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An assessment of availability of Health Services and Manpower in Community Health Centers and Primary Health Centers in Rural Haryana

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In India, the health care services and facilities are distributed randomly. Some areas have more health facilities available than the need of that particular area whereas majorities of areas have more demands for services. India is a country of villages. About 70 percent population of the country is living in the villages. But healthcare facilities and services are very poor in these areas. Government of India started National Rural Health Mission (NRHM) to improve the health of the rural people and reduce the mortality rate, especially vulnerable sections of the society like; women and children. But present study found that there is no impact of this programme in the study area. Present study found that population covered by selected CHCs is above 2.5 times more than recommended population for a CHC. There is also shortage of specialist in both CHCs. All the surveyed PHCs covers 70,322 population on an average which is double than the recommended population. Out of 4, 3 PHCs were in working condition, but facility of institutional delivery is available in Biwan PHC only.

Keywords: Health, Healthcare Facilities, Hospital Preferences and NRHM

Introduction

India is a country of villages. About 70 percent population of the country is living in the villages. But healthcare facilities and services are very poor in these areas. In India, the health care services and facilities available are highly haphazard in nature. Some areas have more health facilities available than the need of that particular area whereas majorities of areas have more demands for services. Thus, there exist disparities not only in rural and urban areas but also within rural and urban areas of different states of India (Mayer, I.A., 2007, p.133). The health care infrastructure in rural India has been developed in three tier system. This three tier system starts from sub-center which is the first contact point between the primary health care system and the community and serves a small population. After sub-center comes Primary Health Centre (PHC) which serves 4 to 6 sub centers and medium population size. PHC is the first place where village community comes in the contact of a Medical Officer. After PHC comes community health center (CHC) which severs 4 PHCs as well as big population size.

Poor people of the villages are suffering from poverty, diseases, high infant mortality rate and maternal mortality ratio. Government of India started many programmes for the development of these rural people since independence. But the health condition of these rural people is still cause of great concern. And recently in 2005, Government of India started National Rural Health Mission (NRHM) to improve the health of the rural people and reduce the mortality rate, especially vulnerable sections of the society like; women and children. Present study tried to find out the availability of health services and manpower in the rural area of Haryana state.

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Data Base and Methodology

The present study is based on both primary data and secondary data sources. Primary data has been collected through primary survey and secondary data has been collected through many sources like; NRHM office Panchkula, RHS Bulletin, Haryana Statistical Abstract, Census of India, Registers of CHCs and PHCs. Mewat district has been selected on the basis of 8 selected indicators in Haryana. These indicators are; Sub Center Per Lakh Population, Primary Health Center Per Lakh Population, Community Health Center Per Lakh Population, Total Literacy Rate, Female Literacy Rate, Rural Population, Total Growth Rate, Rural Growth Rate.

After selecting Mewat district, two community health centers has been selected for the survey; one which is nearest to the District Hospital (DH) and another which is farthest from district hospital. The nearest community health center to district hospital is Firozpur Jhirka and the farthest community health center to district hospital is Punhana. After selecting these two community health centers, four primary health centers (PHC) from selected under these community health centers, two from each community health centers. One is to nearest and another is farthest from community health center. Biwan and Marora primary health centers are selected under Firozpur Jhirka CHC. And Singar and Tigaon primary health centers are selected under Punhana CHC.

Result and Discussion

Healthcare Infrastructure in Rural India: Healthcare infrastructure is regarded as an important mechanism for providing healthcare delivery in the rural areas of the country. The health care infrastructure in rural areas has been developed in three tier system and it is based on the population norms as given in table-1.

 Centre
 Population Norms

 Plain Area
 Hilly/Tribal/ Difficult Area

 Sub Centre
 5,000
 3,000

 Primary Health Centre
 30,000
 20,000

 Community Health Centre
 1,20,000
 80,000

Table- 1: Population Norms for Health Care Centre in India, 2005

Source: www.mohfw.nic.in/NRHM

Sub-Centre (SCs): The Sub-Centre is the most peripheral and first contact point between the primary health care system and the community. Each Sub-Centre is required to be manned by at least one Auxiliary Nurse Midwife (ANM) / Female Health Worker and one Male Health Worker, One Lady Health Visitors (LHV). The Sub-Centers are provided with basic drugs for minor ailments needed for taking care of essential health needs of men, women and children. The Ministry of Health & Family Welfare is providing 100% Central assistance in all the Sub-Centers in the country since April 2002 in the form of salary of ANMs and LHVs. rent at the rate of Rs. 3000/- per annum and contingency at the rate of Rs. 3200/- per annum, In addition to drugs and equipment kits. The salary of the Male Worker is borne by the State Governments. There are 148,124 SCs functioning in the country (2011).

