

**AN ASSESSMENT OF QUALITY OF HEALTHCARE SERVICES AT UPGRADED
PRIMARY HEALTH CENTRES, NAMAKKAL DISTRICT, TAMILNADU STATE,
INDIA**

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ABSTRACT

Healthcare is an essential component which can promote better human capital. Healthcare services are provided by the government to the needy people to improve the quality of life. Availability, accessibility, affordability and utilization of public healthcare services are common benefit which could avail by the vulnerable group. TamilNadu is one among the exemplary State which excelled in health care services. At the same time government contributed and considered a lot to providing healthcare services with quality manner. The select (three) Upgraded Primary Health Centre of Namakkal District and their healthcare quality, delivery mechanism are the main focus of this article. This paper explores the operational issues faced by the Upgraded PHC and makes some improvement practices to offer better service quality. The study assessed the major three parameters like doctor, nurse and pharmacist and their role in healthcare quality which reached nearly 40%, 40% and 44% respectively. It reveals that the Upgraded Primary Health Centre in TamilNadu State needs to improve the quality in their services and monitoring mechanism should also be redesigned to strengthen the system.

Keywords: Utilization, accessibility, availability, affordability and human capital

INTRODUCTION

India is one among the fast moving economy in relation to agriculture, industry, science and technology including medical and healthcare services. The main aim of establishing the National Rural Health Mission (NRHM) scheme was to facilitate adequate medical and healthcare services to the rural poor especially for taking maternal and child health. Apart from that the public health system basically three parts like primary, secondary and tertiary level. The primary level area is Primary Health Centre (PHC), Health Sub-Centre (HSC) or Health and Wellness Centre, Secondary level is Community Health Centre, Taluk Hospital and Government Hospital and Tertiary level is District Head Quarters Hospital and Multi-Specialty hospital.

In order to enhance the healthcare of the people, the public healthcare services offered multifarious medical treatment like general care, maternal, child health, dental, siddha, eye check-up are one part and special care category like skin, gynecologist, pediatrician, kidney care and heart have been provided in advanced hospital.

India has performed well in health sector not only for offering medical benefit but to provide national level health programme to the vulnerable section to strengthen their health condition better and more longevity. India has recently developed Ayushman Bharat and Pradhan Mantri

Jan Aarogya Yojana which facilitates pregnant mother, baby care and their health provision.

STATEMENT OF THE PROBLEM

Healthcare is one of the major elements which can enhance the people quality of life and standard of living. India is one among the developing countries and it concentrates balanced growth in all sectors including health sector. Due to over population and urbanization, there is no possibility of providing free medical and healthcare benefit to entire population.

Hence, the government of India has established the most famous flagship programme of National Health Mission comprises National Rural Health Mission and National Urban Health Mission which was implemented for the purpose of improving human capital and well-being in all segments. The following questions were raised by the researcher in this study, they are:

- a) Whether the Upgraded Primary Health Centre is providing healthcare facilities sufficient way or not?
- b) How far the healthcare services availed by the people from the UPHC?
- c) What way the patients expressed their opinion in relation to healthcare quality at UPHC?

These are the questions have been observed and analyzed to improve the quality of healthcare in UPHCs.

REVIEW OF LITERATURE

1. Nirupam Bajpai and Sangeeta Goyal (2004)¹ evaluated the quality of healthcare services in India with public health system the performance and its outcome. Health transition has three components: demographic factor which involves lowering of mortality and fertility rates and an aging population; epidemiological wherein the pattern of diseases prevalent in the population changes from communicable diseases to non-communicable diseases such as the chronic diseases of adulthood; and social whereby people develop better ability to self-manage their health and have better knowledge and expectations from the health system. While Kerala, Maharashtra and Tamil Nadu are much further along in the health transition trajectory, the densely populated states of Orissa, West Bengal, Bihar, Rajasthan, Madhya Pradesh and Uttar Pradesh were found as still in the early part, with the other states falling in between.

