A Study on Working of Primary Health Care Centres in Tiruvannamalai Block

S. Sankar, A. M. Ayyothi

Department of Economics, Government Arts College, Tiruvannmalai

Abstract

Healthy population is considered to be the engine of economic growth. A healthy person can work with efficiency to earn wealth. Collective wealth of all those persons gives rise to the wealth of the nation. Most evaluations of India's primary health care (PHC) program have been critical of the ways government primary health centers have been functioning. It has been commonly noted that utilization of health services is poor and community participation in the PHC outreach program low. Additionally, medical officers and health center staff are often accused of being negligent in their duties. Attention is drawn to the ingenious ways in which health personnel respond to client demands and government medicine shortages. In this study, an attempt has been made to examine primary health center in Tiruvannamalai block. Primary-level education, household income, and village-level infrastructure and amenities are found to increase the probability of choosing private health care over any other type of facility was analysis.

Key Words: Health Care, Primary Health centers, Tiruvannamalai

Introduction

Economists have long recognized the fact that population, more specifically labour force is an integral and important component of wealth of nation[1-3]. Recognition of the potential of human resources for economic growth and development is embodied in the concept of human capital which acknowledges that input of physical capital and labour time only partially account for increments in total output. what labour contributes to output, the productive capacity of the human beings is vastly larger than all other forms of wealth taken together which has chiefly contributed to the economic growth of countries[4,5].

Empirical studies of the sources of economic growth made in the context of various countries have proven that the increase in output of the economy is higher than the increase in standard physical inputs of capital and labour, and a large part of the increase in total output remains to be attributed to some "unexplained residual factor" in the economy. The studies have also indicated that this "residual factor" which has included improvement in human resources accounts for as much as 50 to 85 percent of the increase in the total output. This underlines the importance of human capital. The productive capacity of human capital can be increased through improvement in the quality of labour by the

*Corresponding author.Tel:+91 9443120694 , E-mail address: sshankr@gmail.com

process of increasing their knowledge, skills and attitudes. This signifies the need for human resource development through increased investment in it[6].

Health for All (HFA) and Primary Health Care

In 1977 it was decided in the World Health Assembly to launch a movement known as 'Health for All by the Year 2000'. The fundamental principle of HFA strategy is equity, that is, equal health status for people and countries, ensured by an equitable distribution of health resources [7]. The member countries of WHO at the 30th World Health Assembly defined Health For All as "attainment of a level of health that will enable every individual to lead a socially and economically productive life".

A new approach to health care came into existence in 1978, following an International Conference at Alma-Ata (Kazakhstan). This is known as "primary health care". The Alma- Ata International Conference defined primary health care as follows:

"Primary health care is essential health care made universally accessible to individuals and acceptable to them, through their full participation and at a cost the community and country can afford"[8].

The Alma-Ata conference called on all governments to formulate national policies, strategies and plans of action to launch and sustain primary health care as part of the national health system. In India the Bhore Committee (19461) had recommended primary health centers as the means to attain equity of health care services, and country was on its way in implementing it. All countries have accepted the concept of primary healthcare as the key to the attainment of health for all and as an integral part of the health system of each country.

Statement of the Problem

The discussion on heath clearly indicates the importance of health care services. The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, and political belief, economic and social conditions. Hence, in the Indian context, as welfare oriented government, it is the bound duty of the government to provide health for all. To achieve this end, access to essential health facilities is the most important element of health care delivery system. More specifically, an efficient health care delivery system is an important requisite to achieve health for all.

Among the various states of India, the Government of State of Tamil Nadu, realizing the need for improving the health status of the public has developed and implemented various strategies of health care provision. This has resulted in the increased health status of the public. The data given below indicates the position of Tamil Nadu among the various states of India in terms of the extension of health services through health facilities.

Objectives of the Study

Based on the above issues, the objectives framed for the present study are as follows:

1. To examine the socio-economic status of the patient respondents who depended on the PHCs for treatment.

2. To trace out the opinion of the sample patient respondents on the availability of health personnel's and the effectiveness of treatment.

