not a person posing as a doctor is professionally qualified. The Rio Declaration states that "Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature." This stresses the important inter-linkages between the social, economic and environmental pillars of sustainable development, all of which are underpinned by good health. Furthermore, Chapter 6 of Agenda 21 of the Declaration emphasizes the fundamental commitment within sustainable development of "protecting and promoting human health." It is quite worrisome that despite so many representations and efforts made by the Indian Medical Association, quacks continue to practice in India.

The major aim of the present study is to examine various determinants of the use of public health care delivery systems across different geographical regions and population sub-groups in Hanumangarh district. The study includes socio-economic variables, which affect the health care choices of the people in the study area. In addition, the study also tries to identify the factors responsible for poor utilization of public health care delivery systems and high dependency on quacks. The findings of

the present study will also lead to an improved delivery and management of public health care in the study area.

## **2. Data Base and Methodology**

The present study is based on both primary and secondary data. Secondary data have been collected from the Office of the Chief Medical and Health Officer in Hanumangarh district. Intensive field work from September to December 2010 was conducted to collect the primary data. The primary data have been collected through sample surveys of 610 households selected from fourteen villages (two villages from each tahsil) and two urban centres of Hanumangarh district. The villages under study (possessing at least 50 households) have been selected according to their distance from Primary Health Centres (PHCs). Two PHCs have been selected from each tahsil. After selecting PHCs, villages in the vicinity of both PHCs were categorised according to their distance from the nearest PHC. Out of these distance categories, two villages from each tahsil have been selected in such a way that one village must lie within a radius of 1km to the first PHC, while the second village must lie farther than 7-8km from the second PHC. This technique has been applied in every tahsil on a rotation basis so as to equal the sum of the distances of both villages from their respective PHCs. To ensure accuracy, selected villages do not lie in the vicinity of any other PHC/CHC/district hospital except the selected PHC.

While selecting villages, it was important to ensure that the entire sample represented the physical, social, economic, cultural and religious characteristics of the study area. Accordingly, selected villages included one that was more than 80 per cent Muslim, one that was more than 80 per cent Sikh, one that was more than 80 per cent scheduled castes, and another that was more than 80 per cent from other backward castes households. In each selected village, 35 respondents were chosen for an in-depth interview through a structured questionnaire based on age, caste, religion, education, occupation, and income. In total, 490 respondents were selected from rural areas of all the seven tahsils of the study area.

Households have been categorised into three classes according to socio-economic status: high, medium and low. 20 households were selected from each socio-economic class in both urban centres. In total, 120 respondents were selected from urban areas. Altogether, a total of 610 respondents have been selected from various parts of the study area. The distance categories have not been considered since the urban centres in the district have small spatial extension.

## **3. Results and Discussion**

### **3.1 Distribution of health care facilities**

In accordance to a WHO resolution of 1978, the Government of India expanded health care facilities all over the country and established a good network of primary health institutions. Health services are usually organized at three levels, each level supported by a higher level to which the patient is referred. It was planned to have a community centre for every 120,000 human population in plain area (on every

Table 1: Tahsil-wise distribution of health facilities, 2010

Tahsil/District	CHC	PHC	Sub-centre	Ayurvedic	Homeopathic	Unani
Sangaria	1	5	32	5	-	-
Tibi	1	3	29	12	-	-
Hanumangarh	1	7	45	18	1	-
Pilibangan	2	4	28	10	-	-
Rawatsar	1	5	43	9	-	-
Nohar	2	11	71	20	1	1
Bhadra	2	10	71	22	-	1
Total	10	45	319	96	2	2

Source: Office of the Chief Medical and Health Officer, Hanumangarh district, 2010.