All health indicators for rural areas compare unfavourably with those for urban areas; people belonging to scheduled castes and tribes have much poorer health compared to those who belong to the upper castes; and children and women in India suffer grossly from the burden of disease and ill-health. Morbidity among women and children is endemic in India. The quality of health care services provided by the public health system is extremely low along almost all the criteria on which quality can be judged – infrastructure, availability of drugs and equipment, patient satisfaction, regular presence of qualified medical personnel and treatment of patients. Instead of being supportive and palliative of people's health, the health system itself poses a hazard to its intended beneficiaries, especially the poor who are often as reluctant to use public health services as the rich.

2. Rana (2009)² highlighted that Quality of care is the key element of health care system that its users are able to obtain. Quality refers to at least two different things; First, the level of

competence with which an examination and or treatment protocol is implemented be it medical examination, diagnostic tests, the quality of administered drugs and medical care generally. This is a technical quality which is likely to depend on a host of factors including the level of medical training, market pressures to acquire requisite training, continuing education, infrastructure, and the regulatory set-up. The second is personal quality that has to do with providers attitudes towards patients, overall surroundings in which health care is provided and the degree of attention that a patient receives (Harvard Team 2001). The best documented and largest system of health care delivery in India is the diverse network of hospitals, primary health centres, community health centres, dispensaries and specialty hospitals financed and managed by the central and state local governments. Public healthcare facilities are officially available to the entire population either free or for nominal charges.

3. Joshi and Mathew (2012)³ analyzed the performance of ASHA's (Accredited Social Health Activist) in the community and also examined whether they generated community participation or not Thane District, Maharashtra. There was 219 ASHA's working in the tribal block fewer than 4 PHCs at the time of survey. Out of which a sample of 40 ASHA's were selected by using Probability Proportionate to Size (PPS) method. In addition to ASHA's were selected by simple random sampling under each PHC. A structured interview schedule was used to collect information from the ASHA's..The incentive wise the ASHA's have given less priority. The performance based payment system worsening but they were working for the community.

4. Sujatha Rao (2012)⁴ observed the performance of upgraded Primary Health Centre to the people especially to pregnant mothers in availing caesarian facilities. Number of babies delivered through surgical means has gone up manifold. The installation of operation theatre has been added to many PHCs besides introducing facilities such as birth companion scheme and Ultrasonogram machines. In 2013-14, as many as 126 PHCs conducted 2, 38,860 deliveries of which 11435 were through caesarian section. In 2007 – 08 only 366 caesarian section deliveries were performed at PHCs. Between 2007 – 08 and 2014, the number of women undergoing caesarian in PHC has increased significantly. As a result, the healthcare delivery system has attained effectiveness and improved their quality practice.

5. To assess the quality of primary healthcare in India, Jackson et.al (2013)⁵ examined structural, geographical, and distribution models. A total of 8619 PHCs in 586 districts serving households were interviewed between 2007 and 2008. The structural quality of care under composite measure addresses the health facility. It has been well documented that the process of care, clinical outcome, patient safety and satisfaction are also important elements to be considered necessary but not sufficient in providing good quality of care.

There were six domains like 24 hours availability of services, clinical staff in position, training in the past years, basic infrastructure, equipments and essential drugs. To construct a preferred measure of overall structural quality of care, the authors calculated Factor Analysis. The geographical wise districts in the Southern part of the country have better quality than those in the north. The lowest quality of care is found in the states of West Bengal, Uttar Pradesh and Manipur. A distribution wise model expressed that the large proportion of poorly managed facilities have very low quality of care in sharp contrast to the well managed health providers.

OBJECTIVES OF THE STUDY

The main objectives of the study are:

1. To assess the quality of healthcare services offered by the UPHC to the people.
2. To examine the healthcare facilities available in UPHCs.
3. To know about the level of awareness on welfare scheme especially maternity and child care.