Methodology of the Study
Primary Data

One of the objectives of the present study is to obtain the respondents' views on working of the health institutions namely, the PHCs in the district of Tiruvannamalai. This requires the collection of the primary data from the patient respondents who received treatment from the nearby PHCs. This requires the selection of the sample respondents in two stages. One is the selection of the sample PHCs and second is the selection of the sample respondents from the surrounding places of the selected PHCs [9,10]. For this purpose, the number of PHCs operating within the District of Tiruvannamalai has been collected from the Records of District Health Department, Tiruvannamalai and the Village Census Abstract. The next stage is the selection of the sample respondents. For this purpose, to have representativeness, it was decided to go for proportionate random sampling. To do this, fixing 90 as the sample limit, the total sample size is distribution among the selected eight PHCs.

The database for this research study consists of both primary and secondary data. Tiruvannamalai district is purposively selected for the present research work. In the district three villages were purposively chosen for this study viz., Kattampoondi, Pavitiram and Su.Valavetti. The sample villages were chosen because the PHCs programmes have been implemented for a long time. Then 90 sample beneficiaries were chosen randomly consisting of 30 samples in study villages. The sample beneficiaries were contacted with a specially prepared and pre-tested questionnaire.

Results and Discussion

The present analyze is attempted to discuss the accessibility of the sample respondents on the public health facilities. However, the studies carried out in the area of health economics have indicated that there is a significant relationship between accessibility to the health facilities and the socio economic status. Based on this theoretical relationship, in the present chapter it is attempted to discuss the socio economic status of the respondent and the relationship between the economic status and their accessibility to public health facilities.

Distribution of Sample Respondents by Age

Age is an important factor determining the accessibility to health. More specifically, more is the age higher is the morbidity and more is the frequency of visit to public health. Hence, it becomes necessary to understand the distribution of age of the people in the study area. This is being done with the help of examining the distribution of age of the sample respondents.

Table 1 - Distribution of Sample Respondents by Age

Name of the PHC	Below 30	30-40	40-50	50-60	60 and above	Total
Kattampoondi	15 (16.67)	10 (11.11)	3 (3.33)	2 (2.22)	---	30 (33.33)
Su.Valavetti	13 (14.44)	9 (10.00)	5 (5.55)	1 (1.11)	2 (2.22)	30 (33.33)
Pavithiram	17 (18.89)	7 (7.78)	2 (2.22)	1 (1.11)	3 (3.33)	30 (33.33)
Total	45 (50.00)	26 (28.89)	10 (11.11)	4 (4.44)	5 (5.55)	90 (100.00)

Source: computed from primary data.

Note. Figures in parentheses indicate percentage to total

As it could be seen in the above table among the 90 sample respondents, 50.00 percentages fall in the age group below 30 years. Another 28.89 percentage of the respondents fall in the age group of 30-40 years. There are 11.11 per cent respondents who fall in the age group of 40-50 years. While 5.55 per cent fall in the age group of above 60 years, the remaining 4.44 per cent fall in the age group of 50-60 years. The PHCs wise analysis on the age distribution indicates that in all the PHCs the number of respondents in the age group of below 30 years constituted the highest with Pavithiram having the highest share.

Distribution of Sample Respondents by Sex

Sex is another factor determining the accessibility to public health. It is apriority that the female folks are more mal-nutrition than the male and hence the morbidity pattern is expected to be more among the female than male.

Table 2 - Distribution of Sample Respondents by Sex

Name of the PHC	Male	Female	Total
Kattampoondi	7 (7.78)	23 (25.56)	30 (33.33)
Su.Valavetti	10 (11.11)	20 (22.22)	30 (30.33)
Pavithiram	9 (10.00)	21 (23.33)	30 (30.33)
Total	26 (28.89)	64 (71.11)	90 (100.00)

Source: computed from primary data.

Note. Figures in parentheses indicate percentage tototal

As it could be seen in Table 2, among the 90 sample respondents, 71.11 per cent are females, while the remaining 28.89 respondents are males. This higher share of female respondents proves the apriority assumption that the morbidity is more among the females than among the males. The PHCs wise examination of

the distribution of sex shows that Kattampoondi health centre has the highest number of female respondents approaching the PHCs for treatment to their morbidity. Thus from the analysis it can be concluded that a majority of the sample respondents (71.11) are females.

