CHAPTER VII

SUMMARY OF FINDINGS, CONCLUSION AND SUGGESTIONS

7.1 INTRODUCTION

Recognising the importance of health care, developing economics like India, as signatories to the Alma Ata Declaration of *‘Health for All by 2000 A.D.’* have incorporated a policy of public health to provide primary health care to promote the health status of the vast majority of the underserved rural and urban poor. The plans laid emphasis on preventive and public health services through a network of Primary Health Centres (PHCs) and sub-centres along with specific disease and welfare oriented programmes. The guiding principles for the first two and half decades of planned development health in India included measures to make health services more accessible to the population to develop the much needed human resources and to provide services for health including maternal, child health and family planning. Tamil Nadu has been in the forefront in formulating and implementing wide range of health care programmes to promote the health status of people in the State. Hence, the present study is an attempt to analyse and compare the primary health care services of rural and urban areas of Madurai district. The specific objectives of the study are:

1. To examine the trends in health indicators in Tamil Nadu and Madurai district.
2. To identify the determinants of health status of people in Tamil Nadu and Madurai district.

3. To discuss the general aspects relating to revenue villages covered, staff pattern, beds, budget allocation and number of out patients treated of the selected PHCs.

4. To study the socio-economic conditions of the sample respondents (users of PHCs) in rural and urban areas.

5. To study the morbidity level and health awareness among the sample respondents.

6. To examine the reasons for preferring public and private health care services by the sample respondents.

7. To offer a few suggestions to the policy makers based on the findings to improve the health status in the study area.

For this purpose, 300 sample respondents (users of PHCs), 150 each from rural and urban areas of Madurai district were randomly selected. The personal interview method was carried with a pre-tested schedule. For the purpose of analyse the functions of the selected PHCs, total of 50 staff working in PHCs namely 20 medical officers and 30 paramedical staff were randomly selected from 10 PHCs. The secondary data relating to life expectancy, birth rate, death rate, IMR and the like were obtained from the records, reports and various publications for the period of 15 years from 1994-95 to 2008-09.
In the foregoing chapters, evaluation of health status in Tamil Nadu and Madurai district, working performance of the selected PHCs, socio-economic conditions of the respondents (users) and health awareness were discussed. In the present chapter, the major findings along with conclusion and suggestions based on the study are presented.

7.2 SUMMARY OF FINDINGS

In Chapter IV, health status is evaluated by assessing the movement of health indicators and health determinants in Tamil Nadu and Madurai district for the period 1994-95 to 2008-09.

It is inferred from the analysis that the life expectancy at birth had increased from 64.09 to 67.98 in Tamil Nadu and from 60.22 to 66.91 in Madurai district.

The average life span had increased by 7.20 years both in Tamil Nadu State and Madurai district during the study period of 16 years. The life expectancy at birth thus shows an increasing trend.

The birth rate had increased from 19.15 to 24.91 in Tamil Nadu and it had increased from 22.14 to 22.61 in Madurai district. The rate of change in birth rate for Tamil Nadu was –0.4231 and for Madurai district it was –0.0038.
The death rate had fallen from 9.15 to 6.21 in Tamil Nadu and from 5.55 to 5.15 in Madurai district during the study period.

Infant mortality rate in Tamil Nadu had declined from 72.11 to 55.21 in Tamil Nadu and from 71.21 to 39.21 in Madurai district. The above trends imply remarkable improvement in health status in Tamil Nadu and Madurai district, for the period 1994-95 to 2008-09.

Regarding the movement of health determinants per capita income at current prices had increased from Rs.7352 to Rs.18314 during the study period in Tamil Nadu and it had increased from Rs.4450 to Rs.9977 in Madurai district.

Public health expenditure had risen from Rs.13071.34 lakhs to Rs.58624.19 lakhs in Tamil Nadu. It has also increased from 603.15 lakhs to Rs.29915.15 lakhs in Madurai district. There had been ten fold increase in public health expenditure both in Tamil Nadu and Madurai district.

It is observed that villages covered for provision of safe drinking water increased from 8134 to 19341 in Tamil Nadu and they increased from 592 to 649 in Madurai district.

The female literacy rate had been accelerated and augmented from 55.41 to 68.91 in the State and from 54.35 to 71.99 in Madurai district.
The per capita food availability in the State increased from 143.00 kilograms to 152.43 kilograms, whereas it increased from 70.50 kilograms to 89.41 kilograms in Madurai district.

PHC per million was 0.040 in 1994-95 in Tamil Nadu and it had declined to 0.047 in 2008-09 due to growing population, low commitment to open up new additional PHCs and cut in health budget during the last decade since the advent of New Economic Policy in 1991. PHC per million population also declined from 0.043 to 0.051 in Madurai district.

It is understood that the fertility rate in Tamil Nadu had decreased from 2.80 to 2.06, whereas in Madurai district, it had decreased from 2.85 to 3.84.

