CHAPTER VI
CONCLUSIONS AND RECOMMENDATIONS

WHO has proclaimed health as a fundamental right of every individual and society. One of WHO's 21 targets states that, "by the year 2010 people in a given region of a community should have much better access to family and community oriented primary health care, supported by a flexible and responsive hospital system."

Primary health care has been defined as a dynamic approach which integrates at the community level. An effective primary health service delivery should be responsive to the needs of consumers; it should be effective, accessible, comprehensive, acceptable and at low cost. Basic health care targets identified in the Minimum Needs Programme in the Ninth Plan included 100% coverage of primary health facilities in rural and urban areas by providing basic health and family welfare services to the population within 1-2 kilometres of their dwellings.

Health services in India are provided by the government, the private sector and voluntary organizations. The people at large receive health care through the public sector, private sector, indigenous system of medicines, voluntary health agencies and vertical health programmes. Actual utilization of health services by the consumers provides the proof of accessibility and acceptability of health services particularly when the service system has the capacity to meet the expressed demand.

The governments of developing countries are unable to deliver free health services, as the basic right of the citizen, in a holistic manner. India's large and diverse geographical terrain, size of the population and its ethnic and cultural variations make it a difficult task for administrators to make provisions for basic health care for all. To fill the gap indigenous health care systems attempt to meet the needs of the people by working with the community. The Indian system of medicine such as Ayurveda, Sidha, Unani and drugless therapies like Yoga and Naturopathy had been widely accepted in India for centuries. These systems offer a range of safe, pure, and cost effective preventive and curative therapies. Further, NGOs or voluntary organizations involved in various health programmes supplement the efforts of the government in health care delivery and related aspects; they bridge the gap between the people and the government.

The health infrastructure in developing countries has been inadequate because of poor surveillance, lack of manpower and funds. The health care sector in our
country includes health care providers ranging from well qualified doctors of the allopathic system, homeopathy, ayurveda, and unani systems to untrained providers of medical aid, herbalists and magico-religious practitioners. India has a strong disparity between the availability and utilization of health services in the organized and the unorganized sector. Health care costs force the underprivileged to do without health care, suffer delayed or incomplete treatment, resort to self-medication, and depend on informal and ineffective sources of care. In urban health care systems, the middle and upper classes have access to both governmental and non-governmental sectors for the best services while the lower class seeks services from the mismanaged and non-organized sector in various ways.

The Government has from time to time declared deadlines for achievement of goals in various health and related areas. Some of the important goals to be achieved by 2000-2015 (also included in the Tenth Plan) are reduction of mortality by 50% on account of TB, Malaria and other vector borne diseases, reduction of IMR (Infant Mortality Rate) to 30/1000 live births, reduction of MMR (Maternal Mortality Rate) to 100/100,000 live births, to increase utilization of public health facilities from current levels of <20 to >75%, and to establish a system of surveillance, national health accounts and health statistics.

Major objectives of National Health Policy 2002 were to:

- ensure equitable access to health services across the social and geographical expanse of the country;
- increase access to the public health system by establishing and upgrading infrastructure in existing institutions;
- enable contribution of private sector in providing health services for the population group which can afford to pay for these services;
- increase access to tried and tested systems of traditional medicine.

It is thus felt that the varied health services in a community need to be assessed to know the availability of health services, to provide better community based care, and to develop more effective health systems. Further, implementation of a holistic national health programme needs an assessment of the available health systems.

The present study was undertaken to determine the availability and utilization of health services in the Union Territory of Chandigarh with the following objectives:
➢ To identify the presence of different types of health care agencies;
➢ To study the availability of health services provided by identified health care agencies;
➢ To assess the infrastructure, equipment and public health facilities in health care agencies;
➢ To study the utilization of health care services;
➢ To study the consumer perception of health care agencies and services provided by these health agencies;
➢ To suggest ways to improve health services.

The following hypotheses were tested in the course of the study:

1. There are a variety of health care agencies belonging to various health care systems.
   a. Majority of the health agencies are in the private sector.
   b. There is inadequate availability of health care agencies with regard to population.

2. Each health care agency provides only a limited scope of health services.
   a. Government health care agencies provide preventive, promotive and curative services.
   b. Indigenous health care agencies provide only curative services.
   c. Maternal child health services are mainly provided by untrained dais in rural and slum areas.
   d. Presence of NGOs working to deliver health services is negligible.

3. Health care agencies do not have adequate manpower, infrastructure, equipment and supplies, public health facilities, and funding essential to deliver health care services.
   a. Government agencies face the problem of shortage of staff.
   b. The qualification and training of many of the private and indigenous health care providers is questionable.
   c. Health care agencies have inadequate outdoor and indoor facilities.
   d. Health care agencies have inadequate equipment and supplies.
   e. Health agencies do not have satisfactory public health facilities.
   f. Indigenous health care agencies do not have adequate infrastructure.
g. Private and indigenous agencies face a problem of funding.

5. There is a difference in utilization of different health care agencies across different geographical areas and socio-economic communities.
   a. The utilization of a particular type of health agency by consumers depends upon their socio demographic characteristics.
   b. The utilization of government health care agencies is low in all socio-economic communities.
   c. Private health services and indigenous health services are most used by all the communities and all socio-economic groups.
   d. Indigenous health agencies are widely accepted and utilized in groups with lower socio-economic status.
   e. Less educated people prefer to utilize indigenous health care agencies.

6. Health care agencies are not easily accessible in terms of distance, transportation facility, and cost.
   a. Consumers are not satisfied with health care agencies in terms of accessibility, transport facilities, cost, staff availability, time consumption, staff attitude, infrastructure, and health care facilities.
   b. Government health care agencies are far from the place of residence.
   c. People in the rehabilitative and slum sectors have inadequate transport facilities to access government health agencies.
   d. Attitude of the staff in government health care agencies is not consumer friendly.
   e. Time spent to avail government health services is more as compared to private and indigenous health services.
   f. Adequate infrastructure and diagnostic facilities are lacking in all the agencies.
   g. Indigenous agencies are cost effective.

**Research Methodology**

The study used both primary and secondary data. A cross sectional survey of geographical areas of Chandigarh was conducted by taking an urban sector (Sector 35), a rural sector (Badheri Village), a slum Sector (Kumhar Colony Sector 25), and a rehabilitated sector (Dadu Majra Colony Sector 38). Primary data was collected through structured interview schedule and observation checklist to collect
information regarding availability of health care agencies and health care services. Periodic visits to the study areas and health care agencies were made to gather information through observation and informal interviews. Secondary Data was collected from government documents, books, journals, available records, bibliographies, unpublished dissertations, and the internet. The data collected was analyzed and inferences drawn by applying various tests like percentage, Pearson chi square and levels of significance.

Main Findings

Hypothesis-1

There are a variety of health care agencies belonging to various health care systems.

Health agencies available in Chandigarh were government (32.2%), private (50.4%), and voluntary health agencies (17.4%). The government health agencies belonged to allopathic, homeopathic and ayurvedic health care systems. An organizational variety of these agencies existed in the form of hospitals, community health centres, health sub centres, dispensaries, and welfare centres. All systems of medicine were practiced in Chandigarh. The presence of various unregistered indigenous agencies reflected the strong link of health care agencies with the beliefs, customs, attitudes, knowledge and practices prevalent.

The survey of the study areas showed the presence of 216 health care agencies. These included 13.9% government, 82.4% private, and 3.7% voluntary health agencies. The 178 private health agencies included 73 formal agencies and 105 informal/indigenous health agencies. Further, in the urban sector majority of private agencies were allopathic clinics, whereas in the other three study areas majority of private agencies were indigenous health agencies.

