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Rapid appraisal of functioning of primary health centers under NRHM Programme in Karnataka

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Abstract

Modern healthcare facilities and hospitals have been concentrated only in the urban areas. Most of the villages even today do not have enough number of primary health care centers or the sub centers (SC). Rural areas in general are marked by the poor implementation of the health facilities. Various Governments have implemented many rural specific health programmes. Still majority of rural hospitals are lacking sufficient numbers of the doctors, paramedical staffs and the required infrastructure. Some of the hospitals in the rural areas don't have even the proper building. Panchayat Raj Institutes (PRI) is a statutory body to deliver rural health care system in India under health decentralization. However, this is only possible if PHIs are strongly efficient. Both PRIs and PHIs must have enough efficiency in various aspects to deliver effective and quality health care. The major objective of this paper is to study an in-depth review of the structural, organizational and operational framework of selected PHCs and to assess the efficiency and effectiveness of their management systems in Karnataka state this study found that even today many PHC s have end up with various administration and technical issues in the rural areas. It is also found that functioning of PHCs in rural areas is not free from impediments and need more up gradation for the effective implementation of NRHM scheme.

Keywords: *NRHM, PHC, Health, Rural, Schemes, Doctors*

1. Background

Health is a part and parcel of any organism. Historically post-renaissance (Post Renaissance is the era followed by the high renaissance (an art) has been a period of enlightenment. It is the phase in the progress of human civilization when the substance was systematically separated from the mind and answers to the everyday world phenomena were required in the dominion of nature. Decentralized system is specially meant for peoples' complete participation, increased transparency and higher degree of accountability to provide comprehensive health services at the grassroots' level. Decentralized health system will provide service to the doorsteps and hence it is very close to the people. Also decentralized health system is very cost effective in terms of both labour and material (Bheenaveni, 2007).

Primary Health Centers are the back bone of the public health system in the rural and tribal India. In spite of the criticism they have faced regarding the quality of health care and the poor infrastructure, they continue to be the major primary care provider for the majority of India's population who resides in the rural areas. In India, it was the Bhore Committee on the Health Survey and Development appointed by the Government of India in 1945 which defines the concept of the Primary Health Centres. The Central Council of Health in its meeting held in January 1953 accepted to set up of Primary Health Centers in each and every block throughout the country. A typical Primary Health Centre covers a population of 20,000 in hilly, tribal, or difficult areas and 30,000 populations in plain areas with 4-6 indoor/observation beds. It acts as a referral unit for 6 sub-centres and refer out cases to Community Health Centers (CHC) (30 bedded hospital) and higher order public hospitals located at sub-district and district level. Primary Health Centers (PHCs) form the back bone of the public health system in rural and urban India (Vaddiraju & Sangeeta, 2011).

According to Gupta (2001), "India is the second most populous country in the world and with a healthcare infrastructure that is over-burdened with ever increasing population, a set of challenges that are unique to India has raised." He further writes as below:

- "India faces the twin epidemic of continuing/emerging infectious diseases as well as chronic degenerative diseases;
- The former is related to the poor implementation of the public health programs, and the latter to demographic transition with increase life expectancy;

Health decentralization is a vital issue in the success of the NRHM programme. Panchayats needs to provide quality maternal health care services but also they have their own structural issues. Still rural people prefer home delivers or delivers at private hospitals because of poor medical facility at rural Govt. hospitals. Panchayats should demand the Govt. to recruit lady physicians for the rural local PHCs. It is also found that majority rural poor women could not obtain any type of post natal care for the second pregnancy at PHCs and they are not in a situation to pay for quality institutional health care while childbirth. Panchayats needs to be taken care about this issue inn popularizing and upgrading PHCs. Authors also opined that the low quality service at PHCs are the major hurdles in the implementation of the NRHM programmes effectively in the rural parts(Vyasulu and Vijayalakkshm,2010).

2. Review of Literature

Mohanty (2013) has opined that feature of the NRHM scheme is its bottom-up method through participatory setting up by the community and Panchayats. Additionally, the formation of the various committees within the PRIs like Health, Sanitation, and Nutrition Committee have become a novel and creative plan to deal with the various vital health issues focusing maternal health care, controlling epidemics, immunizations etc. Since these committee comprises elected members, SHG members, NGOs and community workers etc chance of being successful will be more. The health committees under PRIS can sanction required funding for various health's related activities taking place at its jurisdiction.