Distribution of Respondents by Caste

The caste group is another factor that determines the socio economic status of the respondents. In fact, for any policy purpose or programmes, the identification of the beneficiaries is based only on the caste rather than any other indicator.

As it could be seen among the various caste groups considered for analysis, a highest share that is, 36.67 per cent of the respondents fall in the MBC caste. Another 27.78 per cent fall under SC/ST caste while 26.67 per cent fall in the BC category. There are 8.89

per cent respondents who fall in the General group. The PHCs wise distribution of respondents by caste indicates that MBCs who are approaching the PHCs from Tiruvannamalai block formed the highest. Thus from the analysis it can be concluded that a majority of the sample respondents who access the public health facilities fall in the MBC category.

Distribution of Sample Respondents by Level of Education

The educational attainment is another major indicator that determines the social status of the respondents. As indicated the districts with a higher share of lower caste people and socially disadvantaged groups have less access to the public goods and education is the major public good. Hence, to understand the socio economic status, an examination of the educational attainment has become essential.

Table 3- Distribution of Sample Respondents by level of Education

Name of the PHC	Illierate	Primary	Middle	Seco ndary / HSC	Graduate (general)	Total
Kattampoondi	3 (3.33)	7 (7.78)	5 (5.56)	11 (12.22)	4 (4.44)	30 (33.33)
Su.Valavetti	2 (2.22)	9 (10.00)	6 (6.67)	12 (13.33)	1 (1.11)	30 (33.33)
Pavithiram	2 (2.22)	5 (5.56)	8 (8.89)	14 (15.56)	1 (1.11)	30 (33.33)
Total	7 (7.78)	21 (23.33)	19 (21.11)	37 (41.11)	6 (6.67)	90 (100.00)

Source: Computed from Primary Data

Note: Figures in parentheses indicate percentage to total

As it could be seen in Table 3, among the various levels of education, as high as 41.11 per cent of the respondents have completed their Secondary/HSC level education. This has been closely followed by the respondents (23.33 per cent) who have completed primary level education. There are another 7.78 per cent of sample respondents who are illiterate. While there are 21.11 per cent who have completed Middle, there are only 6.67 per cent who have obtained their graduation degree. The remaining 0.00 per cent respondents have completed their diplomas and certificate courses. The PHCs wise distribution of education of the respondents helps to understand that Pavithiram has the highest number of respondents who have completed Sec/ HSC. Thus from the analysis it can be concluded that a majority of the respondents have completed their Sec/ HSC education.

Distribution of Occupational Status of the Head of the Household

As it could be seen in Table 6, among the 90 sample respondents, 30.33 per cent are Housewife. Another 17.78 per cent Agricultural coolie. There are 15.56 per cent respondents who are farmers. While 14.44 per cent of the respondents' heads of household are Private employed, 8.89 per cent belong to self employed. While 5.56 per cent respondents' heads of household are Govt. Employees, 4.44 per cent belong to Petty shop owner.

Table 4 - Distribution of Occupational Status of the Head of the Household

Name of the PHC	Male	Female	Total
Kattampoondi	7 (7.78)	23 (25.56)	30 (33.33)
Su.Valavetti	10 (11.11)	20 (22.22)	30 (30.33)
Pavithiram	9 (10.00)	21 (23.33)	30 (30.33)
Total	26 (28.89)	64 (71.11)	90 (100.00)

Source: Computed from Primary Data

Note: Figures in parentheses indicate percentage to total

PHCs wise distribution of occupation of the head of household indicates that Housewife is highest percentage of respondents.

Distribution of Respondents by Monthly Income of the Family

Themonthlyincomeofthefamilyoftherespondents is the total income earned by all the earning members of the family and it is an indication of the overall economic status or wellbeing of the entire family.