Primary Health Centres (PHCs): PHC is the first place where village community comes in the contact of the Medical Officer. The PHCs were set up to provide integrated curative and preventive health care facilities to the rural people. The PHCs are established and maintained by the State Government under the Minimum Needs

Programme (MNP)/ Basic Minimum Services Programme (BMS). As per minimum requirement, a PHC is to be manned by a Medical Officer supported by 14 paramedical and other staff. One PHC works as a referral unit for 6 Sub Centers. It has 4-6 beds for patients. The activities of PHC involve curative, preventive, primitive and Family Welfare Services. As per norms, there should be one PHC on 30000 populations in plain area and 20000 population in hilly and tribal area. There are 23,887 PHCs are functioning in the country (2011).

Community Health Centres (CHCs): CHCs has been established and maintained by the State Government under MNP/BMS Programme. There are required four medical specialists i.e. Physician, Surgeon, Gynecologist and Pediatrician with 21 paramedical and other staff, as per minimum norms. CHC has 30 in-door beds with 1 OT, X-Ray, Labour Room and Laboratory facilities. It works as a referral centre for 4 PHCs and also provides facilities for obstetric care and specialist consultations. As per norms, there should be one CHC on 120000 populations in plain area and 80000 population in hilly and tribal area. There are 4,809 CHCs are functioning in the country (2011).

Table 2 shows that as per norms there should be one SC on 5000 population (3000 for Hilly/Tribal/Deserted area), one PHC on 30000 population (20000 for Hilly/Tribal/Deserted area) and one CHC on 120000 population (80000 for Hilly/Tribal/Deserted area). But actual position is not such as above mentioned; on an average one SC, one PHC and one CHC in India covers 5615, 34641 and 172375 persons respectively, which is above than recommended norms at national level. In Haryana, one SC and one PHC cover more population than the national average, but one CHC covers less population than India as a whole. In case of Mewat, one SC and one PHC cover more than double population to the norms; and one CHC covers nearly three times to the norms.

Every SC, PHC and CHC in Mewat district is serving almost double population than the Haryana state as a whole. It shows that these healthcare centers are more over overburdened in Mewat district as compare to Haryana state as a whole.

Table -2: Population Norms for Rural Healthcare Infrastructure and Actual position in India, Haryana and Mewat, 2011

	Population norms		Actual Position			
Health Centers	General	Hilly/Tribal/ Desert	India	Haryana	Mewat	
Sub Center	5000	3000	5615	6560	11490	
Primary Health Center	30000	20000	34641	36983	74243	
Community Health Center	120000	80000	172375	151665	321719	

Source: Data Obtained from Haryana Statistical Abstract, 2012, RHS Bulletin, 2012, Census of India, 2011 and calculated by Author

Availability of Health Care Services in CHCs:

Table 3 indicates about the availability of health care services in selected CHCs of Mewat district. Firozpur Jhirka and Punhana CHCs selected for the survey. Firozpur Jhirka CHC, the one of the two selected CHCs is situated at a distance of 16 kilometers from the district hospital and another CHC, named Punhana is situated at a distance of 22 kilometers.

