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A STUDY ON THE QUALITY OF HEALTH CARE SERVICES DELIVERED BY PHCS OF COIMBATORE WITH RESPECT TO AVAILABILITY OF HUMAN RESOURCE

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Abstract

Manpower is one of the most important resources utilized in an organization to achieve its objectives. A Hospital is a labor-intensive and capital-intensive organization. One reason for healthcare's reliance on an extensive workforce is that it is not possible to produce a "service" and store it for later consumption. In healthcare, the production of the service that is purchased and the consumption of that service occur simultaneously. The interaction between the healthcare consumers & providers is an integral part of the delivery of health services. Given the dependence on healthcare professionals to deliver service, the possibility of heterogeneity of service quality must be recognized within an employee and amongst the employees. Hospital is an institution dedicated to the attention of human suffering, treatment of ailments and promotion of general health of the community. The people who are directly involved in this exercise basically include doctors and nurses with support from para-medical staff. It is the responsibility of the managements of hospitals to provide due attention to them and thereby inculcate a sense of commitment.

Key Words: - Manpower Utilization, Hospital Administration, Service quality of primary health care centers.

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INTRODUCTION

Healthcare sector is an important industry to serve high-quality services and healthcare treatment to citizens in every country in the world (Izzatty, Hazana, & Shamsuddin, 2015). The differences between the countries and regions in terms of management, science, engineering, technology and labor quality have become the factors that explain the complexity dynamics of the 21st century (Uslu, 2015). It needs to be improved continuously, especially in the context of healthcare management.

After the recommendations by Bhore committee in 1946, the concept of the primary health care centre came in existence. After the recommendation of Bhore committee, many different committees have suggested many changes, but the concept of primary health care remains the same. India was committed to "Health for all by 2000 AD" through the strategy of the PHCs. Primary health care through the setup of sub centre and PHCs build up the base of the health of community. Primary health care does not include only the curative care for the diseases but also the preventive, promotive and rehabilitative care to the specified population of the defined area. The National Rural Health Mission (NRHM) was launched in the year of 2005 with the goal of improving the availability and accessibility of the quality health care to the people, especially for those residing in rural areas, the poor, and women. Right now, the three tier system exists in all over country in India in rural area. Coverage of large population by a PHC in large majority of the cases is indicative of the facts that adequate numbers of PHCs have not been established against their requirement – leading to deterioration of the quality and delivery of health care services, and it has also accentuated the problem of overcrowding in CHCs and district hospitals. The sub centres are the first (lower most) tier of this system. The second one is primary health centre and the upper most is the community health centre. The establishment of the PHCs was started in India in 1952 after the recommendations of Bhore committee. After that, many changes had been made to fulfil the requirement and demand. NRHM is aiming towards the improvement of the quality of the services like preventive, promotive, curative and rehabilitative care through the strengthening of the PHC. One PHC is catering the population of 30,000 in rural plain areas and 20,000 in the hard to reach and tribal-hilly areas. To improve the quality of the care at PHCs, the NRHM has developed the standards called Indian Public Health Standard (IPHS) - following the launching of the National Rural Health Mission (NRHM) on 12th April 2005. Primary

objective of the IPHS is to provide healthcare, which is quality oriented and sensitive to the need of community.

PHCs were established with proper infrastructure and aimed to provide comprehensive quality health care to the defined rural population. After the establishment of the PHCs, many studies were carried out on the existence of infrastructure, manpower and essential drugs, suggesting lack of some or many of them. Taking these into consideration, the Ministry of the Health and Family Welfare (MOHFW) had developed the IPHS standards under the NRHM, to monitor and evaluate the PHCs. The IPHS mainly focuses on manpower of PHC, infrastructure of PHC, essential drugs available at PHC and services provided by PHC. Adequate and essential supply of drugs, provision of 24×7 services in at least 50% of PHCs and immediately addressing the shortage of doctors are of paramount importance, if the PHCs have to be efficient, and to cater to the essential services for the people of rural areas and the vulnerable population. Facility surveys are being conducted in different states to find the required numbers, and in turn, fill the gaps. For continuous improvement in quality of care, standards are the main drive.