Table 5 - Distribution of Respondents by Monthly Income of the Family

Name of the PHC	Less than 2000	2000-5000	5000- 10000	10,000-15,000	Above 15,000	Total
Kattampoondi	6 (6.67)	14 (15.56)	5 (5.56)	3 (3.33)	2 (2.22)	30 (33.33)
Su.Valavetti	9 (10.00)	11 (12.22)	2 (2.22)	2 (2.22)	1 (1.11)	30 (33.33)
Pavithiram	5 (5.56)	10 (11.11)	7 (7.78)	5 (5.56)	3 (3.33)	30 (33.33)
Total	20 (22.22)	35 (38.89)	14 (15.56)	10 (11.11)	6 (6.67)	90 (100.00)

Source: Computed from Primary Data

Note: Figures in parentheses indicate percentage to total

As it could be seen in Table 5, among the 90 families of the respondents, as high as 38.89per cent earn a monthly income of Rs. 2000-5000. Another 22.22 percent earns monthly income of Rs. Less than 2000. There are 15.56 per cent respondents who earn an income of Rs. 5000-10000. When 8.20 per cent earn Rs.3500-4000, 4.20 per cent could earn Rs.4000-4500. While 11.11 per cent of the respondents could earn a monthly income of Rs.10000-15000, just 6.67 per cent earns more than Rs.15000.

An examination of the PHCs wise distribution of the monthly income indicates that Kattampoondi has the highest share of respondent (15.56) who have the monthly income ranging from Rs. 2000-5000. Thus from the analysis it could be concluded that a majority of the sample respondents' families earn a monthly income of Rs.2000-5000.

Distribution of Respondents by Frequency of Visit to Primary Health Centre

The frequency of visit to the primary health centre is another important indicator of the demand for health care services from the primary health centers. A higher frequency indicates the higher demand for the health care services of the public health care services and vice versa. Hence, it becomes pertinent to understand the frequency of visit to primary health centers.

Table 6- Distribution of Respondents by Frequency of Visit to Primary Health

Name of the PHC	Once in a week	Once in fifteen days	Once in a month	When there is a need	Total
Kattampoondi	6 (6.67)	20 (22.22)	1 (1.11)	3 (3.33)	30 (33.33)
Su.Valavetti	5 (5.56)	18 (20.00)	3 (3.33)	4 (4.44)	30 (33.33)
Pavithiram	4 (4.44)	17 (18.89)	4 (4.44)	5 (5.56)	30 (33.33)
Total	14 (16.67)	55 (61.11)	8 (8.89)	13 (14.44)	90 (100.00)

Source: Computed from Primary Data

Note: Figures in parentheses indicate percentage to total

As it could be seen in Table 6, among the 90 respondents selected, 61.11 per cent visit the primary health centre once in two weeks either for their health problems or for the problems of the members of their household. This has been closely followed by the respondents (8.89 per cent) who visit the primary health centre once in a month. While there are 14.44 per cent visit primary health centre as and when there is a need. The remaining 16.67 per cent visit the primary health centre once in a week. Thus from the analysis it can be concluded that a majority of the sample respondents visit the primary health centre once in two weeks.

Distribution of Respondents by Type of Morbidity for Which Visit Is Being Made To Primary Health Centre

The purpose of visit or the reason for approaching the primary health care centre is another important indicator of the demand for public health care services. The studies carried out to identify the access to health care services indicated that the public utilize the services public hospitals only for a few specific morbidities. Hence, it become essential to understand the nature of morbidity for which the sample respondents demand the health care services of the primary health care centers.

Table 7 - Distribution of Respondents by Type of Morbidity for Which Visit Is Being Made to Primary Health Centre

Name of the PHC	Katta mpoondi	Su. Vala vetti	Pavi thiram	Total
Diseases Head ache	2 (2.22)	2 (2.22)	2 (2.22)	6 (6.67)
Fever	5 (5.56)	4 (4.44)	2 (2.22)	11 (12.22)
Typhoid	1 (1.11)	3 (3.33)	2 (2.22)	6 (6.67)
Stomach pain	1 (1.11)	1 (1.11)	4 (4.44)	6 (6.67)
Respi ratory infection	2 (2.22)	1 (1.11)	2 (2.22)	5 (5.56)
Cough/Cold	2 (2.22)	5 (5.56)	3 (3.33)	10 (11.11)
TB	3 (3.33)	2 (2.22)	2 (2.22)	7 (7.78)
Delivery	14 (15.56)	12 (13.33)	13 (14.44)	39 (43.33)
Total	30 (33.33)	30 (33.33)	30 (33.33)	90 (100.00)