Table- 3: Availability of Health Care Services in Selected CHCs in Mewat, 2012

Sl. No.	Coverage of Services	Firozpur Jhirka	Punhana
1.	Population covered (in numbers)	291344	340523
	Number of PHCs served by CHC	4	4
	Distance from District Hospital (in kms)	16	22
	Distance from the nearest PHC (in kms)	12	4
	Distance from the farthest PHC (in kms)	28	19
	Time taken from District Hospital (in minutes)	20	45
	Time taken from nearest PHC (in minutes)	25	15
	Time taken from farthest PHC (in minutes)	40	30
2.	Specialist services available (Yes/No)		
	Medicine	Yes	No
	Surgery	No	No
	OBG (obstetrics and gynecology)	No	Yes
	Pediatrics	No	No
	Emergency services (24 Hours)	Yes	Yes
	24 - hour delivery services including normal and assisted deliveries	Yes	Yes
	New-born care	Yes	Yes
	Emergency care of sick children	Yes	Yes
	Essential Laboratory Services (Specify the type of lab tests conducted)	Yes	Yes
	Blood storage facility	No	No
	Referral transport service	Yes	Yes
3.	Bed Occupancy Rate in the last 12 months (1- less than 40%; 2 - 40-60%; 3 - More than 60%)	2	2
4.	Average daily OPD Patients	125	130
5.	Indoor Patient Treated (Monthly)	90	150
6.	Types of Surgeries performed (specify)	No	No
7.	Service availability		
	Ante-natal Clinics	Yes	Yes
	Post-natal Clinics	Yes	Yes
8.	Is separate septic labour room available	Yes	No
9.	Availability of facilities for out-patient department in Gynecology/obstetric (Yes / No)	No	No
10.	Institutional Delivery (Yes/No)	Yes	Yes
	Institutional Deliveries (Monthly)	220	110
	Institutional Deliveries conducted from 8 PM to 8 AM (Yes/No)	Yes	Yes
	Institutional Deliveries conducted from 8 PM to 8 AM Monthly	120	60

Contd.../Table-3

Contd.. Table-3

Sl. No.	Coverage of Services	Firozpur Jhirka	Punhana
11.	ANC Registration	Yes	Yes
	ANC Registration (Monthly)	60	100
	ANC Given 3 Checkups	90%	60%
12.	Are prescribed medicines available in health centre (Yes/No) if available upto what extent (click $\sqrt{\ }$)		
	Almost of them	Yes	Yes
	Half of them		
	None of them		
13.	Rogi Kalyan Samiti exists (Yes/No)	Yes	Yes

Source: Based on Primary Survey

Firozpur Jhirka CHC covers 291,344 population, while Punhana CHC covers 340,523 population in its coverage area. Firozpur Jhirka and Punhana CHCs serve 4 PHCs each. The distance from Firozpur Jhirka and Punhana CHC to their nearest PHCs is 12 and 4 kilometers respectively. Time taken to their respective nearest PHC is 25 minutes and 15 minutes respectively. On the other hand, distance and time required to reach their respective farthest PHCs is 28 kilometers with 40 minutes and 19 kilometers with 30 minutes.

Table - 4: Availability of Manpower in Selected CHCs in Mewat, 2012

S. No.	Medical Personnel	Firozpur Jhirka	Punhana
A	Clinical Manpower		
	General Surgeon	No	No
	Physician	No	No
	Obstetrician / Gynecologist	No	No
	Pediatrics	No	No
	Anesthetist	1	No
	Public Health Programme Manager	No	No
	Eye Surgeon	No	No
	Other specialists (if any)		1
	General duty officers (Medical Officer)	5	4
B.	Support Manpower		
	Nursing Staff		
	- ANM	No	No
	- Staff Nurse	8	4
	• Dresser	No	No
	Pharmacist / compounder	2	1
	Lab. Technician	3	1
	Radiographer	No	1
	Ophthalmic Assistant	No	No
	Ward boys / nursing orderly	No	No
	Sweepers	3	2

Contd.../ Table-4

Contd.../ Table-4

S. No.	Medical Personnel	Firozpur Jhirka	Punhana	
	• Chowkidar	No	No	
	OPD Attendant	No	No	
	Statistical Assistant / Data entry operator	2	No	
	OT Attendant	No	No	
	Registration Clerk	1	No	
	• Any other staff (specify)	Yes	No	
	• Steno	1	1	
	• Information Assistant	1	No	
	• Accountant	2	1	
	Lady Health Visiter	1	1	
	Block Health Educator	1	No	
	• MPHS	1	1	

Source: Based on Primary Survey

There was no specialist of surgery and pediatrics in both CHCs. Medicine specialists was available in Firozpur Jhirka CHC but not available in Punhana CHC. Gynecologist was available in Punhana CHC but not available in Firozpur Jhirka CHC. Facility of 24 hours emergency services, 24 hours delivery services, new born care, emergency care for sick children, essential laboratory services and referral services were available in both CHCs. While facility of blood storage was not available in both CHCs. Bed occupancy rate was 40 to 60 percent in both CHCs. The attendance of average daily OPD patients was 125 and 130 in Firozpur Jhirka and Punhana CHC respectively. The numbers of IPD patients treated monthly are 90 and 150 in Firozpur Jhirka and Punhana CHC respectively.