Various government health care agencies present in study areas were 2 allopathic dispensaries, one homeopathic dispensary and deaddiction centre each, 3 day care crèches, and 26 anganwadis. Various formal private agencies included 41 allopathic medical clinics, 5 ayurvedic clinics, 4 homeopathic clinics and nursing homes each, 6 laboratories, 7 dental clinics, and 2 gynae clinics, eye clinics and MTP centres each. Various indigenous health agencies included 35 traditional healing centres, 34 magico-religious healing centres, 14 traditional cum magico-religious
health agencies, 19 traditional dai centres, 2 reiki healing centres and one meditation healing centre.

Hence, presence of a variety of health care agencies belonging to different systems was found in Chandigarh as well as in the study sectors.

Hypothesis -1a.

Majority of the health agencies are in the private sector.

Half (50.4%) of the health agencies available in Chandigarh were private health agencies. In study areas, of 216 health care agencies 82.4% were private health agencies. Primary data revealed that in all study areas private health agencies were in majority. Further, this trend of private health agencies being in majority was found in the individual study areas too. Area wise, 90.7% of the 54 health care agencies in the urban, 73.3% of the 30 health agencies in the rural, 82.8% of the 35 health agencies in the slum, and 80.4% of the 97 health agencies in the rehabilitated sector were private health agencies.

Hence both the secondary and primary data supported the hypothesis that majority of the health agencies are in the private sector.

Hypothesis -1b.

There is inadequate availability of health care agencies with regard to population.

The 216 health agencies in the study areas included 13.9% government, 82.4% private and 3.7% voluntary health agencies. The availability of government health agencies in study areas was 1/20532 population in the urban, 1/3293 in the rural, and 1/18300 population in the rehabilitated sector; there was no health care centre available in the slum sector. According to World Health Organization standards there should be one sub centre for 5000 population. Thus, availability of government health care agencies was less than the norms in all study areas except the rural sector.

The ratio of availability of formal agencies and population was 1/477 in the urban, 1/411 in the rural, 1/9135 in the slum and 1/868 in the rehabilitated sector. Thus availability of formal agencies was more than the recommended norms in all study areas except in slum sector. This corroborated the secondary studies (Table 1.5).
Hence, the hypothesis that there is inadequate availability of health care agencies with regard to population was rejected in terms of the overall picture. However, the availability of government health agencies in study areas was much below norms, except for the rural sector.

**Hypothesis - 2**

Each health care agency provides only a limited scope of health services.

According to secondary data lack of essential services affected the services of health centres in various states of India. The study revealed that none of the government agencies provided physiotherapy, occupational, and indoor services. Day care crèches provided neither preventive nor promotive health services. The slum sector was deprived of the services of government health agencies except anganwadis. Further, services of all the government health agencies were limited to only morning hours. Of 600 consumers 88.7% did not utilize government agencies because these did not provide round the clock health services.

In study areas 47.7% private health agencies provided referral services, 16.8% promotive, 5.6% laboratory test facilities, and 3.4% indoor facilities. None of these agencies provided rehabilitation, physiotherapy, occupational, deaddiction services and home visits. Indigenous health agencies mainly dealt with the curative rather than preventive and promotive aspect. However, magico-religious and traditional cum magico-religious healers claimed to prevent forthcoming problems.

The traditional dais were mainly responsible for reproductive health practices. Reproductive health practices included conducting deliveries, manipulation of the inverted child in uterus, massage during post-partum phase, setting prolapsed uterus, and providing nutritional advice during pregnancy and after child birth. Interestingly, the dais also took it upon themselves to suggest how to have a male child! All dais providing maternal and child health services were illiterate and majority (84.2%) untrained.

All voluntary health agencies in study areas provided preventive health services and home visits. None of these agencies provided curative, rehabilitative and specialized or referral services.

Availability of services in government health agencies in terms time duration of availability i.e. opening hours showed that all government and
voluntary agencies were available only during morning hours while majority of the private agencies provided services round the clock and during both morning and evening hours. This was also supported by the responses of consumers for round the clock non availability of private health agencies - fewer numbers reported this as compared to those who reported the same for government agencies. It was the informal indigenous private agencies that formed a large part of the health services being provided round the clock and were the nearest health agencies to majority subjects in all study areas. However, 42.8% consumers reported round the clock non availability of private agencies; perhaps due to the fact that there was no advertisement or display marking the presence of the indigenous health agencies.

Thus none of the health agencies provided all the services. Further, informal indigenous private agencies formed a large part of the health services being provided round the clock and were the nearest health agencies to majority subjects in all study areas.

Hypothesis - 2a

Government health care agencies provide preventive, promotive, curative and rehabilitative services.

Primary data revealed that 90% of the government agencies provided preventive and promotive health services, 10% government agencies provided curative services, 13% rehabilitative services, 3% provided deaddiction services, 10% provided laboratory test facilities, and 7% provided home visits. None of the government health agencies provided rehabilitative, physiotherapy, occupational and indoor health services. All government health agencies provided referral services. All anganwadis provided preventive and promotive health services. Day care crèches did not provide any health service.

Thus government health care agencies provided preventive, promotive, curative and rehabilitative services. However each government agency did not provide all the services.
Hypothesis – 2b

Indigenous health care agencies provide only curative services.

It was seen that the indigenous health care providers mainly dealt with the curative aspect of illnesses rather than preventive and promotive. However, the magico-religious and traditional cum magico-religious healers claimed to prevent forthcoming health problems in the care seekers as well as their families.

A number of studies quoted claims of cure of a number of health problems by traditional healers like curing TB, managing fractures, treating infertility, curing swollen glands, management of diabetes mellitus, rheumatoid arthritis among others. Primary data supported the secondary studies and revealed that traditional healers claimed to cure a number of illnesses with the use of herbs, oils, balm, bone setting (chiropractic), kadas, acupressure and with ‘Vata and Pitta’ treatment. Curative aspect of the diseases mainly used herbs to treat various ailments like boils, skin infections, ear ailments, wounds, piles, indigestion, diabetes, and infertility. The oils were used for massage, local application, and oral consumption to treat fractures, sprains, new born umbilicus and body massage; balm for topical application especially for body aches and headaches; and ‘kadhas’ were used by these traditional healers for postpartum women, infertility treatment, various stomach ailments especially in children, and for ear ailments. The various health care practices followed by bonesetters (chiropractors) were treating fractures, dislocations, sprains and backaches; acupressure healers used various instruments like acupressure shoes, stands, knee caps and rollers among others.

The study also revealed that in addition to doing jharas and removing ill effects of the ‘evil eye’, magico-religious healers also used holy ashes and performed animal sacrifices and kala jadu (black magic) to cure illnesses. Traditional cum magico-religious and magico-religious indigenous health workers treated various existing health problems and also claimed to prevent forthcoming ones. Reiki healers used the method of transference of pure healing energy through hands to treat illnesses. The traditional dais were mainly responsible for reproductive health practices which included conducting deliveries, manipulating inverted child in uterus, body massage of post partum mothers, setting prolapsed uterus, giving nutritional advice during pregnancy and after child birth, and also took it upon themselves to advise on begetting a male child.
Thus, along with curative services the preventive aspect was also addressed by indigenous health care providers.

**Hypothesis – 2c**

Maternal child health services are mainly provided by untrained *dais* in the rural and the slum areas.

The traditional *dais* were mainly responsible for reproductive health practices; this was also supported by secondary studies. Out of 19 traditional *dais* in the study areas 10 were in the rehabilitated, 5 in the slum, 4 in the rural, and none in the urban sector. Narang (1997) had also noted that *dais* were the main providers of intranatal and postnatal care.21

Thus, the study found that the traditional *dais* were mainly responsible for reproductive health practices.

**Hypothesis – 2d**

Presence of NGOs working to deliver health services is negligible.