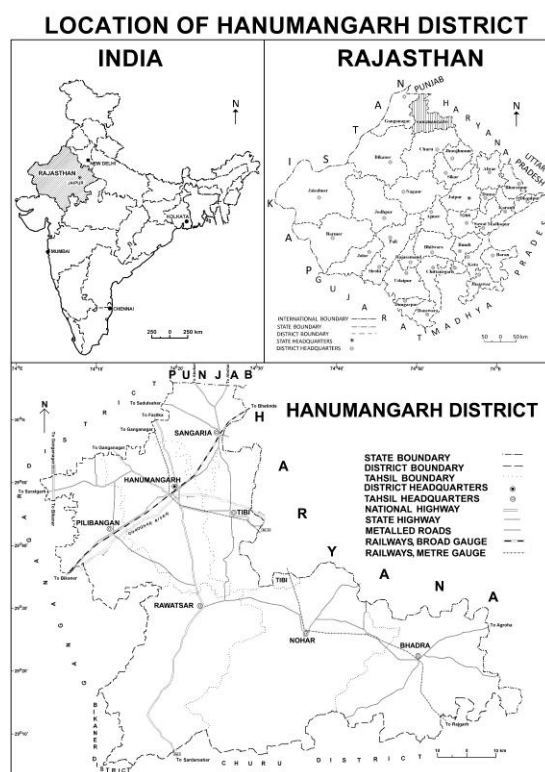


FIG.1

Figure 1. Location of the Hanumangarh District in Rajasthan, India.

80,000 population in hilly and tribal areas), a primary health centre for every 30,000 population in plain area (on every 20,000 population in hilly area and tribal areas) and a sub-centre for every 5,000 population in plain area (on every 3,000 population in hilly area and tribal areas). Health care services in rural areas are being provided through these health centers and district hospitals. Thus at the district level, there are sub-centers (SCs), primary health centers (PHCs) and community health centers (CHCs). District hospitals (DHs) have been set up as a first referral unit (FRU).

The area under study (Fig.1) is served by one district hospital, 10 CHCs, 45 PHCs and 319 SCs. There are 96 Ayurvedic, 2 Homeopathic and 2 Unani hospitals providing health care services to the people (Fig. 2). Tahsil-wise distribution of various health facilities is provided in Table 1. Spatial variations in health care facilities have been analyzed at tahsil/district level with reference to PHCs. The highest number of PHCs are found in Nohar (11) followed by Bhadra (10) and Hanumangarh (7) tahsils. The Sangaria, Tibi and Rawatsar tahsils experience abject conditions in terms of the number of PHCs (Table 4.3). It is notable that four tahsils, namely Pilibangan, Tibi, Hanumangarh and Sangaria lie in the plain area while the remaining three tahsils, Nohar, Bhadra and Rawatsar, lie in desert area. Since the norms for establishment of an SC/ PHC/CHC are different for plain and desert area, the availability of health care facilities is not strictly comparable between the two areas.

The tahsil area varies notably in the study area. Thus, the availability (density) of health care facilities has been analyzed in reference to per 100 sq. km of surface area. Similarly, all the tahsils of the study area do not contain equal population so the availability of health care facilities (e.g. PHCs and SCs) has been made in reference to per 10,000 people.



Figure 2. Location of health care facilities in Hanumangarh District, Rajasthan, India.

Table 2: Tahsil-wise distribution of PHCs and sub-centres, 2010

Tahsil/District	PHCs		Sub-centres	
	Per 100 km <sup>2</sup> of area	Per 10,000 of pop.	Per 100 km <sup>2</sup> of area	Per 10,000 of pop.
Sangaria	0.76	0.47	4.88	2.98
Tibi	0.40	0.21	3.90	2.05
Hanumangarh	0.57	0.30	3.68	1.92
Pilibangan	0.42	0.28	2.92	1.93
Rawatsar	0.27	0.35	2.30	3.05
Nohar	0.45	0.49	2.91	3.16
Bhadra	0.58	0.45	4.14	3.22
District	0.47	0.37	3.32	2.63

Source: Self computed.