Both the CHCs have the facility of ante-natal and post-natal clinics. Separate septic labour room is available in Firozpur Jhirka CHC but it is not available in Punhana CHC. There was not available the facility of gynecologist/obstetric for OPD patients in both CHCs. Both CHCs conduct the institutional deliveries. Firozpur Jhirka conduct 220 deliveries on an average per month while Punhana CHC conduct 110 delivery on an average per month. Facility of institutional deliveries in night is available in both CHCs. Both the CHC have the facility of ANC registration.

On an average 50-60 monthly ANC registration held in Firozpur Jhirka and 100 cases in Punhana CHC. Those women registered in Firozpur Jhirka CHC, they took 90 percent 3 ANC checkups, while women registered in Punhana CHC, and they took 60 percent 3 ANC checkups. Both the CHCs provide almost all of the prescribed medicine to patients. Rogi Kalyan Samiti exists in both CHCs.

Availability of Manpower in CHCs: The availability of manpower in selected CHCs are shown in table 4. There were no general surgeon, no physician, no obstetrician/gynecologist, no pediatrician and no eye surgeon in both CHCs. Firozpur Jhirka CHC has one anesthetist while Punhana CHC has no anesthetist. There were five general duty officers in Firozpur Jhirka and four in Punhana. Eight staff nurse were working in Firozpur Jhirka and four in Punhana CHC. There were 2 pharmacists and 3 lab technicians in Firozpur Jhirka CHC, while one pharmacist and one lab technician were in position in Punhana CHC. Punhana CHC has one radiographer but Firozpur Jhirka has no radiographer.

There were following posts were vacant in both CHCs; ophthalmic assistant, ward boy/nursing orderly, chowkidar, OPD attendant and OT attendant. Three sweepers were in Firozpur Jhirka and two in Punhana CHC. Firozpur Jhirka has 2 data entry operator while Punhana has no data entry operator. One registration clerk was on work in Firozpur Jhirka but not in Punhana CHC. There was one steno in each CHC. Along with these above posts, one information assistant, two accountants, one lady health visitor, one block health educator and one MPHS also were in Firozpur Jhirka CHC. One steno, one accountant, one lady health visitor, and one MPHS were in Punhana CHC.

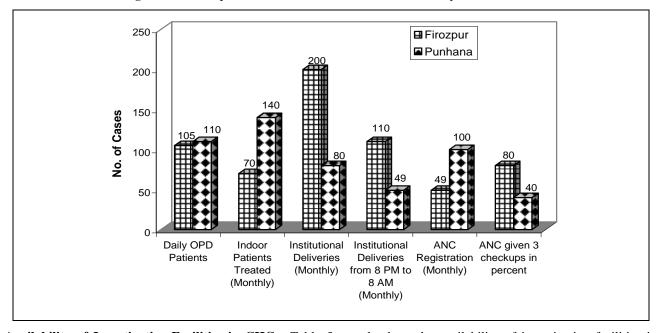


Figure-1: Mewat performance of selected indicators in surveyed CHCs, 2012

Availability of Investigative Facilities in CHCs: Table 5 reveals about the availability of investigative facilities in selected CHCs. ECG facility was available in Punhana CHC but not in Firozpur Jhirka CHC. X-Ray facility was available in both CHCs, but the operator of x-ray machine was not available in Firozpur Jhirka CHC. Ultrasound facility was not available in both CHCs. Appropriate training of ECG to nursing staff was not given in both CHCs. Lab test facility was available in both CHCs.

Firozpur Jhirka Punhana **Investigative Facilities** Availability of ECG facilities (Yes / No) No Yes X-Ray facility (Yes / No) Machine is available but operator is not available Yes Ultrasound facility (Yes / No) No No Appropriate training to a nursing staff on ECG (Yes / No) No No Lab test facilities (specify kind of tests done) 5-6 type test done Yes No No Any lab test / diagnostic test outsourced to private lab / hospital (please specify the test)

Table-5: Availability of Investigative Facilities in Selected CHCs in Mewat, 2012

Source: Based on Primary Survey

Availability of Infrastructural Facilities in CHCs: Study found that both of CHC are located within village locality and both are working in designated government building. The building of Punhana CHC was in good condition but Firozpur Jhirka CHC's building was not in good condition. Compound wall of Firozpur Jhirka CHC was partial while Punhana CHC has all around complete wall. Floor condition was good of both CHCs. Cleanliness of OPD, OT room and ward was fair but toilets were in poor condition.