Factors considered under IPHs are:

- Improvement in the availability of specialist services in the CHCs/PHCs by an ensuring availability of all the sanctioned specialists. Additional sanction of the post of Anesthetist and Public Health Manager is also envisaged.
- Strengthening support staff, by recommending a Public Health Nurse and an ANM in all these Centres, in addition to the existing staff.
- Norms for infrastructure, equipment, laboratory, Blood storage facilities, and drugs have been formulated.
- Guidelines for management of routine and emergency cases under National Health programmes are being provided to all CHCs, to maintain uniformity, and also optimum standardized treatment.

Commitment to provide universal free health service including have and have not in same line and the established network of institutions with manpower over the years and field based actions on attractive health interventions are all enhanced the care of the individual over the years with recognition of Public Health as specialty over several years.

Since the launch of NRHM the progress in health sector is increased to a great extent through relentless action to implement the core strategy of skill transfer through training, provision of infrastructure and enhancing the capacity of support services. The Tamilnadu has provided skilled manpower at various levels, increased bed strength, provided 30 bedded upgraded PHCs, established inter departmental convergent activities, streamlined AYUSH services and developed intersectoral convergence activities with school education and social welfare departments. Healthcare modeled through PPP mode to identify developmental disorder as early as in the stage of foetus is unique. Inter facility transport facilities through 108 are the few successful hallmarks in Tamil Nadu.

With an established path for career progression, periodic loss of trained manpower from the primary health care institution does pose a challenge for capacity building but ensures presence of adequately experienced and trained essential and specialized service providers at higher institutions with adequate understanding of field conditions. Based on the needs specified above, the State of Tamilnadu has opted for Regional / District level capacity building institutions. All the Government MCH centres /District Head Quarters hospitals/Major Sub District hospitals have been identified as district training centres at the district level for clinical skill up gradation.
Public sector health services are, experiencing new pressures to improve the quality, quantity and accessibility of the services they provide, while at the same time having to operate under tight financial constraints. Allied to these pressures is the need to change the roles that different cadres of staff discharge, emerging in part from new views of health professional roles, partly through a changing technology for health interventions and partly through a requirement for greater skills in the workforce to meet the growing expectation of the public.

Human resources in health system are defined as “the stock of all individuals engaged in promotion, protection or improvement of population health”. Also referred to as health work-force, they cater to both private and public sectors apart from dealing with disease prevention, health promotion, public health interventions, and research, management and support services (Ghosh, Chakrabarti, & Chakraborty, 2013)

Literature review:

Human resource management is defined as a strategic approach towards the effective employment and development of a highly committed and qualified workforce to achieve the company's objectives (Hecklau, Galeitzke, Flachs, & Kohl, 2016).

Several factors influence availability of human resources in public health facilities. The "pull" factors that attract and retain health professionals in a health facility are better living condition, educational facilities, and employment opportunities for spouse. Thus, poor and less developed areas (e.g. states, districts) will have a lower share of health professionals than their public health facility share (Pallikadavath, Singh, Ogollah, Dean, & Stones, 2013). Human resource management in the health system within each state, should become more open, more flexible, more focused on services and be provided to citizens from different cultures. This is extremely important because the health system interacts with the patient-citizen, and the service is based on communication between doctor and patient. The culture of the patient and his origin influence, the result of the health service they would receive. The interaction between patient and physician is a key factor in developing and implementing health services. The human dimension of medical care cannot be removed from the health system, at least for now (Dimitrios, 2012). There are critical disparities in access and quality of health care between urban and rural populations, with rural communities being excluded from health benefits available to those in urban areas. If health outcomes are to be improved, it is essential that rural communities have access to skilled health workers in their local areas(Haskins, Phakathi, Grant, & Horwood, 2016). Minimum standard of recruitment is important to maintain a good quality of manpower in long term planning. Manpower, unlike machine, cannot develop suddenly. It takes time to get a good manpower, because a good manpower usually needs mature experiences(Purwadi, 2012).

Shortcomings witnessed in respect of coordination with and between the States as also in implementation of applicable legislations in the States are primarily an offshoot of inadequacies in manpower and infrastructure in the States. Strengthening the regulatory mechanism in the States will remain a far cry unless these infirmities are taken care of(Sabha, 2015).

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(Srinath & Veena.R, 2012).