It was found that of 216 health agencies available in study areas only 3.7% were voluntary health agencies. Area wise, 3.7% in the urban sector (2 of 54 health agencies), 10% in the rural sector (3 of 30 health agencies), 8.6% in the slum sector (3 of 35 health agencies) were voluntary health agencies. The rehabilitated sector had no voluntary health agencies.

Thus, we saw a minimal presence of NGOs.

**Hypothesis - 3**

Health Care agencies do not have adequate manpower, infrastructure, equipment and supplies, public health facilities, and funding essential to deliver health care services.

Government health agencies, along with shortage of staff and shortage of health facilities, had the practice of health services being provided by untrained and unauthorized personnel.

As per consumers’ and staff responses regarding the availability of health facilities within the health agency, reasons for non utilization of health agencies, and problems regarding availability of health care facilities like inadequate equipment
and infrastructure; these were more pronounced in government health care agencies as compared to private health agencies.

Primary data showed majority of consumers (67.2%) reported non-availability of laboratory/diagnostic facilities in the government agencies. Further, primary data showed 64.5% respondents in study area reporting non-availability of medicines in government agencies. The study found the presence of staff toilet in 90% government and 74.7% private agencies; it found patients' toilet in 86.7% government and 24.2% private agencies.

Singh (2002) reported lack of essential infrastructure in indigenous agencies. Similar findings were noted in the present study. Voluntary health care agencies lacked infrastructural facilities. There was no fixed manpower at any time.

Majority of the private health agencies were self funded.

Hence it was found that all health agencies lacked infrastructural facilities, equipment and supplies, and public health facilities in one form or the other. Thus health agencies did not have satisfactory public health facilities. Health agencies also faced a problem of funding.

Hypothesis - 3a

Government agencies face the problem of shortage of staff.

Along with shortage of staff and shortage of health facilities, government health agencies had the practice of health services being provided by untrained and unauthorized personnel. The allopathic dispensary in the urban sector, homeopathic dispensary (rural sub centre) and allopathic dispensary in the rehabilitated sector had fewer number of health workers than that recommended by the Bhore Committee. The availability of doctor and ANM in the government health agencies was 1/20,532 population in the urban sector, 1/18222 in the rehabilitated sector, and none in the slum sector; this was very less as per the WHO norms of 1/5000. In the rural sector, the doctor posted at two places was available only three days a week in the study area. The slum sector remained deprived of a government health agency except for 3 anganwadis. An ANM was allotted the slum as an extra area in addition to her regular charge in an adjoining urban area. Similarly, the rehabilitated sector had one doctor against 2 posts, and the post of nurse remained vacant. In the rural and the
rehabilitated study sectors it was found that the pharmacist examined the patients and prescribed medicine in the absence of the doctor.

Further, according to the ANM in the rural area, while the population served by her was 4500 in the rural sector that was primarily allotted to her, the additional 2 urban sectors allotted to her made her serve a total population of >20000. An ANM of an urban area was assigned the slum sector under study as an extra area, thus catering to – 45675 population in the slum sector in addition to population of the urban sector. It is important to note that while she was fulfilling the norms for the ANM requirement in the urban sector on one hand, on the other she was heavily overburdened with the responsibility of more than double the norm by being allotted the slum sector also. The directorate expressed helplessness at this situation on account of being constrained by inadequate staff. Of the 64 staff working in the government agencies, 79.7% complained of shortage of staff.

Thus, there was a problem of inadequate staff in the government health agencies.

Hypothesis – 3b

The qualification and training of many of the private and indigenous health care providers is questionable.

While it was believed that the health providers of government agencies possessed the requisite qualifications and training, the same was questionable in case of private health workers. Majority of health providers (82%) were in the private health agencies. Further, majority of the private health providers, i.e. 62.2%, were unregistered; that included all indigenous health providers. The study found >75% unregistered private practitioners in the rural, slum and rehabilitated areas.

There were a number of private practitioners belonging to different systems of medicine in the study areas. Further, a relatively small percentage of private practitioners had the requisite qualifications and training. In all study areas, RMP doctors had no formal training, only work experience. The RMP doctors were 2% in the urban, 50% in the rural, 60% in the slum and 42.1% in the rehabilitated sector. Further, 50% of all the available pharmacists in study areas, and the nurse in the rehabilitated sector had no formal qualification and training - they had learnt on the job. All the sweepers were uneducated. None of receptionists was a high school
graduate. All dais in study areas were found to be illiterate and 84.2% dais workings in private agencies were untrained as well. Primary data showed that none of the indigenous health workers had formal training (these accounted for 56.8% of the total private health care providers). Except for the urban sector, majority of indigenous workers in other study sectors (82.8% in the slum, 75.6% in the rehabilitated, and 71.4% health providers in the rural sector) were either self learnt or were imparted training by some traditional guide. Further, primary data also revealed that the number of indigenous workers were more in the slum and the rehabilitated sector.

Majority i.e. 76.2% of the indigenous workers in the study sectors were illiterate. Of the 80 indigenous workers who were illiterate 37.5% were the magico-religious healers, 27.5% traditional healers, 23.8% traditional dais, and 11.2% traditional cum magico-religious.

Thus it was seen that there were RMP doctors and other untrained staff in private health agencies. Majority of private health care providers were indigenous; further, they were illiterate and none of them had been formally trained.

Hypothesis – 3c

Health care agencies have inadequate outdoor and indoor facilities.

Primary data for the availability of the infrastructural facilities showed that only 3.3% of 30 government health agencies had 10-12 of the 14 basic infrastructural facilities on the checklist drawn up to assess infrastructural facilities, 13.3% agencies had 7-9, 33.3% agencies had 4-6 and 1-3 facilities each, whereas 6.7% agencies had none of these basic infrastructural facilities. 73.3% government health agencies had no signboard displayed outside their agencies. 86.7% had no waiting arrangement for the patients and attendants, 26.7% had no seating arrangement, essential furniture for staff not available in 26.7%, examination table for patient’s examination was unavailable in 90%, there was poor lighting in 23.3%, toilet facility for staff was absent in 10%, toilet facility for patients/children was absent in 13.3%, and there was no fire fighting equipment in 96.7% government health agencies.

Majority i.e. 35.4% of 178 private health agencies had only 1-3 of the 14 basic infrastructural facilities on our checklist, 11.8% were rated very poor in terms of
availability of these facilities, and 22.5% were rated excellent for having >13 of these facilities. Signboard was absent in 61.2% private agencies; they did not feel the need for advertising as word-of-mouth information spread easily about the local traditional facilities available. In many cases, especially in the urban sector, tax avoidance was a reason revealed during informal interviews. Furniture for staff was lacking in 67.4% private agencies, examination table was not available in 61.8% agencies, cleanliness of treatment room was not up to the mark in 43.8% agencies, seating arrangement was lacking in 62.4% agencies, waiting arrangement was lacking in 48.3% private health agencies, lighting was poor in 33.7% agencies, toilet for staff was absent in 25.3% agencies, there was no patients’ toilet in 75.8% agencies, and none of the private health agencies had fire fighting equipment except for one in the urban sector. Most of the infrastructural facilities were absent in majority of the indigenous agencies.

Consumer and staff responses regarding the availability of health facilities within the health agency and reasons for non utilization of health agencies were studied. It was revealed that problems regarding availability of health care facilities like inadequate equipment and infrastructure were more pronounced in government health care agencies as compared to private health agencies. These perceptions may explain some important reasons for low utilization of government agencies in relation to private health agencies. Of 64 staff in government health agencies 64.1% reported inadequate infrastructure and 96.9% inadequate equipment. Whereas of 324 staff in private health agencies 37.6% reported inadequate infrastructure and 28.7% reported inadequate equipment. Non-availability of equipment discouraged 62.5% out of 600 consumers in the sample from utilizing government health agencies. 197(32.8%) reported lack of laboratory/diagnostic facilities, and none reported lack of seating arrangement in government health agencies. In private agencies only 7.7% reported shortage of equipment, 15.8% reported lack of laboratory/diagnostic facilities, and 2.8% reported lack of seating arrangement.