Both the CHCs are located at a place where a person from the farthest village under the respective CHC can reach within 2 hours. None of these CHCs has registration counter. Separate public utilities were available in Punhana CHC but not in Firozpur Jhirka. There was not suggestion/complaint box in both CHCs. Family welfare clinics did not exist in both CHCs. Waiting room for patients is available in Punhana CHC but this facility is not available in Firozpur Jhirka CHC.

Both the CHCs have emergency/casualty room and separate wards for males and females. Firozpur Jhirka CHC has 6 beds for males and 6 for females; whereas Punhana CHC has 10 beds for male and 15 beds for females. Both CHC have operation theatre and both were not in working condition, due to non availability of doctors.

Labour room was available in both CHCs and also was in working condition at the time of survey. Laboratory was available in both CHCs but blood storage unit was not available in both CHCs. Tube well is the source of water in Firozpur Jhirka CHC, while Punhana CHC is linked with piped water supply. However, both CHCs have overhead water tank. Laundry facility was available in Firozpur Jhirka CHC but not in Punhana CHC. There is a washing machine for laundering facility in Firozpur Jhirka CHC. But this facility is not available in Punhana CHC.

Personnel computer was available in both CHCs but telephone facility was available only in Firozpur Jhirka; although it was not working. Both CHCs were connected by metalled road. Each CHC has ambulance facility. Both CHCs have residential facility for the staff but accommodation facility for admitted patient's families was available only in Punhana CHC.

Table- 6: Perception of Respondent (Doctor/Health Personnel) about NRHM in Selected CHCs in Mewat, 2012

Perception about Facilities	Firozpur Jhirka	Punhana
Is there any improvement in the situation of Infrastructure after NRHM	No	No
Is there any improvement in the situation of Man-Power Availability after NRHM	Yes	No

Source: Based on Primary Survey

Perception of Respondent about NRHM in CHCs: Table 6 implies the perception of respondent in the CHC. The respondents of Firozpur Jhirka told that there is no improvement in the infrastructure after NRHM but manpower is improved after NRHM. While the respondent of Punhana CHC replied that there is no improvement in infrastructure and manpower after introduction of NRHM.

Availability of Health Care Services in PHCs: In present study 4 PHCs has been surveyed for the assessment of development after NRHM. 2 PHCs namely Marora and Biwan selected under the Firozpur Jhirka CHC and 2 PHCs namely Singar and Tigaon under Punhana CHC. Marora and Biwan PHCs under Firozpur Jhirka CHC covers 72,201 and 57,767 persons respectively; while Singar and Tigaon PHCs under Punhana CHC covers a population of 55,903 and 95,456 persons respectively. Average population covered by all PHCs is 70,332; while

as per norms one PHC should cover 30,000 population. Population covered by selected PHCs is more than double compare to as per norms. Every PHC is supported by some sub center in its coverage area.

Marora and Biwan PHCs have 6 and 5 sub center respectively in their coverage area. On the other hand Singar and Tigaon PHCs have 7 and 8 sub center respectively. Proximity between the health facilities is one of the important factors. Marora and Biwan PHCs have nearest sub center at a distance of 2 kilometers and 3 kilometers respectively. Nearly 10 minutes required to reach from these SC to PHC. Singar and Tigaon PHCs have nearest sub center at a distance of 2 kilometers. A vehicle needs nearly 5 minutes to reach PHC from sub center. Marora and Biwan PHCs have farthest SC at the distance of 11 and 10 kilometers respectively. The time taken by travelling between these SC and PHCs is 20 and 30 minutes respectively. Singar and Tigaon have their farthest SC at the distance of 13 and 20 kilometers respectively; travelling time required at least 30 and 40 minutes respectively. The distance of selected PHCs to their respective CHC is 21 and 12 kilometers for Marora and Biwan PHCs. While the distance for Singar and Tigaon PHCs is 4 and 12 kilometers respectively.

A vehicle takes nearly 30 minutes to reach Firozpur Jhirka CHC from Marora and Biwan PHCs. On the other hand time taken from Singar and Tigaon PHCs to Punhana CHC is about 10 and 20 kilometers respectively.