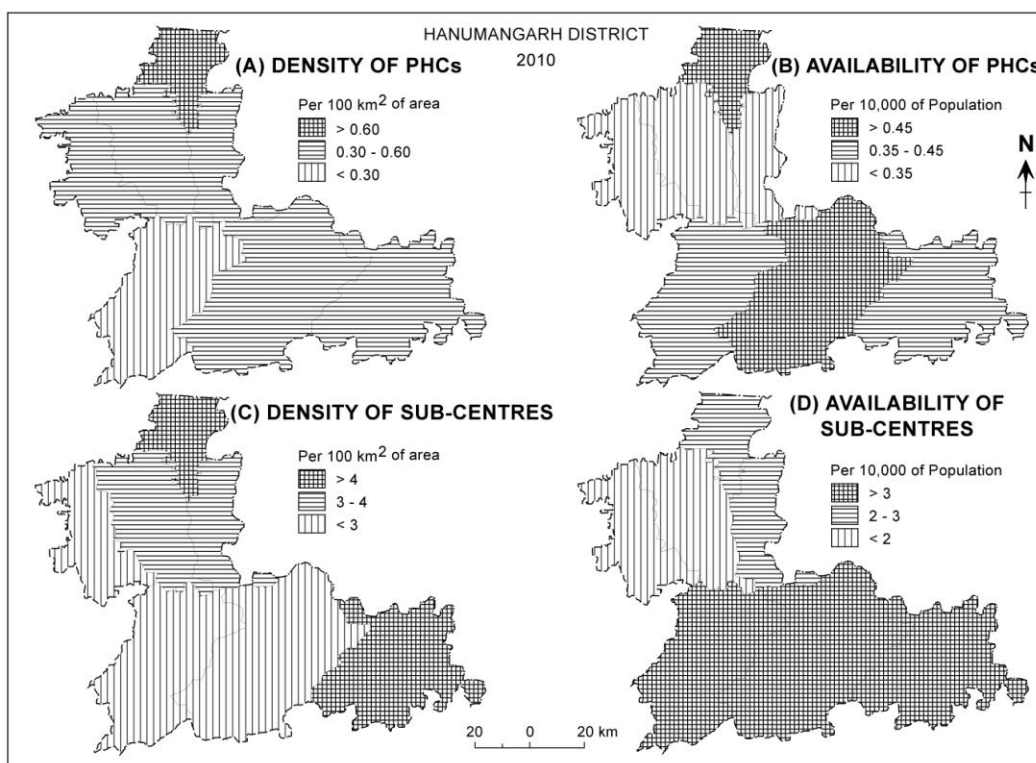


Fig.3

Figure 3. Distribution of health facilities in Hanumangarh District, Rajasthan, India.

Table 2 presents the density of PHCs and SCs in terms of area and population. It is apparent from Fig. 3A that the density of PHCs per 100 km<sup>2</sup> of area is highest in Sangaria tahsil and lowest in Rawatsar tahsil. The remaining tahsils have moderate density of PHCs. While considering the availability of PHCs per 10,000 people it has been found that Nohar tahsil is best served while Tibi is the least served tahsil. Nohar and Sangaria tahsils recorded high availability of PHCs per 10,000 people while Rawatsar and Bhadra showed moderate density. The remaining three tahsils registered low density of PHCs (Fig.3B). It is clear from the preceding

Table 3: Distance-wise distribution of villages from nearest PHC

Tahsil/District		Distance (km) from nearest PHC			Total
		0-5	5-10	> 10	
Sangaria	Number	42	40	97.00	179
	Per cent	23.46	22.35	54.19	100.00
Tibi	Number	14	31	193	238.
	Per cent	5.88	13.03	81.09	100.00
Hanumangarh	Number	33	58	290	381
	Per cent	8.66	15.22	76.12	100.00
Pilibangan	Number	39	73	164	276.
	Per cent	14.13	26.45	59.42	100.00
Rawatsar	Number	26	59	212	297
	Per cent	8.75	19.87	71.38	100.00
Nohar	Number	35	23	146	204
	Per cent	17.16	11.27	71.57	100.00
Bhadra	Number	32	51	115	198
	Per cent	16.16	25.76	58.08	100.00
District	Number	221	335	1217	1773
	Per cent	12.46	18.89	68.64	100.00

Source: Jansankhya Sthirata Kosh (JSK) (National Population Stabilization Fund), district level health data, 2006.

discussion that five tahsils have a sufficient number of PHCs as per norm set by the Government of India.

Density of sub-centres also varies in the study area. Sangaria and Bhadra tahsils registered a high density of SCs per 100 km<sup>2</sup> of area while Tibi and Hanumangarh tahsils showed moderate density. Pilibangan, Rawatsar and Nohar tahsils showed low density of SCs (Fig.3C). The density of SCs per 10,000 of people is high in Nohar, Bhadra and Rawatsar tahsils while Sangaria and Tibi tahsils recorded moderate availability of SCs.