The per capita income in Tamil Nadu had increased from Rs.7352 to Rs.18314 but in Madurai district it was Rs.4450 in 1994-95 and it had increased to Rs.9979 in 2008-09.

In Tamil Nadu, per capita income, public health expenditure and number of villages covered for provision of protected drinking water had shown the highest growth rate, female literacy rate, literacy rate, couple protection rate, sex ratio and number of hospitals had shown the lowest growth rate. In Madurai district also, similar trends were observed.
The second objective of the study is to focus on the influence of health determinants on health indicators, through multiple regression analysis.

Multiple regression analysis unfolds the following inferences:

Number of PHCs have significant influence on life expectancy at birth both at State level and district level.

Female literacy rate and per capita food availability played a major role in determining the birth rate.

At State level as well as at district level, PHC per million population did play a vital role in minimising the death rate.

The female literacy rate at State level and PHC per million population at district level were dominant and influencing factors in reducing the infant mortality rate.

The district shows the negative correlation between female literacy rate and infant mortality rate. The value of correlation coefficient is –0.8753. It is observed that infant mortality rate goes on decreasing as the female literacy rate increases in the district.

As per the Table, the calculated ‘t’ value is 2.2427 which is significant 5 per cent level, and since the calculated value is greater than the tabulated value
(2.120), the null hypothesis is rejected. Thus, it may be concluded that the infant mortality rate is highly influenced by female literacy rate in Madurai district.

In Chapter V, working performance of the selected Primary Health Centres in rural and urban areas in Madurai district were discussed.

In order to identify the important activities and functions of the selected PHCs, Garrett’s Ranking technique has been used. For this purpose, total of 50 respondents, 20 medical officers and 30 paramedical staff in 10 PHCs were randomly selected.

In rural areas of Madurai district 3.85 per cent of PHCs are provided with Gynecologists, 3.85 per cent is provided with paediatricians, 23.08 per cent of the PHCs is equipped with minimum 6 beds facility, no operation theatre for family planning, 26.92 per cent of the PHCs clean labour rooms are available, no working ambulance, no blood bank is created in PHCs in rural, 15.38 per cent of the PHCs provided staff quarters fully used and in 26.92 per cent of the PHCs essential drugs 60 are available.

In urban areas of Madurai district the following are the infrastructural facilities provided by PHCs. 10.67 per cent of PHCs are provided with Gynecologists, 5.33 per cent are provided with paediatricians, 9.33 per cent of the PHCs possess operation theatre for family planning, 18.67 per cent of PHCs have
clean labour room, 9.33 per cent of the PHCs are equipped with working ambulance facility, no blood bank, 13.33 per cent of the PHCs are provided with staff quarters and 18.67 per cent of the PHCs are provided with drugs. More funds need to be spent on infrastructure and drugs.

In Chapter VI, socio-economic conditions and health awareness of the sample respondents (users of PHCs) were discussed.

It is inferred from the analysis that a majority of the respondents belong to the age group of 40 to 50 years in both rural and urban areas.

In the rural area, majority of the respondents (60.67 per cent) as in Table 6.2 are scheduled caste, followed by backward community. In the case of urban areas, majority of the respondents (71 out of 150) are from backward community.

The sex-wise analysis revealed that male was higher in number for using PHCs for both rural and urban areas.

As per Table 6.4, educational qualification revealed the fact that a very few are illiterate. Majority of the respondents (40.67 per cent) attended 6 to 10\textsuperscript{th} Std in rural area and in the urban area 37.33 per cent have studied upto 12 Std.
Regarding the employment level, farmers and agricultural labourers dominated (54 per cent) in rural areas whereas in urban area, employees in private sector were in large numbers followed by self-employed persons.

Regarding the housing status, majority of the respondents lived in tiled house (71.33 per cent) in rural area and pucca house (62 per cent) in urban area. The electricity facilities were found exceeding 90 per cent in both rural and urban area.

The analysis revealed that about 75 per cent of the sample respondents used protected water for drinking purpose from public water tap.

Regarding the monthly income, about 94 per cent of the respondents have monthly income below Rs.15000 in the case of rural area. In the case of urban area, a majority of the PHCs users are having income range Rs.10000 to 20000.

The average monthly expenditure was found high in urban than rural area.

Majority of the rural users (67.33 per cent) come to PHCs more than 3 kms., where it was found less in number (46 per cent) in urban. Mostly the mode of travel was bus by the users of both rural and urban.

Garrett’s rank results revealed that rural respondents preferred to avail of the services of PHC. If the morbidity existed for than a week, they preferred to
avail the services of Government taluk hospital. Third preference goes to private clinics, fourth preference goes to Ayurvedic system of medicine or house remedy and fifth preference goes to charitable hospital. So majority of the people in villages prefer to avail of the services of PHCs in Madurai district.

The respondents have stated that people prefer the services of PHC because of the availability of free treatment and free medicines, supplied by the PHCs. Thirdly PHCs are accessible in about half an hour time. Transport cost in villages is low in Tamil Nadu since they are interconnected with link roads and service of mini-buses is available.