DATA COLLECTION

To analyze the study, a random selection of three upgraded Primary Health Centres from Namakkal District of TamilNadu State namely Pillanallur PHC, Namagiripet PHC and Olapatti Sowdapuram PHC was made at first. After a pilot study, a list of patients from each PHC visited during four working days in the months of June, July and August 2019 was taken in to account and average number of patients visited was calculated. From that 50 per cent of them were selected randomly and it came to 281 (Table 1). Apart from these, 3 Block Medical Officers, 6 duty Doctors, 3 Staff Nurses, 3 Pharmacists and 3 Siddha doctors, 1 Dentist and 3 Ophthalmology Assistants were contacted and interviewed.

RESEARCH METHODS

To examine the statistical significance of the determinants of healthcare decision making ANOVA and Regression were done. The values assigned to the decision making were under:

Doctor = 3, Husband = 2, Wife = 2 and Relatives / Friends = 1

The results are given below:

The dependent variable was healthcare decision making and independent variables were sex, community, marriage, occupation, education, family income and disease profile.

The^bvalue came to 0.95 implying the explanatory power of the selected independent variables on the dependent variable

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.975 ^a	.950	.949	.19099

a. Predictors: (Constant), MIC, SEX, MAR, CMY, OCP, EDQ, FMS

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	188.754	7	26.965	739.236	.000 ^b
	Residual	9.958	273	.036		
	Total	198.712	280			
a. Dependent Variable: Healthcare Decision Making						
b. Predictors: (Constant), MIC, SEX, MAR, CMY, OCP, EDQ, FMS						

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.406	.070		-5.831	.000
	SEX	.823	.048	.473	17.052	.000
	EDQ	-.076	.014	-.344	-5.282	.000
	CMY	.466	.037	.463	12.448	.000
	MAR	-.136	.032	-.131	-4.218	.000
	FMS	.010	.036	.019	.287	.774
	OCP	.231	.020	.539	11.650	.000
	MIC	-5.567E-6	.000	-.038	-.479	.632
a. Dependent Variable: Healthcare Decision Making						

It was found that out of the seven variables selected, five of them were significantly ($p < 0.05$) influenced the healthcare decision making and the remaining two variables namely, family

monthly income and disease profile were not found influencing the healthcare decision making of selected households. Hence, the null hypothesis
 Ho: Family Monthly income does not influence the healthcare decision making was accepted.

INDIAN PUBLIC HEALTH STANDARD GUIDELINES

The government of India has taken lot of healthcare programme to improve the healthcare of the people and redesigning human welfare effective way. As per the “Indian Public Health Standard” norms revised 2012, the primary or secondary or any other public healthcare institution should follow the guidelines which prescribed by the National Health Missions. The norms are structured not only to maintain their service efficiently but that should provide high quality in all spheres. The quality of healthcare services are mainly emphasized on standard operating procedure, standard treatment protocol and grievance redressal mechanism which concentrated on health care service under Indian Public Health Standard norms. In this paper highly focused on government Upgraded Primary Health Centre, as per the IPHS guidelines, the UPHC should posses 30 bedded hospital which provides common health complained treatment both communicable and non-communicable diseases, specialist like dental, Siddha, eye check-up, gynecologist, surgery, pediatrician, childcare and AYUSH. These types of special care services should be provided in UPHC to the rural masses.

To ensure that the sufficient man power, medical equipments, laboratories, better infrastructure, standardized medicine supply, hygienic hospital premises and well functioning referral unit which construct better hospital in all ways that reflect IPHS . Government of India has taken lot of steps to improve the healthcare services and supporting well-being of the society in particular. Healthcare services in India have attained progress gradually and steadily. To promote excellent services in health sector to the general public, it is possible only when the government to allocate optimum fund at all level with efficient monitoring mechanism.