Statement of the research problem:

The world is trying to respond to Human Resource challenges, but Human Resources for Health remains a huge challenge. Human Resources for Health require manpower usage than use of machinery. Although national and international standards have been developed and significant improvements of Human Resource for Health made, still there is more to be done to meet the required priorities and population demands. A policy brief prepared for the National Rural Health Mission (NRHM) explicitly states that 'there is indeed a major crisis in human resources for health in India and that this crisis could account for much of the poor performance of the health sector'. The NRHM which began in 2005 has an agenda of strengthening the rural health care system by improving its workforce (Pallikadavath et al., 2013)

Objectives of the study

- To study the availability and adequacy of medical, para-medical and supporting staff in PHCs
- To assess the actual practices with regard to management of workforce
- To recommend options and solutions to further improve the manpower planning, development, and recruitment

Research design

The study was intended at assessing the quality management system of Primary Health Centres in stipulations of the availability and deficiency of Human resource towards the health care management system in the district of Coimbatore. For collecting the data on present functioning of the health care management system a cross sectional survey design was adopted for the study.

Tools of the study

The tools used for analysis are Simple percentage analysis, Paired Samples Statistics and Paired Samples Test

Materials and Methods

The data were collected 47 PHCs of Coimbatore District, Tamilnadu. Secondary data collection was done from various publications of the state and central government. The researcher was personally involved in choosing the data pertaining to the study period and analyzing them with the chosen protocols.

Results and discussion

Sl.No	Position	Expected	Availability	Deficiency
1.	ANM	68	39 (57%)	29 (43%)
2.	Ayush MO	20	13 (65%)	7 (35%)
3.	Computer Assistant	12	10 (83%)	2 (17%)
4.	Lab Technician	27	17 (63%)	10 (37%)
5.	LHV	64	58 (91%)	6 (9%)
6.	MO	116	69 (59%)	47 (41%)
7.	Pharmacist	47	45 (96%)	2 (4%)
8.	Staff Nurse (Regular)	25	13 (52%)	12 (48%)
9.	Staff Nurse (Contractual)	145	74 (51%)	71 (49%)
10.	Support Staff	79	62 (78%)	17 (22%)
11.	Support Staff (Regular)	147	75 (51%)	72 (49%)
	Total	**750**	**475 (63%)**	**275 (37%)**

Table 1.1: Table showing the relationship between the expected, availability and deficiency of Manpower in Coimbatore PHCs

From the study it was identified that Pharmacist with availability of 45 (96%) against the expected level of 47 followed by Health Assistant (Female)/LHV with 58(91%) against the expected level of 64, Computer assistant with 10(83%) against the expected level of 12, Support staff availability of 62(78%) against the expected level of 79, Ayush Medical Officer (MO) availability of 13(65%) against the expected level of 20, Lab Technician availability of 17 (63%) against the expected level of 27, Medical Officer (MO) availability of 69(59%) against the expected level of 119, ANM availability was 39(57%) against the expected level of 68, Staff Nurse (Regular) availability was 13(52%) against the expected level of 25, Staff Nurse

(Contractual) availability was 74(51%) against the expected level of 145 and Support Staff Regular availability was 75 (51%) against the required level of 147.

Overall availability of human resources manpower in Primary Health centres in Coimbatore was found to be 475(63%) against the required manpower of 750 hence a gap of 275(37%)

