CHAPTER - IX

SUMMARY AND CONCLUSIONS

Result of urbanization and shortage of resources in many cities in both developing and developed countries are increasingly unable to provide the infrastructure and services required to meet the needs of their population. In low income and slum areas, in particular the effects of environmental degradation and lack of housing, drinking water and sanitation coupled with inaccessible or poor quality and inefficient health services are precipitating an urban health crisis.

The utilization of health care services depends on the availability of quality of health care services at a reasonable and on the ability of people to utilize the health services effectively. The provision of appropriate health infrastructure is a necessary but not a sufficient condition for health care utilization. A number of factors such as economic status, caste, occupation, education and gender have great influence on the perceived need for medical care and affect the access to health care facilities. In this chapter an attempt is made to summarize the data analyzed so far to bring out the differential utilization pattern of health services of five important socio-economic classes identified and also the major problems in the field of urban health system.

Summary of findings

The socio-economic context of medical care utilization in a developing society like India becomes the focal point of investigation for
understanding the nature and extent of the efficacy of health services utilization system. There are also some factors responsible for not utilizing existing medical facilities by the urban masses and the mounting problems of urban health.

**Problems of urban health**

The findings of the present study proved that rapid urbanization is the root cause of all urban health problems. The world urbanization trend is rising fastly and India too had experienced rapid urbanization in the last 3 decades. Among the states Mizoram records the highest degree of urbanization followed by Goa, Tamil Nadu and Maharashtra. Kerala too is in the forefront of urbanization with 25.97%, which is very close to the national average of 27.8% in the 2001 census. Among the districts, Kannur district record the highest degree of urbanization where the present study was focused.

The problem of accessibility of public medical facilities is an important problem in the urban health environment of Kerala. The bed population ratio (availability of Govt. hospital beds) also varies from district to district and the position of Kannur district is less than the state average of 3.1 beds per 1000 population. The inter district disparity in the availability of Govt. doctors to the urban community compared to their rural counterparts is another finding of the study. Two districts, (Thirssur and Kannur) face the problem of lower doctor population ratio. In the study district (Kannur) 50.46% of the urban population is served by only 47.5% of the doctors available in the district and in the case of
Thrissur 28.1% of the urban population of the district gets services from only 21.2% of the doctors working in the district. The lower doctor-population ratio is an important finding of the study, which has an important bearing on the utilization of health services in urban areas. Accessibility of public and private health services varies from country to country and from region to region. In Cali (Columbia) the private sector caters only 15% of the medical care, whereas in Bombay the proportion is almost 50% and 75% of the urban poor in Bombay use private sector for minor ailments. This is mainly due to the inability of the public health centres to cater the needs of the people who approached such centres. The data related to health expenditure of Govt. of Kerala revealed that major chunk of the Govt. health budget is devoted to paying salary and allowances (i.e. 67.69%) and other expenditure associated with day-to-day administration and only a very meagre amount was incurred (17.83%) for the purchase of medicines. As such they could not meet the requirements of the people and compelled even the poor ones to switch over to private institutions for medical care.

The poverty related health hazards is increasing in the urban set up. These include infectious and gastro-intestinal diseases, often called ‘diseases of poverty’ chronic de-generative diseases associated with poor living and working conditions and pathogenic conditions associated with stress resulting from social isolation and insecurity. The findings of the study (analysis of secondary data about the problem) indicates that the health problem is severe among the urban poor mainly due to overcrowding, lack of sanitation, lack of proper drainage, lack of pure
drinking water and lack of good housing. This support the hypothesis formulated for the study that living environment is the important determinant of health status.

Severe threat to maternal health due to unnecessary medical intervention is another finding of the study. Hike in caesarean rates causes a lot of morbidity problems among the mothers and the newborns. Doctors in the private medical institutions are encouraging caesarean for getting maximum fees and also to augment the hospital income. The conditions of Govt. maternity hospitals are such that once they enter the hospital for delivery they cannot return in normal health. As such in certain circumstances even poor people become victims of caesarean sections of private hospitals. An examination of the performance of each state on the different safe motherhood indicators reveals that the performance is below the national average in most of the states including Bihar Madhya Pradesh, Rajasthan, Nagaland, Uttar Pradesh, Madhya Pradesh, Sikkim, Assam and Arunachal Pradesh. The performance of Kerala is better when compared to all the other states.

