



Research Paper

## NRHM AND IPHS - STANDARDS IN PRIMARY HEALTH CARE

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Primary Health Centers are the cornerstone of rural health services- a first port of call to a qualified doctor of the public sector in rural areas for the sick and those who directly report or referred from Sub-centers for curative, preventive and promotive health care. The overall objective of it is to provide health care that is quality Oriented and sensitive to the needs of the community. The main objective of this study is to assess the compliance of PHCs according to the IPHS. A sample of 5 PHCs was randomly selected from a frame of 31 in Bangalore urban district. Both quantitative data using the IPHS survey tool and qualitative data through Key Informant Interview (KII) were collected. There were great variations between the PHCs in terms of manpower, and less variation for drugs and supplies. The medical doctors in the PHCs were not aware of the IPHS. Interviewees opined that insufficient human resources need to be addressed and adequate number of equipments in working condition needs to be provided for better care. The respondents favored the standards, which increased the patient inflow by improving the quality of care. Introduction of the IPHS for PHCs is an important factor in the improvement of the quality services provided. But the introduction of standards and norms alone cannot change or improve the facility and the services provided. There need to be the identification of gaps for the targeted approach to be implemented. The issue of the functionality of human resources should be taken in to account seriously and alternatives designed for addressing the staff shortages.

**Keywords:** Primary Health Care, IPHS, NRHM, Quality

### BACKGROUND

India is a signatory to the Alma Ata Declaration of 1978 and had committed to attaining “Health for All” by 2000AD through the Primary Health Care approach. Primary Health Care seeks to extend the first level of the health system from sick care to the development of health. It seeks to protect and promote the health of defined population

health problems at an early stage. The National Rural Health Mission (NRHM) was launched by the Hon'ble Prime Minister of India in 2005 with a goal to improve the availability and accessibility of quality health care to the people, especially for those residing in rural areas, the poor, and women<sup>1</sup>. There is a three tier system of healthcare in rural areas which starts with the Sub Center,

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<sup>1</sup> [http://mohfw.nic.in/NRHM/Documents/NRHM\\_Framework\\_Latest.pdf](http://mohfw.nic.in/NRHM/Documents/NRHM_Framework_Latest.pdf). Accessed on 28/12/11

then the Primary Health Center (PHCs) and the last one is the Community Health Center.<sup>2</sup> The establishment of PHCs in India started as early as in 1952, and there have been several changes to meet the increasing demand for health care services. Quality services like preventive, promotive, curative, supervisory, and outreach services are to be provided by the PHCs, and the NRHM aims at strengthening the PHCs for this. The PHCs cater to the population of 30, 000 in the rural plain areas and 20, 000 in the hilly areas. As on March 2007 (Figure 1), there were 22, 370 PHCs functioning in the country<sup>2</sup> and Karnataka has 2195 PHCs. The PHCs cover an average population of 16, 000 in Karnataka and there is one PHC for every four sub center under them. Number of PHCs which are functioning 24x7 in Bangalore urban district are 21.<sup>3</sup> In order to improve the standard of care in PHCs, NRHM has come up with a set of norms called as Indian Public health Standards (IPHS). The main driver of the improvement in quality is the setting up of standards and the primary objective of the IPHS is to provide healthcare which is quality oriented and sensitive to the needs of the community.<sup>4</sup>

The PHCs were conceived and established to be a proper infrastructure for the provision of comprehensive health care to the rural population. There were various criticisms on the PHCs regarding the lack of manpower, essential drugs, adequate infrastructure, and the lack of community participation as it was acting as a

peripheral health service institution without any involvement from the local people. Taking these issues in to account, the Ministry of Health and Family Welfare (MOHFW), under the NRHM has developed IPHS standards to monitor the functioning of the PHCs. The IPHS for PHCs focuses on sections like Manpower, Infrastructure, Drugs, and Services. Adequate and essential supply of drugs, Provision of 24 x 7 services in at least 50% of PHCs, immediately addressing the shortage of doctors are of paramount importance if the PHCs have to be efficient and cater to the essential services for the people of rural areas and the vulnerable population<sup>2</sup>. Facility surveys are being conducted in different states to find the required numbers and in turn fill the gaps<sup>5</sup>. The IPHS gives a framework and structure to find out the gaps existing in the healthcare delivery in the rural communities as it aids in the measurement of indicators which in turn helps to measure the performance with the resources available. The availability of trained manpower, essential drug and services are the main imperative which cannot be compromised, and which is well captured in the IPHS survey format developed by the NRHM.