It is opined there is a need to have some programme aimed at building capacities of the Gram Panchayats with systematic local planning for the creation of more awareness about the NRHM among the rural folk. It also sought to create community awareness on various health care issues and to make them as an active partners in the various government health programmes and to implement the programme so that that every needy person can get some sort of benefits in a more transparent manner. Also the Grama Panchayats can increase their capacity in having collaboration with the private sector for the more effective public health care system. Comprehensive baseline information about the NRHM beneficiaries can be prepared with the private experts, so that the gram panchayats may prioritize the health interventions at ground level though PHCs (Singh, 2008; Pahwa, 2013).

Experts opined the first step is to provide adequate facilities and equipment for the existing PHCs (land, building, equipment, and supplies) previously set up by the government. Every PHC should consist of a preliminary screening room with a computer, an examination room for the doctor, a laboratory for medical tests and sup - plies, and toilets. Majority PHCs lack even such a basic element of infrastructure as electricity. Additionally, each PHC should have full time staff consisting of a lady doctor, a paramedic to perform initial screening test, a trained nurse or physicians' assistant, and a laboratory technician (Bheenaveni, 2007).

It is suggested that not only there is an inadequacy of facilities that are essential for PHCs to become functional, but also there is a mis-match between the complementary facilities and man-power. Such an inadequacy of both essential facilities and man-power on the one hand and mis-match of complementary facilities on the other are likely to affect the utilization rate adversely in PHCs (Rajasekhar & Satapathy, 2007).

Manjundar *et al*. (2004) says "It is well known that doctors are technically more resourceful than any other supporting paramedical personnel. In rural India people are more dependent on the latter which are playing dominant role today. If we consider the elasticity co-efficient as a measure of productivity then in the rural health care system Paramedical staffs are more productive than the Doctors". Further Verma (2010) 'There is a strong need to remove the inadequacies in terms of buildings, manpower and provisions of drugs supplies and equipment constitutes major impediments to full operationalization of rural primary health care system.

A government-funded review of NRHM also revealed its slow progress in upgrading PHCSs in the country. The major problems in the upgrdation of PHCs are: administrative constraints, governance issues, inadequacies in human resources as well as the poor investment in public health services in the recent past (Shrivastava, 2008). People below poverty line availed themselves of exemptions from user charges at PHCs. According to field survey ignorance among the poor about free treatment and the multipart and unwieldy procedure were constraining the access of the poor to the required health care services at rural PHCs (Ghuman & Mehta, 2006).

3. Objective and Methodology

i. To find out availability and adequacy of medical, para-medical and supporting staff in PHCs; to reveal extent of utilization of health care services available in PHCs; and

ii. To find out the quality of health care services delivered by PHCs

iii.

4. Methodology

This study has been conducted in the Karnataka state. A multi-stage purposive sampling design was adopted for the current study to select the PHCs. Around 49 PHCs delivering various NRHM schemes/programmes were selected from the seven districts through random sampling technique. PHCs have been selected using Health and Family Welfare Survey (2011) report and the RCH Survey report as a stratifying parameter. Using interview schedule, data have been collected from the State Officers, NRHM officials, Taluk and Dist Health Officers, RCHO officers , and the Health workers (other than the health officials) etc. Data has been analyzed using SPSS software. Study done between for the period, 2015-17.

5. Result and Discussions

A. Infrastructure Details of the Studied PHCs

Table 1.