Urban morbidity is rising steadily in all the urban centres and it is mainly due to bad living environment. Regarding the type of morbidity, both communicable and chronic diseases are on the rise and communicable diseases affect the poor living in the slum area more. The infant death statistics of Kerala in 1995 reveals that the problem of infant death is high in urban Kerala where out of the 5664 total infant deaths, 71.5% was reported from the urban centres. This hike in infant deaths is mainly due to concentration of maternity hospitals and delivery clinics in
urban areas on the one hand and presence of larger proportion of urban poor and slum population on the other. Morbidity of the aged is another serious concern in the urban areas and they are subject to more of chronic diseases. Another important finding of the study is that, urban Kerala records the highest number of chronically ill elderly in India. In Kerala it is the females, who dominate over the males in the category of the chronically ill aged persons. It is also found that housing conditions, food consumption pattern, educational status of households, living environment, drinking water, and sanitary facilities and above all their economic soundness are the important determinants of health.

**Morbidity and Socio-economic Status**

Morbidity and its linkage with various socio-economic variables analysed reveals the impact of socio-economic status on the morbidity pattern. The morbidity commonly faced by the urbans was divided into three categories, namely diseases due to infection, chronic diseases, and other diseases. The major diseases due to infection identified among the population are Typhoid, Jaundice, chicken pox, malaria, Tuberculosis, filariasis, leprosy, dysentery, fever, diarrhoea etc. Morbidity of chronic infectious disease like filariasis and tuberculosis is very high in the slum dwellings. Morbidity rate of filariasis is 7.44 and tuberculosis is 11.9 for every 1000 population in the slum and it is only 3.9 in the case of tuberculosis and filariasis in the urban area. The major chronic diseases found in the study sample are diabetes, heart disease, cancer, mental illness, asthma, epilepsy, kidney diseases, blood pressure, arthritis, ulcer etc. Among chronic illnesses diabetes accounts for 22.73% in urban
areas followed by asthma, blood pressure, and heart disease. In the slum the major chronic illness found are asthma (65%) followed by blood pressure, diabetes, and heart disease. The major other illnesses found in the study area are surgeries undergone for cataract, appendicitis, insect bite, accidental injuries, eye diseases etc.

Morbidity analysis with socio-economic status shows that as socio-economic status decreases from upper class to very low class (SES$_1$ to SES$_5$) both in the case of slum and urban, the morbidity prevalence of infectious illness increases. The morbidity trend of chronic illness shows that as socio-economic status decreases, the morbidity prevalence of chronic illness also decreases, indicating that chronic illness dominates among the affluent and better off sections. The trend of chronic illness in the slum reveals that, though its magnitude is less in the SES$_3$ and SES$_4$ (lower middle class and low class), it is slightly higher in the lowest socio-economic status group (SES$_5$) indicating that there are certain chronic illness which are diseases of poverty like asthma, and diseases of affluence like hyper tension. The SES$_5$ (very low class) is more affected by asthma and its morbidity rate is 40 per 1000 population, whereas in the urban sample its morbidity rate is 13.38 per 1000 population. Another trend that is found in the study is that morbidity prevalence of chronic illness, including heart disease, blood pressure, and diabetes together accounts 61 per 1000 persons in the urban areas, whereas this was only 34.2 in the urban slum, which supports the idea that chronic diseases are the diseases of affluence. This is in conformity with the hypothesis formulated for the study, as SES
status comes down morbidity of communicable (infectious) illness increases, whereas chronic illness decreases. In the case of other illness also it is observed that as socio-economic status decreases, the morbidity prevalence rate increases. The findings of the study about overall morbidity picture reveal that as socio-economic status falls from SES₁ to SES₅ (upper class to very low class) the overall morbidity prevalence rate also increases both in the urban and slum areas. These findings support the hypothesis formulated that as SES status comes down overall morbidity prevalence rate increases steadily. The morbidity and its linkage with educational status reveal that, morbidity prevalence of infectious illness is high among illiterate and those with primary and below primary level of education. Similarly for chronic illness also its magnitude is high among the illiterates both in the urban and slum indicating that education is a vital determinant of health status. The prevalence of morbidity on the basis of occupation shows that its intensity is high among the unskilled, semi-skilled and unemployed categories both in the urban and slum, which indicates that occupation also acts as an important determinant in the health status of the urban dwellers. In other words morbidity prevalence is high among blue collars (unskilled and skilled) and less among white collars (clerical, semi-professional etc). The analysis of morbidity prevalence and type of housing reveals that morbidity cases are reported more from Kachcha and semi-pucca type of houses. In the case of urban the prevalence rate of illness is high among children in the age group of 4-15, those in the age group of 36 to 55 and those exceed 55, whereas the slum morbidity is high in all the age group except in the category of 16 to 35. These
findings indicate the need for targeted health intervention in certain specific age groups to reduce morbidity prevalence. The study also reveals that infectious illness is also high among those household who have no proper sanitation, safe drinking water and good drainage system. The analysis of the primary data of the study approves the hypothesis formulated that the living environment is the important determinant of health status.