## RESEARCH QUESTIONS

- Do PHCs meet the IPH Standards
- Are the staffs in PHC aware about these standards
- Is there any issues faced in complying with the standards

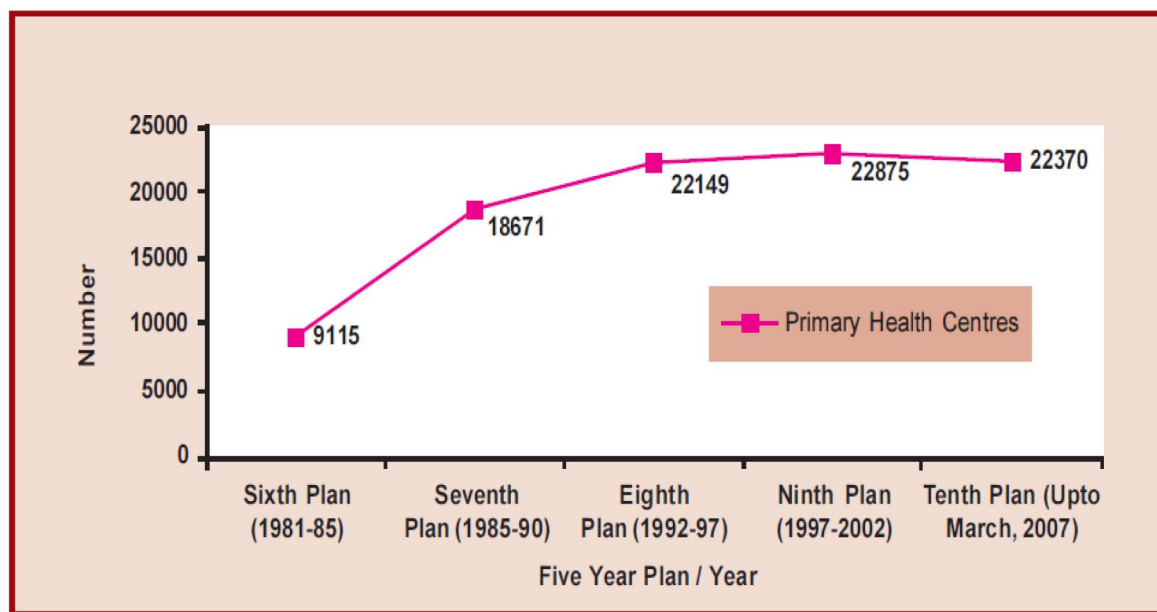
<sup>2</sup> [http://www.whoindia.org/LinkFiles/Health\\_Systems\\_Development\\_Primary\\_Health\\_Care\\_Primary\\_health\\_care\\_resources\\_.pdf](http://www.whoindia.org/LinkFiles/Health_Systems_Development_Primary_Health_Care_Primary_health_care_resources_.pdf). Accessed on 28/12/11

<sup>3</sup> [http://mohfw.nic.in/NRHM/Documents/24x7\\_PHC\\_Karnataka.pdf](http://mohfw.nic.in/NRHM/Documents/24x7_PHC_Karnataka.pdf). Accessed on 28/12/11

<sup>4</sup> Director General of Health Services, Ministry of Health and Family Welfare, Government of India. IPHS for PHCs. 2006

<sup>5</sup> Satpathy S K, Venkatesh S, Human Resources for Health in India's National Rural Health Mission: Dimension and Challenges, Regional Health Forum, Volume 10, Number 1, 2006.

**Figure 1: Number of PHCs in Five Year Plans**



Note: Under Tenth Five Year Plan (2002-07), Some of the PHCs have been upgraded as CHCs.

Source: Rural Health Statistics, MOHFW, GOI (2007)

- Is IPHS really helping the quality improvement or it is structured and designed without due consideration to the state of health system in India.

## OBJECTIVES

The primary objectives of the facility survey were

- To assess the existing status of the health care facilities available in the PHC establishments in Bangalore urban district Karnataka as per the IPHS norms developed under the NRHM.
- To find out the awareness of IPHS among the PHC staff, and issues and bottlenecks which affect the functioning of PHCs and compliance to the IPHS norms

The main objectives of the facility survey have been to assess PHCs:

1. Availability of Services as per IPHS norms
2. Functionality of Equipments as per IPHS norms
3. Availability of Drugs as per IPHS norms
4. Functionality of Staffs as per IPHS norms

## METHODOLOGY

The methodology which was carried out for this study is mixed methods which involved both qualitative and quantitative survey. Bangalore urban district has four taluk divisions as shown in the Figure 2. A sample of 5 PHCs was randomly selected from a frame of 31 in Bangalore urban district. The quantitative data was collected for the sections of Manpower, Services, Equipments, and Drugs and Supplies using the IPHS survey

tool for PHC available from the NRHM website. The qualitative data was collected using a semi – structured questionnaire through Key Informant Interview (KII) of medical officers and/or staff nurses from two PHCs out of the five. Both quantitative as well as qualitative questionnaires were administered through telephone. The quantitative data was analyzed to find out the percentage of availability and functionality for the aforementioned sections. The qualitative data was collected to get information and perspectives of the PHC staff regarding the standards in Primary Health Center, NRHM, and the IPHS. Figure 3 gives the overview of the research design.