Marora and Biwan PHCs have the OPD and referral services but not have emergency and IPD services. Singar PHC has the facility of OPD, emergency and referral services but IPD facility is not available in this PHC. Tigaon is the only PHC where is no facility available. Marora and Biwan PHCs have 1 and 2 beds respectively, while Singar and Tigaon PHCs did not facility of beds. Bed occupancy rate was less than 40 percent in Marora and Biwan PHCs. 55-60 patients daily came to Marora PHC as OPD, the average number of daily patients in Biwan PHC are 60-70. On an average 80-85 OPD patients came daily to Singar PHC, while Tigaon PHC did not OPD facility. Only 5-6 T.B patients came to Tigaon PHC and dots are provided to them by peon.

Facility of maternal child health care (MCH) was not available in all PHCs. Marora, Biwan and Singar PHCs have the facility of ante-natal care, post-natal care, new born care, intra-natal care, child immunization and family planning. But there is no facility is available in Tigaon PHC. Facility of institutional delivery is available in Biwan PHC only. The facility of tubectomy and vasectomy is available in Marora and Biwan PHCs only. ANC registration facility is available in Marora, Singar and Biwan PHCs. Marora and Biwan PHCs provides almost all prescribed medicines, while half of medicines are available in Singar PHC. Rogi Kalyan Samiti is exists in only Biwan PHC only.

Availability of Manpower in PHCs: Table 7 shows the availability of manpower in surveyed PHCs. Tigaon is the only PHC where medical staff is not available. Only two fourth class worker are available. Each PHC have 2 sanctioned posts of doctors. But one doctor is available in each PHC (except Tigaon). AYUSH doctor is not available in all PHCs. One pharmacist is working in each PHC (except Tigaon). There are three staff nurses in Biwan PHC, while other PHCs has no staff nurse. Two female health workers were on position in Biwan PHC, while Marora and Singar PHCs have one female health worker each. The post of health educator is laying vacant in Biwan, Singar and Tigaon PHCs. Health assistants were in work at Biwan and Singar PHCs. The post of clerk and driver are laying vacant in all four PHCs. Laboratory technicians were available in Marora and Biwan and Singar PHCs. 1 fourth class worker is available in Biwan and Singar, while 2 fourth class workers are working in Marora and Tigaon PHCs each. Dental surgeon was available in Marora and Biwan PHCs only.

Table- 7: Availability of Manpower in Selected PHCs in Mewat, 2012

Sl.	Medical Personnel	Firozpu	r Jhirka	Punhana	
No.	Medicai Personnei	Marora	Biwan	Singar	Tigaon
1	Medical Officer				No
	o Sanctioned	2	2	2	2
	o In Positioned	1	1	1	0
	o AYUSH	0	0	0	0
2	Pharmacist	1	1	1	0
3	Nurse - Midwife (Staff Nurse)	0	3	0	0
4	Health Worker (Female)	1	2	1	0
5	Health Educator	1	0	0	0
6	Health Assistant (One male and One female)	0	1	1	0
7	Clerks	0	0	0	0
8	Laboratory Technician	1	1	1	0
9	Driver	0	0	0	0
10	Class IV	2	1	1	2
11	Dental Surgeon	1	1	0	0
	Total	8	11	6	2

Source: Based on Primary Survey

Availability of Infrastructure Facilities in PHCs: Study found that the buildings of Marora, Biwan and Singar PHCs are situated within the village locality, while the building of Tigaon PHC is situated one kilometer far from village. Except Tigaon, no PHCs are working in a designated government building. There are only two 4th class workers in Tigaon PHC. These two are running Tigaon PHC. One of them is sweeper and another is watchman. There is no OPD and other services in this PHC. Only T.B patients came in this PHC and Sweeper gave them medicine. One is also important fact with this PHC is that this is the only PHC in surveyed PHCs which have own designated government building with 4.5 acres and residential quarter. This PHC was in working condition before seven years, which concludes that NRHM did not impact in the improvement of this PHC.

Primary Health Center of Marora village is running in a sub center in Marora and because building of Marora PHC was started five year earlier but it is still in the primary condition. Biwan PHC is working in a rented building. Marora and Singar PHCs are working in sub-centers.

All the PHCs have complete compound wall. Plaster was coming off from wall in all PHCs. The condition of Marora and Singar PHC's floor was very good, while rest two have not good condition floor. Cleanliness of Marora PHC was good, cleanliness of Biwan and Singar was fair and cleanliness of Tigaon PHC was poor. All of these PHC are located at easily accessible area. Only Biwan PHC has 2 beds for patients, one for male and one for female. Operation theatre is not available in any PHC. Labour room is available in Biwan PHC only. Laboratory is available in Marora, Biwan and Singar PHCs. Piped water supply is available in Marora PHC. Electricity is available in Marora, Biwan and Singar PHCs, but generator facility was not available in any PHC. The facility of telephone and computer was not available in any PHC. All the PHCs were connected to metalled road. There was no facility of vehicle for transport in any PHCs. Renovation is reported in Marora and Singar PHC after NRHM.