**Treatment process and curative care**

The data related to seeking of treatment for different illness reveals that as socio-economic status declines the percentage of households seeking treatment for all illness declines. It is found that people in the lower SES class go for treatment only in the case of illness of serious nature and in such cases too they wait and see the severity of illness. The study also found that as socio-economic status improves the perception or awareness of households about different diseases increases and the tendency of opting immediate treatment for illness also increases. This behaviour pattern of households support the hypothesis formulated for the study, which is that, the better the social and economic position, the better would be the perception of people about different diseases and higher would be the utilization of health services. The health check-up, which is another indicator for health services utilization reveals that the practice of health check-up is restricted among the better socio-economic class in the urban areas and none in the slums have gone for health check-up. This also indicates that volume of health services utilization is high among the better socio-economic class.
Type of health centre utilized: The type of health centre used by different socio-economic classes for different illness reveals that the utilization pattern differs widely across the socio-economic class. In the urban sample 75% of them preferred private clinic and private hospitals, whereas in slum this proportion was very meagre about 12.5%.

Choice of health centre: Analysis of data regarding the reasons for the choice of particular health centre shows that, the better SES class prefer one particular hospital or health centre either for obtaining highly specialized treatment or for good treatment, whereas the lower SES class opt for a particular health centre for obtaining free or concession treatment. It is found that 100% of the SES5 in the urban and 89% of the SES5 in the slum preferred one health centre for obtaining only free or concession treatment. This reveals the significance of socio-economic status in the utilization of health services. The study found that regarding the stage of treatment only 11.25% of the households prefer immediate treatment of illness, whereas this was 57.5% in the case of urban reflecting the impact of high percapita income. As income increases the stage of treatment of illness becomes more and more immediate. The relation between age and system of medicine utilized reveals that at the lower age (age upto 15) and at the age 60 above allopathy is utilized maximum both in the urban and slum for all the three type of illness. The age of the infectious patients and the type of medical agency utilized reveals that in the urban set up lower age group (age upto 15) utilized more of private agencies, whereas in the slum all age group upto to 60 have inter-changeably used both private and
Government agency. It is found that 100% of the slum patients in the age of 60 plus utilized Govt. hospital alone. This is mainly due to financial stringency; the family set up in the slum is such that youngsters usually neglect the aged people. In the case of chronic illness 83% of the urban in all age group preferred private agencies, whereas in slum this was only 43.5%.

The education of the head of the household and the type of medical agency utilized reveals that as educational status improves, there is a tendency for opting more of private medical services which is quite common both in the urban and slum, and is also common in the case of all the three type of illness. They consider allopathy as the only source. Similarly among those who used Govt. allopathic centres for treatment of infectious illness, all of them were dissatisfied about the services rendered and the major complaints raised include lack of medicine, careless treatment, rough behaviour of the doctors and early discharge from the hospital.