### DATA ANALYSIS AND CATEGORIZATION

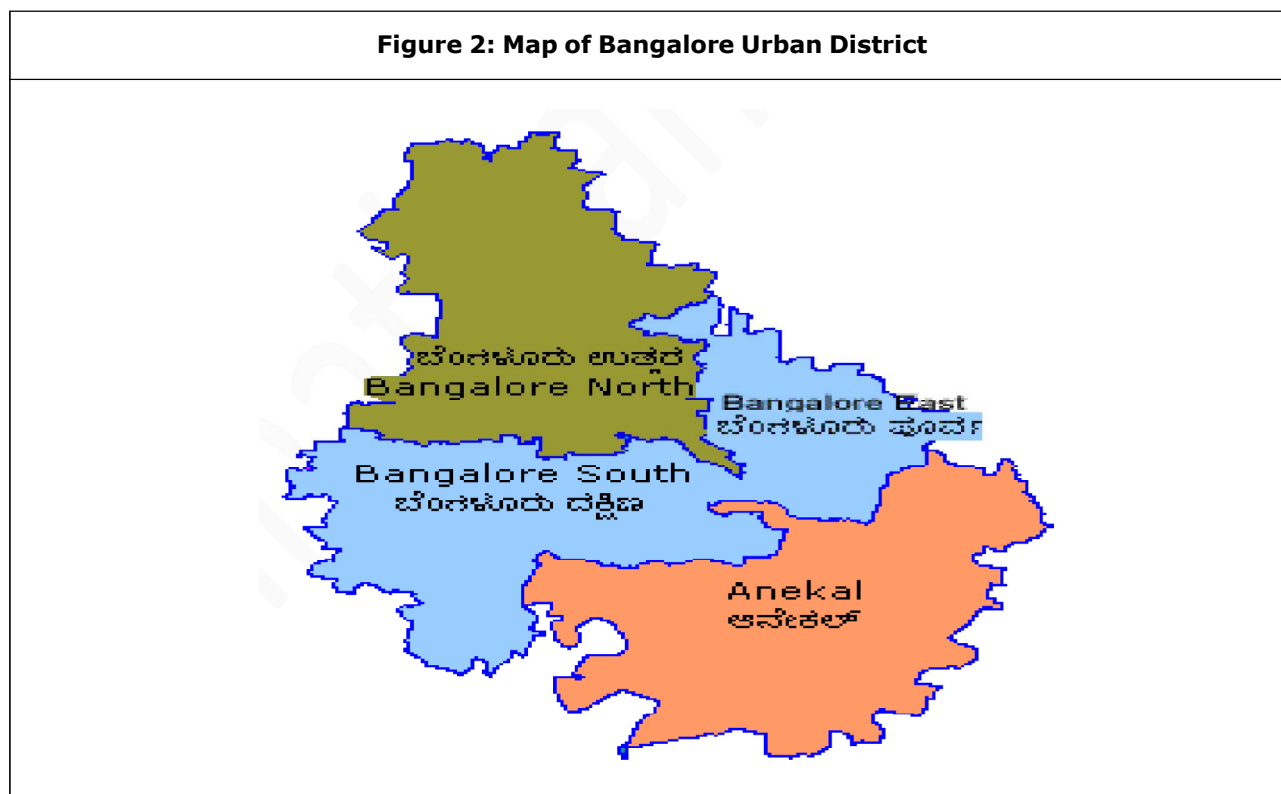
The quantitative data which was collected were entered in to the MS Excel package with the