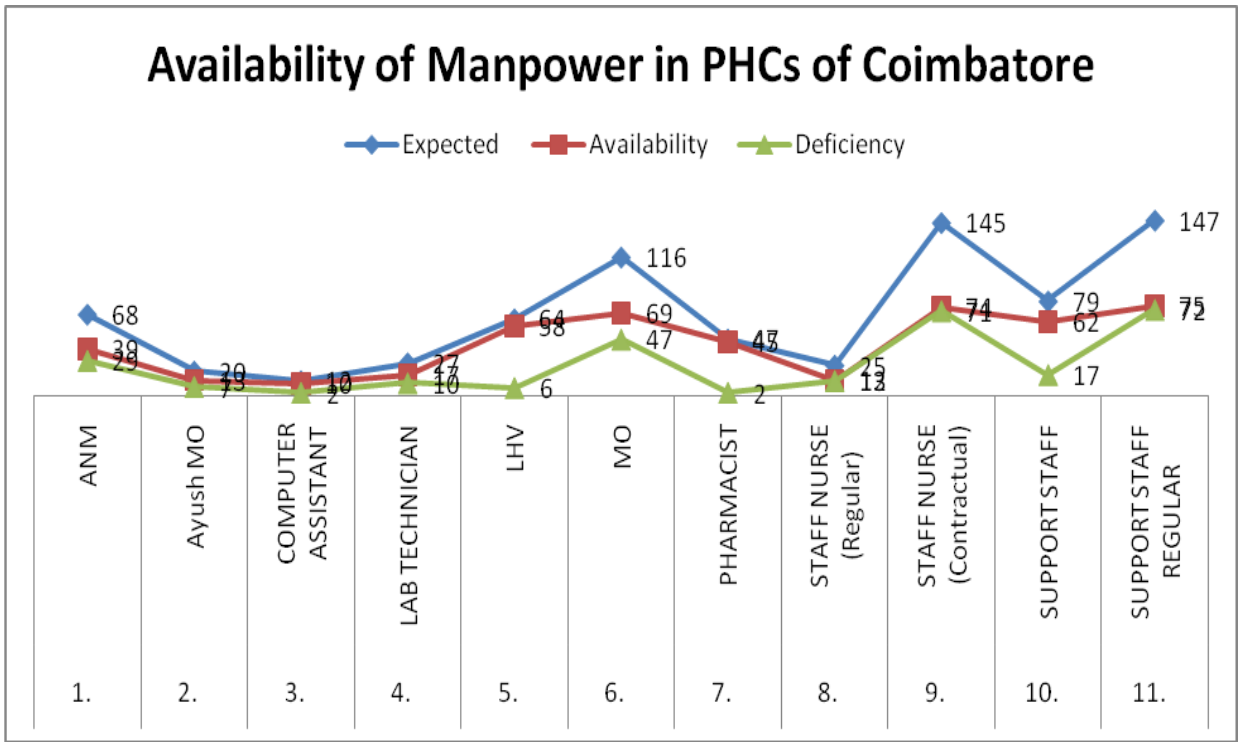

Figure 1.1: Figure showing the relationship between the expected, availability and deficiency of Manpower in Coimbatore PHCs