Building	**N-49**	**%**
Working in own buildings	38	77.5%
Rented buildings	1	2.0%
Donated buildings	7	14.3%
Others	3	6.1%
Type of PHC building		
Kachha	4	8.2%
Semi-pucca	7	14.3%
Pucca	38	77.6%
Present condition of the existing buildings		
Good	15	30.6%
Satisfactory	20	40.8%

Need repairing	14	28.6%
Availability of staff quarters		
Yes; but not good	38	77.6%
No quarters	10	20.4%
For ANM/pharmacist only	1	2.0%
Does PHCs have these facilities		
Medical and paramedical staff	38	77.6%
Power and water supply for 24 hours in PHCs	39	79.6%
Facility of generator/inventor available	20	40.8%
Separate toilet facility for males and females	29	59.2%
Labour room	33	67.3%
Dispensary	39	79.6%
Ambulance	7	14.3%
All the above	40	91.8
Who is available at night in the health centre		

Sources: Primary Survey

Since the sub-centers are not working everywhere, the primary health centers need to play a key role in delivering the NRHM services. We found more than 77% (Table 1) of PHCs are functioning in the own buildings whereas 14% of them are working in the donated buildings. Majority buildings are in good conditions with the modern outfits. Health staff says staff quarters are available but not in good condition. Hence, medical staffs are not staying in the area. Majority studied PHCs have good fundamental facilities. About 77% of PHCs having medical staff and 79% of PHCs are having separate dispensaries and 67% PHCs have modern labour rooms etc. Normally ANM or staff nurse will remain in the hospital during the night time to take care of the 'in patients'. Around 87% of medical officers say required medicines are available in the PHCs. Hence, they will not send patients' outside for the medicines. Now under NRHM, PHCs are being upgraded with the modern facilities.

B. ***Details about the Health Staff of the PHC Centre and its Activities***

Table 2

Professional qualifications of the medical officer	N-49	%
MBBS	43	87.8%
BAMS/Other	5	10.2%
Additional Diploma /PG level	1	2.0%
Length of service		
1-5 years	35	71.4%
Above 5 years	14	28.6%
Special training programmes attended		
Vector born disease control programme	42	85.7%
Directly Observed treatment- Short Course (DOTS) training	44	89.8%
Immunization training	41	83.7%
Others	36	73.5%
Does PHCs have involved in these activities		
Creating health awareness among people regarding nutrition, sanitation, cleanliness etc.	49	100.0%

Mobilizing community for their better access to public health facilities	46	93.9%
Counseling women on birth preparedness and safe delivery, family planning, care for infants etc	49	100.0%
Accompanying pregnant women and arranging escort for pregnant women/children to the nearest health facility	47	95.9%
Have you attended these special skill training programme		
NSV –Non Scalpel Vasectomy trainingprogramme	6	12.2%
MTP- Medical Termination of Pregnancy training	26	53.1%
Reproductive Tract Infection/Infection (RTI/STI) training	41	83.7%
Management of obstetric complications (Emergency Obstetric Care) training	20	40.8%
IMNCI- Integrated Management of Neonatal and Childhood Illnesses training	36	73.5%
Type of trainings coordinated by the PHCs		
Pulse polio training	46	93.9%
Training of ASHA/ANM	38	77.6%
NRHM programme	41	83.7%
Training for the PRI members	26	53.1%
Other	0	0.0%
Opinion about referral services available		**%**
Emergency obstetric care provided in all PHCs	28	57.1%
Action initiated for the quality first line referral services	37	75.5%
There is no formal preferential treatment for referred cases	14	28.6%
Most complicated cases will be referred to the private hi-tech hospitals /district hospital	31	63.3%

Sources: Primary Survey

We found from Table 2 that about 87% of medical officers working in PHC centers have MBBS degree, whereas 10% of them have BAMS (alternative medicine) degree. Regarding special training programme, of the MO majority of them have attended DOTs programme, immunization training programme and vector born disease control programme. In the survey we found PHCs are involved in the health awareness creation programme and counseling for pregnant women, which is highly appreciable. Regarding the skill training programme 83% of them have attended RTI related programme whereas 73% of them have attended IMNCI programme and only 12% of them have attended NSV programme. Majority medical officers have coordinated pulse polio training and NRHM programme. Regarding the referral services, PHCs (75%) are handling most of the cases with in their limit sent by the SCs. If PHCs could not handle the referred complicated cases they are referring it to the high tech hospitals. Around 93% of PHCs have conducted different training programme including PRI and for the health providers in their jurisdictions. We also found that Cholera and Jaundice and Typhoid are most frequently occurring disease in the area.

