CHAPTER 9

SUMMARY AND FINDINGS

Health is a critical factor in the development of any country. Health is man’s greatest possession, for it lays a solid foundation for his happiness. A healthy community is the infrastructure to build an economically viable society. Disease pattern changes with modernization and industrialization. Health problems are being tackled by multi disciplinary teams - Public health and administrators, psychologists, sociologist, economists, and so on. Periodical evaluation of health care system from the point of view of beneficiaries is essential to assess the efficiency with which these institutions serve people. Primary health care being the most important and integral part of health care is to be evaluated properly and periodically so as to point out the problem areas and lacunas in the working of the system so that corrective measures can be implemented in future and make the system more efficient. Without having strong and efficient primary health care secondary and tertiary sector will not work. Hence, the present study is intended to examine the working of primary health care system and its impact on the health status of people.

Evaluation of primary health care system in this study was conducted by classifying the major elements of the primary health care into three; preventive, promotive and curative. The households selected for the study have been classified into three groups according to socioeconomic variables via: SES I, SES II and SES III representing lower strata, middle strata, and higher strata respectively. Kodungallur Block from Thrissur district and Chittur Block from Palakkad district were selected randomly for the study.
9.1. Preventive Measures

Preventive Measures relate to improving family welfare which includes 1. Family Planning and 2. Maternal and Child Care.

9.1.1. Family Planning

Both divisions recorded striking performance in terms of family planning programmes. Performance of Family Welfare Programme in terms of achievement of target in sterilization in Thrissur is impressive by far exceeding the target in most of the period under study. The highest rate of achievement was recorded during the year 1998-99. In Palakkad, the rate of achievement was below the targeted level except in 1998-99. During the last two years, Palakkad showed better performance than Thrissur.

Break up of sterilization into vasectomy and tubectomy showed one sided participation. Though vasectomy is simple, safer, less expensive, male participation was negligible in both the areas. Since 2002-03, there is a marginal increase in the number of male participation in Palakkad, though Thrissur recorded steep fall. Though Kerala stands with high female literacy and a favourable ratio and women enjoy a better position than else where in the country, male participation in this respect is nil as seen in other parts of the country.

Break up of female sterilization into different components like PPS, Minilap, and laproscopy showed that PPS is considered to be the most popular
method in Palakkad and Thrissur. In Thrissur, there is increasing preference for laproscopy.

**Temporary Methods**

A cursory glance at the annual target for intra-uterine (IUD) contraception device in Thrissur showed that achievement in IUD was less than the target in most of the period. Compared to the achievement in sterilization, this method has not much acceptance among the people.

**Conventional Contraceptives**

There has been steady decline in the number of conventional contraceptive users and contraceptive pieces distributed. As far as the use of contraceptive method is concerned both areas do not show much difference.

**Oral Pills**

Methods of Oral Pills seem to be the most unpopular one in the study areas in both the divisions.

**9.1.2. Maternal and Child Health Care Programme**

Maternal and child Health Care Programme includes TT pregnant women, BCG vaccination, DPT, Oral Polio, Measles, Vitamin A, DT, TT 16 years, IFA pregnant women. In Maternal and child Health Care Programmes, both divisions recorded significantly remarkable achievement by far exceeding the target during the study period. Evaluation of primary Health care system in
terms of preventive measures recorded remarkable progress during the study period.

9.2. Outcome Evaluation of Family Welfare Programme

Crude Birth Rate

Birth rate registered a steady decline in Thrissur and Palakkad. Though Palakkad recorded higher rate than Thrissur in the initial period, it reached a lower level than Thrissur at the end of the period. This indicates a satisfactory performance of family planning programmes in these areas.

Death Rate

In terms of Death Rate, performance of both the areas is impressive. Palakkad showed better performance compared to Thrissur. Thrissur division showed a marginal increase in death rate during the study period. It is doubtful whether the state can attain the target of 5 per thousand by 2010 if the present trend continues. This points out the need for giving attention to environmental factors.

Gross Fertility Rate

GFR in Thrissur recorded 57 % which is lower than the state average, though Palakkad showed a higher rate than Thrissur and state average.
**Total Fertility Rate**

TFR of Thrissur and Palakkad recorded 1.75 and 1.78 respectively, which is slightly higher than the state average, though lower than the ninth plan goal of 2.6 and National Population Policy Goal of 2.1. Thus, achievement of these two areas in terms of GFR and TFR is also satisfactory.

**Couple Protection Rate**

In terms of CPR, both divisions could not attain the target, but stands close to the National Goal.

