An Economic Study of Awareness and Utilization of Block Primary Health Centres in Madurai District, Tamil Nadu  
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Introduction

Health is considered as the most important thing for a human being. It is a well-known concept that health is wealth. Health is one of the goods of life to which man has a right; wherever this concept prevails, the logical sequence is to make all measures for the protection and restoration of health accessible to all at free of charge. Medicine like education is then no longer a trade, and it becomes a public function of the state.

India is experiencing, demographic, epidemiological and health transition simultaneously and differentially. This essentially calls for to address and explore the new avenues and strategies for meeting the challenges of quality health services to be rendered to the people in the new millennium. Indeed, health is a vital component as well as crucial index of social and economic development of the country.

Public Health Care Services:

The purpose of health care services is to improve the health status of the population. The scope of health care services varies from country to country and influenced by general and ever changing national, state, and local health problems, and attitudes as well as the available resources to provide these services.

There is now broad agreement that health services should be

a) Accessible  
b) Acceptable  
c) Comprehensive  
d) Provide scope for community participation, and  
e) Available at a cost the community and country can afford.

These are the essential ingredients of primary health care, which forms an integral part of the country’s health system of which it is the central function and main agent for delivering health care. The health care system intended to deliver the health care services. It operates in the context of the socio-economic and political framework of the country.

In India, it is represented by three major sectors, which differ from each other by the health technology applied and by the source of funds for operation. They are:

i) Primary: Primary health centers and Health sub centers.  
ii) Secondary: District headquarters hospitals, Taluk hospitals.  
iii) Tertiary: Teaching hospitals and Specialty hospitals.
Primary Health Centres (PHCs):

The concept of PHC is not new to India. The BHORE committee in 1946 gave the concept of a PHC as a basic health unit, to provide, as close to the people as possible. It is an integrated curative and preventive health care to the rural population with emphasis on preventive and promotive aspects of health care. The Bhore committee aimed to having a health center to serve a population of 10,000 to 20,000 with six medical officers, 6 public health nurses and other supporting staff. However, in view of the limited resources, the BHORE committee’s recommendations could not be fully implemented, even after a lapse of 50 years.

The health planners in India have visualized the PHC and its sub centers have the proper infrastructure to provide health services to the rural population. So the programme of establishing PHC in each community development block was launched in 1952.

Statement of the Problem

Health care services are becoming more significant today than even before in India. This may be attributed to some extent on the ongoing education, economic prosperity, and liberalization process. Public health facilities are allocated based on population-based norms. For primary care, there are primary health centers through which comprehensive health services are provided for the rural population.

In this connection, the present study aims to find out the cost structure for general medical care for the primary health centers in Madurai district. In addition, it is an attempt to know the socio – economic status of the PHC users, their health problems for which they are availing the services, awareness of health care services and satisfaction of the rural people towards various services provided by the primary health centers in Madurai district.

Objectives

The major objectives of the present study are:

1. To Examine the Cost structure for the General Medical Care of the Primary health centers in Madurai district.
2. To Study the Socio – Economic status of the PHC users.
3. To identify the health problems of the PHC users and the accessibility of health care services.
4. To explore the awareness and satisfaction derived by the patients towards various services and facilities extended by the PHCs.
Methodology

Type of Study

The present study is an applied research, also known as action research, which is associated with a particular problem. It suggests ways for the solution of social problems.

Sources of Data

The study includes both primary and secondary data.

Primary Data

Primary data are obtained by a study specifically designed to fulfill the data needs of the problem at hand. In order to collect the primary data, Questionnaires has been used which consists of about 50 questions relating to the socio-economic status, health problems, awareness to health care and satisfaction towards various services by the PHCs.

Method of Data Collection

The responses have been collected through direct personal interview method where the researcher presents the questions to the interviewees and the responses have been recorded.

Sampling

Sampling is a method of selecting some fraction of a population. Madurai district has 42 PHCs with 13 Block PHCs and 29 additional PHCs. The study includes only the Block PHCs, which is the base of the pyramid of health care. The study includes multi stage random sampling being the PHCs as the first stage; block PHCs as the second stage and the patients (PHC users) as the third stage. From the 13 block PHCs, two PHCs were selected (15%) based on the number of outpatients. Hence, Karungalakudi was selected due to the high number (395) of outpatients per day and Katchaikatti was selected for the low number (114) of outpatients per day. The study includes 30% of the sample from the total population i.e. for Karungalakudi, 126 respondents and for Katchaikatti, 34 respondents were selected. Therefore, the study includes 150 respondents.

Secondary Data

Secondary data are the data, which are not originally collected but rather obtained from published and unpublished resources. Secondary data has been collected from the books, journals, reports, and from the deputy directorate of health services. The secondary data collected for the study from the secondary sources were cost for general medical care, number of outpatients for each PHCs and the population covered by each PHCs. Besides relevant books, journals, reports and other studies relating to them also used. the data collected were processed, tabulated and subjected to statistical analysis.
Tools of Analysis

Chi-square has been used to find out the association level of satisfaction of the respondents with different income groups.