Availability of sub-centres has been found low in Hanumangarh and Pilibangan tahsils (Fig.3D). Although the study area has a sufficient number of PHCs and SCs, accessibility and affordability are still major hurdles to universal health provision. There is wide variation in density of health care institutions. The majority of the settlements, particularly in the southern three tahsils, are scattered in nature. These scattered habitats located in vast desert areas have very low rail and road connectivity with the health care institutions. Poor accessibility and low availability of health care institutions force people to seek medical help from a quack in case of illness. Better accessibility and higher availability may in turn lessen the role of quacks in the study area.

### 3.2 Distance of villages from PHCs

To analyse accessibility to PHCs, all the inhabited villages of the study area have been categorised into three groups according to their distance from the nearest

PHC (Table 3). It is evident from Table 3 that 12.46% of villages are between 0-5 km, whereas 18.89% of villages are between 5-10 km. More than two-thirds of the total villages are located at a distance more than 10 km from the nearest PHC. Clearly, for the majority of the villagers, distance to a PHC is a significant constraint. It is very difficult to travel a distance of 10 km in the desert, particularly for poor people who do not possess their own transport/vehicle.

### **3.3 Types of hospitals in the study area**

There are altogether 96 Ayurvedic hospitals in the study area. Sangaria tahsil has the lowest number of Ayurvedic hospitals while Bhadra has the highest number (Fig.1). At the same time, there are two homeopathic hospitals in the study area, one each in the Hanumangarh and Nohar tahsil. In the study area there are two Unani hospitals, one each in the Nohar and Bhadra tahsil.

### **3.4 Utilization of health care facilities**

The area under study is commonly served by public (government) health care centers. However, a few specialized private hospitals and nursing homes located in six urban centres of the study area also provide services. An attempt has been made to probe the pattern of utilization of health care services available at public health facilities by the sample respondents. It has been assessed in relation to socio-economic and demographic characteristics of the interviewees, which exert significant influence on the utilization of health care facilities. In addition, effort has been also made to assess the magnitude of utilization of various medicine systems with social, cultural and economic variables.

### **3.5 Socio-economic profile of the respondents**

The study under reference covered 610 respondents (one from each household) in the age group of 15-49 years in fourteen sample villages and two urban centres. Of the sample households, 86.9% are Hindu while 5.7% and 7.4% are Muslim and Sikh, respectively. According to social groups, 34.9% belong to general castes while 44.3% and 20.8% per cent belong to other backward castes (OBC) and scheduled castes respectively. The computed mean age of the male respondents is 33.20 years and 30.24 years for female respondents. The average monthly family income was computed as Rs. 7432. The literacy rate of males is 88.2% while that of females is 62.3%. The level of educational attainment of both male and female respondents in the sample villages is depicted in Fig.4.4 and 4.5 respectively. Only 1% of female and 14.6% of male respondents have an education of 14 or more years (graduation and above). Nuclear families account for 62.3% of the surveyed population while the remaining 37.7% respondents belong to joint families. Most of the male respondents are farmers (35.2%) whereas the majority of females are agricultural labourers (20.8%).



### 3.6 First visit in case of illness

Table 4: Religion and first visit in case of illness

Religion	CHC/PHC/Sub-centre	Private hospital	RMP	Quack	Traditional healer	Total
Hindu	16.8% (89)	13.6% (72)	10.8% (57)	57.5% (305)	1.3% (7)	100% (530)
Muslim	5.7% (2)	11.4% (4)	17.1% (6)	65.7% (23)	-	100% (35)
Sikh	24.4% (11)	33.3% (15)	13.3% (6)	28.9% (13)	-	100% (45)
Total	16.7% (102)	14.9% (91)	11.3% (69)	55.9% (341)	1.1% (7)	100% (610)

Source: Based on personal survey, 2010.

Note: The figures in parenthesis indicate the number.

Availability, affordability, accessibility and reliability of health care facilities decide the first visit in cases of illness. In the study area out of 610 households, 341 (55.9%) sought help from quacks while 102 (16.7%) respondents visited CHCs/PHCs/SCs, 69 (11.3%) respondents consulted registered medical practitioners (RMP), 91(14.9%) visited private hospitals and 7 (1.1%) sought help from traditional healers in cases of illness. Easy availability, convenience, low expense and frequent visits to household members are the main reasons behind the high dependency on quacks. Distance to health facilities coupled with poor transportation resulted in low use of health care facilities.