The ‘felt need’ of the respondents and their idiosyncrasy about the services of PHCs are revealed. The respondents expect the services of PHCs in the evening also, since the villagers return from the agricultural work only in the evening. So government should make arrangement to make PHCs functioning in the evening also. Secondly, they expect more drugs from PHCs. The drugs supplied to the chronic patients are insufficient. Thirdly, they expect minimum facilities in labour room. Delivery cases can efficiently be attended to only if minimum facilities like water, tools and medicines are available in PHCs at all time. The respondents also expect sufficient buildings, blood bank, in-patient care and X-ray facilities from PHCs.
The respondents stated that they prefer the services of private hospitals because of personal attention to patients, the role of emergency ward, safe delivery arrangement and availability of specialised doctors in private hospitals.

7.3 RESULTS OF TESTING OF HYPOTHESES

The first hypothesis namely ‘infant mortality rate is highly influenced by female literacy rate’, was statistically tested, and empirically verified. This hypothesis was accepted. Therefore there is negative correlation between female literacy rate and infant mortality rate.

The second hypothesis namely ‘total government spending for health care, improves the life expectancy at birth of the people’, was rejected, after statistical verification. This implies that the government expenditure did not make much impact on life expectancy at birth, in the study area.

The third hypothesis namely ‘among the users of the health services of primary health services, females outnumber males’, was accepted after empirical verification. It was revealed that female members were dependent on male members on economic and social ground. Hence a large number of female members avail of health care services from PHCs.

The fourth hypothesis namely ‘distance (proximity) is an influencing factor in making use of health services provided by Primary Health Centres’,
was rejected after statistical verification. It was found that distance was not a problem in getting health care services from the PHCs in the study district.

And finally the fifth hypothesis namely ‘getting immunisation to the children in the age group of under five, reflects the level of health awareness among the people’, was accepted after empirical verification. There is high health awareness in getting immunisation to the children in the age group of under five

**7.4 SUGGESTIONS**

Based on the findings of the study, the following suggestions have been made to improve the health status of the people in the study area.

**7.4.1. Suggestions to Government**

The following suggestions are placed before the Government for enhancing the health status of the state further.

The number of PHCs and HSCs emerged as a crucial factor in maintaining and enhancing the health status of rural people and Government should give priority to open some more additional PHCs and HSCs in Tamil Nadu State. The ratio of PHC per million populations, both in the state and Madurai district, has been decreasing.
Government should earmark more funds for the procurement of drugs and medicines.

Government should make arrangement that the PHCs are functioning in the evening also, to cater to the felt need and expectations of rural people.

Productive public health expenditure should be encouraged. Wastages if any should be minimised. Government should reprioritise the resources in health sector in favour of the poor.

Government should also concentrate on non-health sectors namely agriculture, food availability through public distribution system, provision of protected drinking water, housing, sanitation and education, as suggested by Panicker and Soman (1984).

The user fee concept should not be implemented since it will affect the PHC users, who are already poverty-stricken people.

State Government should allocate at least 15 percent of the state revenue towards health budget.

Minimum power-cut may be effected in PHC area so as to maintain and preserve immunisation vaccines.
7.4.2. Suggestions to the Medical and Paramedical Staff

Since a large number of out-patients turn out at PHCs, the medical and paramedical staff should pay personal attention to the patients.

PHC buildings are maintained by Public Works Department. The Medical officer should bring to the notice of the Government to repair the buildings and ensure water supply in PHC to facilitate clean and safe delivery at labour room.

7.4.3. Suggestions for the Society

People should approach Village Health Nurse for immunisation to their children.

Pregnant women should contact Village Health Nurse and have periodical antenatal check-up at the PHC.

If any epidemic or environment pollution is found in their area, it should be informed to the Health Inspector.

7.5. CONCLUSION

From the foregoing summary and findings of the study, the following important conclusions emerge. Regarding the rural health care services, in India the role of Primary Health Centres and Health Sub-Centres cannot be belittled. In
the present scenario of globalisation, public health sector in India is facing a cut in health budget. India, being the second most populous country in the world, cannot shirk its responsibility of delivering the primary health care, through PHCs and HSCs free of cost or at low cost. In India, ‘Health for All’ can be attained only through the judicious blending of public health care services and private health care services. Opening up of additional PHCs in the study area, namely in Tamil Nadu State and in Madurai district, is the need of the hour to enhance the health status further. The findings of the study substantiating the efforts of increase female literacy rate in the study area, have multifarious impact on health status. The central and state governments have bounden duty to impart and encourage female literacy in the area.

7.6. SCOPE FOR FURTHER RESEARCH

There is ample scope for further research in Health Economics in the context of proliferation of private practitioners in health sector. Economics of regulating the private practitioners in health sector in India, is the proposed area for further research. The prices of medicines have gone up. The cost of treatment in private hospitals has become a nightmare for rural people. Social science researchers may attempt to analyse the problems in private health sector and suggest possible lines of approach to control and regulate private health sector.