Thus all health care agencies were found to have inadequate outdoor and indoor facilities in terms of signboard, waiting hall, seating arrangement, essential furniture, examination table, laboratory, and toilet facilities. However these problems were more pronounced in government health care agencies.
Hypothesis – 3d

**Health care agencies have inadequate equipment.**

The present study showed that majority i.e. 86.7% of 30 government agencies were rated very poor in terms of availability of essential equipment for health care. Only one of the 19 government health agencies had an adult weighing scale, a child weighing scale, an oxygen cylinder, measuring tape, tongue depressor, speculum and sterilizer. In the category of physical assessment articles only 2 government agencies had thermometer, B.P. apparatus, stethoscope and torch. Regarding dressing articles only one government agency had cheetle forceps to handle sterile equipments, 2 had antiseptic lotion, disinfectants, sterile pack and scissors. None of the government agencies had suture material. Of the required laboratory investigation articles only one government agency had facility for blood tests while none had urine test facilities. Regarding records one agency had disease surveillance records, staff, attendance and leave records and 2 government health agencies had patients’ records. Of 64 staff in government health agencies 96.9% subjects complained of inadequate equipment in their agencies. Further, non-availability of equipment discouraged 375 (62.5%) out of 600 consumers from utilizing government agencies.

The status of the private health agencies on the parameter of availability of basic equipment was very low. Primary data showed that majority i.e. 63% were rated very poor in terms of equipment and only one i.e. 0.6% out of 178 private health agencies was rated excellent for having >24 of the 26 listed basic equipment and supplies. 8-10% agencies were rated between poor and very good on the basis of the number of items of equipment available. Area wise equipment and supplies revealed that though all private agencies lacked equipment and supplies in one form or the other the problem was comparatively less in the urban sector.

In a nutshell, 13.3% government and 27-32.6% private health agencies had thermometer, stethoscope, B.P. apparatus and torch. 10% government and 20-26.4% private agencies had adult weighing machine, tongue depressor and sterilizer. 6.6% government and 7-18% private health agencies had child weighing machine, measuring tape and speculum. This availability indicated by primary data was very
less as compared to 50% availability of physical assessment articles recorded by Aggarwal (2001)\textsuperscript{23} and Jain (1999)\textsuperscript{24}.

Further, of 216 formal (private and government) health agencies only 3(1.4%) had oxygen cylinder. The situation of erratic availability was reflected across studies like that of Satesh Gururaj’s (1999)\textsuperscript{25} study that had found this availability to be 80% while Gupta’s (1991)\textsuperscript{26} study recorded no oxygen cylinder facility in hospitals of North India.

Hence, all health care agencies had inadequate equipment in terms of physical assessment articles like oxygen facilities, thermometers, blood pressure instruments, stethoscope, sterilizer, weighing machines, measuring tape, and tongue depressor; dressing articles; laboratory investigation articles; and essential records. However, these inadequacies were more pronounced in government health care agencies.

**Hypothesis – 3e**

Health agencies do not have satisfactory public health facilities.

With regard to public health facilities 23.3% government and 33.7% private health agencies were found to have poor lighting. Cleanliness of treatment room was not up to the mark in 76.7% government and 43.8% private health agencies, 26.7% government and 58.4% private health agencies lacked dustbin, 13.3% government and 75.8% private agencies lacked toilet for patients/children, 10% government and 25.3% private agencies lacked toilet for staff, water storage facilities were found lacking in 63.3% government and 71.3% private agencies, hand washing articles were unavailable in 76.7% government and 64% private agencies, and there was no fire fighting equipment in 96.7% government and 99.5% private agencies. Further, 73.4% of the 64 staff in government, and 13.6% of the 324 staff in private agencies reported lack of public health facilities. All indigenous health care agencies in study areas lacked toilet for staff.

In spite of >5 years working duration of government health agencies in study areas public health facilities in all 30 government agencies were still largely absent. 73.4% staff of government health agencies reported lack of public health facilities in one form or the other.
Similarly, in spite of the fact that majority of the private health care agencies were serving since >5 years in study areas 13.6% staff in private health care agencies reported lack of public health facilities in these agencies. 

Thus, it was found that health agencies did not have satisfactory public health facilities in terms of electricity, water supply, and sanitation facilities.

Hypothesis – 3f

Indigenous health care agencies do not have an adequate infrastructure.

The study found that dustbin, toilet for patients, helpers, weighing scale, delivery kit, health education material, and traditional medicines like balm and ash were lacking in all indigenous health agencies of the urban sector. All indigenous health agencies in the rural sector lacked toilet for patients, helpers, weighing scale, delivery kit, acupressure articles, drugs, health education material, and records. None of the indigenous agencies in the slum sector had waiting arrangement for patients, patients’ toilet, helpers/aids, dressing articles, stove/sterilizing facilities, utensils to boil water, weighing scale, delivery kit, traditional medicines, health education material, and records of any kind. All indigenous agencies of the rehabilitated sector lacked patients’ toilet, helpers/aids, weighing scale, delivery kit and traditional medicine such as balm, acupressure articles, drugs, health education material and records.

Hence indigenous health care agencies did not have adequate infrastructure.

Hypothesis – 3g

Private and indigenous agencies face a problem of funding.

Majority of the private health agencies were self funded. Self funded private agencies were 95.9% in the urban sector, 95.5% in the rural sector, 96.6% in the slum sector and 96.2% in the rehabilitated sector. Donations were taken by one private agency in the urban sector and one voluntary health agency each in the rural and the slum sector. One private health agency in the urban and rural sector and 2 agencies in the rehabilitated sector had taken loan. 54.7% staff in the government agencies and 62.6% in the private health agencies reported lack of funds in these agencies.
Interestingly, consumers and staff responses regarding the availability of health facilities within the health agency and reasons for non-utilization of health agencies showed that problems of inadequate equipment and infrastructure were more pronounced in government health care agencies as compared to private health agencies. This was in spite of lack of funds in private health care agency as compared to government health agency.

Thus, it was found that private and indigenous health agencies faced a problem of funding.

Hypothesis – 4

There is a difference in utilization of different health care agencies across different geographical areas and socio-economic communities.

The allopathic private clinics were the most often used health agency followed by indigenous private agencies, ayurvedic private clinics, government health agencies and finally the private homeopathic clinics. Further, the indigenous health agency was the most often used by majority of consumers in the slum sector whereas allopathic clinics were most often used in other areas.

Area versus most often used health care agencies showed that indigenous health agency was most often used by majority of consumers in the slum sector whereas allopathic clinics were most often used in the urban sector. Chi square value 198.9 and p value <0.001 showed highly significant difference in the use of different health agencies in different areas. It showed that the use of allopathic clinics in the urban sector and the use of indigenous agencies in the slum sector were significantly high.

Primary data showed that majority of subjects in the urban sector i.e. 56.7% belonged to highest income group (i.e. >15,000/month) whereas majority of the slum subjects (70%) and the rehabilitated subjects (55.3%) were from the lowest income group (1000-5000). Utilization of government vs. private health agencies in different income groups revealed that the number of subjects from each area and socio-economic group for the use of private agencies was more than that for the use of government health agencies. The use of private health agencies was significantly higher in all study areas and hence in all socioeconomic groups. (Chi square value was 8.15 and p value 0.043). Further, allopathic clinics were used most often by majority, i.e. 85 respondents, from the highest income group. Chi square value of
110.617 and p value of <0.001 indicated that the use of allopathic clinics was significantly higher in the higher income group.

Thus, it was proved that there was a difference in utilization of different health care agencies across different geographical areas and socio-economic communities.