### 3.7 Socio-economic characteristics and first visit in case of illness

The socio-economic and demographic variables discussed in this section include religion, social-group (caste), family structure, monthly income of households, age, education and occupation of the respondents. Since information regarding health care behaviour of the household has been collected from the husband, only husband's age, education and occupation have been considered.

### 3.8 Religion

Use of health care facilities is associated differently with religion in the study area (Table 4). A high percentage of Hindus and Muslims consulted quacks while Sikhs visited private hospitals in cases of illness. A perusal of Fig.4.6B reveals that traditional healers were not consulted by the Muslim or Sikh populations while a small number (1.3%) of Hindus visited traditional healers during illness.

### 3.9 Social-group

Table 5: Social-group and first visit in case of illness

Social-group	CHC/PHC/ Sub-centre	Private hospital	RMP	Quack	Traditional healer	Total
General	16.9% (39)	23.5 % (50)	18.3% (39)	41.3% (88)	-	100% (213)
OBC	15.6% (42)	13.0% (35)	8.9% (24)	61.1% (165)	1.5% (4)	100% (270)
SC	18.9% (24)	4.7% (6)	4.7% (6)	69.3% (88)	2.4% (3)	100% (127)
Total	16.7% (102)	14.9% (91)	11.3% (69)	55.9% (341)	1.1% (7)	100% (610)

Source: Based on personal survey, 2010.

Note: The figures in parenthesis indicate the number

80% of the total population in the study resides in rural areas. In Indian villages, caste strongly influences the life style of the people and symbolizes their social and economic status. The Central Government of India classifies some of its citizens based on their social and economic condition as Scheduled Caste (SC), Scheduled Tribe (ST), and Other Backward Class (OBC) (Premi, 2003). The castes, which were the elite of the Indian society, were classified as high castes. The other communities were classified as lower castes or lower classes. The lower classes were listed in three categories. The first category is called Scheduled Castes. This category includes communities of untouchables. The untouchables call themselves *Dalit*, meaning depressed. The second category is Scheduled Tribes. This category includes those communities who did not accept the caste system and preferred to reside away from the main population in the jungles, forests and mountains of India. The Scheduled Tribes are also called *Adivasi*, meaning aboriginals. The third category is called Other Backward Classes or Backward Classes. In the constitution of India, OBCs are described as "socially and educationally backward classes," and government is enjoined to ensure their social and educational development. All the castes in the study area have been broadly grouped into three social-groups, i.e., general, other backward castes (OBCs) and scheduled castes (SCs). There is no scheduled tribe population in the study area. All the social-groups showed a high dependency on quacks in general and scheduled castes in particular. Scheduled castes belong to lowest strata of the society and possess comparatively lower socio-economic status because a very high proportion (89.45%) of scheduled castes is engaged as agricultural labourers. Poverty and illiteracy are the main reasons, which resulted in very high (69.3%) dependency on quacks among scheduled castes (Table 5). All the social-groups, however, showed a high dependency on quacks except the scheduled castes, which possess comparatively lower socio-economic status and are mainly engaged as agricultural labourers, registered high preference (69.3%) in consulting quacks in case of illness (Table 5).

This table clearly reveals that the public health system is not popular in the study area among the weaker sections of the society. About one-fourth of the

Table 6: Family structure and first visit in case of illness

Family structure	CHC/PHC/ Sub-centre	Private hospital	RMP	Quack	Traditional healer	Total
Nuclear	17.4% (66)	18.9% (72)	10.8% (41)	52.4% (199)	0.5% (2)	100.0% (380)
Joint	15.7% (36)	8.3% (19)	12.2% (28)	61.7% (142)	2.2% (5)	100.0% (230)
Total	16.7% (102)	14.9% (91)	11.3% (69)	55.9% (341)	1.1% (7)	100.0% (610)

Source: Based on personal survey, 2010.

Note: The figures in parenthesis indicate the number.

interviewees from general castes visited private hospitals, while the proportion of interviewees is only 13% and 4.7% for OBCs and SCs, respectively.