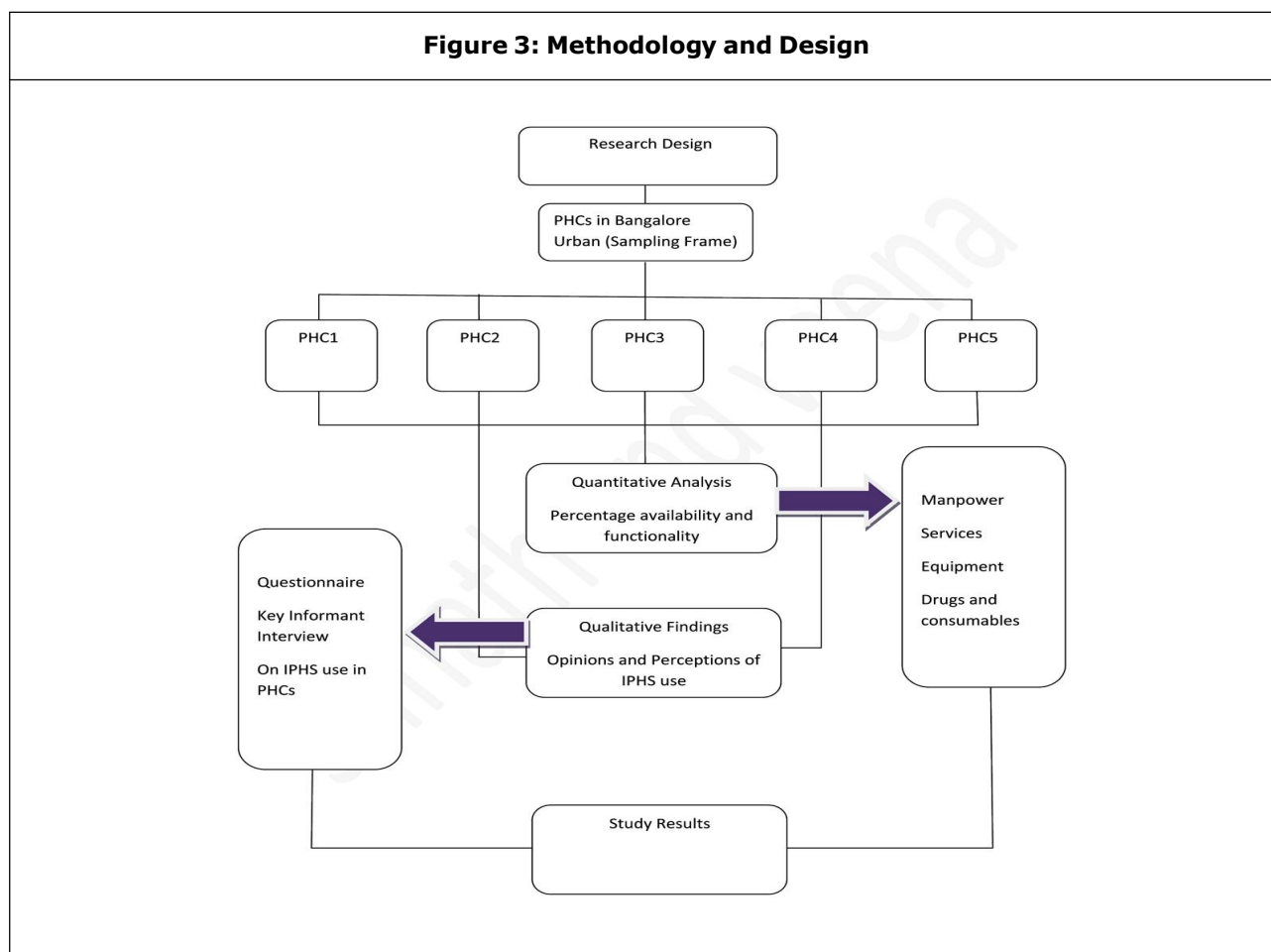
variables in the horizontal row and the PHC identification in the vertical column. The drugs and services were analyzed for availability, while the manpower and equipments were analyzed for functionality. Availability means the presence and functionality means utilization/working condition during the survey day. After it was entered the proportion of availability and the functionality for the above sections were calculated and percentage entered by creating a table. The sections which were below 66% was given red coding, between 66 and 75% were given yellow coding, and above 75% were given green coding. The three different coding represents three categories. This was then represented pictorially through Bar graphs.

### RESULTS

There are approximately 23, 200 PHCs which are functioning in India with the ratio of one PHC for

Figure 2: Map of Bangalore Urban District



**Figure 3: Methodology and Design**

every 30, 000 population. In India there is a shortfall of approximately 4500 PHCs in total<sup>6</sup>. While in Karnataka, there are 2193 functioning PHCs which are approximately 1000 more than the required number of 1211, and most of the PHCs are functioning in the government buildings. Due to a greater surplus in the PHCs, there is not enough availability of resources to run the PHCs efficiently.