C. ***Details about the NRHM Programme Management***

Table 3

How would you rate the success of NRHM in your Jurisdictions	**N -49**	**%**
Very good	15	30.6%
Moderate	17	34.6%
Fairly succeeded	17	34.6%
Poor	0	0.0%
other	0	0.0%
What has been NRHM s specific achievements in your PHCs level		
Handled highest numbers of beneficiaries	21	42.8%
Highest percentage of handling communicable diseases	7	14.2%

Highest numbers of handling referrals	11	22.4%
Highest numbers of treating infectious diseases	10	20.4%
Are Sharing of health information with PRIs		
Yes ; always	**15**	**30.6%**
Not always	11	22.4%
Only some time	26	46.9%
Reasons for not sharing information with PRIs		
No reply from the panchyats	17	34.6%
No use	10	20.4%
Shares information at meetings only	22	44.8%
Will you send the patients' outside for medicines		
Yes: always	6	12.2%
Not :always	43	87.8%

Sources: Primary Survey

We probed about the management of the NRHM issues in the PHC jurisdictions. About 34% (Table 3) of them claims moderate level of success and 30% of them says a good success. None of them claimed 'poor performance'. Regarding the specific achievement of PHCs about 42% of them say they handled highest numbers of beneficiaries whereas 22% of them say they have handled the highest number of referrals with their capacity. It shows PHCs are working at the decent level. We found only 30% of PHCs are sharing the health information with the PRIs. This needs to be focused urgently. Regarding the reasons for not sharing, about 20% of them say 'it is no use' and 34% says there will be no reply from the panchayats. Regarding the association with the health standing committees, around 79% of them have associated with the village health and sanitation committee whereas 65% of them have been associated with the hospital management committee regularly. They are playing an advisory role there.

D. ***Details about Service Availability in PHCs***

Table 4

Service availability at PHCs	**N-49**	**%**
Ante-natal care	46	93.9%
Intranatal care (24 - hour delivery services both normal and assisted)	29	59.2%
Post-natal care	36	73.5%
Reproductive health	31	63.3%
New born care and immunization	49	100.0%
Communicable diseases	37	75.5%
Management of RTI/STD	45	91.8%
Other facilities under NRHM	39	79.6%
Availability of specific services		
Are antenatal clinicsbeing organized by the PHC regularly	29	59.2
Delivery servicesavailable in the PHC for 24 hours	31	63.3%
Tubectomy and vasectomy available at the PHCs	7	14.3%
Facility for the minor surgery	34	69.4%
Counseling service	14	28.6%
All the above	44	89.8%
Other functions and services performed		
Nutritional services	42	85.7%
School health programmes	48	98.0%

Water borne diseases and basic sanitation programme	48	98.0%
Prevention and control of locally endemic diseases	48	98.0%
Disease surveillance and control of epidemics and collection and reporting of vital statistics	48	98.0%
Education about health / behaviour change communication	48	98.0%
HIV/AIDS control programs	49	100.0%
Rehabilitation services	17	34.7%

Sources: Primary Survey

Different services are available in the studied PHCs. Almost all PHCs do have ante natal care facility and post-natal care facility. About 91% of PHCs (Table 4) have facility for RTI /STD treatment. All PHCs have new born care and immunization facilities. Regarding the specific services available all PHCs have facility for the minor surgery, 24 x 7 baby delivery facility etc. Studied PHCs have involved in nutrition, school health programme, awareness about water borne diseases, disease surveillance and control of epidemics, collection and reporting of vital statistics sanitation, surveillance, and AIDS awareness programmes like extension activities etc.

E. ***Details about the Infrastructure and other Facilities Availability***

Table 5

Availability of working OT room	**N -49**	**%**
Yes	12	24.5%
No	37	75.5%
If no reasons thereof		
Non-availability of surgeon	18	36.7%
lack of equipment	17	34.7%
poor physical state	21	42.9%
no power supply	12	24.5%
any other	6	12.2%
Is PHC has labor room facility		
Yes	40	81.6%
No	9	18.4%
Does PHCs have required medical instruments		
Examination table	48	98.0%
Delivery table	44	89.8%
Bed side screen	21	42.9%
Emergency kit	45	91.8%
All the above	48	98.0%
Is their availability of these special items in PHCs		
Instrument trolley	38	77.6%
Sterilization instrument	39	79.6%
Instrument cabinet	26	53.1%
Blood / Saline stand	28	57.1%
Stretcher on trolley	30	61.2%
Wheel chair	40	81.6%
All the above	44	89.8%
Is their availability of these items with the PHCs		
Normal delivery kit	44	89.8%
Kit equipment for assisted vacuum delivery	6	12.2%

