INTRODUCTION

Health – A national Perspective

India ranks seventh among the large countries of the world and it has the second largest population next only to that of China. Apart from its vast size and huge population what distinguishes India from other countries is it's geographical diversities and the multi ethnic, multi- religious and multi lingual character of the Society. This striking feature has attracted the attention of travelers and scholars from all over the world. While there have been thinkers who have scaled the pinnacle of philosophy, there are still pockets where animism is prevalent.

The study of the vast diversities, customs and racial characteristics can be and has been a subject of serious research for the anthropologists. It has a been a work of a lifetime for many of the anthropologists. One important segment of the Indian population is the tribal population of India living in different parts of the country. Probably, they are the original inhabitants of India. Even now, tribal population outnumbers the rest of the population, in certain parts of the country, and such areas, have been accorded a special status under the constitution.

In Karnataka state there are areas where the tribal population is predominant. These tribals are socio-economically backward. By and large they are at the lowest end of the social spectrum. They are continuing to lag behind on every dimension of development, be it, education, economic or healthcare, a situation, which demands a swift redressal.

The present study, which is being submitted, has focused its attention on the health condition of the tribals in the areas selected for the study, which presumably are reflective of their conditions in the other tribal areas of the country.

It is impossible to overemphasize the importance of health. “Health is wealth” is an age old saying. This was true yesterday, is true today and will be true tomorrow. The importance attached to the cause of health can be gauged traversing back into the history of ancient India. Right from the beginning, great importance has been attached
to life and longevity. “Ayushman Bhava”, “May you live long” used to be the blessing of the elders in our country.

A brief reference to the ancient system of medicines in India, which are still in vogue and relevant to this study are outlined below.

Ancient history of India is associated with the rich Vedic knowledge in all fields with respect to life and living. One of the impacts of the Vedic way of life is about the contribution made to the cause of Ayurveda (alternative system of medicine) in India. There existed people who practised what was scripted in the health science branch of the Vedas underscoring the central factor of life – “Health”. One such science related to health that has remained in practice even to date is the science of Ayurveda. The names of Charaka and Sushruta are prominently associated with this system.

Ayurveda comprises more than mere administration of medicine. Yoga, pranayama and dhyana are prominently associated with Ayurveda and have received scientific acceptance. They have become almost a rage among the Westerners. Unani is another system of medicine which was introduced into India by the Arab invaders. Probably the Arabs received this knowledge from the Greeks. Mogul history is replete with the contributions made by the Unani medical practitioners. A close examination of past Indian history will show that unani thrives as an alternative system of medicine in India even today.

If we look into the ancient Indian history it will reveal the fact that people looked for health care only in the alternative system of medicine, Ayurveda. This was but natural because they were not exposed to the allopathic medicine till the British started importing medicines and health care management services from the West. Perhaps the big invasion of Western medicine into India came with the discovery of Penicillin, an antibiotic to fight infectious diseases.

In the post independent period, commencing with the first five-year plan the government has laid emphasis on the development of the ancient systems of alternative medicine with required budgetary allocations. This, not only envisaged
keeping ancient practice of Ayurveda alive but also to make it “affordable to the masses”. Reviewing the practice and popularity of alternative system of medicine in India, we can state that this system, even today, is cost effective and employment oriented, giving relief to a lot of people directly and indirectly sustaining their livelihood.

With over three fourths of the Indian population living in the villages their closest source of medicine is the system of alternative medicine. Alternative medicine consists of ideas handed down from the forefathers of the families, which practice is carried on even today. Perhaps, one of the best examples here would be the use of turmeric powder for cuts and bruises as the best antiseptic application. No doubt, through conventional generics, allopathic medicines have made their way to the remote regions of our country.

There is no doubt that the western form of medicine has also contributed, on a massive scale, in disease management. Examples of controlling epidemics such as cholera, small pox etc shows its contribution has been remarkable. With the passage of time the western philosophy of health care management has digressed from the spiritual quest of “health for all ”to corporate profiteering.

The opening up of the global economy under the WTO regime coinciding with the spread of dreaded diseases like AIDS, Hepatitis virus etc, catapulted the western mode of treatment from holistic level to global profiteering. Consequently, the western system of medicine became alarmingly expensive forcing the marginalized people of society to seek alternatives in health care.