### 3.9 Family structure

Family structure also plays a significant role in the use of various health care facilities, though a very large proportion of respondents consulted quacks irrespective of their family structure. There is no significant difference in visits to CHCs/PHCs/Sub-centres and RMPs, but there is a wide variation in utilization of services of private hospitals between the two family structures (Table 6). Only 8.3% of respondents belonging to joint families visited private hospitals, while 18.95% of respondents from nuclear families visited the private hospitals in case of illness. In joint families, expenditures are decided by the head of the households so there is less freedom for choices.

### 3.10 Income

Income of the household to a large extent decides the use of available health care facilities. It is clear from Table 7 that the percentage of respondents visiting private hospitals increases with the increase in household income. Visits to CHC/PHC/Sub-centre increases with higher income up to a certain limit; thereafter it shows a negative relationship with the income. It is apparent that those respondents whose monthly family income is less than Rs 1000 have the highest (90.8%) dependency on quacks, while the proportion of respondents who visited private hospitals in case of illness, is highest in the income category of above Rs 15000.

### 3.11 Age

An individual's age affects health care behavior as well. Table 8 shows the relationship between age of the respondents and their use of health care facilities. It is apparent from Table 8 that as age increases, the percent of respondents who sought help from quacks decreases due to the inability of quacks to cure some specific old age diseases. The percentage of respondents who visited private hospitals during illness increases up to the age group of 40-44 years; thereafter it declines

Table 7: Income and first visit in case of illness

Monthly income (Rs)	CHC/PHC/ Sub-centre	Private hospital	RMP	Quack	Traditional healer	Total
< 1000	4.6% (4)	-	-	90.8% (79)	4.6% (4)	100% (87)
1000-5000	15.5% (17)	3.6% (4)	2.7% (3)	77.3% (85)	0.9% (1)	100% (110)
5000-10000	20.5% (60)	12.0% (35)	14.7% (43)	52.1% (152)	0.7% (2)	100% (292)
10000-15000	17.3% (19)	40.9% (45)	19.1% (21)	22.7% (25)	-	100% (110)
> 15000	18.2% (2)	63.6% (7)	18.2% (2)	-	-	100% (11)
Total	16.7% (102)	14.9% (91)	11.3% (69)	55.9% (341)	1.1% (7)	100% (610)

Source: Based on personal survey, 2010.

Note: The figures in parenthesis indicate the number.

Table 8: Age of respondents and first visit in case of illness

Age-group	CHC/PHC/ Sub-centre	Private hospital	RMP	Quack	Traditional healer	Total
20-24	4.0% (4)	16.0% (4)	16.0% (4)	64.0% (16)	-	100% (25)
25-29	18.4% (28)	11.8% (18)	5.3% (8)	63.2% (96)	1.3% (2)	100% (152)
30-34	10.9% (16)	15.0% (22)	13.6% (20)	60.5% (89)	-	100% (147)
35-39	20.4% (42)	16.0% (33)	8.3% (17)	52.9% (109)	2.4% (5)	100% (206)
40-44	16.4% (9)	21.8% (12)	16.4% (9)	45.5% (25)	-	100% (55)
45-49	24.0% (6)	8.0% (2)	44.0% (11)	24.0% (6)	-	100% (25)
Total	16.7% (102)	14.9% (91)	11.3% (69)	55.9% (341)	1.1% (7)	100% (610)

Source: Based on personal survey, 2010.

Note: The figures in parenthesis indicate the number.

significantly. It is clear from Table 8 that after the age-group of 35-39, respondents' dependency on Registered Medical Practitioner (RMP) increases significantly. Percentage of respondents who visited CHCs/PHCs/Sub-centers increases as the age of respondents increases. The highest percentage of respondents who visited CHCs/PHCs/Sub-centers is in the age-group of 45-49 years.

Table 9: Educational attainment and first visit in case of illness

Education	CHC/PHC/ Sub-centre	Private hospital	RMP	Quack	Traditional healer	Total
Primary	12.3% (8)	1.5% (1)	10.8% (7)	72.3% (47)	3.08% (2)	100% (65)
Middle	21.4% (44)	10.2% (21)	5.3% (11)	63.1% (130)	-	100% (206)
High School	9.9% (9)	18.7% (17)	11.0% (10)	60.4% (55)	-	100% (91)
Intermediate	20.7% (18)	12.6% (11)	20.7% (18)	46.0% (40)	-	100% (87)
Graduate and above	13.48% (12)	43.8% (39)	25.8 (23)	16.8% (15)	-	100% (89)
Illiterate	18.6% (13)	2.78% (2)	2.78% (2)	69.44% (50)	6.94% (5)	100% (72)
Total	16.7% (102)	14.9% (91)	11.3% (69)	55.9% (341)	1.1% (7)	100% (610)

Source: Based on personal survey, 2010.