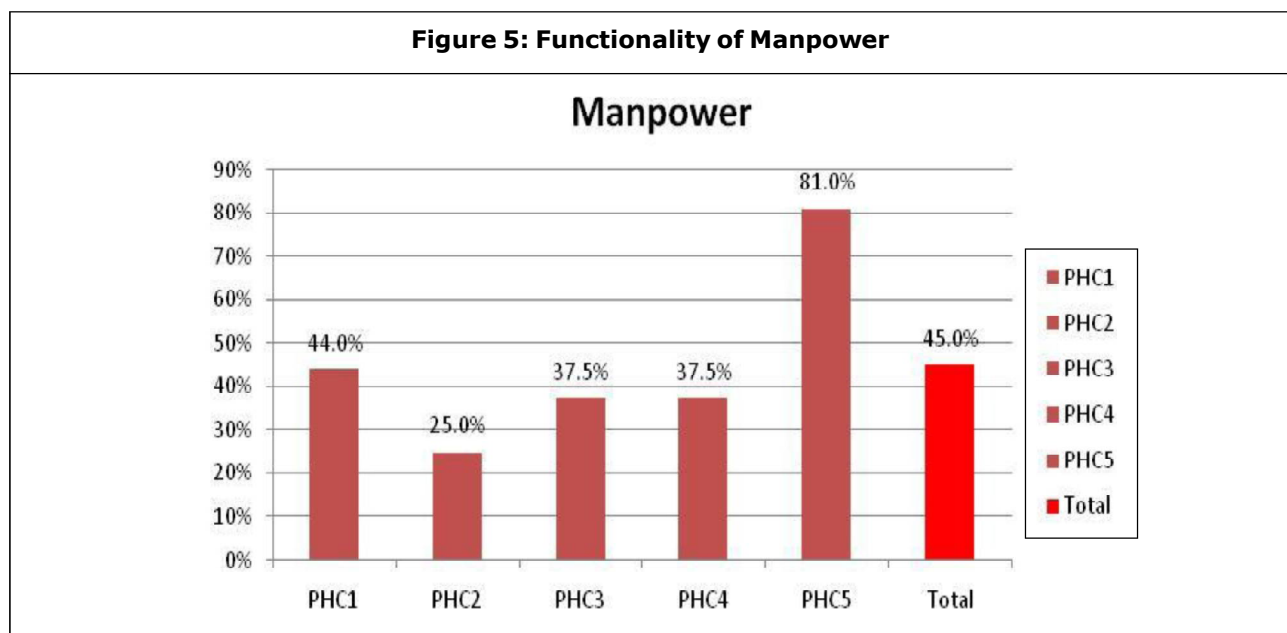
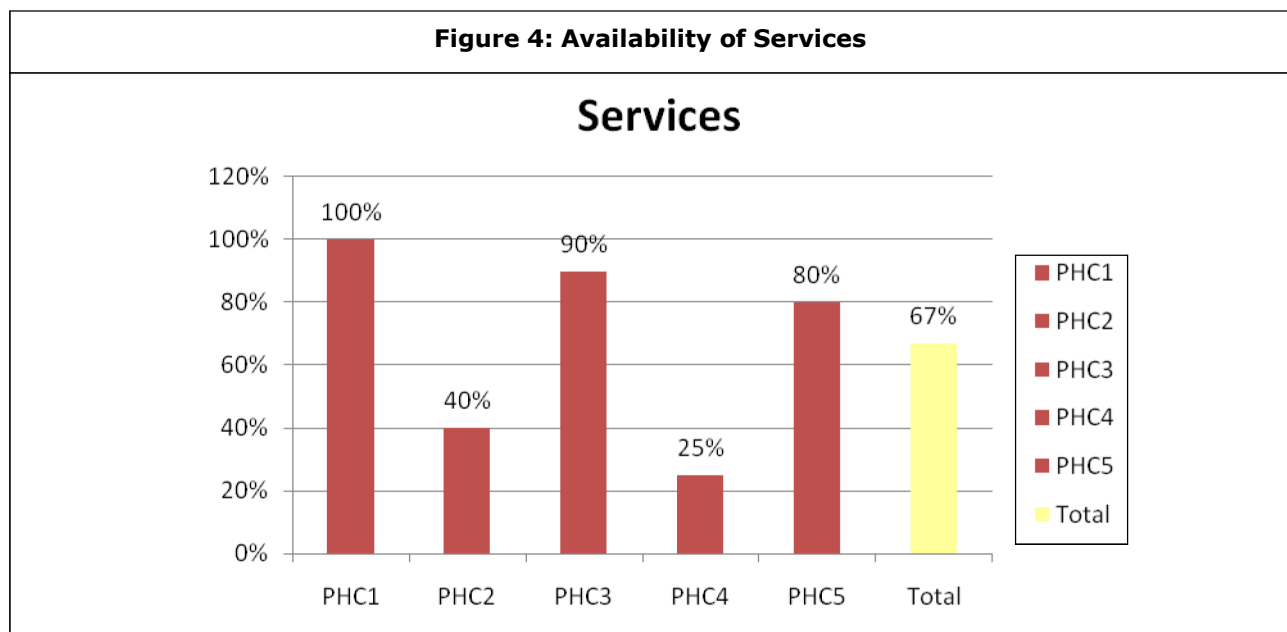
The services are classified as essential assured services, and desirable services. The services like Medical Care, Newborn care, Child Care, Nutrition, Management of RTI/STI, reporting of vital events, control of endemic diseases, promotion of safe drinking water and sanitation

etc., are essential services which the PHC must provide to the community.<sup>7</sup> While there are approximately 76% PHCs in Karnataka which are functioning with labor room, Operation Theater, and with 4-6 beds, there are only 41% PHCs which have 24 hours delivery facility.<sup>5</sup> The Figure 4 below gives the availability of services in the five PHCs which were studied in the Bangalore Urban district. It is to be noted that the availability of services ranged from as low as 25% in PHC4 to as high as 100% in PHC1. Totally only 67% of the services were available among the PHCs. This area falls in to the yellow category.