Treatment related to chronic illness reveals that 83% of the urban and 43.5% of the slum utilized private hospital. As these diseases require intensive treatment and medicines, Govt. health centres and hospitals could not provide this. The SES wise analysis reveals that patients in the low class (SES4) and very low class (SES5) in the slum and very low class (SES5) in the urban, where 50% and above utilized Govt. hospital for chronic illness. It is their poor economic status, which compelled them to opt for Government hospitals even if they are rendering services, which give rise to a lot of complaints. Due to the
callousness of the Govt. doctors and lack of medicine in Govt. hospitals, people who are leading a hand to mouth existence are compelled go to private hospitals for treatment. Regarding the method of treatment for chronic illness 87.5% of the urbans and 83.8% of the slum patients utilized allopathic system. The better off sections in the urban in the SES$_1$ and SES$_2$ category has shown much interest for ayurvedic and homoeopathic systems with the expectation that the system is free from all side effects. The study found that, the utilization of Govt. hospital is high in the case of inpatient care. For undergoing treatment, as inpatient in the private hospitals requires huge amount, so many low class and very low class socio-economic status patients in the slum utilized Govt. hospitals for inpatient care to escape from the huge hospital bills. With respect to the inpatient care the study reveals that 85.7% of short stay and 80% of long stay of chronic patients in the slum area is in the public health centres. Among the urban dwellers this was 20% and 40% respectively indicating the better financial status of urban dwellers. This reveals the impact of socio-economic status in the selection and utilization of health services. Regarding the sex and system of medicines utilized, the allopathic system is more popular among the males, which they consider as the means of quick relief and early recovery. Similarly percapita income and type of medical agency utilized reveals that in most cases as the income increases, they prefer more of private agencies indicating the impact of economic status on the health services utilization. In the case of other illness, which include surgeries undergone and injuries occurred, major chunk of the urban and slum patients utilized allopathic system. Patients who belong to lower SES
class prefers ayurvedic treatment for bone fractures, snakebite and insect bite, as it is less costly compared to allopathic system. Similar to that of chronic and infectious illness patients, most of the other illness patients who utilized Govt. hospital services were also dissatisfied. Major complaints raised against Govt. health centres or hospitals are lack of proper care, bribery, favouritism, irrational behaviour of nurses, lack of medicine etc. The relation between percapita income and type of medical agency utilized for curative care by the ill persons reveals that in most cases as income increases they prefer more of private agency indicating the impact of economic soundness on the utilization of private health services. In the urban sample, it is found that in most cases as income increases they steadily switch over to private health services with rare exceptions. In the slum also, increase in percapita income inspired them to go for private medical services. According to them, if they go to Govt. hospital, their work will be affected due to the rush in Govt. hospitals and they have to purchase all the medicines from outside. What they can save is only doctor’s fees, for the same they have to sacrifice their day’s wage not only of the ill person but also of the accompanying person. The timings of the private hospital is such that, they can go in the morning or in the evening without any loss of earning. In certain cases the poor financial status of the household resulted in non-treatment of chronic illness and thereby non-utilization of health services. The data analysis shows that as socio-economic status comes down the percentage of untreated illness cases increase, which shows that financial status has an important role in the treatment pattern and extent of utilization of health services. The reason for no-treatment is so
specific that in most of the cases both in the slum and urban, it is mainly due to financial constraints. Regarding the system of medicine utilized, the study found that allopathic system is most popular both in the urban and slum households and only a smaller percentage resort to homoeopathic and ayurvedic system. The overall analysis of treatment process of households in various socio-economic status reveals that socio-economic status is an important determinant of health services utilization. At the same time demographic factors like age, sex, place of residence, nature of illness etc. also exert an influence in the degree of utilization of health services.

**Utilization of Government and private hospitals**

Analysis of data related to per capita income and utilization of Govt. hospital for the last 3 years by the household reveals that as income increases, the percentage of households who utilized Govt. hospital services diminished steadily (with the exception of one income slab in the urban) and it is quite common for the urban and slum households.