The profiteering of the multinational drug manufacturing companies, the Intellectual Property rights (IPR) and patenting regime have played havoc with the people of developing and underdeveloped countries. IPR regime (Intellectual Property rights) has imposed restrictions on indigenous research and development, technological assistance and access to marketing of cheaper drugs. This has compelled the people of developing countries to seek alternative forms of medicine.
Health is not a mere absence of disease but has multiple dimensions. Good health also results in increased work output and productivity, which is the cornerstone of overall welfare. Poor health causes physiological distress, reduced quality of life, and physical disability and diminished work capacity. This causes increased societal cost. Poor health condition can be an important cause of capability deprivation resulting in unemployment and poverty. Therefore, both the infrastructure and its delivery of basic healthcare facilities have an overwhelming importance in enhancing a nation’s manpower resource.

The proportion of people unable to afford basic healthcare has doubled in the last decade. One out of three people who need hospitalization and who are paying out of pocket are forced to borrow money or sell assets to cover expenses (Department of Statistics GOI).

Sound long-term development of social sectors such as education and health is vital for sustaining higher rates of overall economic growth (Dadibhavi and Bagalakoti 1994)

India’s current health policy has its origins in the nation-building initiative at the time of Independence and in the thinking embodied in the Bhore Committee report. The Bhore Committee clearly modelled its vision for a public National Health Service on the one adopted by the United Kingdom (Bhore et al. 1946).

The high incidence of sickness (morbidity in technical terms) cuts into the budget of people in two different ways, i.e. they need to spend large amounts of money for treatment of disease and simultaneously are not in a position to accelerate production for generating additional income for meeting the expenditure.

Health care has become the utmost need of the day and can be ranked next only to food. The poor are particularly vulnerable in the present scenario. Providing health care for all citizens of India is a fundamental obligation, which the constitution of our country enjoins. Some of the factors, which contribute to good health, are the right to primary education, provision of free food in the schools for the poor and encouraging the adult education campaigns. The government needs to build the
infrastructure that will create the necessary conditions for building such a sustainable environment.

Healthcare costs could be one of the primary reasons for rural indebtedness and poverty. Studies show that the poor spend a greater percentage of their earnings on health related expenditure. This happens because of the abysmally low hygiene practiced at their homes coupled with a lack of clean drinking water facilities, poor sanitation and low earning capacities, lack of state government health facilities, infrequent visits of social health workers and above all lack of literacy and prevalence of superstitious beliefs. According to National Advisory council 2006 “Medical expense is the single largest cause to push people towards bankruptcy and poverty in India”.

The poor invariably suffer a loss of family income when they are sick. They have to bear a higher insecurity from illness resulting in a great deal of mental stress in the family. The number of Government health care centers and health care professionals is inadequate, especially, in rural areas where the actual need is higher. With this imbalance, the government is indirectly encouraging private medical practitioners to make a foray in unchartered areas where its own health care facilities are inadequate. Seeking quick recovery, the poor, therefore, go to private health care practitioners for medical treatment. The tragedy is that because of their ignorance, they are not aware of the quality of the medical treatment dispensed to them.

“A study conducted by David et al. (2002) “The poor still depend on the public sector for the majority of their health services, the private sector provides 79 percent of outpatient care for those below the poverty line, much of which is of low quality and provided by untrained practitioners”.

Health of an adult individual in the rural area impinges directly on the income of the family. Therefore, health needs to be considered as an important component of progress and development of society.

Although the State Health Mission is chaired by the state chief minister and co-chaired by the health minister with the state health representation from the related
Departments, NGOs and private professionals etc. The WHO and professor Amartya Sen (2005) have a similar opinion that the health care index for India is far lower than that of some of the smaller under-developed countries. It would be worthwhile in certain areas to make frequent health checks in rural schools and colleges, and among agriculture workers and specially the rural women who bear the brunt of multitasking of domestic chores.

Further, there are wide differences in the health care facilities between rural and urban societies. The contrast between the rural and urban health care management services is growing at an alarming rate which when seen and compared leaves the observer shocked and dismayed. One observes with a sense of scepticism that urban India is trying to copy the western methods of high tech health care services giving rise to the idea that only the financially sound are entitled to good health care. If the divide increases on this pattern, the gulf between the haves and the have-nots will only increase. This eventually, will affect the social cost of medical treatment in urban centers because the mass of the people will exert pressure on availing themselves inexpensive government health care benefits.

Due to the growing population, rural demands for health care in India has become a distant dream for the underprivileged though the constitution guarantees the minimum healthcare for the poor. Some of the problems in rural health care are so alarming (high Infant mortality rate) that India is seen in a poor light in regard to health care benefits.