**Felt Needs or Unmet Needs**

In terms of unmet needs, Palakkad showed better performance than Thrissur. Both divisions showed better performance than state average.

**Infant Mortality Rate**

Both divisions recorded a lower rate of Infant Mortality Rate (IMR) than the targeted rate of 2010, though compared to the developed nations it is higher. Again, in those regions, death rate is higher than IMR whereas in the study areas IMR is higher than death rate. In terms of IMR, Kerala leaves much to be desired.

Break up of infant mortality into peri natal, neonatal and post neo natal mortality reveals that in Thrissur, around 75% of the total infant death occurred
with in one month and in Palakkad, all the infant deaths are within one month. Endogenous factors like malnutrition, maternal diseases, and low birth weight babies, intra-uterine or neo natal infections are supposed to be the major cause for it.

**Still Birth Rate**

Still Birth Rate in Palakkad recorded higher than State average and National average though Thrissur recorded lower rate.

**Low Birth Weight Babies**

Percentage of low birth weight babies is estimated to be 13.2 and 16.1 respectively in 1998-99 which is higher than the internationally accepted rate. Again the rate has increased to 23 % in Thrissur while Palakkad recorded a marginal decline to 14 % in 2001. In 2003, percentage of low birth weight babies in both the divisions worked out to be 18 %. It showed that in terms of nutritional status, our achievement is not satisfactory since birth weight is associated with endogenous factors.

**9.3. Promotive Measures**

Promotive measures include evaluation of water and sanitation provisions. Major source of water in Kodngallur is tap water whereas well water is the main source in Chittur. Eighty percentages of the respondents in Kodungallur complained about irregularity of water supply and 70 % were not satisfied with
the quality of water supply where as in Chittur 40 % reported irregularity of water and 20 % were not satisfied with the quality of water supply.

With regard to the sanitation facilities, 91 % in Kodungallur have septic tank facilities, where as in Chittur, only 15 % have toilet facilities. More than 60 %, even from among the higher income groups use open ground in Chittur. This shows income is not a major determinant of type of sanitation. This depends on health habits of people.

9.4. Curative Measures

Disease profile of the patients treated for various diseases in the government allopathic institutions recorded a steady decline in the morbidity of diarrhea, T.B, pneumonia, fever, STD, whooping cough, measles, chicken-pox and hepatitis B in both divisions. Respiratory diseases contributed the largest share of morbidity in both divisions, though Thrissur recorded 40 % increase and 20 % decline in Palakkad. With regard to the ‘other diseases’ which include chronic degenerative diseases in addition to the minor acute illness recorded a marginal decline in Trichur. In terms of morbidity though the rate per thousand hospital admissions though increased in absolute terms. Palakkad recorded steady increase in this disease during the period under study.

There has been steady decline in the in-patients and out-patients treated in the health centers in both the divisions. Rate of decline in in-patients is greater than the out-patients in both the divisions. This is in contrast to the higher rate of utilization of the private institutions related to in-patients and out-patients. This
shows lower and declining rate of utilization of primary health centers because of their poor quality performance.

9.5. Pattern of Morbidity

Disease profile of Kodungallur collected from the records of health centers recorded higher and increasing rate of diarrhea, respiratory disease, TB, and fever. Typhoid and malaria recorded declining rates. Chittur division recorded higher rate of nutritional deficiency diseases, chronic diseases like gastroenteritis, dysentery, TB, diabetics, bronchitis, ulcer stomach, intestinal infection, arthritis and heart diseases. Evidence of malaria, leprosy and typhoid fever indicate the need to strengthen the curative health care activity in these areas.

Morbidity data related to the private institutions in Kodungallur recorded higher rate of diarrhea, respiratory disease and hepatic B, heart disease and stroke. Respiratory diseases contributed major share of the disease. There is evidence of malaria, TB and typhoid.

Primary data collected from Kodungallur and Chittur divisions recorded higher morbidity in Chittur than Kodungallur. Both the divisions recorded significantly higher rate than national average and state average recorded by previous studies. In terms of both acute and chronic degenerative diseases, both divisions recorded higher illness prevalence than the previous studies conducted at national and state levels.
Increasing disease load in these areas points to the need for giving serious attention to the curative care facilities provided by the health centers.

In spite of wide network of public sector medical care institutions where medical services are supposed to be easily accessible and freely available, private expenditure on medical care worked out to be very high. Data related to the health expenditures incurred by the house holds recorded higher rate than the previous studies.

Rate of utilization of private health care institutions for curative care worked out to be very high. Again, it was striking to see that more that 50 % even from the lower division availed private facilities. This may be the reason for higher health expenditure reported by them.