**Opinion about inpatient services and Accessibility of doctors:** The study found that 92% of the slum respondents and 78% of the urban respondents were totally dissatisfied about the inpatient services rendered by the Govt. hospitals. They consider the service as poor and dismal even in the case of accessibility of doctors in the inpatient ward. The major complaints raised against Government hospitals were poor check-up, bad behaviour of doctors, bribery, favoritism, lack of
cleanliness, medical equipment, medicines and doctors were more money minded.

Private health services: The data related to the utilization of private health services found that 90.8% households in the urban and 66.3% households in the slum utilized private health services in the last two years. The analysis shows that the proportion of households who utilize private health services increases with rise of socio-economic status. The major reason suggested by the households for the choice of private health services are good treatment, doctor is known, no need of waiting for long time, clinic functions in night and lack of medicine in Govt. hospitals. The only complaint against private hospital services is about its cost.

The analysis of data related to utilization of private and Govt. health services for the last 2 years reveals that only 9% of the urban samples utilized Govt. health services alone for all health needs, and in slum this proportion is 34%. Similarly another 34.2% in urban and 55% in slum utilized both private and Govt. health centres.

Medical Expenditure: The amount of medical expenditure incurred is considered as an important indicator of health services utilization. It is found that as socio-economic status increases, the amount incurred for medical expenditure also increases. In order to see the differences between SES classes in the amount of expenditure incurred for health services utilization, the annual average per capita expenditure on health and annual average per capita income was analysed. It reveals that in the
case of urban sample, as socio-economic status falls, proportion of income spends on health rises. It is 2.4% only in the case of upper class but reached to the maximum of around 5 times (i.e. 10.44%) in the case of lower class. Similarly the annual average percapita expenditure on health incurred by household fall as socio-economic status falls. It is 695.87 in the case of upper class (SES$_1$) but only Rs.360.49 in the case of very low class (SES$_5$). The same trend is visible in the slum sample also, though the differences between the lower middle class (SES$_3$) and very low class (SES$_5$) is not wide.

**Utilization of Maternal health services**

The utilization of maternal health services which is another indicator of health services utilization reveals wide differences between urban and slum dwellers. In the case of utilization of antenatal care services by pregnant women, it can be seen that, 100% of the urban dwellers utilized it, whereas this was only 96% in the case of slum. In the selection of agency for the utilization of antenatal care, 75% of the urban mothers utilized private agencies, whereas this was only 10.6% in the case of slum. It is found that in the urban as socio-economic status rises the mothers are utilizing more and more of private agencies for their antenatal care services and it is common for both urban and slum. It is found that 100% of the SES$_1$ or upper class in urban utilized private agencies for antenatal care, whereas 100% of the SES$_5$ or very low class utilized Govt. health centers, indicating that the SES status is an important indicator of the selection of agency for the utilization of antenatal care services. The upper class (SES$_1$) and upper middle class
mothers started antenatal care earlier than the low class (SES_4) and very low class (SES_5). Similarly the number of times the antenatal care sought was also increased with rise of socio-economic status. Majority of the upper class and upper middle class (SES_1 and SES_2) mothers in the urban received full dose of antenatal care services (check-up, tests, IFA tablets, T.T. injection and advice) whereas this proportion was comparatively less in the case of low class (SES_4) and very low class (SES_5) mothers in urban and slums and as a whole urban mothers are better placed in the utilization of antenatal care services compared to slums. This pattern of antenatal care services utilization supported the hypothesis formulated for the study. Regarding the selection of place of delivery, SES class differed widely and the reason suggested by them is such that free or less expensiveness prompted the mothers of low SES classes to opt for Govt. health centres, whereas the need for good medical care and rapport with the doctors prompted the better SES class to opt for private health services. It is found that as socio-economic status increases, the proportion preferring good medical care as the reason for the choice of delivery place increases both in urban and slum. Another finding of the study is that, the problem of under weight children is more associated with lower SES class group both in the urban and slum and the poverty and malnutrition are responsible for the creation of such children. Another finding of the study related to immunization is that, as far as the full dose of immunization is concerned (i.e. BCG + 3DPT + 3 Polio + Measles) the urban coverage is 85.7% and got full protection against 6 vaccine preventable diseases, whereas this proportion was only 79.6% in the case of slums. This also supports the
hypothesis formulated in the beginning that urban mothers utilized the M.C.H (Maternal and child health) services at a higher rate than the slum mothers.