In this context, it will be worthwhile to quote a distinguished health care analyst Gaur et al. (2005) as to how the opening of the economy supposedly for accessing better health care has done more damage than good for the poor. Public spending on health is very low, stagnant at around 1 percent of gross domestic product (GDP) in spite higher incidence of malnutrition and diseases. “In the US it is 12.4 %, 6.5 % in Japan and 6.2 % in U.K. Such low spending puts India among the bottom 20 % of countries”.

According to professor Sen. (1999), “poverty must be seen as the deprivation of basic capabilities rather than merely as lowness of incomes”
Both these factors are man made due to unequal distribution of the benefits derived in the process of economic growth. Merely increasing the gross domestic product to 8 percent makes itself irrelevant in the face of the lack of distributive justice. Studies show that the poorest of Indians forgo medical treatment 2-3 times more than the richest when ill.

In a developing country like India it is very important that substantial amount of funds are pumped into preventive and social medicine so that it takes care of health care services in rural areas in general and the tribal belt in particular.

In a study by Kennedy et al. (1996) income inequality was shown to directly affect the total mortality in a given population \([p<0.05]\). The same study measures income inequality by ‘Robin Hood Index’, which is that part of the income that needs to be redistributed from the rich to the poor to achieve economic equality. 1% rise in this index led to 21.7 excess deaths per 100,000 populations. This shows the profound effect income inequality has on the health of a population.

The hopelessness of the situation with regard to poor health care is all pervading. Malnutrition has made the health condition of the poor vulnerable even to common diseases. Income levels and deprivation have changed the contours of food habits from marginal intake to extremely low calorific values. There are reports that in the backward areas of Orissa state, the poor and the deprived live on shrubs and roots and other forest produce.

It would make sense for the government to help the tribals in self-employment schemes and construct the minimum required infrastructure for the sale of their produce. With this, their income capabilities will rise. Consequently, they may move from extreme deprivation to marginal livelihood. This, in itself, will raise the nutritional value of food intake, thereby restricting diseases that afflict them.

The history of health care management in India can also be viewed from the demographic point of view. While agriculture remains the main source of income, dependence on monsoon cannot be undermined. Inadequate rainfall results in resource
crunch. For example, the year 2002-2003 saw a rain deficit of 19% for the whole country and 29% of the country faced drought under which 10% fall under severe drought condition problems (Badi et al).

The poor who live in villages with extreme dependence on monsoon and other natural resources bear the brunt of ill health. The patterns of land holding and size of the families make a tremendous difference in income generating capabilities of families. Heavy dependence on small acreage of land holding deprives them of nutrition and good health. Vagaries of monsoon also deprive them of steady income for maintaining themselves. This invariably drives them below the poverty line whose side effects are disease and death.

Though the above analysis seems systematic and logical yet complex issues continue to dog the administrative set up of the government in the proper management of the entire rural health care system. The government should strengthen its machinery in order to fulfill its commitment to health care management services. India’s changing demographic statistics is imposing pressure on healthcare management but the government machinery has not been able to expand the infrastructure due to various factors. Though Governmental spending on Primary health Centers and sub units is on the increase, yet, people are not reaping the benefits. In spite of increased budgetary allocation by the government for rural health care management, the benefits do not seem to be reaching the poor owing to lack of monitoring agencies.

“About 85% of India’s total health expenditure is financed by household out-of-pocket expenditure” (GOI website 2002).

“Analysis shows that public spending on health services including complementary expenditures on water supply and sanitation are just about 1.3 per cent of GDP. Given the low level of per capita GDP in the country, public health expenditure in per capita terms is abysmal. I hope to show the unequal distribution of resources. In India, Private health spending accounts for more than 80 percent of all health care spending, one of the highest proportions of private spending found anywhere in the world.” (David et al 2002).
There is a rise in the government's resource commitment to the provision of health care services, which is evident with examples like constructing minimum facilities in local health care centers for meeting emergency such as nursing room for expectant mothers and good OPD (Out Patient Department) facility. Activity in vending medicine in rural health care centers is also on the rise. This is very crucial because none should be casual when dispensing medicine, which may affect the life of a patient. Educating patients through visual media like charts coupled with education and counseling centers regarding health and hygiene will go a long way in assisting the rural poor in social and preventive medicine. Wherever possible government has also set up facilities for dispensing alternative medicines so that the patient has a choice in availing himself of treatment.

All the programmes floated by government agencies are beset with overriding problems of high scale of unawareness, ineffective communication system, poor transportation facilities, to name a few. Consequently, health care programmes in rural areas have remained insensitive to the cause of medical aid of the poor. A visit to rural health care center for a practical assessment reveals the poor co-ordination of various activities. We have a long way to go in implementing the basic health care programme.