Present study revealed that no one in these areas was covered under any type of health insurance.

It was surprising to see that all the respondents in both the divisions were not against charging user fees, provided, they are getting quality services. The present trend in the disease profile and attitudes of the people indicates people’s preference towards private health care system. It clearly indicates that people in these areas prefer quality care than the cost they have to incur. Higher rate of utilization of private care in spite of higher cost indicates health consciousness of the people in these areas. There is much scope to increase the performance of public health care institutions by improving the quality of services provided by them.
Socio-economic classification of households showed high disparity between the actual poverty and the estimated poverty. More than 80% of the households surveyed come under below poverty line as per government records (i.e. in their ration card). But, as per present study, on the basis of socio-economic variables, only 23% in Kodungallur and 35% in Chittur come under lower income strata. It clearly indicates that if BPL is measured strictly on the basis of socio-economic variables, percentage of people under BPL group can be reduced to 1/4th of the present estimates. Free services given by these institutions need to be strictly restricted to these groups alone. Middle income group may be given some concession in the rate of consultation fees or medicines etc. all others may be charged the same amount as charged by the private health care units. People residing in each locality may be given health cards denoting the grades of their socio-economic status and different types of privileges may be given to them as per their socio-economic status. Like wise, health insurance may be implemented in these areas to all the residents and the rate of payment may be charged on the basis of grades or category a house hold may come under. These policies may reduce the financial burden of the government and the additional revenue generated through user fees may be used to improve the quality performance of these institutions.

9.6. Operational Efficiency of the Health Centers

Operational efficiency of the health centers is measured in terms of awareness, availability, acceptability, accessibility, patient satisfaction etc.

Degree of awareness of the existence of primary health center is higher in Chittur division and lower in Kodungallur division. In both the divisions, degree
of awareness is higher among lower strata and lower among higher strata. Though degree of awareness is higher in Chittur division, rate of utilization is higher in Kodungallur than Chittur. Rate of utilization is higher among lower strata than the higher strata in Chittur.

Services of primary health centers availed by the people in both divisions are preventive in nature like vitamin tablets, iron and folic acid for pregnant women and immunisation for infants and children. It was surprising to see that less than one third of the people have availed curative services from primary health centers. Nearly one third of the sample population even from among the lower income have not availed any services of primary health centers. This shows that health care programmes of primary health centers are confined to Family Welfare programmes alone neglecting curative aspects in spite of the increasing disease burden in these divisions. This supports the first hypothesis that changes in the health profile require reallocation of resources of primary health care system.

Non-availability of medicines, doctors, treatment, distance and no confidence were the major reasons reported by the respondents for not availing any services from primary health center. In Kodungallur, distance was reported as the major reason while Chittur, the reason was non-availability of medicines, and doctors. The need for full time availability of doctors especially lady doctors were reported by the entire respondents. This point to the need for making effective functioning of sub-centers. Instead of appointing specialists in these centers, appointment of more doctors with minimum qualification may increase the operational efficiency of these centers. Medical officers working in these centers with higher qualifications and experiences were not happy to work over
there with regard to their salary and other working environment. Appointing health workers from distant places also result in absenteeism. If they were given a chance of working nearest to their residence, work absenteeism of these workers may be reduced.

There is significant difference between the two blocks, regarding opinion of the people relating to the availability of doctors. No one in Chittur was satisfied with the availability of doctors while only a little more than half of the respondents in Kodungallur were not satisfied with the availability of doctors.

All the respondents in both the divisions were of the opinion that only routine medicines were available in primary health centers. Nearly one third of the people in both the divisions were not satisfied with the quality of medicines. It seems that increasing the availability of medicines may increase the rate of utilization of these centers.

All the respondents pointed out the need for strengthening the functioning of sub-centers by making full time availability of lady doctors. Effective functioning of sub centers by making full time availability of doctors may increase the rate of utilization of health centers

Nearly one third of the respondents in both the divisions were not satisfied with the working of primary health centers. Again, people among lower strata in both the divisions expressed better performance of primary health centers than the higher strata. There is association between the performance rating given to the PHC and the SES classes of the respondents SES1 reported good performance of PHC than the other groups
With regard to the MCH care services of primary health centers, it was seen that Kodungallur reported 100% institutional delivery, whereas a little more than one tenth was home delivery in Chittur block and 5% of home delivery was without the assistance from trained personnel. Nearly one third even among the lower income opting private institutions for delivery is an indication of inefficiency and ineffectiveness of government institutions. It is surprising to see that no delivery was conducted at primary health center level in spite of 12% home delivery. Again, it was striking to see that more than one third of the delivery in Kodungallur and a little less than one fifth of the delivery in Chittur are cesarean. Statistically however, no association was seen between type of institutions and type of delivery and also type of institutions and SES classes. It was known from the study that the increasing trend in cesarean might be to avoid risk of patients and to safeguard the position of the doctors.