S. No. Perception about Facilities Firozpur Jhirka Punhana

Table- 8: Perception of Respondent (Doctor/Health Personnel) about NRHM in Selected PHCs in Mewat,

C No	Perception about Facilities	Firozpur Jhirka		Punhana	
S. No.		Marora	Biwan	Singar	Tigaon
1.	Is there any improvement in the situation of Infrastructure	Yes	Some improvement	Yes	No
2.	Is there any improvement in the situation of Man-Power Availability	Yes	Some improvement	Yes	No

Source: Based on Primary Survey

Perception of Respondent about NRHM in PHCs: Table 8 implies about the perception of respondent in the PHCs. The respondents from Marora and Singar PHCs reported that there is an improvement in infrastructure and man power availability after NRHM. The respondent of Biwan PHC reported that there is some improvement after NRHM. But the respondent of Tigaon PHC told that there is no improvement after NRHM. Respondent replied that Tigaon PHC was working before implementation of NRHM but now it is not working; so there is a negative improvement in Tigaon PHC.

Conclusion

Healthcare services and infrastructure are very poor in India and especially in rural areas. Present study found that this situation is also true about the rural area of Haryana. Study found that Firozpur Jhirka CHC covers 291,344 persons, while Punhana CHC covers 340,523 persons in their respective area. Population covered by these CHCs is above 2.5 times more than recommended population for CHC which is 120,000. There was no specialist of surgery, physician, obstetrician/gynecologist, pediatricians and eye surgeon in both CHCs. It shows that there is shortage of specialist in both CHCs. There was facility of ECG, X-Ray in both CHCs but these were not in functioning condition because non availability of operators. Ultrasound facility was not available in both CHCs. Infrastructure of Punhana CHC was better than Firozpur Jhirka CHC but cleanliness was better in Firozpur Jhirka than Punhana CHC. There is no improvement noticed in infrastructure in both the CHCs. But improvement in manpower is noticed in Firozpur Jhirka CHC.

All surveyed PHCs covers 70,322 population on an average and this is double than the recommended population which is 30,000. Out of 4, 3 PHCs were in working condition, but facility of institutional delivery is available in Biwan PHC only. Rogi Kalayan Samiti ia also exist in Biwan PHC only. Only two PHCs provides all prescribed medicines. There was no medical staff in Tigaon PHC while rests have one doctor in each PHC. The building of 3 PHCs is situated within village locality while Tigaon PHC is situated one kilometer away from village. Transport facility was also not available in any PHC. Renovation is reported in Marora and Singar PHCs after NRHM. In the last it can be said that healthcare facilities and services are very poor and overburdened in the surveyed PHCs and CHCs.