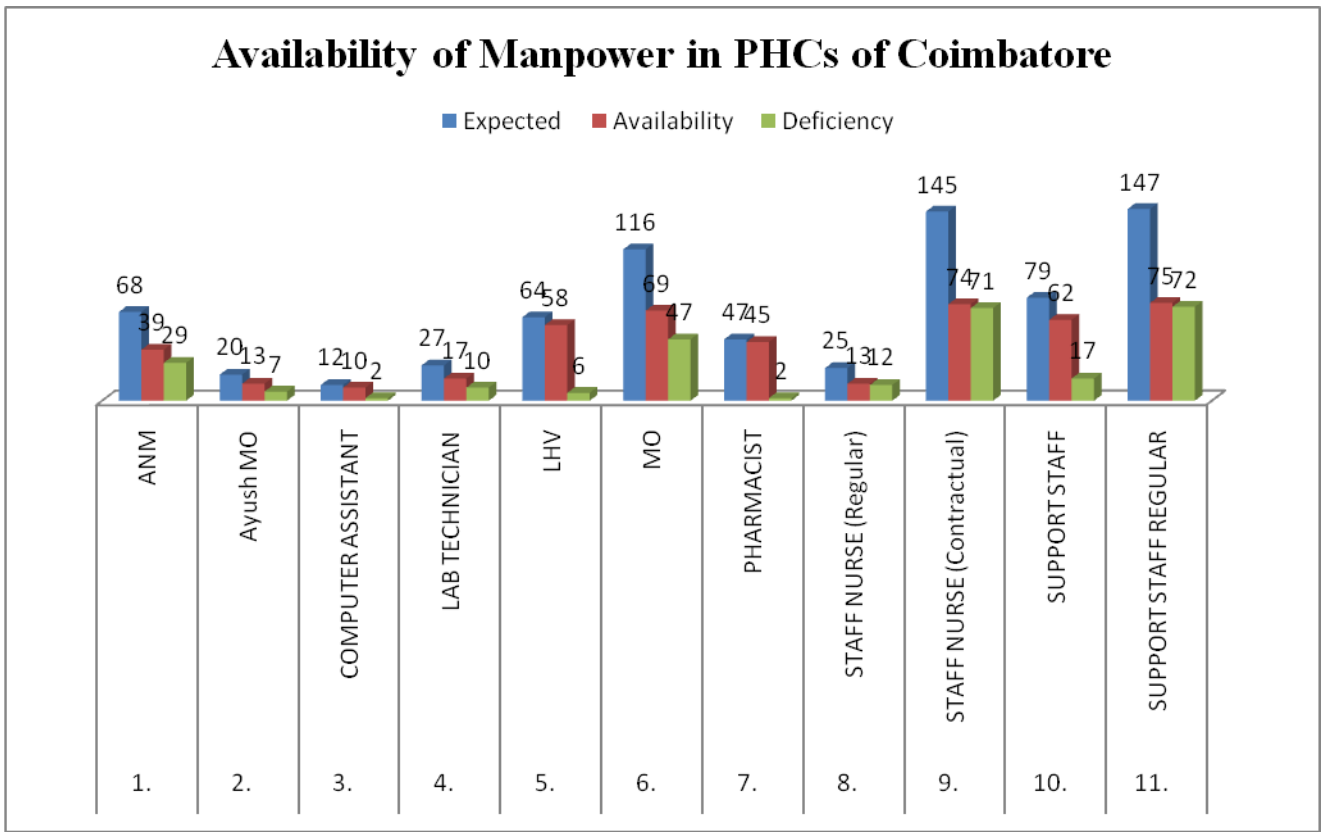

Figure 1.2: Figure showing the relationship between the expected, availability and deficiency of Manpower in Coimbatore PHCs

From the study it was found that the Deficiency was found highest for the position Support Staff Regular with 72(49%) against the required level of 147 and Staff Nurse (Contractual) with 71(49%) against a requirement of 145, Staff Nurse (Regular) Deficiency was 12 (48%) against a requirement of 25, ANM deficiency was 29(43%) against a requirement of 68, Medical officer followed with a deficiency of 47(41%) against a requirement of 116, Lab Technician had a deficiency of 10 (37%) against a requirement of 27, Ayush Medical Officer position had a deficiency of 7 (35%) against a requirement of 20, Support staff deficiency was 17(22%) against a requirement of 79, Computer Assistant deficiency was 2(17%) against the expected level of 12 followed by Health Assistant (Female)/LHV deficiency with 6 (9%) against the expected level of 64, and the least deficiency was for the position of the Pharmacist with 2 (4%) against the required number of 47. Overall Deficiency of human resources, manpower in Primary Health centers in Coimbatore was found to be 275(37%) against the required manpower of 750

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Expected	125.00	12	202.295	58.398
	Availability	79.17	12	127.122	36.697
Pair 2	Availability	79.17	12	127.122	36.697
	Deficiency	45.83	12	76.466	22.074

Table 1.2: Table showing Paired sample statistics for the relationship between the expected, availability and deficiency of Manpower in Coimbatore PHCs

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	Expected & Availability	12	.996	.000
Pair 2	Availability & Deficiency	12	.973	.000

Table 1.3: **Table showing Paired sample Correlation for the relationship between the expected, availability and deficiency of Manpower in Coimbatore PHCs**

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Expected - Availability	45.833	76.466	22.074	-2.751	94.418	2.076	11	.062
Pair 2	Availability - Deficiency	33.333	55.593	16.048	-1.989	68.656	2.077	11	.062

Table 1.4: Table showing the paired samples test for the relationship between the expected & availability relationship and availability & deficiency relationship of Manpower in Coimbatore PHCs

Paired sample test was done in the study and was found that the mean was high for the factor paired between Expected and availability at 45.833 and the Mean for the pair Availability and deficiency was at 33.333 and the standard deviation was also higher for the factors expected & availability at 76.466 and the standard deviation for the pair availability & deficiency was 55.593.

