

ACCESSIBILITY AND UTILIZATION OF PUBLIC HEALTHCARE FACILITIES: AN INVESTIGATIVE STUDY OF PRIMARY HEALTH CENTRES IN NAMAKKAL DISTRICT, TAMIL NADU

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Abstract

In the Demand - Supply nexus effective utilization of healthcare services provided by the state government hospitals, PHCs, HSCs and District Head Quarters hospitals assumes a greater significance as those who use are mostly from weaker sections of the society. Hence, the issues of accessibility and utilization of such healthcare facilities assumes importance. A field study conducted in villages coming under three upgraded PHCs in Namakkal District, TamilNadu state covered 281 patients. It was found that most of the cases were treated in maternity and child healthcare wards. Another group of out-patients took treatment for both communicable and non-communicable diseases. In the case of physical accessibility, people from 35 Km radius are using the services and reach the PHCs through government buses. Out of three upgraded PHCs (Namagiripet, Pillanallur and OlapattiSowdapuram) selected in Namakkal district, O.Sowdapuram is not having sufficient transport facilities for the people to reach the PHC and rest two PHCs have adequate transport facilities.

The healthcare facilities at the Namagiripet Upgraded PHC are relatively better with special care units like Dental, Radiographer, Blood Bank, Operation Theatre and a DGO specialist doctor. However, these kinds of facilities were missing in Pillanallur and O.Sowdapuram PHCs. The selected patients demanded that the healthcare infrastructure has not been adequate and quality of healthcare services has also to be improved.

Key words: *Quality of healthcare services, treatment, accessibility, infrastructure and utilization.*

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I. Introduction

Government of India has provided efficient public healthcare services to both rural and urban masses. The level of availability and accessibility are widely correlated with utilization of facilities offered by upgraded Primary Health Centre. Healthcare services are of prime domain which can promote better quality of life of the people. In TamilNadu State, we have a better performing State for providing healthcare services according to Health Access Index 2016-17 prepared by NITI Aayog and jointly coordinated by World Bank and ranked at 7th in the State. Health now-a-days is one among the basic needs which could determine better human capital. TamilNadu State has offered effective public healthcare services to improve upon good health status among the rural as well as urban poor.

Health is fundamental to national progress in any sphere. In-terms of resources for economic development, nothing can be considered of higher importance than the health of the people which is a measure of their energy and capacity as well as of the potential of man hours for productive work in relation to the total number of persons maintained by the nation. For the efficiency of the industry and of agriculture, the health of the worker is an essential consideration.

Health is a positive state of well-being in which the harmonious development of physical and mental capacities at the individual lead to the enjoyment of a rich and full life. It is not a negative state of mere absence of disease. Health further implies that complete adjustment of the individual to his total environment, physical and social. Health involves primarily the application of medical science for the benefit of the individual and of society. But many other factors, social, economic and educational have an intimate bearing on the health of the community. Health is thus, a vital part of a concurrent and integrated programme of development of all aspects of community life.

II. Review of Literature

1. According to Sonmithra Ghosh (2015), who examined the utilization of in-patient care in India, people from richer households were more likely to seek hospital admission and use in-patient care more frequently than their poor counter parts, that is rich people have greater access to healthcare. The policy measure that the government could take to improve the access of quality healthcare services for the poor is to strengthening the public health system through enhanced investment in the National Health Mission. About 1.4% of the population had at least one overnight stay in hospital in 2004 which is almost one percentage point higher than in 1995-96 (1.6%). The average number of hospitalization by an individual was 0.03 in 2004. Hence, the two key factors that determine economic inequities in access to healthcare services are financing and the delivery system.

It is found that socio economic as well as demographic factors such as income, education, age, sex and household size are significant determinants of hospital admission and the intensity of hospitalization. People from urban areas had a significantly lower probability of hospital admission than their rural counter parts. A greater healthcare among the rural population and limited access to better quality of healthcare services that for

their urban counter parts. The author evaluated and observed cross sectional data from the NSSO 60th Round of 2004 survey on “Morbidity and healthcare”.

2. For Rama Baru et.al (2010) stated that utilization of preventive service such as child hood immunization and ANC are effective indicators for assessing the availability, accessibility and quality at the primary level of health services provisioning. The overall indicators for full immunization are poor in India with variation across rural and urban areas: State and social economic groups. While the all India immunization coverage is low (44%) there is considerable variation across socio economic group. In 2004, a mere 21% of people in rural area and 19% of urban areas utilized the public sector for out-patient services. The NSSO 2005 reported that in-patient treatment were 42% and 38% in rural and urban areas respectively. The evidence for recent years shows a high (80%) dependence on private sector for out-patient care, which is largely due to the weakness in the delivery of public health services. The authors identified five key health service factors that affect equity in access to health services. These includes, insufficient investment in public sector, unregulated commercialization and rising cost, variable quality of care in public and private sectors, health sector reforms and lack of accountability in the public and private sectors. The authors argued that four key areas require urgent attention and action, they are: flagship programmes should focus only for economically down-trodden, comprehensive regulation on medical and healthcare, new and innovative system of monitoring performance and evaluating progress towards equitable health outcome need to be introduced and health security.