Garrett ranking has been used to find out the ranks given by the PHC users for the difficulties faced by them during the visit of the PHCs.

Review of Related Literature

Review of literature is an important part of the study and this serves as a background for the researcher to have knowledge about the covered and uncovered facts in the previous studies. Some studies have direct relevance to the topic and few have indirect bearing on the study.

Kamalabhai (1983) has attempted an analysis of “A study on public health administration in Chidambaram District” aims to find out an overall assessment of the functioning of PHCs with special reference to coverage, service adequacy of staff, equipment, medicine and adequacy of buildings. The author gave the following findings from the study that 35% of the health centers reported that the limited space available in these buildings could not be sufficient to cater to the needs of the people, The supply of medicines and equipment was inadequate in 55% of the selected health centers due to the paucity of resources, 50% of the villages covered under the study having poor sanitation. Regular vaccination was being carried out by 80 % of the PHCs and 75 % of the PHC users were satisfied about the performance of the services provided by the primary health centers.

P.Rameshan and Shailendhra Singh (2004) has made a study on “Quality of services of primary health centers” and their main objectives were to evaluate the quality of services and customer orientation of primary health centers against the backdrop of the changed environment in the country with customer focus. The major findings of the study were, 75 % of the respondents ‘always’ use PHC services while about 25% use them only as an alternative when private services are not available, 85% of the respondents believe that the doctors presently available are good, About 63% of the respondents are receptive to a user charge of half of the private charges. Only 22% of the respondents want it to be less than one – fourth of the private charges, Customers perceive the PHC services as more reliable when there is greater availability of medicines and facilities and when the doctors and the staff behave well.

Findings of the Study

The major findings of the study are:

I Cost Structure

- PHCs were spending more on electricity i.e., about Rs.25,000 per month. For laboratories, they were spending upto Rs. 500 and for the disposable materials like the gloves, syringes and needles, Rs.2500 has been spent for one month.
II Socio Economic Conditions:

- 37% of the respondents belong to the age group of 31 – 40 years. Only 2% belongs to the age group of 11 – 20 years were using PHCs.
- 41% of the respondents were studied up to 5th standard only 1% of the respondents were completed graduation.
- Fifty five percent (55%) of the respondents were engaged in agriculture.
- 27% of the respondents belongs to the income group of Rs. 1000 - 2000. Only 14% earns upto Rs.4000 and they were self employed and drivers.
- The sex of the respondents was equally distributed. Therefore, the study is free from gender discrimination or bias. In addition, the study gives an equal chance to both the sex regarding the health care services of PHCs.
- 59% of the respondents belongs to the most backward classes, 40% of the respondents belongs to the backward classes and only 1% was belong to the scheduled class.
- Majority of the respondents (96 %) were Hindus, and only 1% was Muslims.
- 95% of the respondents were married, since the study includes 97% of the respondents under the age group of 21 - 60.
- 93% of the respondents were in nuclear family. Only 7% of the respondents were in joint family system.

III Health Problem

- 83% of the respondents were consulted the doctors for minor illness namely fever, head ache, stomach pain, cold and cough and for ear problem because of chronic illness.
- 61% of the respondents were spending up to Rs.50 for fever, headache, stomach pain, leg injury, cold, and cough. Because they have to purchase needles, syringes, and bottles to take the ointments given by them.
- 57% of the respondents visit PHC within a week their disease comes.
- 90% of the respondents were not fully recovered from the disease.
- 91% of the respondents were not needed the admission, 9% of the respondents were not interested in having IP treatment

IV Accessibility:

- 85% of the respondents said that the center is easily accessible. This is because they are within the reach of the center.
- Even though the center is easily accessible for 85% of the respondents, only 39% of the respondents say that they have easy access with the doctors, because they comes earlier and get treatment soon after they come. Only 61% of the respondents said that they do not have easy access with the doctors.
65% of the respondents view is that the number of medical staff is adequate, but their contribution is very less. Only 35% of the respondents were saying that the number is not enough to treat such a long crowd.

87% of the respondents waited for long time for treatment and only 13% of the respondents have not waited for long time since they used to come earlier.

97% of the respondents were saying that X-ray infrastructure was not available for the patients and out of this 97%, 67% were going out and take, 15% were waiting and take and the rest of the 15% were coming for other day.

89% of the respondents’ lives within the reach of 5 K.m. from home to PHC and out of this 53% come by walk, 11% comes by cycle and 22% comes by bus.

43% of the respondents say that the time spent by the doctors during consultation is in sufficient.

50% of the respondents receives the medicines ‘sometimes’ within the campus.