Note: The figures in parenthesis indicate the number.

### 3.12 Education

A perusal of Table 9 reveals a strong association between educational attainment and use of health care facilities. It is interesting to note that health services rendered by quacks are found to be very high in illiterate respondents (69.4% per cent) as well as in respondents with primary level schooling (72.3%). With an increase in educational level, services provided by the qualified practitioners increases rapidly, while a declining trend is found in use of services provided by quacks. However, visits to a CHC/PHC/Sub-centre in case of illness have no direct relationship with educational attainment, indicating that educated as well uneducated respondents are not satisfied with government run health care institutions. Use of private hospitals is highly significant in respondents who have higher education (graduation and above). Educated persons generally earn more and are more aware of the quality of health care facilities. A very small percentage of illiterate (6.9%) and poorly educated respondents (3.08%) sought help from traditional healers during their illnesses.

### 3.13 Occupation

The occupation of individuals reflects their economic status, which in turn, influences the health care behaviour of the household. In general, the occupational structure of India's population reveals the backwardness of the economy since more than 60% of the total work force is engaged in agriculture (Ramachandran, 2008). A similar situation exists in the case of the study area where over three-fourths of the working population is engaged in agriculture-related activities.

Table 10: Occupation and first visit in case of illness

Occupation	CHC/PHC/ Sub-centre	Private hospital	RMP	Quack	Traditional healer	Total
Cultivators	4.2% (9)	13.5% (29)	8.4% (18)	72.6% (156)	1.4% (3)	100% (215)
Agri. lab	6.5% (2)	-	-	93.5% (29)	-	100% (31)
Indus. lab.	66.7% (8)	-	-	33.3% (4)	-	100% (12)
Business	37.5% (54)	13.2% (19)	15.3% (22)	34.0% (49)	-	100% (144)
Construction	-	-	-	100% (18)	-	100% (18)
Service	14.3% (15)	39.0% (41)	25.7% (27)	21.0% (22)	-	100% (105)
Transport	22.7% (5)	9.1% (2)	9.1% (2)	59.1% (13)	-	100% (22)
Others	14.3% (9)	-	-	79.4% (50)	6.3% (4)	100% (63)
Total	16.7% (102)	14.9% (91)	11.3% (69)	55.9% (341)	1.1% (7)	100% (610)

Source: Based on personal survey, 2010.

Note: The figures in parenthesis indicate the number.

The occupations shown in Table 10 represent both high-skilled as well as low-skilled jobs. Table 10 shows that respondents who are cultivators (72.6%), agricultural labourers (93.5%) and construction workers (100.0%) have a high dependency on quacks. This may be attributed to their low level of educational attainment and poverty coupled with poor awareness about the services available at health care institutions. It has also resulted in low use of CHCs/PHCs/Sub-centers and private hospitals. Those respondents who are engaged in the service sector registered the highest percentage (39.0%) of private hospital visits in case of illness.

#### 4. Conclusion

The study found that public sector health care facilities are neither adequate nor easily accessible in the study area. Poverty, poor levels of literacy, and lack of proper transport facilities contribute to the role of quacks in primary health care. The utilization pattern of health care facilities in the study area reveals that the people of the study area, irrespective of their background characteristics, are highly dependent on quacks in terms of medical help. The problems faced by the public health care system in the study area are the result of interplay of different social, economic, demographic and infrastructural factors.

This research may assist in formulating policies and programmes by identifying critical variables, target groups, and grey areas for effective management of public health care delivery systems. To achieve the goal of universal health care,

future strategies and initiatives must recognize critical variables and target groups and grey areas that pose challenges to adherence of proper use of public health care facilities. Availability and affordability of health care facilities as well as accountability and responsiveness of health care providers must be incorporated into policy formulation and implementation to make health care facilities more effective at the grass-root level. Such measures will surely help to reduce gaps in public health care systems, which consequently decrease high dependency on quacks in the study area.

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