3. Anil Gupta (2016) highlighted that universal access to healthcare (UAH) seems to have become the current slogan for health services development, both internationally and within India. The universal access to health could be implemented for the well being of the society. This would be successful one who achieves the four approaches they were: i) role of commercial sector in financing and provisioning, ii) public financing and private provisioning, iii) for enhanced public spending with a central role for the State provisioning and iv) a central role on public financing and provisioning with a regulatory framework on the context of comprehensive services. The universal access to healthcare must be reinforced and good approach will give better health system in near future.

4. Benny George (2011) evaluated the National Rural Health Mission (NHRM), the Rural Water Supply (RWS), and the Total Sanitation Campaign (TSC), the flagship public health programmes of the government of India which are seeking to serve around 2/3rd of the total population residing in rural areas. Fund utilization of NRHM (to provide accessible, affordable, accountable effective and reliable healthcare facilities in the rural areas) should reach the poor and vulnerable sections of the society. A close look at the utilization of funds earmarked for the implementation of above mentioned three public health programmes of the government of India shows that more than the paucity of resources what bedevils the system is its inability to translate the funds into public health facilities and services. If we fail to take meaningful action to tackle the systematic deficiencies, we would be frittering away the demographic dividend we are endowed with.

5. D.Varadarajan (1999) pointed out that healthcare infrastructure was considered to be good. Its performance was not encouraging and the reason were partly finance and poorly organization. Due to this,

inefficiency of the staff and lack of man power was a major problem to improve the efficiency of healthcare unit. Therefore, we need to address the monitoring mechanism and provide sound finance to the needy people.

Statement of the problem

India is one among the fast moving economies of the world with regard to healthcare provisioning and maximizing human capital in all parts of the country. Due to higher pressure of population, lack of awareness among the people on health and hygienic, unaware of immunization and preventive care measures, there has been morbidity status increased steadily.

The level of population and quality of life positively correlated with well-furnished public healthcare system. Equal access for equal needs has to be streamlined and government has to be taken care of effective implementation of public healthcare and medical services provided to the vulnerable group. There is an urgent need for micro level analysis about accessibility and utilization of people availing healthcare facilities from upgraded PHCs.

Objectives of the study

1. To find out the extent of an accessibility and utilization of healthcare facilities by the patients available at upgraded PHCs.
2. To analyze the nature of illness of selected patients and quality of treatment obtained from the selected PHCs.

III. Methodology

A random selection of three upgraded Primary Health Centres from Namakkal District of Tamil Nadu 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 2017 was taken into account and average number of patients visited was calculated.

From that 50 per cent of them were selected randomly and it came to 281. 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.

Table 1 PHC- wise Selection of Patients

| S.No | Name of the PHC | One Time Cases | Sample | Follow-up cases | Sample | Total | Sample |
|------|-----------------|----------------|--------|-----------------|--------|-------|--------|
| 1. | Namagiripet | 132 | 66 | 58 | 29 | 190 | 95 |

| | | | | | | | |
|-------|--------------------|-----|-----|-----|----|-----|-----|
| 2. | Pillanallur | 117 | 59 | 46 | 23 | 163 | 82 |
| 3. | OlapattiSowdapuram | 143 | 71 | 65 | 33 | 208 | 104 |
| Total | | 392 | 196 | 169 | 85 | 561 | 281 |

Source: Primary Data

Physical Access

Physical access describes mode of transport and to measure the distance between one patient and who can reach the PHC. On the basis of aggregate sample of 281, of which 87.5% of the people came from O.Sowdapuram PHC between 1 and 5 K.M. distance, followed by Namagiripet and Pillanallur were registered 50% and 75% respectively. Besides 3% of the patients who came to PHC in the distance between 20 and 30 K.M. In the meantime, one important observation was made as 26% of the patients came to PHC between 6 K, M to 20 K.M.

It is justified that nearby residing people have accessed much better than more than 20 K.M. distance people utilizing PHC minimal.