42% of the respondents says that the nurses behave ‘harshly’ to the patients.

49% of the respondents were examined by medical officer and the rest of the respondents were treated by the health workers and assistants at 43% and 8% respectively.

PHC provides only tank water, which is unclean and tidy.

53% of the respondents said that the toilet facilities were available and 47% of them were saying that the toilet facilities are not inside that campus and they have to use open latrines.

89% of the respondents said that that the cleanliness maintained were bad, 4% of the respondents were saying that it was very good and 7 % of them said it as good.

Proper ventilation should be maintained in the hospitals. Then only the patients feel comfortab54% of the respondents felt that the ventilation maintained was satisfactory and only 46% of the respondents felt that it was not satisfactory.

Respondents were equally said that about the building space. 50% of the respondents say it was enough and 50% said it as not enough. Therefore, it cannot be concluded that whether the building space is enough or not.

7% of the respondents said that they have no idea about the equipment sterilized, 71% of the respondents said that the equipments were not sterilized and 22 % of the respondents said that the equipments were sterilized.

25% of the respondents said that the disposal of waste is satisfactory and majority (75%) of them said that the disposal of waste is not satisfactory.

V Utilization of Health Care Services:

77 % of the respondents visits PHC for about 10 years and only 23 % visits for more than 10 years.

39 % of the respondents got awareness from their relatives.

79% of the respondents were aware of maternal and child health.

91% of the respondents were referred and out of this, 13% were referred to doctor’s private clinics.
VI Satisfaction

- 55% of the respondents felt that PHC Timings were convenient, 45% of the respondents said that the working hours of the primary health centers were not convenient.

- 66% of the respondents said that they were not asked for grievances.

- First rank goes to the reason that PHCs are not functioning in the evening. The second rank is for no proper X-ray infrastructure.

- 40% said that the services are good, 35% said that the services as bad because they expects more facilities and services from the PHCs.

- Even though the patients have come to the PHC, they are having some reasons for not preferring PHC. This has explained with the help of Garrett ranking method. It is true that the order of importance given to choices of health care services is not the same with all the respondents. The ranks assigned by the respondents for these factors were different and hence ‘Garrett ranking technique’ has been used for drawing a conclusion, regarding the order of importance of these factors. The felt need of the people is exhibited and the first rank goes to the reason that PHCs are not functioning in the evening. The second reason is no proper X-ray infrastructure, the third reason is no emergency ward. These primary reasons are found common in Madurai district. Other reasons such as ‘mostly referral’, ‘insufficient drugs’, ‘no mobile hospitals’ and ‘less building facility’ comes one after another.

- Chi square test has been used in order to find out the association between the overall opinion and their income. The result of the chi square is 2.32 and the table value at degrees of freedom 8 at 0.005 is 15.507. The study hypothesized that there is no association between the income and the overall opinion. However, it is found that the calculated value of chi square is lower than the table value. Hence the study observes from the analysis that the null hypothesis H0 is true. Thus it is inferred that education of PHC users is independent of their overall opinion.

Policy Implications

The policy makers could, however, consider the following multi-pronged strategies for improvement:

- **Empowering communities served by PHCs**

  To empower village communities in the PHC context, first the policy makers need to launch the awareness campaigns in each PHCs catchment area. The campaigns should enlighten communities as to what facilities and services the PHC provides, what support they could expect from the doctors and the staff, who are the persons responsible for monitoring the PHC activities at official level, whom to approach if facilities and services are operated inefficiently or if behavior of the doctors and the staff is unsatisfactory, etc.

- **Augmenting the infrastructure facilities and logistics of PHCs**

  The government needs to think innovatively to think resources for providing basic infrastructure, facilities and necessary logistic support to PHCs.

- **Enriching and motivating the doctors and the staff**

  To enrich and motivate the doctors and the staff in particular, initiatives for training in both professional and behavioral attitudinal aspects need to be taken. The doctors should also be given opportunities to widen their scholastic horizons by funding their research interests, sponsoring them of attending...
professional conferences, enabling them to subscribe for professional journals, etc. while posting the staff too, preference could be given to candidates from around the PHC localities as moral pressure could be given to candidates from around the PHC localities as moral pressure or urge to perform may be exercised better in one's own locality.

Finally to ensure effective functioning of PHCs and to reduce corruption, the district medical offices (DMOs) should be properly monitored by the state health authorities. A district level user committee and the district civil administration can be empowered, independent of each other, to monitor the functioning of DMOs and resource flows into and out of the DMOs.

Conclusion
The Primary health center is the basis of the medical system in India. It is the first contact point between village community and the medical officer acts as a referral unit for subcentres and provides for hospitalization and other medical treatment for patients. Infact, the activities of primary health centers involve curative, preventive, promotive and family welfare services. The preference for PHC is mainly by the poor community because of its inability to afford secondary and tertiary hospitals.

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