The manpower planning in the public health sector is based on the prevailing health situation

<sup>6</sup> RHC Bulletin. MOHFW. Government of India. 2009.

<sup>7</sup> IPHS for PHCs. Director General of Health Services. Guidelines, revised (2010).



and the recommendation of different committees.<sup>5</sup> People with right skills, in right numbers, and at the right place lead to a better health outcome.<sup>8</sup> It has been proposed under the NRHM, to include three staff nurses to provide round the clock services, and recruit more AYUSH practitioners to supplement and address the shortage of allopathic doctors. As per the IPHS norms, there

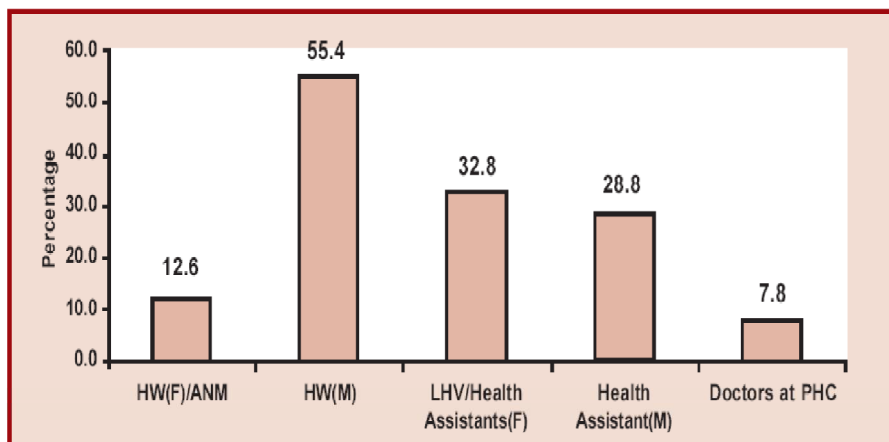
need to be 2 Medical Officer (M.O), 1 Pharmacist, 1 staff Nurse, 1 Female Health Worker, 2 Health Assistants (1 Male, 1 Female), One Ophthalmic Assistant, 2 Clerks, 1 Data Handler, 1 Laboratory Technician, 1 Driver, 4 Class IV people adding to a total of 17 members who are essential manpower for a PHC. Apart from these people there are 8 more whose services are desirable.<sup>7</sup>

<sup>8</sup> WHO – Human Resource for Health, (<http://www.who.int/hrh/en>.)

The existing manpower is an important prerequisite for the efficient functioning of the rural health infrastructure. Despite significant progress made in terms of creating manpower over the years, there remains a huge gap in terms of human resource at primary care level (Figure 6), which is realized by the government, and the process is under way to bridge the gap.

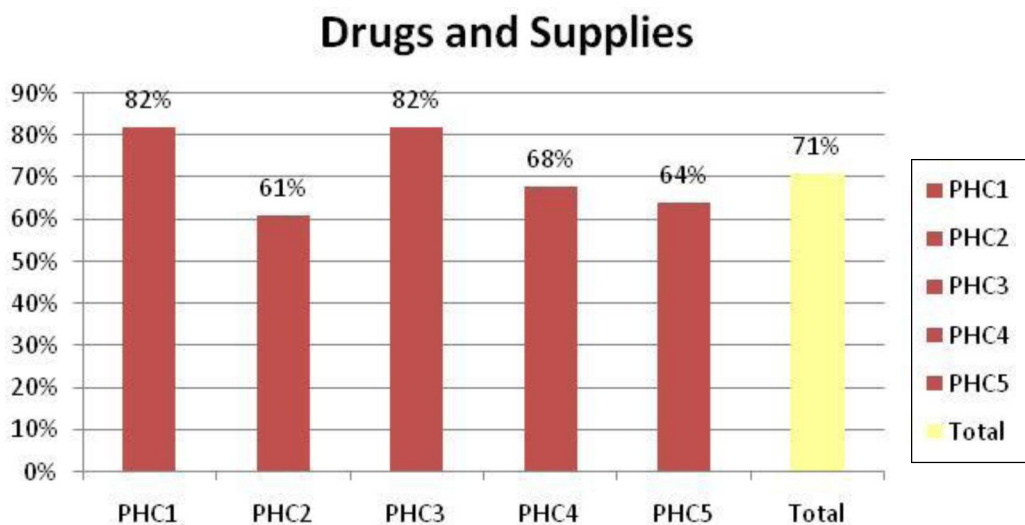
The Figure 5 above shows the functionality of manpower in the five study PHCs in the Bangalore Urban district. It is to be noted that the functionality of manpower ranged from as low as 25% in PHC2 to as high as 81% in PHC5. Totally only 45% of the manpower in the PHCs were functional. This area falls in to the red category.