Equipment for assisted forceps delivery	14	28.6%
Equipment for New Born Care and Neonatal Resuscitation	35	71.4%
Standard Surgical Set and IUD Insertion Kit	23	46.9%
All the above	45	91.8%
Essential Laboratory Tests Available		
Blood grouping	43	87.8%
Sputum testing for TB	30	61.2%
Blood smear examination for Malaria Parasite Urine (Routine)	45	91.8%
Culture/sensitivity/Microscopy	7	14.3%
Haemogram (TLC/DLC)	9	18.4%
Diagnosis of RTIs/STDs with wet mounting, grams stain, etc.	17	34.7%
Rapid Plasma Reagin (RPR) test for Syphilis and Rapid tests for pregnancy	34	69.4%
All the above	45	91.8%

Sources; Primary Survey

Availability of required infrastructure is very essential at the PHCs for delivering the quality NRHM services. About 75% of PHCs (Table 5) have working OT room but have some technical issues. We found non-availability of surgery and lack of equipments; poor physical staff in majority PHCs. Around 81% of PHCs has the labor room facility. Around 18% of the PHCs don't have labour room due to the various reasons. All most all PHCs have the required essential medical furniture's but not in good condition. Regarding the special medical equipments, around 89% of PHCs have all the required tools for treating the patients. All most all the PHCs (85%) do have some of the essential items like different freezers, cord box etc. Though all the PHCs have the decent level of labs, they don't have enough facility to diagnosis RTIs/STDs, for culture/sensitivity/microscopy, sputum testing for TB etc. Next, PRIs must act soon to upgrade the labs in all PHCs with all the modern facilities.

Health planning is a vital issue in the NRHM programme. Both PHCs and PRI will jointly frame the village health plans. Normally PHCs involve in disease mapping (91%), drugs planning (85%) health staff management etc like issues. They are also involved in some general planning's including infrastructure, utility planning etc. We found that PHCs will do health plans based on the health department guidelines, based on the previous year's data, feedback from various health staff and committees etc. Health plans are being approved by THO and DHO based on the procedure. PRIs role in the public health management is now under question. Further, PHCs, SCs and VHSCs, NGOs, Gramasaba, health staff have divergent opinion about the statutory powers to the PRIs about the health issues. Around 20% of the health staff opines better to delink the health powers from the PRIs whereas 69% recommends continue with the existing system without any change. We also probed about the negative experiences of the health staff facing because of the PRIs role in the health care management. Health officers say it is creating harassment to the health staff and working under the political pressure is a big issue every day. Health staff is not ready to work under the PRIs. Also they say PRI people don't have any technical knowledge about various health issues. Some of them are accusing the PRI members about misusing funds and few of them opined reformation in PRIs is need of the hour.

Aarogya Raksha Samithis (ARS)

After introduction of the NRHM in April 2005, Ministry of Health & Family Welfare, Government of India, introduced of having different health standing committees and meets tits expenditure under the Untied Fund and the Annual Maintenance Grants. Hence, in Karnataka, Government, converted Aarogya Salaha Samithis for PHCs and CHCs into Aarogya Raksha Samithis(ARS) to check corruption and provide required facilities under the 'single window system' in every rural PHCs. ARS is an effective management structure. This committee, which would be a registered society, acts as a group of trustees to

manage the affairs of the PHCs. It consists of members from the local panchayat raj institutions, NGOs, local elected representatives and officials from Government sector who are responsible for the proper functioning and management of the Hospitals (PHCs/CHCs). ARS are free to prescribe, generate and use the funds for the smooth functioning and maintaining the quality of services. In Karnataka.