Hypothesis – 4a

The utilization of a particular type of health agency by consumers depends upon their socio demographic characteristics.

Socio demographic factors like age, sex, educational status, occupational status, monthly income and number of family members were studied. Consumers in study areas were interviewed to assess the relationship of their socio economic characteristics with their utilization of health care agencies.

In the urban sector, majority of the subjects were males, in the age groups of 25-45 and 45-65 years; graduates; businessmen; from the highest monthly income group (> Rs.15,000); and with small families of 3-5 family members. In this sector majority consumers (65.4%) most often utilized allopathic private clinics. In the rural sector majority of the subjects were females; in the age group of 25-45 years; matriculate; labourers and government servants; from the monthly income group of Rs. 10,000-15,000; and with 3-5 family members. Here also, as in the urban sector, majority consumers (53.3%) most often utilized allopathic private clinics. In the slum sector majority of the subjects were females; in the age group of 25-45 years; illiterate; labourers; from the lowest income group (1,000-5,000); and with family size of 6-8 members. In this sector majority subjects (74%) most often utilized indigenous health agencies. In the rehabilitated sector majority of the subjects were females; in the age group of 25-45 years; matriculate; labourers; from the lowest monthly income group (1,000-5,000); and with 3-5 family members. In the rehabilitated sector too, just as was found in the urban and rural sectors, majority i.e. 45.3% most often utilized allopathic private clinics.

The data on most often used health agency vs. age groups revealed that the lower age group i.e. 5-25 years most preferred the indigenous health agencies. Respondents in the age group of 25-45 most preferred allopathic clinics, however there was a fairly large preference for the indigenous agencies also in this group.
(second most preferred). The allopathic clinics were the most preferred health agency for both the 45-65 and >65 age groups. Chi square value 39.79 and p value <0.001 showed a highly significant difference in the use of different health agencies in different age groups.

Further, it was found that both the sexes had equal preference for all health agencies. The Chi square value of 4.46 and p value of 0.346 showed that the difference in use of different health agencies in both the sexes was non significant.

**Education wise**, it was also found that illiterate people preferred to use indigenous agencies; maximum number of the illiterate respondents showed preference for these agencies. Chi square value 96.78 and p value <0.001 showed a highly significant difference in the use of different health agencies by people with different educational status.

**Occupation wise**, except labourers, majority of other groups used allopathic clinics the most. Majority of the subjects i.e. 36.7% who used allopathic clinics were businessmen and majority of businessmen i.e. 56.6% used the allopathic clinics the most. Chi square value of 110.25 and p value of <0.001 indicated a highly significant difference in the use of different health agencies by people from different occupations.

It was also found that majority of people from low-income groups availed health services from informal health agencies with the consideration of low cost. Thus, utilization of a particular health agency depended upon the socio-economic status of the community as well as cost of health agencies; this may explain the reason for most often utilization of allopathic private clinics in the urban and indigenous health agencies in the slum sector. Further, allopathic clinics were used most often by majority i.e. 85 respondents from highest income group. Chi square value of 110.617 and p value of <0.001 indicated that the use of allopathic clinics in the higher income group and indigenous agencies in the lower income group was significantly higher. Also, indigenous health agencies were most often utilized by the slum sector i.e. the area with large families.

Thus utilization of a health agency by consumers depended largely upon their socio demographic characteristics.
Hypothesis – 4b

The utilization of government health care agencies is low in all socio-economic communities.

Government vs. private health agencies in study areas showed that of 600 consumers government agencies were used by only 8% subjects whereas 92% subjects used private health agencies. It was also found that government agencies were less utilized in all study areas i.e. by all income groups. Hence the use of government agencies could not be explained on the basis of income groups.

Thus, it supports the fact that government agencies are less used in all socioeconomic communities, perhaps because of less availability in study areas.

Hypothesis - 4c

Private health services and indigenous health services are most used by all the communities and all socio-economic groups.

Private health agencies were used by majority (92%) subjects and government health agencies by only 8% subjects in study areas. It was also found that private health agencies were used by the majority in all study areas. Chi square value of 8.15 and p value equal to 0.043 showed that the use of private agencies was significantly higher in all the communities as compared to government agencies in study areas and hence all the socio-economic groups. Further, 490(81.7%) consumers reported that they availed of the services of the indigenous health agency at one time or the other.

Regarding utilization of various health agencies in study areas, of 600 consumers in study areas (150 from each study area) allopathic private clinics were most often utilized by 256(42.7%) consumers. These included 65.4% of the urban, 53.3% of the rural, 45.3% of the rehabilitated, and 6.7% of the slum subjects. Indigenous health agency was most often utilized by 194(32.3%) subjects. These included majority i.e. 74% of the slum, 24% of the rehabilitated, 20% of the rural, and 11.3% of the urban subjects. Ayurvedic private clinics were most often utilized by 56(9.3%) subjects in study areas which included 12.7% of the rural, 10% of the slum, 8% of the urban, and 6.7% of the rehabilitated subjects. 48(8%) subjects most often used government health agencies. These included 15.3% of the rehabilitated, 7.3% of the rural, 6% of the urban, and 3.3% of the slum subjects. 46(7.7%) subjects who most often utilized homeopathic private clinics included 9.3% of the urban, 8.7% of the rehabilitated, 6.7% of the rural, and 6% of the slum subjects.
Further, regarding **time duration of availability of health agencies** majority of private agencies in the study areas provided services round the clock and in both morning and evening hours. Majority of indigenous health agencies i.e. 75% in the urban sector, 91.7% in the rural, 97.5% in the rehabilitated, and 100% in the slum sector served round the clock and were the nearest, i.e. approachable or accessible earlier than any other health agency, to majority of the subjects in all study areas.

Thus, it was found that though the use of private health care agencies was significantly higher in all socio-economic groups in study sectors as compared to government health agencies, the use of indigenous health agencies was significantly higher in low socio-economic study sectors i.e. the rehabilitated and the slum sectors.

**Hypothesis - 4d**

**Indigenous health agencies are widely accepted and utilized in the groups with a lower socio-economic status.**

It was also found that majority of the people from low-income groups availed health services from informal health agencies keeping in mind the consideration of low cost. Thus, it was apparent that the utilization of a particular health agency depended upon the socio-economic status of the community as well as cost of utilization of health agencies; this may explain the reason for most often utilization of allopathic private clinics in the urban and indigenous health agencies in the slum sector.

The data on area versus most often used health care agencies showed that the indigenous health agency was the most often used by majority of the consumers in the slum sector. Chi square value 198.9 and p value <0.001 showed highly significant difference in the use of different health agencies in different areas. It showed that the use of indigenous agencies in the slum sector were significantly high.

It was found that the low income group used indigenous health agencies the most i.e. 103 out of 194 respondents who utilized indigenous health agency most were from the income group of Rs. 1000-5000. The utilization in relation to number of patients attended per day showed that majority of indigenous agencies, i.e. 70% in the slum and the rehabilitated sector, attended >15 patients per day. Further, in the
rehabilitated sector 100% indigenous agencies attended 5-10 patients per day and 91.7% attended 10-15 patients per day.

Majority of indigenous health agencies, i.e. 75% in the urban, 91.7% in the rural, 100% in the slum and 97.5% in the rehabilitated sector, served round the clock and were the nearest to majority subjects in all study areas. However, these were most often used by majority of consumers in the slum sector in spite of there being no advertisement or display marking the presence of the indigenous health agencies. One explanation for this was the awareness of the local persons about the availability of these agencies. Another reason for high utilization may be due to the fact that it was the informal indigenous private agencies that formed a large part of the health services being provided round the clock in these areas.

Hence it could be said that indigenous health agencies were widely accepted and their use was significantly higher in the rehabilitated and the slum sectors.

Hypothesis - 4e

Less educated people prefer to utilize indigenous health care agencies.