**Figure 6: Percentage gap in Human Resource in PHCs**



Source: Rural Health Statistics, MOHFW, GOI (2007)

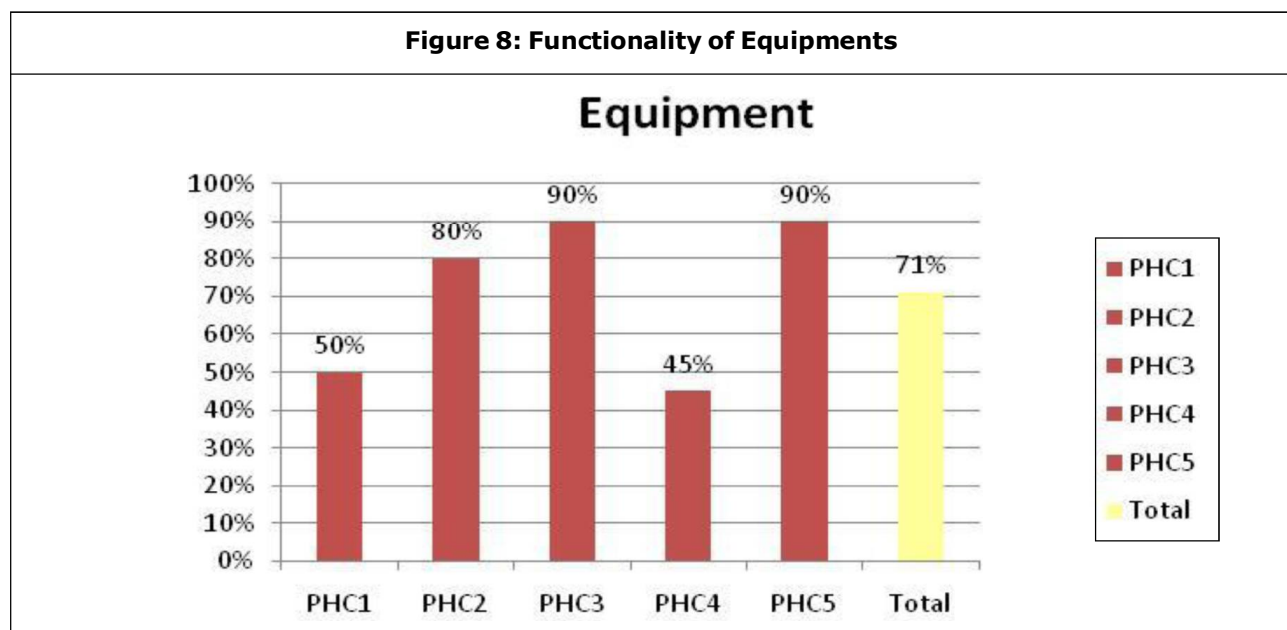
**Figure 7: Availability of Drugs and Supplies**



The whole data is presented in the table below, and the subsequent graph (Table 1 and Figure 9).

From qualitative survey conducted in the two PHCs, it was found that the medical officers were unaware of the IPHS. But they knew about the various activities and programmes under the NRHM. One of the respondents said that the programmes like Janani Suraksha Yojana (JSY), Prasthuthi Arike and various other programmes like these, have attracted more people to the public facilities, and has helped the service providers to cater to a larger population. There is

improvement in the early registration for ANC (Antenatal Checkup), IFA (Iron Folic Acid) supplementation and immunization activities. For the question of issues which need to be addressed, there were mixed responses like “not much scope and sufficient except for cancer treatment”, “geographical area is too vast and unable to deliver services for all”. The respondents in both the PHCs told that the issue of manpower should be addressed effectively. For the question of improvement in PHCs after introducing the standards under NRHM, there



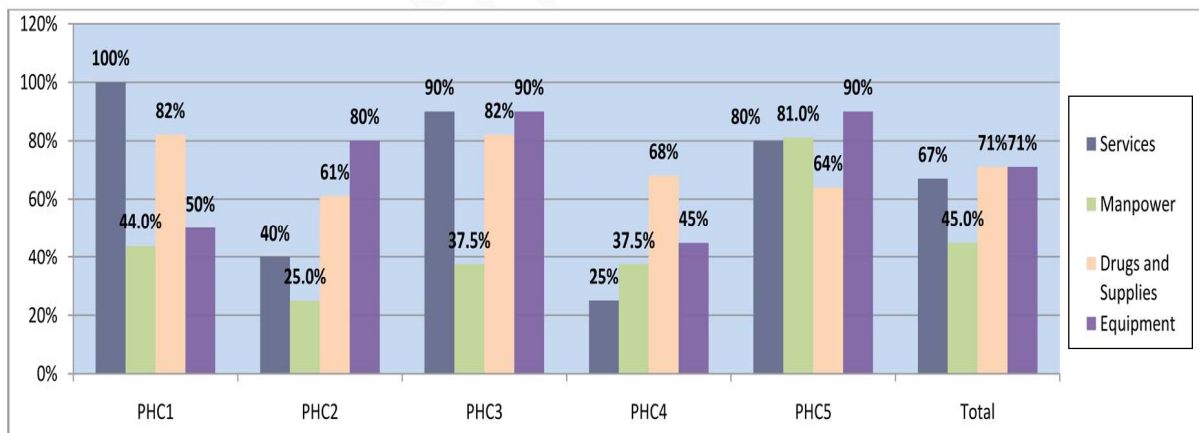
**Table 1: Color coding and Categorization**