In the study we found that ARS is meeting normally takes place 4-6 times in a year. Some time even more than six times in a year. In the meeting, ARS members are discussing about repair of buildings, patients welfare, up gradation, procuring equipments, purchasing drugs for PHCs, fund utilization etc. We also probed about the ARCs role in the health system improvement. ARC role is quite significant in IEC activities, in health-nutrition, child & mother health, awareness creation, guiding health staff etc.ARS seems to be working satisfactorily with regard to the health extension and communication issues in the state. But the ARS have not performed as an independent management committee of hospitals. Accountability is yet to be realized. Medical officers (65%) opine effectiveness of ARS in public health institutions is a quite significant issue.

Monitoring, Supervision and Quality Control

Monitoring and supervision is a very vital issue. PHCs are normally monitoring the functioning of the sub centers, through regular visiting and getting monthly reports from them. Medical officer are visiting the different health staff to review their work. Also they are monitoring the NRHM programmes through review meetings with the concerned people, site visits etc. Quality control measure is being done through the constitution of citizen's charter, ombudsmen, internal monitoring, social audit through panchayati raj institutions etc. But all these not up to the mark. Often PHCs are receiving the written feedback from the DHO/TO or other supervisory officers about the PHCs general performances and we also found DHO will normally review and monitors the infrastructure(s) and maintenance of the PHCs. Next, DHO reviews and monitors the performance of the health staff (PHC) at the regular interval also.

Government has to provide various facilities for the health staff in the rural areas. We learn that around 59% of the PHC staffs are not being provided any government quarters. We also got some information about the problems in the government quarters including the old buildings, no water, no power facility etc. Around 69% of them say they don't have any good transport facility to reach the PHCs. Normally ANM/ASHA members are residing locally. The main reasons why doctors are not ready to stay in the rural are the absences of the good facilities. Field survey shows all most all staff quarters are ruining. They are not in the good structure. All medical staffs are staying in the nearby urban areas only

Under NRHM up-gradation of PHCs/ CHCs are being done regularly. In the last two years more than 50 PHCs have been up-graded to 24 x 7 PHCs through this up-gradation PHCs will be having required OT, labour rooms, new medical instruments etc. Some of the PHCs are are converted into CHCs. More then 47% PHCs are running shortage of medical staff. More than 65% don't have paramedical staff due to various reasons. Lady medical staffs are totally absent in as many as 41% PHCs. The major issue is involvement of politicians in this up-gradation issue lot of politics will also play over here. Influential politicians will bring pressure on health department to up-grade more number of PHCs and CHCs in their constituents. Sometime these politicians show interest to up-grade PHCs in the village/ hobli from where they can get more votes. In some cases up-gradation is being done without giving any medical infrastructure to the PHCs. More than 70% of CHCs don't have scanning, ventilators and ECG facilities. Though they have X-ray machines it is also not functioning properly. Basically PRIs should meet the expenses of water, power and telephone charges of PHCs/ CHCs , such expenses should be met out of different heads like utility fund, development fund etc. We found few PRIs (28%) have not paid water and power bills of PHCs over the years. Different heads of expenditures have been created in PRIs for different purposes. However, certain PRIs using money from one head for the different purpose. Other than the purposes for which money from that head is supposed to spend.

Rural PHCs are also facing the problems including lack of proper accommodation, lack of amenities in PHCs, poor quality buildings , transport problem, an inadequate supply of both medicines and equipment, and bureaucratic practice in transferring physicians and p.m staff. Regarding the process of medical care, the frequent transfer of doctors and health staff, lack of their dedication, indifferent attitude towards people, lethargy, doctors lack of interest to work in the rural areas, and insufficient or untimely supply of medicines are observable in the rural PHCs. Regarding the outcome of service in rural areas of Karnataka, there is a lack of aftercare services, lack of attention towards the prevention of diseases before their actual attack, and lack of follow up methods .

6. Conclusion

PHCs are the vital health system. Functioning of the PHCs in rural areas is not free from the problems. Several impediments on the path of functioning of the PHCs such as illiteracy of the people, negligence, lack of response from the beneficiaries, lack of one time funding from the government, lack of staff at the PHCs and lack of interest on the part of people occupying authority positions were also observed at the time of fieldwork. The overall performance of the PHCs is greatly affected by these issues. They also affect the attitude of the people towards accepting the services rendered by the PHCs. However, all the PHCs are not having the same degree of these impediments. Therefore, it is essential to identify the specific impediments confronted by each PHC in the rural parts.

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