References

- 1. Akhter, Rais. "Spatial Distribution and Growth of Health Facilities in Rajasthan", Geographical Review of India, 1978, Vol. 40 (3), pp. 206-214.
- 2. Akhtar R and Nilofer J. "Health Care Delivery in India". The Indian Geographical Journal, 1984, 59 (2) 106.
- 3. Ansari SH. "Spatial Organization of Health Care Facilities in Haryana", National Geographical Journal of India," 2005, Vol. 51, Pts. 3-4, pp. 51-62.
- 4. Babu VH. "Rural Health System and Health Infrastructure in Vishakhapatnam District, A.P., India", Man and Life, 2009, Vol.35, Nos. 1-2, pp.21-28.
- 5. Banerjee, Abhijit, Deaton, Angus and Esther Duflo. "Health Care Delivery in Rural Rajasthan", Economic and Political Weekly, 2004, Vol. 39, No. 9, pp. 944-949.
- 6. Banerji D. "Health Behaviour of Rural Populations: Impact of Rural Health Services", Economic and Political Weekly, 1973, Vol. 8, No. 51, pp. 2261-2268.
- 7. Baru, Rama V. "Structure and Utilization of Health Services: An Inter-State Analysis", Social Scientist, 1994, Vol. 22, No. 9/12, pp. 98-111.
- 8. Bhandari l and Dutta S. Health Infrastructure in Rural India, 2007, pp.265-285.
- 9. Chib, Sukhdev Singh. "Public Health Facilities in Kinnaur: A Study in Geography of Health", National Geographical Journal of India, 1985, Vol. 31, pt. 2, pp. 99-106.
- 10. Choubey, Kailash. "Health Care Delivery System in India: A comparative Study in Geography of Health", Geographical Review of India, 1996, Vol. 58, No. 4, pp. 350-366.
- 11. Gupta, Monica Das, Desikachari BR, Shukla Rajendra, Somnathan TV., Padmanaban P and KK Dutta. "How Might India's Public Health System Be Strengthened? Lesson from Tamil Nadu", Economic and Political Weekly, 2010, Vol. XLV, No. 10, pp.46-59.
- 12. Hassan MI and Daspattanayak PR. "Health Care Infrastructure in Orissa- A Geographical Study", Eastern Geographer, 2008, Vol. XIV, No. 1, pp. 33-40.
- 13. Husain, Zakir. "Health of National Rural Health Mission", Economic and Political Weekly, 2011, Vol. XLVI, No. 4, pp. 53-60.
- 14. Kanchan, Rolee. "Primary Health Services: Their Adequacy and Accessibility in Vadodara District", Region, Health and Health Care, 1997, Vol. 2, No. 1, pp.13-19.
- 15. Khan ME, Prasad CVS and Neshat Quaiser. "Reasons for Under Utilization of Health Services: A Case Study of a PHC in Tribal Area of Bihar", Demography India, 1987, Vol. 16, No. 2, pp. 177-195.
- 16. Kumar BLN and Vani BVS. "An Integrative Approach for Rural Health Care: NRHM", Kurukshetra, 2008, Vol. 56, No. 12, pp. 15-20.
- 17. Mehrotra S. "Public Health System in UP: What Can Be Done?" Economic and Political Weekly, 2008, Vol. XLIII, No. 49, pp. 46-53.
- 18. Mukherjee, Subrata and Levesque, Jean-Frederic. "Changing Inequalities in Utilization of Inpatient Care in Rural India: Evidence from the NSS", Economic and Political Weekly, 2010, Vol. XLV, No. 46, pp.84-91.

- 19. Neelima A and Reddy, A Sudarshan. "Peoples perspectives on health care services in rural Andhra Pradesh: An epidemiologic study", Social Change, 2009, Vol. 39, No. 2, pp. 257-269.
- 20. Patil AV, Somasundaram, KV, and Goyal RC. "Current Health Scenario in Rural India", Australian Journal of Rural Health, 2002, Vol.10, pp. 129-135.
- 21. Purohit, Brijesh C. and Siddiqui, Tasleem A. "Utilization of Health Services in India", Economic and Political Weekly, 1994, Vol. 29, No. 18, pp. 1071-1080.
- 22. Rajeshwari. "Gender Bias in Utilization of Health Care Facilities in Rural Haryana", Economic and Political Weekly, 1996, 31 (8), 489-496.
- 23. Ratawa Meeta and Sharma PR. "An Appraisal of Health Care Facilities: A Case Study of Sewapuri Block (Varanasi District)", National Geographical Journal of India, 2010, Vol. 56, Pt. (i), pp. 1-8.
- 24. Sadanandan, Rajeev. "Government Health Services in Kerala: Who Benefits?", Economic and Political Weekly, 2001, Vol. 36, (2), 3071-3077.
- 25. Shinde, Dhanashri S. "Spatial Analysis of Health Facilities in Maharashtra's South Konkan Region", Eastern Geographer, 2010, 1, Vol. XVI, pp. 43-48.
- 26. Singh ND. "Rural Healthcare and Indebtness in Punjab", Economic and Political Weekly, Vol. XLV, 2010, 11, 22-25.
- 27. Singh, Urmilesh. "Health Infrastructure in Rural India", Yojana, 2009, 53 (7), 48-50.
- 28. Varadarajan, Dhulasi Birundha and Deivamani K. "Health Status in Tamil Nadu", Indian Journal of Regional Science, 2000; Vol. XXXII, No. 2, pp. 24-31.
- 29. Waseem S, Ashraf A, Ahmed Sabbir and Hussain Najmul. "Regional Imbalances in Rural Health Care Facilities: A Case of Murshidabad District, W.B.", National Geographical Journal of India, Vol. 57, Pt. (1), 2011; 45-56.

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