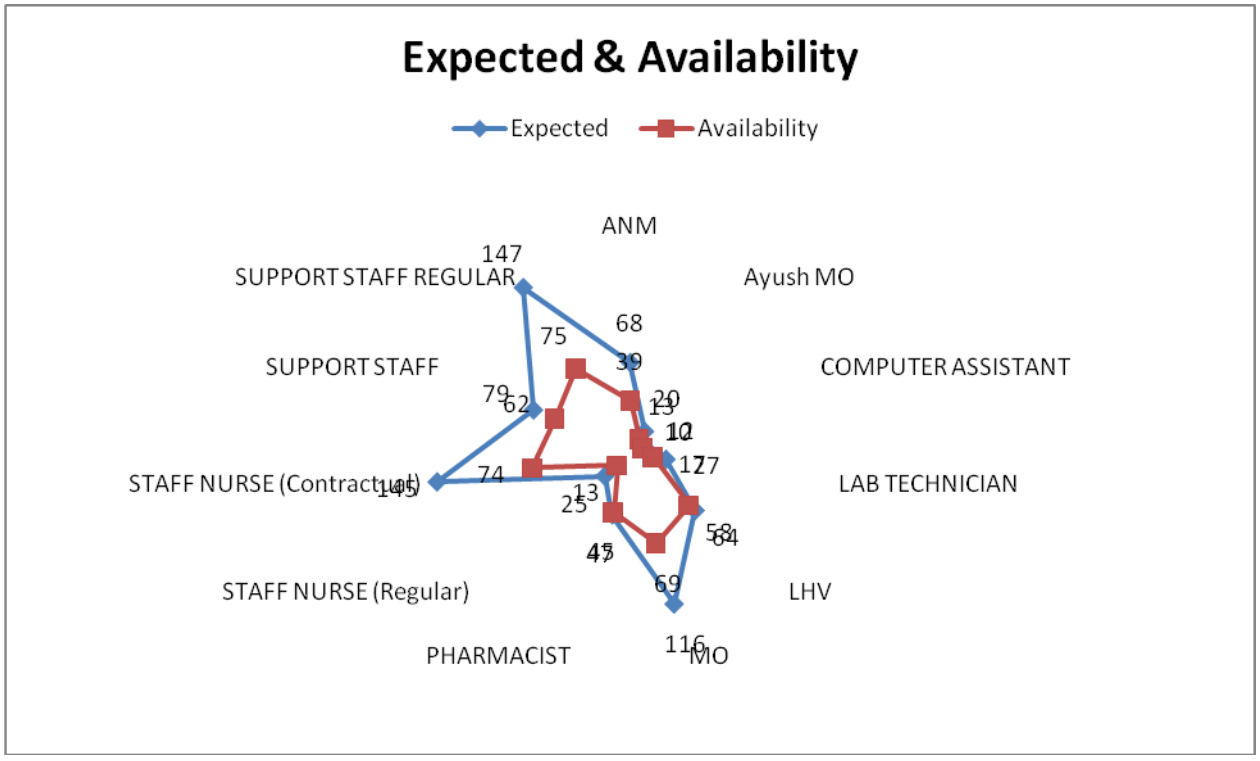

Figure 1.3: Figure showing the relationship between the expected & availability of Manpower in Coimbatore PHCs

The above mapping clearly shows the difference in the expected & availability of Human resource in PHCs of Coimbatore Where high importance is to be provided for the need for Medical Officer, Support staff regular Staff Nurse and Ayush Medical officers and the need to reduce the gaps for delivery of better quality service to the public.

Conclusion

Primary Health care operational performance are quality are predicted by HRM Practices followed by the public health system, Recruitment and Selection, Compensation and Reward, Performance Appraisal, Team Work and Training and Development. Availability of enough health personals will enable the primary health centres to work better with better quality and satisfaction of all the stakeholders involved. Recruitment and Selection had a significant effect on organizational performance. It implies that the right selection of nurses with adequate qualifications and traits will enable the hospitals in enhancing the performance of hospitals.

The rational deployment of health workers would ensure that they are made available in PHCs covering larger population; difficult geographical locations covering dispersed population; PHCs where institutional deliveries are taking place irrespective of whether they are designated delivery points and PHCCs with high caseloads. The PHC health care team plays a key role in National Disease Control Programs (NDCP) and in malaria endemic areas and awareness programmes. Primary Health Centers are also increasingly seen as the first port of health needs call. Trainings and capacity building of the existing health workers at PHCs is necessary to handle emerging disease profiles and conditions.

It would be a success if considerations are provided in order to provide round the clock clinical services, there is likelihood of a shortage of doctors in 8-hourly shift duties. This shortage can be compensated by resource pooling (Block Pooling Concept) of available doctors posted at Primary Health Centres covered under the CHC. Under the present scenario of shortage of clinical manpower, it is suggested that doctors of PHCs, in addition to attending to routine OPD duties at PHCs may also do shift duties to provide emergency services at CHCs as per the guideline of the Indian Public Health System (IPHS)

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