Table: 1 Selection of Patients

S. No	Name of the PHC	One Time Cases	Sample	Follo w- up cases	sampl e	Tota l	Sample
1	Namagiripet	132	66	58	29	190	95
2	Pillanallur	117	59	46	23	163	82
3	Olapatti – Sowdapuram	143	71	65	33	208	104
Total		392	196	169	85	561	281

Source: primary data

Functioning of Healthcare Services Centre in India and Tamil Nadu

As per the Ministry of Health and Family Welfare, Statistics Division, Rural Health Statistics 2018-19 report the number of health centre functioning at all India level was 157411 HSCs ,

24855 PHCs and 5335 CHCs. In Tamil Nadu the numbers were 8713, 1422 and 385 respectively in the year 2019.

Table: 2. Status of health centre functioning in India and Tamil Nadu

Region	HSC (2018)	PHC (2018)	CHC (2018)	HSC (2019)	PHC (2019)	CHC (2019)
TamilNadu	8712	1421	385	8713	1422	385
All India	158417	25743	5624	157411	24855	5335

Source: Ministry of Health and Family Welfare, Statistics Division, Rural Health Statistics 2018-19 report

Due to the recently established flagship programme of AB-PRJAY and National Healthcare Protection Scheme, the existing Health Sub – Centre and PHC were converted in to Health and Wellness Centre. Due to this, the number of HSCs was reduced from 158417 in 2018 to 157411 in 2019. The data on select health indicators for the years 2005 and 2012 were taken to have a comparative analysis between All India and Tamil Nadu.

In the case of CDR, TFR and Life expectancy at birth both have shown similar performance. At the same time Tamil Nadu has shown a better performance in CBR, MMR and U5M.

HEALTHCARE FACILITIES IN UPHC

Government of India has given more importance to the health sector also including offering welfare schemes like medical insurance, maternity and child care etc. The popular welfare scheme of National Rural Health Mission and National Urban Health Mission was established which comprises many aspects to provide better healthcare to the needy people both rural and urban areas. In this domain, there are three major players like Primary Health Centre, Health Sub Centre and Community Health Centre or Upgraded Primary Health Centre is functioning for the benefit of the society to provide medical and healthcare facilities.

The primary level healthcare services like UPHC offers blood test, blood sugar checkup, HIV Test, Urinary Test, Sputum Test, Malaria Test, X-Ray, Ca Cervix Test, Ca Breast Test, Ultrasonic Scan Test for pregnant women and new born baby care health etc at free of cost. Meanwhile, special care units like Siddha, Dental care and Eye-checkup have also been serving the people. At the same time, dog bite, snake bite and poison cases, fire and road accident cases, caesarean and family planning form an important component have also been treated and few cases are given referral also. Out of three UPHCs, Namagiripet is only one hospital which provides blood bank facilities, special DGO specialist lady doctor. These kinds of provision were missing in rest of two UPHCs like Pillanallur and Sowdapuram.

NATIONAL HEALTH PROGRAMME

Government of India has been implemented many health and wellness oriented programme which

would help the entire society to meet the medical and healthcare services. The most important health programmes are:

1. National Health Mission (NHM) which comprises two areas like National Rural Health Mission (NRHM) and National Urban Health Mission NUHM.
2. Universal Immunization Programme
3. National Cancer Control Programme
4. National Mental Health Programme
5. National Programme for Healthcare of Elderly (NPHCE)
6. National Programme for Control of Blindness
7. National Iodine Deficiency Disorder Control Programme
8. National Programme for Prevention and Control of Deafness
9. National Leprosy Eradication Programme
10. On the basis of NCD School Health Programme, National Programme on Prevention and Control of Diabetes, CVD and Stroke
11. Reproductive Maternal Newborn Child and Adolescent Health (RMNCH)
12. Revised National Tuberculosis Control Programme

The above listed programme has been functioning effectively in secondary and tertiary care services in India.

Discussion and Analysis of quality of healthcare services

Apart from that providing quality of medical and healthcare services to the needy people is the focus of the UPHCs attention. The three major dimensions of healthcare qualities are service, process and outcome of which the standardized with quality care can be provided and accessed by the people.

Quality of service of the Doctor

From the survey assessed that as for quality of service of the doctor as concerned majority of the respondents ranked as good (40%). Hence, the quality of healthcare service played by the doctor in the select PHCs were good.