District	Facility	Sections			
		Services	Manpower	Drugs and Supplies	Equipment
Bangalore Urban	PHC 1	100%	44%	82%	50%
	PHC 2	40%	25%	61%	80%
	PHC 3	90%	37.50%	82%	90%
	PHC 4	25%	37.50%	68%	45%
	PHC 5	80%	81.00%	64%	90%
	<b>Total</b>	<b>67%</b>	<b>45%</b>	<b>71%</b>	<b>71%</b>

<b>Color Code</b>	<66% Red	66%-75% Yellow	>75% Green
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**Figure 9: Overall availability and Functionality**

were responses like “Increased awareness of Public health facilities”, “Increase in the availing of services from the people”, “Introduction in BPL cards and DMC (Designated Microscopic Centers)”. There were common response that the OPD flow has increased, and one of the respondents told that it has approximately increased to 40% after introducing the standards.

## DISCUSSION

The Primary Health Care must be comprehensive, of acceptable standard, and sensitive to the needs of the community. The IPHS paves the way to achieve these tasks. There is a large network of rural health centers which was operating without any standards leading to a poor quality of services due to problems in manpower, community involvement, issues of accessibility and accountability.<sup>9</sup> Standards are the cornerstone for producing quality health services and have minimum set expectations for health care activity. It has been found in various studies that by merely

printing the guidelines and other materials for dissemination, the standard does not improve, unless it is coupled with other interventions like self-audit, discussion, and reminders. It is imperative to look in to the economic and patient-centered barriers which affect the performance.<sup>10</sup> In this study it is evident that the major problem lies in the human resource availability in the health facilities, and from the quantitative analysis it is found that no section satisfies the criteria for designating it as a green category (>75% compliance). There are various limitations in this study which can affect the generalisability of the results. This is a cross sectional survey of the PHCs only in the Bangalore urban district which may not be applicable to the rural areas and other locations beyond. The other limitations are the interview was conducted through telephone which can compromise on the quality of answers and there may be social desirability bias. In spite of these limitations, this study points out the gaps in the primary health care delivery, perceptions

<sup>9</sup> Satpathy S.K. Indian Public Health Standards (IPHS) for Community Health Centers . Indian Journal of Public Health; Vol. No. 3, July-September 2005.

<sup>10</sup> Standards and Evidence-based Guidelines. Health care Improvement Project. USAID. <[http://www.hciproject.org/improvement\\_tools/improvement\\_methods/approaches/standards\\_evidence\\_based\\_guidelines](http://www.hciproject.org/improvement_tools/improvement_methods/approaches/standards_evidence_based_guidelines)>. Accessed on 04/01/2012

and knowledge of the PHC staff on IPHS, and the barriers faced in implementing the standards and in turn improving the quality of care. Since it is realized that no medical officer were aware of the IPHS norms, we propose and recommend that there needs to be adequate and frequent training sessions conducted for the PHC staff in this area. IPHS is a license for PHC to demand resources and helping supporting the staffs to improve the service quality. During the literature search and review made during the study, it was found that there were huge gaps in the literature pertaining to the IPHS. This needs to be given specific attention and addressed swiftly. Only when more research studies are conducted in this area, we can come to know the issues and challenges faced in the IPHS implementation in the PHCs.

## CONCLUSION

This study set out to determine the compliance of PHCs to IPHS, and it has given an account of the noncompliance areas. There might be several reasons for this noncompliance; however it is important to note that there has to be service realization from the part of providers and political will in order to improve the delivery of services in PHC. It is noted from this study that there has been insufficient training to the staff's of PHCs regarding the IPHS norms, which is one of the various approaches to quantify the gaps in the PHC that impacts the service delivery. This study evaluated only 5 PHCs and it cannot be generalized for other PHCs. As we know that PHCs play an important role in Public health care delivery in our country and which has major impact in achieving MDGs, especially the health indicators, it is imperative to make our Primary

Healthcare more efficient with a focus on quality, and which meets the expectation of not only the rural masses but the urban masses as well. This study serves as a base for future studies on this topic and also adds to the rationale behind the importance of accreditation of Primary Healthcare facilities.

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