Educations wise, primary data showed that majority of the slum subjects i.e. 73.3% were illiterate whereas majority of the urban subjects were graduates and post graduates i.e. 66.7% and 18.7% respectively. It was also found that illiterate people preferred to use indigenous agencies, as more than half of the subjects from the illiterate group showed preference for these agencies (i.e. 100 out of 194 respondents). Chi square value of 96.78 and p value <0.001 showed a highly significant difference in the use of different health agencies by people with different educational status. Further, it was also seen that as the educational level of people increases there is an inclination towards the use of allopathic clinics (Table 4.14). Thus, the use of indigenous health agencies was significantly higher among less educated people.

Hence indigenous agencies were widely accepted and their use was significantly higher in the rehabilitated and the slum areas, i.e. among the sectors having a larger number of less educated persons.
Hypothesis - 5

Health care agencies are not easily accessible in terms of distance, transportation facility, and cost.

Primary data revealed that according to 48.2% of 600 respondents distance was the reason for non utilization of government health agencies; the same opinion was expressed by 69.5% respondents for non-utilization of private health agencies. Interestingly, the distance of the nearest approachable health agency was within 1-2 kilometres for 100% respondents in all study areas. On the other hand, primary data drawn from the same respondents regarding most often used health agency showed the private agency to be the most often used agency. Thus, it may be surmised that distance did not play a significant role in the utilization of government and private agencies.

Further, while the indigenous private agency was the nearest among all according to majority (i.e. 59.5%) respondents, it was the second most often used agency next to allopathic clinics. Allopathic private clinics were nearest to only 13.3% respondents, however, these were most often used by most of the respondents (42.7%). Hence, even in the case of government, ayurvedic and homeopathic private clinics distance did not show any significant impact on utilization.

However, the situation was different for the indigenous health agencies. Majority i.e. 40-87.3% respondents in study areas reported that indigenous health agencies were approachable or accessible earlier than other health agencies. Indigenous health agency was the most often used agency in the slum sector; further, of those who gave the most importance to the physical proximity of the indigenous health agency, majority were from the slum sector. Thus, wide use of indigenous agencies in the slum sector was likely to have been because these were the nearest ones. Hence distance/nearness played an important role for indigenous agencies being the most utilized in the slum sector.

Non availability of transport facilities to access government and private agencies was given as a reason for their non utilization by only 12% and 13.2% respondents respectively. Notably, while both private and government health agencies were farther away to a substantial percentage of consumers i.e. private health agencies were far away from 69.55% respondents and government agencies from 48.2%, the latter were less utilized. Hence it can be said that non availability of transport
facilities to access health agencies did not make a significant difference to their utilization.

261(43.5%) out of 600 consumers utilized a health care agency which would cost them less in terms of money. These included 20 respondents from the urban, 59 from the rural, 123 from the slum and 59 from the rehabilitated sector. Thus, the cost factor was an important consideration for a very large number of slum respondents. Further, it was found that consumers were actively utilizing the low-cost indigenous health agencies in the slum and the rehabilitated sectors. Thus, an important reason for most often utilization of indigenous health agencies in the slum sector appeared to be their low cost.

54.7% respondents said that they had to wait long in government health agencies, whereas 45.8% respondents said the same about private health agencies (Tables 4.4 and 4.8). Hence, for the sake of avoiding a long wait, the use of private health agencies over government health agencies by the consumers was a likely preference. However, it was noted that except in the urban sector, where allopathic private clinics were the most used agencies, majority utilized the services of indigenous health agencies. Hence, apart from higher availability, low cost in terms of time and money may be reasons for higher utilization of private allopathic clinics in the urban sector and private indigenous agencies in the slum and rehabilitated sector.

Thus, it was found that distance did not play a significant role in the utilization of government and private agencies. However, it played an important role for indigenous agencies being the most utilized in the slum sector. Further, apart from higher availability, low cost in terms of time and money may be reasons for higher utilization of private allopathic clinics in the urban sector and private indigenous agencies in the slum and rehabilitated sector. Non availability of transport facilities to access health agencies did not made a significant difference to their utilization.
Hypothesis - 5a

Consumers are not satisfied with health care agencies in terms of accessibility, transport facilities, cost, staff availability, time consumption, staff attitude, infrastructure and health care facilities.

According to 48.2% respondents, distance was the reason for non utilization of government agencies and the same was true for private agencies according to 69.5% respondents from all study areas. Non availability of transport facilities did not account much for non utilization of government and private health agencies as shown by responses of 12% and 13.2% respondents where as private health agencies were far away from 69.55% respondents and government health agencies from only 48.2% consumers. There were 43.5% consumers who utilized a health care agency which cost them less in terms of money. Cost factor was most considered by the slum respondents. 42.7% consumers reported non availability of staff in government health care agencies whereas none reported the same for private agencies. There were 54.7% respondents who said that they had to wait longer in government health agencies, whereas 45.8% respondents said the same for private health agencies. Lack of personal attention and lack of satisfaction in private health care agencies were reported by only 62(10.3%) and 50(8.3%) subjects respectively, whereas the same was reported for government health care agencies by a higher number of subjects i.e. 423(70.5%) and 511(85.2%) respectively. Rude behaviour of the government health care staff was given as a reason for non-utilization by 48% consumers, whereas the same was reported by 27.2% respondents for private health care staff.

62.5% consumers reported non-availability of equipment in government health agencies and 7.7% reported the same in private health agencies. Round the clock non-availability of services in private health agency was mentioned by 42.8% consumers, whereas 88.7% consumers reported the same in government health agencies. Out of 600 consumers from study areas, 2.8% reported lack of seating arrangements and 84.2% reported lack of laboratory/diagnostic facilities in private agencies. It was also found that private health care agencies and indigenous health care agencies did not have adequate infrastructure.

Hence, it was found that consumers reported problems regarding accessibility, transport facilities, cost, staff availability, time consumption, staff attitude, infrastructure and health facilities in health agencies in study sectors.
Hypothesis - 5b

Government health care agencies are far from the place of residence.

47% of the 600 consumers reported that the factor of physical proximity made them most often utilize a particular health agency. 289 (48.2%) respondents said that they could not approach and utilize government health agencies because these were far away from them. These 289 respondents included 100% of the slum, 44% of the rural, 26.7% of the urban, and 22% of the rehabilitated subjects. Hence, it was seen that in spite of the government health agencies being near to majority they were less utilized.

Thus, distance did not play such an important role in the utilization of government health agencies.

Hypothesis – 5c

People in the rehabilitated and slum sectors have inadequate transport facilities to access government health agencies.

Non availability of transport facilities to access government and private agencies was given as a reason for their non utilization by only 12% and 13.2% respondents respectively. Notably, while both private and government agencies were farther away to a substantial percentage of consumers i.e. private health agencies were far away from 69.55% respondents and government agencies from 48.2%, the latter were less utilized. Hence it can be said that non availability of transport facilities to access health agencies did not make a significant difference to their utilization.

Further, in spite of government health agencies being nearer to a larger percentage than the private health agencies, they were less utilized. Only 12% and 13.2% consumers reported non-availability of transport facilities to reach government and private health agencies respectively. Interestingly, though there was no government health care agency in the slum sector (except 3 anganwadis) none of the respondents gave lack of transport facilities to go to government health agency as a reason for its non-utilization. Hence, non-availability of transport facilities did not significantly account for non-utilization of government and private health agencies.
Hypothesis – 5d

Attitude of the staff in government health care agencies is not consumer friendly.

48% consumers reported rude behaviour of staff in government health agencies, while only 27.2% consumers reported the same for private health agency staff. Thus, the non-friendly consumer behaviour of staff in government health agencies was experienced by a larger percentage of consumers as compared to that in private agencies; this may be a reason for utilization of government health agencies by a smaller number of consumers.