Birth complications during pregnancy and delivery recorded higher rate in both divisions.

In Chittur, marriage and delivery takes place at the earlier age than in Kodungallur. Half of the respondents in Kodungallur and 16% in Chittur reported complications during pregnancy and delivery. In both the divisions, there is significant difference in birth complications between SES classes. It is higher among the women of higher SES groups. Both the divisions represented higher proportion of low birth weight babies than WHO norms. Our study also confirms that percentage of low birth weight babies was higher among lower income than higher income.
With regard to the home visits made by the health workers, it was seen that a little more than half of the respondents in Kodungallur and a little more than 4/5th of the respondents in Chittur, reported no visits by the health workers during the last month prior to the survey. This again indicated the ineffective working of the health workers. It was surprising to see that for 85% of the births in Chittur and 99% in Kodungallur, mothers made at least three antenatal visits. For antenatal visits, more than half of the respondents availed private facilities. It was seen that more than one third even from among the lower income strata availed private facility for antenatal check-up. Rate of utilization of private facilities for antenatal check-up is higher in Kodungallur than Chittur.

Type of institutions opted for by the respondents for female sterilisation also recorded increasing preference for private among higher income groups in both the divisions. Rate of utilization of public health facility for sterilization was higher among the lower income strata. In addition to the free health care given to them, some financial incentives were also given for those who undergo sterilization in government institutions.

Operational efficiency of the primary health care system, in terms of quality assessment of health centers and Maternal and Child Care programmes from the point of view of beneficiary survey, revealed operational inefficiency. This proves the third hypothesis that there is a significant decline in the operational efficiency of the primary health care system.

It was again striking to see that the main source of motivation for the acceptance of sterilization was self, i.e. women itself. They were not motivated by the financial incentives which the government provided to them. At present,
the need for limiting the size of the family was felt by the couples themselves in order to give better amenities to their existing children. It seems therefore that there is much scope to limit the incentives to the most needy group so as to reduce the financial burden of the government and the same may be spent for quality assurance of the health centers. Again, it was seen that no sterilization was conducted at primary health center level though previously sterilization was also conducted at primary health center level.

9.7. Conclusions and Recommendations

1. Strengthening of sub-centers and equipping the government health care institutions would be more effective for effective utilization of health care institutions.

2. Epidemiological monitoring system must be an integral component of primary health care to control major diseases and for prioritization of public health programmes.

3. Instead of appointing specialists in these institutions appointment of more doctors with minimum qualifications may increase the operational efficiency.

4. Appointing health workers from the nearest of their residence rather than appointing from distant places may reduce their absenteeism.

5. A significant portion of the resources must be targeted towards curative measures by subsidising and making available nutritional element for pregnant women. This may reduce the percentage of low birth weight babies, still birth rate and higher proportion of peri natal mortality since these rates are associated with endogenous factors like nutritional status of pregnant women.
6. Implementing user fees and health insurance may increase the quality of services and efficiency of primary health care system since majority is availing private services.

Considering the present changes in the health profile, traditional pattern of resource allocation should be altered to meet the urgent health care needs of the people. Preventive and promotive measures like health education for giving awareness among people to change health habits, diet pattern, life style etc. are to be developed. Proper diagnosis and treatment of the disease at the beginning of the stage itself may help to cure majority of disease. For that, public health policy must ensure the primary health care as enunciated at Alma-Ata international Conference. At the same time public health is not to be treated as the sole responsibility of the government. Active community participation is an essential means to attain the goals.

Government should control the growth and working of private sector by fixing limits to doctor's fees and other charges related to diagnosis and treatment of diseases to make it affordable to the common man. Strict measures must be implemented to collect detailed information related to the working of private health care system. Since health is recognized as a fundamental human right, the minimal basic objective of public health policy must be to ensure accessibility and affordability to primary health care for all.

9.8. Scope for Further Research

The present study could shed light on the need for prioritization of resources in the light of sub-optimal allocational pattern of the primary
healthcare components. An economic evaluation of these components of primary healthcare system will throw light on the optimum resource allocation pattern which may increase the operational efficiency of the existing system. An indepth study of morbidity profile of the state is to be made at micro level basis and allocation of both human and other resources should be made strictly to the resource needs of the region.