Table: 2. Status of Physical Access to Selected PHCs

| Sl.No | Name of the PHC | 1-5 K.M | 6-10 K.M | 11-15 K.M | 16-20 K.M | 21-25 K.M. | 26-30 K.M | Above 30 K.M. | Total No. of out-patient |
|-------|-----------------|---------|----------|-----------|-----------|------------|-----------|---------------|--------------------------|
| 1. | Pillanallur | 61 | 14 | 2 | 1 | - | 2 | 2 | 82 |
| 2. | Namagiripet | 48 | 21 | 13 | 8 | - | 5 | - | 95 |
| 3. | O.Sowdapuram | 91 | 9 | 4 | - | - | - | - | 104 |
| Total | | 200 | 44 | 19 | 9 | - | 7 | 2 | 281 |

Source: Primary Data

Financial Access

Public healthcare institutions are offering medical and health services at free of cost to the people. Similarly, people coming from remote area to reach PHC (about 5 K.M. to 12 K.M.), they need to spent transport cost either by government buses or by two wheeler or by foot. The overall observation is that one time one who visit PHC for taking medical treatment, they need to incur transport cost of Rs.14 per head (To and fro charges up to 1 to

7K.M.) and also to refresh tea and snacks, they have to pay Rs. 10/- and totally to incur Rs. 24/- one time case. About 60% of the patients who come to PHC, those persons have come under non-farmer and also lost their wage on visiting day. Financing pattern is also a major part of the patient who met illness.

In case one who come to PHC accompanied with family members, it leads to financial access has to be increased steadily.

Table: 3 Status of people reaching PHC (Mode of Transport)

| Sl.No | Name of the PHC | No. of patients availing the bus | No. of patients using own Two Wheeler | Patients come by foot | Total |
|-------|-----------------|----------------------------------|---------------------------------------|-----------------------|-------|
| 1. | Pillanallur | 12 | 32 | 38 | 82 |
| 2. | Namagiripet | 15 | 61 | 19 | 95 |
| 3. | O.Sowdapuram | 14 | 70 | 20 | 104 |
| Total | | 41 | 163 | 77 | 281 |

From the table clearly shows that (58%) majority of the patients have availed two wheeler to reach PHC. About 15% of the patient came by bus and 28% of the patient reaching the PHC by government bus.

Transport Cost and Patients reaching PHC

About 82 patients (over all of 29%) have reached the PHC to take medical treatment; they met transport cost under four segments of distance with government bus levied charge of Rs.7, Rs.10, Rs.12 and Rs.18 respectively. In case a patient would have to come with one person, they need to spend more on transport cost with miscellaneous expenses also.

Table:4 Status of People incurring Transport Cost

| Sl.No | Distance | Cost levied by government bus |
|-------|------------------------|-------------------------------|
| 1. | Distance up-to 07 K.M. | Rs. 7/- |

| | | |
|----|-----------------------|----------|
| 2. | Distance up-to 14 K.M | Rs. 10/- |
| 3. | Distance up-to 21 K.M | Rs. 12/- |
| 4. | Distance up-to 31 K.M | Rs.18/- |

Most of the patient has not enough facilities with the help of Health Sub-Centre, they need to incur on transport cost to reach the PHC and taking health checkup frequently. It is significant to note that government has to monitor entire rural healthcare network and establish health centre on the basis of the density of population. It encourages the weaker section to avail and access the healthcare nearby home.

Access to Healthcare Facilities and utilization

Government of India has framed well known health reform National Rural Health Mission (2005) with a view to help accessing and utilizing better healthcare by the needy people. An upgraded PHC has facilities like 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. In addition special care units like Siddha, Dental care and Eye-checkup have also been serving the people. Similarly, 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.

Besides, periodical immunization camp, mobile health unit, leprosy treatment, and HIV AIDS affected persons are given counselling also in PHC.

Out of three selected PHCs, Namagiripet is a well-developedone having well equipped blood bank facility, radiographer facility, operation theatre and one full time DGO qualified Lady. But these facilities were missing in Pillanallur and O.Sowdapuram PHC.

Table: 5 Special cases treated and cared in the selected PHCs

| SL.N o | Name of the case | Treatment available | First Aid and Referral | Only First aid | Only Referral |
|-----------|---------------------|---------------------|------------------------------|----------------|---------------|
| 1. | Dog bite | 3 PHCs | - | - | - |
| 2. | Snake bite | O.Sowdapuram | Namagirip et | Pillanallur | - |

| Sl.No | Name of the case | Treatment available | First Aid and Referral | Only First aid | Only Referral |
|-------|--|-------------------------|------------------------|--------------------------|--------------------------|
| 3. | Poison consumed (Poison Management Centre) | - | - | O.Sowdapuram&Pillanallur | Namagiripet |
| 4. | Accident | - | Pillanallur | O.Sowdapuram&Pillanallur | - |
| 5. | Emergency (Fire or road accident) | - | Pillanallur | O.Sowdapuram&Pillanallur | - |
| 6. | Caesarean | Namagiripet | - | - | O.Sowdapuram&Pillanallur |
| 7. | Family Planning | Pillanallur&Namagiripet | - | - | O.Sowdapuram |

Source: Primary Data

Healthcare facilities have also been extended to special cases like dog bite, snake bite Primary healthcare should provide basic requirements of road accident and fire accident cases also but these facilities are absent.