The primary data showed that a high percentage of subjects in the study areas, i.e. 74.3%, gave importance to personal attention provided in health agencies. Primary data showed that 48% subjects did not utilize government health agencies because of the rude behaviour of their staff. Majority of the consumers from the rehabilitated and the slum sector reported rude behaviour of staff in the government health agencies; it may be surmised that this led to less utilization of government agencies in these areas.

The study found the staff in government health agencies to be inadequate, overburdened, and also found unauthorized persons servicing consumers. It also found only a small percentage of private practitioners having the requisite qualifications and training. These inadequacies may be attributed to be among the reasons for the rude/unfriendly attitude of health care staff. Further, majority of government and private health agencies had poor availability of basic infrastructural facilities and equipment essential for health care. The staff complained of shortage of manpower, equipment, infrastructure and lack of public health facilities in government agencies.

It was also found that a higher number of staff respondents found themselves overburdened and complained of non-recognition of their work in government health agencies as compared to those in private health care agencies. Overcrowding/overburden was reported by 67.2% staff of government agencies and only 3.3% staff of private agencies; non-recognition of work was reported by 85.9% staff of government agencies and by none from private agencies; unduly long hours of work by 60.9% staff of government agencies and by none from private agencies; less pay by 85.9% staff of government agencies and only 50.9% staff of private agencies; lack of public health facilities in the agency by 73.4% staff of government agencies.
and only 13.6% staff of private agencies; lack of funds by 54.7% staff of government agencies and 62.6% staff of private agencies from all study areas.

Thus, we see that problems regarding availability of health care facilities were more in government health care agencies as compared to private health agencies. Interestingly this was in spite of the greater problem of lack of funds in private health care agencies as compared to government health agencies. These problems may, to a large extent, explain the lower utilization of government health care agencies.

These are also likely contributing reasons for the unfriendly attitude, especially of staff of government agencies, and comparatively higher utilization of private agencies in study areas. Further, as per the responses of staff and consumers, problems regarding availability of health care facilities were found more marked in government health agencies as compared to private health care agencies.

**Hence the unfriendly attitude of the staff in government health care agencies towards the consumer was substantiated by the study.**

**Hypothesis – 5e**

**Time spent to avail government health services is more as compared to private and indigenous health services.**

Time is one of the critical factors in today’s fast paced life. In terms of waiting time to meet health needs, 77% respondents said that it was difficult to afford time to avail health services unless there was a dire emergency. Further, 54.7% respondents said that they had to wait more in government health agencies, whereas 45.8% respondents said the same for private health agencies. Hence, the use of private health agencies by the consumers appeared to be preferred over government health agencies. Further, except in the urban sector, majority utilized the services of indigenous health agencies in study areas, perhaps because these were cost effective in terms of time. Thus, in the light of the discussion of the consumer’s time factors and that of the most utilized health agency, it can be said that cost effectiveness was an important factor for the consumer when deciding the utilization of a health agency.

It was seen that the indigenous health care agency was the nearest health care agency among all to majority, i.e. 59.5%, respondents in all study areas. There were 40-87.3% respondents in study areas who agreed that indigenous health agencies were approachable or accessible earlier than any other health agency in case of health care.
demands (illnesses). Area wise, the indigenous health agency was nearest to majority respondents (87.3%) in the slum sector. In other words, time taken to reach indigenous agencies was less in the slum sector as compared to other health agencies and hence may be a cause for indigenous agencies as most often used health agency in the slum sector.

Hence, use of indigenous agencies was cost effective, in terms of time spent to reach and waiting time, as compared to government agencies.

Hypothesis – 5f

Adequate infrastructure and diagnostic facilities are lacking in all the agencies.

All health care agencies had inadequate facilities in terms of infrastructure as well as equipment. The study revealed that the problems of health care facilities existed more in government health agencies as compared to private health agencies as already discussed in hypotheses 3c and 3d.

Thus, it was found that all health care agencies lacked health care facilities in one form or the other.

Hypothesis – 5g

Indigenous agencies are cost effective.

Cost was found to be an important factor in affecting the decision regarding choice of health care agency, especially among the slum subjects. Primary data also showed that 43.5% consumers preferred to use services of the health agency that involved less expenditure. Majority i.e. 82% of the slum subjects selected low cost health agencies whereas a very small number (13.3%) of the urban subjects considered the cost factor when deciding to use a health agency.

46% consumers said that government health care services were costly (in terms of money) so they did not utilize them. Majority (92.7%) of the slum subjects did not utilize government health agencies because of high cost. Some of these respondents said “had they been in a position to afford three meals a day they would have chosen better health services too.” It was also found that majority of people from low-income groups availed health services from informal health agencies on the consideration of low cost. Thus, it may be said that the utilization of a particular health agency depended upon the socio-economic status of the community as well
as the cost of the health agency; this may explain the reason for most often utilization of allopathic private clinics in the urban and indigenous health agencies in the slum sector.

One of the reasons given by consumers for the most often use of a health agency was the distance. This was in spite of the fact that the distance of the nearest approachable health agency was within 1-2 kilometres of all respondents. 282 (47%) consumers reported that the nearness/physical proximity of the health agency made it the most often utilized one for them. These 282 consumers included 79.3% of the slum subjects, 68% of the rehabilitated, 33.3% of the rural, and 7.3% of the urban subjects (Table 5.1).

Cost effectiveness in terms of time was also evaluated on the basis of nearness/distance of most often used health agency and waiting time at the health care agency. 462 (77%) subjects in study areas preferred health agencies which were less time consuming. It was seen that the indigenous health care agency was the nearest among all health agencies to majority subjects (59.5%) in study areas. Of these 357 subjects majority (87.3%) were from the slum sector. In other words, time taken to reach indigenous health agencies as compared to other health agencies was less in the slum sector and hence may be a cause for indigenous agencies being the most often used health agency in the slum sector.

Availability of health agencies in terms of opening hours was surveyed. Majority of indigenous health agencies i.e. 75% in the urban sector, 91.7% in the rural, 100% in the slum and 97.5% in the rehabilitated sector served round the clock. However, 42.8% consumers reported round the clock non-availability of private agencies (Table 4.8). This was perhaps due to the fact that it was the informal indigenous private agencies that formed a large part of the health services being provided round the clock.

Hence, indigenous health agency was reported as less costly, nearest, with less waiting time and second amongst others as the most often used health agency in study areas. Thus indigenous health care agencies were found cost effective in terms of money and time both.
Suggestions for Policy Makers and Health Administrators

The suggestions listed below are with a view to making a difference at the cutting edge of the availability and delivery of health services and thereby impacting utilization. Implementation of these suggestions would work towards the achievement of the goals of the National Health Policy.