Table 3 Quality of Service of the Doctor(s)

S.No	Parameter	Excellent	Good	Fair	Poor
1	Doctor on-time	21	111	116	33
2	Proper examination of patients/diagnosis	22	113	101	45
3	Time spent with the patient	16	116	102	47
4	Treatment	26	110	97	48
5	Finding disease	17	110	107	47
6	Patients recovery	17	117	101	46
7	Drug prescribed	15	106	115	45
8	Reception and consultation	15	114	113	39

Source: Primary data

Quality of service of Nurse (s)

In the case of performance of Nurse, more than 40% of the respondents opined that quality of service of nurse availability, cleanliness, hospitality and guidance were good.

Table 4 Quality of service of Nurse

S. No	Parameter	Excellent	Good	Fair	Poor
1	Availability	2	124	105	50
2	Cleanliness	24	109	98	50
3	Hospitality	6	119	108	48
4	Guidance	7	112	115	47

Source: Primary data

Quality of service of Pharmacist

From the survey indicates that 44% of the respondents ranked as good and 41% of the respondents ranked as “fair “in the quality of service of pharmacist at PHCs.

Table 5 Quality of service of Pharmacist

S. No	Parameter	Excellent	Good	Fair	Poor
1	Supply of medicine as per the Doctor’s prescription	0	120	111	50
2	Guidance	1	120	115	45
3	24 Hours availability of medicine	3	124	107	47

Source: Primary data

Out of six parameters, more than 90% of the respondents were not complained about PHC’s medical and paramedical staff services. It indicates that no such drawbacks were reported by the respondents in selected PHCs.

Awareness and Utilization of Maternity and Child Health Care Services

As per the survey, 244 (86%) respondents were aware on welfare schemes offered by the Government in relation to maternity benefit. At the time of survey, 124 respondents reported that they availed Dr.MRMBS and 81 got benefited from Janani Suraksha Yojana (JSY) scheme. The Free Ambulance facility was availed by the 70 respondents.

Table 6 Awareness about welfare schemes

S. No	Name of the Programme / Scheme	Good	Moderate	Poor
1	Dr. Muthulakshmi Reddy Maternity Benefit Scheme (MRMBS)	244 (86.83%)	11	26
2	Janani Suraksha Yojana (JSY)	241	9	31
3	Free Ambulance Service – Janani Shishu Suraksha Karyakaram	241 (85.76%)	13	27

Source: Primary data

On the basis of responses obtained from the selected households it was ascertained that more than 85% of them found aware of the two schemes which were designed to benefit the women both during Pre-natal and post-natal period. The welfare schemes like Dr.Muthulakshmi Reddy Maternity Benefit Scheme and Janani Suraksha Yojana have benefited for mother and baby with the financial assistance of Rs. 12,000 (Now it has been raised to Rs.18,000/-) and Rs. 700/- respectively. Similarly, the Free Ambulance Service (Janani Shishu Suraksha Karyakaram) is effectively provided in Namagiripet UPHC. Almost 95% of the maternity check-up cases found as aware of this scheme and availed the amount.

QUALITY IMPROVEMENT PRACTICES

The government of India has to re-design on allocation of resources in relation to healthcare sector and improve the healthcare quality. In the case of TamilNadu State has to revamp the healthcare service by means of providing 24 hours healthcare service, proper infrastructure facilities, sufficient man power, well-trained medical and para-medical staff, individual care to be taken for pregnant women, to re-structure the monitoring mechanism, to establish special child care centre, to establish old age patient care etc. These are the practices should be carried out effectively and efficiently so that we may attain quality in all ways.

CONCLUSION

Healthcare delivery system on accessibility and utilization of healthcare facilities at select Upgraded Primary Health Centres in Namakkal District, TamilNadu was found as good. However, 25% of the patients registered their level of satisfaction as low. On the basis of the patients needs, the PHC has to revamp their facilities and services. The main problem of man power and laboratory facilities has to be redesigned and implement to provide quality of healthcare.

SUGGESTION

From the study, most of the patients suggested that separate ward should be allotted for old age group people, to establish new unit of ENT, Skin specialists' doctors and also to maintain good sanitation in all Upgraded PHCs to save the patient health right way. Mobile Health Unit has to be monitored in the remote village so as to ensure that better healthcare for them.

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