Source: Computed from Primary Data

Note: Figures in parentheses indicate percentage to total

As it could be seen in Table 7, among the sample respondents and their friends and relatives who visit the primary health centre, as high as 43.33 per cent visit the primary health centre for delivery. Another 12.22 per cent visit for fever. There are 11.11 per cent respondents who visit the primary health centre for getting treatment for Cough/Cold. The order of morbidity for which the treatment has been taken from the primary health centre by the respondents includes: Head ache (6.67per cent), Typhoid (6.67 per cent), Stomach pain (6.67 per cent), Respiratory infection (5.56 per cent) and TB (7.78 per cent). This order of the morbidity is in conformity with the study made by TANIDA which indicates the reliability of the information obtained. Thus from the analysis it can be concluded that a majority of the sample respondents visit primary health centre for delivery.

Distribution of Respondents by Opinion on the Time Taken by the Medical Officer for Consultancy

The waiting time in the primary health centers is also an important determinant of the demand for health services in the public health service centers. This is because the patients who approach the primary health centers are economically poor and downtrodden. Hence, the patients or their associates have higher opportunity cost of time as they have to carry out their occupation of that day so as to win their earnings of the day. Hence, an understanding of the time taken in consultation and related activities becomes essential. Such an analysis would also help to understand the speed with which the health services are provided.

Table 8 - Distributions of Respondents by Opinion on the Time Taken By the Medical Officer for Consultancy

Name of the PHC	Below 5	5-10	10-15	Above 15	Total
Kattampoondi	11 (12.22)	7 (7.78)	4 (4.44)	8 (8.89)	30 (33.33)
Su.Valavetti	14 (15.56)	6 (6.67)	6 (6.67)	4 (4.44)	30 (33.33)
Pavithiram	12 (13.33)	8 (8.89)	5 (5.56)	5 (5.56)	30 (33.33)
Total	37 (41.11)	21 (23.33)	15 (16.67)	17 (18.89)	90 (100.00)

Source: Computed from Primary Data.

Figures in parentheses indicate percentage to total

As it could be seen in Table 8, among the 90 sample respondents, 41.11 per cent viewed that it took below 5 minutes for them to get consultancy from their doctors. Another 23.33 per cent viewed that it took 5-10 minutes for them to get consultancy from the doctor. There are 16.67 per cent respondents who viewed that it took 10-15 minutes for them to get consultancy from the doctor. Another 18.89 per cent viewed that the doctor took above 15 minutes to diagnose the nature of morbidity. The PHCs examination of the time taken for consultancy indicated that for higher share of respondents from the taluk of kattampoondi has been spent a time of above 15 minutes in consultancy by the doctors. Thus from the analysis it can be concluded that according to a majority of the sample respondents, the time taken by the medical personal for consultancy is below 5 minutes.

Conclusions

To study these objectives both primary and secondary data were collected. To analyze the trends in the growth of health in Tiruvannamali Block, the secondary data pertaining to the number of doctors, number of nurses and other health personals, the number of beds, number of health institutions in the district, the health related indicators like, the birth rate, death rate, IMR, MMR number of inpatients and outpatients by morbidity were collected from various published sources like, directorate of Medical services Reports, Chennai, Annual Statistical Abstract of Government of Tamil Nadu. Economists have long recognized the fact that population, more specifically labour force is an integral and important component of wealth of nation. Among the various forms of human capital, improvement in health is an important aspect. Hence,

in the Indian context, as welfare oriented government, it is the bound duty of the government to provide health for all. To achieve this end, access to essential health facilities is the most important element of health care delivery system. More specifically, an efficient health care delivery system is an important requisite to achieve health for all.

Major Findings

Findings related to Socio - economic Status and Access to Public Health

Age group

Out of 90 sample respondents, the majority of the sample respondents (50.00) who Visit the primary health centres fell in the age group of below 30 years. The PHCs wise examination of the distribution of sex shows that Kattampoondi health centre has the highest number of female respondents (25.56) approaching the PHCs for treatment to their morbidity.