1. There is need to increase the availability of public health care agencies and services.
   a. It was found that utilization of the health agency was directly related to its availability in various geographical areas. The study had found both low availability of public health care agencies as well as their low utilization. It could be expected that increasing their availability would increase their utilization. This would work towards the goal of the National Health Policy 2002 of ensuring a more equitable access to health services across the social and geographical expanse of the country.

   b. The study found that day care crèches did not provide any health service, while anganwadis provided preventive and promotive health services. The suggestion of providing preventive and promotive health services through day care crèches would widen the coverage of these services.

   c. It was found that distance did not play a significant role in the utilization of government and private agencies. However, it played an important role in the slum area where unregistered private indigenous agencies were found to be both the closest and the most utilized. Thus, making the public health care agencies more available in the slums can further the achievement of the goal of acceptable standard of good health among the people, especially the marginalised.

   d. There were various reasons found that could explain private indigenous agencies being the most utilized in the slum and the rehabilitated area, and second most often utilized health agencies in the overall picture. Among the important reasons identified were the high availability of these agencies and the low costs in terms of both time and money. In the light of their high acceptability and utilization it is important to standardise them in terms of licensing the agencies with formally trained healers or those trained traditionally by recognised traditional teachers. Hence the net result will be a higher availability of standardised private indigenous health agencies that will serve the low cost health needs of the marginalised sections of society.
e. Further, an effective extension network of government health providers in all health systems will improve their accessibility and availability and go a long way in weaning consumers away from untrained private indigenous health providers and faith healers. This would also conform to the objective of the National Health Policy 2002 of increasing the access to the decentralized public health system by establishing new infrastructure in deficient areas.

f. The study could not establish a clear relationship and hence explanation for the use of government health agencies on the basis of income groups. However, in general terms, increasing their availability can increase their utilization in all income groups which will help to fulfil the National Health Goal of increasing the utilization of public health care facilities from the current level of <20% to >75% to be achieved by 2015.

g. One reason for lower utilization of government agencies found among the sample was perhaps their lower availability and also their non availability round-the-clock in the study areas. It was found that the few government agencies that were there were crowded and overused; this indicated a high demand for these. Thus, along with the increase in the availability of public health care agencies their availability in terms of longer/more convenient hours was also important.

h. The study found a general perception of higher cost of government health agencies as opposed to the general belief that private health agencies charged more than government ones. This was partially explained by the fact that indirect costs were high. Indirect cost (cost of transport and conveyance, self-medication, special food, and wage/income loss) per hospitalized case in public hospitals was three times higher than in private hospitals. Thus, efforts need to be made in the direction of increasing the availability and convenience of transport facilities, and availability of medicines at low prices thereby reducing indirect costs of public health agencies for their users.

2. **Training of health workers** will enable provision of better health services across all agencies and in all sectors.

a. While the public health agencies were found to have trained and qualified manpower it was also found that the state of the facilities, especially public health facilities, was woefully inadequate. This lacuna of neglect of this
aspect was dwelt upon in the National Health policy which states that, “In India, the situation is that public health expertise is non-existent in the private health sector, and far short of requirement in the public health sector.”  
Hence developing of expertise in public health through training of health administrators and workers is the need of the hour.

b. It was found that private indigenous agencies formed a large part of the health services being utilized for various reasons, including that of their availability round-the-clock, and them being the nearest to majority of the subjects. However, private indigenous health workers were found to be illiterate/less educated. It is therefore suggested that the knowledge and skills of these workers be upgraded and faith healers should be discouraged.

c. Unfriendly attitude of the staff of government agencies towards consumers was substantiated by the study. Orientation training of the staff to understand their role and commitment as health workers, and refreshing this orientation from time to time would go a long way in addressing the behavioural problem of the staff in public agencies.

d. The study found that majority of the dais practicing maternal and child health care were untrained. Training of so far untrained dais is a critical capacity building input to achieve the goal of 100% deliveries by trained Traditional Birth Attendants as per the National Population Policy.

3. **Public-private partnerships** will increase availability and provide better facilities, better services, and better health care for the masses. There is a need for collaboration and integration of services of the government health care agencies with private formal and private indigenous (informal) health care providers to achieve national health goals.

a. The study showed the availability of government health care agencies to be less than the prescribed norms in all study areas except the rural sector. Further the study also showed that formal agencies (both public and private) were more than the recommended norms in all study areas except the slums. Hence while the overall picture was of adequate availability of all types of health agencies, actually there were large gaps, especially in the peripheral areas. Public-private partnerships can be developed to increase the availability of health services as well as have improved infrastructural facilities, equipment and supplies.
b. The study found inadequate public health facilities in all types of health care agencies. Provision and maintenance of public health facilities is a grey area that needs to be addressed for all categories of health care agencies. Contracting out the provision and maintenance of these services to the private sector could help in addressing this problem to a large extent.

c. The study found inadequate transport facilities, poor staff availability, poorly organised service systems, and unfriendly attitude of health care providers in health care agencies in the study sectors. These are issues that can be addressed through public-private partnerships by contracting out the establishment and maintenance of these services.

4. **Education and documentation** will bring better quality of health care services through formal recognition of standardised private indigenous health agencies and health workers as opposed to the reliance on quacks/faith healers. This improved availability of private indigenous health services would especially benefit the consumers from the lower socio-economic strata who were found to have used them the most.

a. Government should promote the establishment of institutes for upgrading the knowledge and skills of private indigenous health care providers; this would equip indigenous health workers to **improve/propagate documentation** of indigenous medicine and cures. Further, these institutes should work towards creating awareness about standardised indigenous health practices for the benefit of the general public; voluntary health agencies can play an important role at the grassroots level in this regard. This will save people from being misled by superstitions and unscientific practices, hence safeguarding the interest of the consumers.

b. Lagging behind in documentation has already made the traditional systems lose out their first right to patents in the WTO (World Trade Organization) regime. The suggestion of facilitating documentation systems is in keeping with the objective of the National Health Policy 2002 that focussed on building up credibility for the alternative systems by encouraging evidence based research to determine their safety, dosage, certification, and quality marking of products to widen and popularise the acceptance of these systems of medicine.
5. **Monitoring and surveillance** of all health services will provide feedback, improvement in availability, and consequently improvement in their utilization.

a. No feedback was found to have been taken from clients in any of the agencies studied, nor did these agencies show any evidence of systematic monitoring procedures. Regular monitoring is essential for feedback on utilization, client satisfaction, and as an input for future planning.

b. The practice of health services being provided by untrained and unauthorised personnel was found in the study. An effective monitoring mechanism is required to check this practice in health agencies.

c. The study did not find any voluntary agencies performing the function of monitoring of health care services. The monitoring mechanism needs to involve voluntary agencies in monitoring health care agencies, especially of the local area. The National Health Policy has also identified various roles for NGOs in health care.

d. There is great need for effective monitoring to ensure proper utilization of government funds. It was found that while government agencies had more funds than private agencies they also had more acute shortage of health care facilities and infrastructure than private agencies. Hence, the proper utilization of funds in government health agencies is a grey area that needs to be addressed.

e. There was no evidence of any established system of periodic surveillance regarding the availability of health care agencies. However, some private research studies were found to have been conducted in this regard. A system of periodic surveillance is suggested to enable identifying the state of existing health care agencies and using this information as a basis for planning the establishment and upgradation of health care agencies.

6. Government should **popularise and promote the work of voluntary agencies** in the health sector through funding available for the voluntary sector, especially in the health plan priority areas.

a. The study revealed an insignificant presence of voluntary health agencies providing health services. The important role voluntary agencies need to play in increasing health awareness and in rehabilitative health care, especially for the lower socio-economic groups and in the slum and rehabilitated sectors, was not in evidence in the study areas. This needs to be addressed.
b. As already mentioned above the study did not find any voluntary agencies performing the function of monitoring of health care services. Monitoring and surveillance ideally need to be conducted by independent agencies; voluntary agencies are highly suitable to perform this task at the grassroots level. They should be equipped with the wherewithal to perform this task effectively.

c. The study found voluntary agencies performing services like documentation as part of the government’s Reproductive Child Health Programme. It is suggested that voluntary agencies be involved in playing a larger role in the delivery of government health programmes. It is believed that the specific requirement of certain public health programmes being implemented in the field can best be met by voluntary agencies having a commitment to the task. The National Health Policy 2002 acknowledged the increasing contribution being made by NGOs in the delivery of different components of public health services and the need to consolidate on this contribution.

The researcher will feel amply rewarded if the present study stimulates serious thinking in crucial areas of health care. The gaps that exist for systemic enquiry due to the delineated scope of the study may provide rich areas for future research.

References:

21 Sangeeta Narang, and H. Simon Helen, loc. cit.
27 K.S. Nair, loc. cit.
28 Government of India, “National Health Policy 2002” p 12

273