Theoretically, government Primary Health Centres offer excellent facilities for the benefit of the poor people who can access them easily and take free medical treatment. In the selected PHCs a greater amount of utilization and accessibility were reported by the selected patients.

It was found as much better in the cases like maternal health checkup. Overall the patients' opinion about accessing and utilizing healthcare services in the selected upgraded PHCs was found as very good.

Treatment of outpatients

Patients expressed that taking medical treatment from private hospital is highly expensive for both major and minor ailments. The various types of cases coming to these 3 PHCs is really remarkable. Pre-natal care cases occupied the most followed by Blood Pressure checkup and other categories.

Table: 6 Status of illness – Outpatients

| Sl.No | Type of Ailment | Pillanallur | Namagiripet | O.Sowdapuram |
|-------|--------------------------------------|-------------|-------------|--------------|
| 1. | Blood Pressure Follow up only | 14 | - | 8 |
| 2. | Blood Pressure with Sugar | 8 | 2 | 14 |
| 3. | Sugar check-up and follow up only | 2 | 1 | 84 |
| 4. | Cold and Cough | 3 | 2 | - |
| 5. | Fever with cold, cough | 8 | 33 | 4 |
| 6. | Head-ache | 1 | 1 | - |
| 7. | Stomach-ache | 1 | 3 | 8 |
| 8. | Pregnancy check-up (Pre Natal care) | 8 | 34 | 42 |
| 9. | Asthma/ TB | 4 | 4 | 2 |
| 10. | Leg Pain/ body pain/ hip pain/ tooth | 8 | 3 | 10 |
| 11. | Injury (Minor) / Fracture | 8 | - | - |
| 12. | Skin allergy | 1 | 2 | - |
| 13. | Kidney Problem | 1 | - | - |
| 14. | Swelling | 2 | - | - |
| 15. | Fever- Dengue/ Typhoid | 1 | 2 | 3 |
| 16. | Pimples/ Allergy | 1 | - | 1 |

| Sl.No | Type of Ailment | Pillanallur | Namagiripet | O.Sowdapuram |
|-------|-------------------------------|-------------|-------------|--------------|
| 17. | Dog bite | 2 | - | 2 |
| 18. | Ulcer | 1 | 2 | 2 |
| 19. | Stroke | 1 | - | - |
| 20. | Sputum and cough | 1 | - | 2 |
| 21. | Small Pox | 2 | - | - |
| 22. | Chicken pox | 1 | - | - |
| 23. | Family Planning Operation | 1 | 2 | - |
| 24. | Loose bowels | 1 | 1 | 2 |
| 25. | Centipede bite/ Scorpion bite | 1 | 3 | - |
| 26. | Epilepsy | | - | 1 |
| 27. | Eye sight | | - | 1 |
| Total | | 82 | 95 | 104 |

Source: Primary Data

From the above table one inference strikes is the fact that patients periodically taking medical treatment in the selected PHCs in a better manner. For pre-natal care cases mostly they visited O.Sowdapuram and Namagiripet PHCs. Asthma patients found taking quality medicines periodically from three PHCs and only one case was treated for Epilepsy in O.Sowdapuram PHC.

Quality of Healthcare Services

There has been many studies relating to assessment of quality of healthcare services expressed that the public healthcare system need to improve more on quality enhancement and practices. This would also be applicable to our selected PHC also. On the basis of observation made about quality, most of the out-patient obviously exhibits their opinion positively. However, they have suggested that Namagiripet PHC has an exemplary clinic or health centre for all people because they have adequate blood bank capacity, operation theatre, radiologist, dentists and DGO specialist. These units were entirely missing in rest of the Pillanallur and O.Sowdapuram PHC.

Hence, the patients have expected that to offer such special facilities means everyone can get utilized. There has been regional disparity on providing medical and healthcare services in the study area. Therefore, the public healthcare system should pay more attention on providing quality of healthcare mechanism and to uplift the rural poor healthy way with vigorously.

IV. 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.

V. Suggestion

Most of the patients suggested that separate ward should be allotted for old age persons, to establish new unit of ENT, Skin specialists' doctors and also to maintain good sanitation in all PHCs to save the patient health.

Mobile Health Unit has to be monitored in the remote village so as to ensure that better healthcare for them.

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