The finding of the study clearly reveals that the low class and very low class (SES4 and SES5) both in the slum and urban areas did not consume health services to the fullest extent they required. Apart from their incapacity to consume private health services, they also fail to utilize the freely available public health services. So any health services package which aims to augment the volume of health services utilization by the whole community should take steps to eradicate the agonies of these urban poor.

**Suggestions and Recommendations**

Health and nutritional programme for the urban poor should be designed and implemented according to their needs and environmental content. Special programmes through a comprehensive package of shelter, health care and economic support programmes are urgently required for this group. For improving the accessibility and utilization of health services by the urban poor and slum dwellers, it would be better if the authority can provide mobile health care vans in their dwelling place during night and in the evening. Specific health risks such as traffic accidents, suicidal attempts, food poisoning and tuberculosis are health problems that are more frequent in urban and urban slum than in rural communities and require varied type of services. Facilities should be created in urban dispensaries to treat the accident victims so that un-
necessary delay and heavy rush in the General hospitals and District head quarter hospitals can be avoided and many accident victims can be saved from death. Significant steps must be taken to make health care affordable and accessible. In the health care budget of the Government more allocation of funds should be earmarked for medicines and supplies, so that the vulnerable and urban poor utilizing Govt. hospitals and dispensaries will be benefited a lot. Similar to the rural health infrastructure set up through the primary health centres, an urban health infrastructure should be created by setting up new-dispensaries or health centres and strengthening the existing dispensaries in the urban areas. In other words establishment of a regional health care delivery system suited for the urban areas is most inevitable to mitigate the problems of urban health. For this survey of the existing resources and facilities in the urban set up is to be measured along with the actual needs. Similarly earmarking of institutions is to be started or upgraded, estimate personnel needed, available and also their potential. Moreover specific standards should be fixed for organization and maintenance of equipments and also for services to be provided. Above all proper examining machinery for supervision, monitoring and evaluation should be created to ensure quality of services rendered.

The basic infrastructure facilities like good drinking water, sanitation facilities and drainage facilities etc should be provided in the residential areas of urban poors and some income generating activities should also be undertaken for alleviating their poverty.
For the improvement of the slums the following policy implications are suggested.

For the overall development of the human resources more thrust should be given to the children of slum areas. Health, education, sports and recreational facilities should be provided to them within the slums at reasonable distance. In all the existing slums the basic amenities for human needs should be provided as under the scheme of Environmental Improvement of Urban Slums (EIUS). Some income generating activities should be undertaken by the Government in these areas for the betterment of slum dwellers. Activities, which help in the social and cultural assimilation of slum dwellers in the city life, should be taken up. Non-governmental agencies can be used for devising ways of narrowing the gap between city culture and slum culture. For improving the housing facilities of the slum dwellers, a housing scheme with Governmental subsidy should be devised to rehabilitate the slum dwellers. Most of the slums identified and selected for the study are low lying areas and are inundated during rainy seasons. Measures should be taken to raise their levels in order to avoid problems of flooding and sledging in such slums.

The unhygienic living conditions and unhealthy working conditions of the low class and very low classes expose them to a variety of communicable diseases, occupational diseases, injuries and physical disabilities. Whereas the upper classes and upper middle classes are mostly free from these health problems due to their better living and working conditions. But their eating habit and stressful occupational
environment create ample chances of chronic diseases. To get rid of this urban health problems fast food habit should be avoided and balanced diet high in fibre and low in calorie to be consumed. People should be encouraged to follow a habit of moderate exercise in order to have a positive and cheerful attitude. For reducing the morbidity problems of the aged population, old age homes providing gainful activities and entertainment to the aged should be created in the urban centres. The health services scheme proposed above will reduce the gap that exists between urban and slum dwellers in the utilization of health services and also make the health services scheme affordable and accessible to the entire urban community.