Education

The PHCs wise distribution of education of the respondents helps to understand that Pavithiram has the highest number of respondents (41.11) who have completed Sec/HSC. Thus from the analysis it can be concluded that a majority of the respondents have completed their Sec/HSC education. PHCs wise distribution of occupation of the head of household indicates that Housewives are highest percentage of respondents.

Findings Related to Accessibility to Public Health

The PHCs wise examination of the respondents on the nature of visit to PHCs indicates that a majority

of the respondents from the Kattampoondi visit PHCs regularly.

The PHCs distribution of respondents' opinion on the curation of morbidity shows that a highest share of respondents from Kattampoondi viewed that they are cured in one consultancy.

It can also be seen that as in the case of the other inputs with regard to the supply of these critical kits/ vaccines/ contraceptives, there was no much variation among the PHCs. Which spoke for the significance of PHCs and their effective functioning?

Suggestions

The following suggestions emerge from the study carried out:

1) The Government of India may consider funding the appointment of Male health workers. The study indicated that in the case of sample PHCs, a majority of the workers are female workers. The opinion indicated that for certain ailment, the male workers are reluctant to approach and get treatment from ANMs who are females. Hence, flexibility may be given to the states to either opt for male health worker or additional ANMs.

2) Strengthening of Management and Supervisory Assistance at the CHC/FRU level is recommended as this is needed for efficient functioning of National Health Programmes and ASHA .

3) To strengthen the management and supervision at the PHC level, it is recommended to have a Programme Manager with public health back ground, who can supervise and coordinate all Public Health activities.

4) A list of essential drugs, equipments and other supplies can be prepared depending on the weekly or monthly needs and orders can be placed well in advance to avoid shortage.

5) A flexi-fund for meeting the cost of drugs and other supplies during epidemics/ natural disasters may be permitted to be created at the district level.

6) For quality services, the skill of the health personnel needs to be improved. The attitudinal changes in the health personnel to be responsive to the health needs of the community will require orientation of health personnel. In this context, the induction training, in-service skill development training, and management training of the health personnel becomes essential and hence arrangement can be made at the district level.

7) Primary Health care, which is currently being funded predominantly by the State government (85%) should be funded fully by the Central Government after ensuring that the funds are utilized by the States for the purpose intended.

References

1. Government of India, Health Survey and Development (Bhore) Committee, Report, Volume I, Delhi, Publications Division, 1946

2. Abhijit Banerjee, Angus Deaton, Esther Duflo, Health Care Delivery in Rural Rajasthan, Economic and Political Weekly, February 28 (2004)944-949.

3. Hamumappa "Rethinking Health Care Systems: Private Health Care Provision in India" World Development 26(1998)1463-79.

4. Duraisamy Health Status and Curative Health Care in Rural India National Council of Applied Economic Research, Working Paper Series No. 78(2001)

5. Nair, V. M., Thankappan, K. R., Sarma, P. S., & Vasan, R. S Community utilization of sub-centres in primary health care in Kerala- an analysis of determinants in Kerala. Indian Journal of Public Health, 48 (2004). 17-20.

6. S. Srinivasan, Primary Health care services in Rural India, Current status and future challenges", Kurukshetra, (2002) 22-27

7. Andrew Mitchell, Ajay Mahal, Thomas Bossert Healthcare Utilisation in Rural Andhra Pradesh, Economic & Political Weekly, (2011),15-19.

8.   Mini Elizabeth Jacob et.al A Community Health Programme in Rural Tamil Nadu, India: The Need for Gender Justice for Women Reproductive Health Matters, 14(2006):101–108

9.   Monica Das Gupta et.al How Might India's Public Health Systems Be Strengthened? Lessons from Tamil Nadu, Economic & Political Weekly, 10(2010)46-60.

10.   N. Senthil Kumar, B. Prabhakaran, Service Quality in Health Care – Perspectives of Stakeholders, International Journal of Business S Economics And Management Research, 3(2011) 23-34.