The following WHO Health report (2003) highlights the pathetic level of healthcare services in rural India. “Per capita expenditure on public health is seven times lower in rural areas, compared to government health spending for urban areas. The ratio of doctors to population in rural areas is almost six times lower than that in the urban population. Per capita expenditure on public health is seven times lower in rural areas, compared to government health spending for urban areas. Though the total spending on healthcare is 6% of gross domestic product (GDP), the state expenditure is only 0.9% of the total spending. People using their own resources spend the rest of it. Thus only 17% of the total health expenditure in the country is borne by the state, and 83% comes as ‘out of pocket payments’ by the people. This makes the Indian public health system grossly inadequate and under-funded. Only five other countries in the world are worse off than India regarding public health spending (Burundi, Myanmar, Pakistan, Sudan, and Cambodia)”
David (2002) analyses that “Indians who are hospitalized spend 58 percent of their total annual expenditures on health care. More than 40 percent of hospitalized people borrow money or sell assets to cover expenses”. Health care services are extremely expensive. Poorest of the poor struggle for survival every day. Those who are below poverty line and illiterate are more likely to procrastinate the visit to the medical practitioner and seek medical treatment. Consequently, the poor have to bear a higher cost of medical treatment as a result of delay. Poor quality of health care services in the rural area needs to be addressed urgently. “A study by ORG showed that in large parts of India health care services are very poor and not functioning effectively” (Shah 1989).

Holistic health care services encompass various fields that interact and bring out the best in patient care management. This system is what management experts call a “process driven system”. The processes symbolize the systematic functioning of health care services whose steps are as under:-

A. Diagnosis of the diseases
B. Laboratory test
C. Medical prescription
D. Counseling and follow-up.

While discussing management of health care services delivery it is very essential that the fundamental three-part operations are kept in mind in nursing the patients back to good health. They are as under: -

1. **Human resource development** - diagnosing the disease by health care professionals.
2. **Infrastructure** – Building Equipment and Laboratory.
3. **Drugs and its implication** - (pharmaceutical products) - To regain and stabilize the health condition.

**Human Resource development**

All professionals, once inducted into any stream of activity require training and development. Human resource development can be the process of introduction to
a professional, as to how one needs to work in one’s respective field. Training and
development activity for a professional in any field is reinforcing and upgrading
further skills to one’s existing level of knowledge. Frequent exposure to exchange of
ideas helps in understanding various factors that one may not be aware of. Programmes such as Continuous Medical Education (CME) for doctors expose them
to advanced techniques in their respective speciality. Seminars, conferences and
symposiums are platforms for debating, discussing and coming to consensus on
disease management. Professional bodies like Indian Medical Association (IMA) and
various periodicals encourage doctors to participate in exchanging views in the field
of medicine. With the above assistance to medical professionals in exchanging and
acquiring further skills it is assumed that treatments given by doctors are of the latest
development in medical science.

Infrastructure

It is not uncommon to observe in cities hoardings and boards of hospitals
claiming to have world-class infrastructure facilities catering to all fields of medicine.
These privately run hospitals, no doubts, have facilities but the usage of them comes
at a price. Normally, people below certain income levels do not venture into utilizing
this world-class facility due to the cost involved. We are now trapped in conflicting
situations about patient cure versus affordability. In view of this conflict, it becomes
imperative for government health care machinery to establish infrastructure facilities
such as diagnostic laboratories, consultation rooms, a minimum of clean waiting halls,
drinking water facilities, clean sanitation and preferably, a unit dispensing medicine in
all the health care centers. The problem arises in the maintenance of these buildings
and in educating the people coming there to utilize the facilities with utmost care.
Rural India is strewn with ignorant masses. Consequently, any amount of building
good infrastructure facilities tend to get dysfunctional in a short period due to the
apathy of the people at the helm of affairs in educating the masses on the value of
facilities. We cannot squarely blame the ignorant masses on this score because
exposure to literacy being at a minimal level they do not understand the concept of
owning responsibility for good maintenance. Poverty and deprivation need not
necessarily justify the reckless use of facilities at government health care centers as
long as the monitoring personnel account for performance. It is because of this lack of
a sense of responsibility that the health care centres are in a deplorable condition.
Hence it is very important to build the infrastructure facilities to help patients avail of quality treatment.

**Drugs and its implications**

It is generally presumed that medicine constitutes an integral part of the treatment. Today, even super specialists are very conscious about the optimal dose of a drug because of the side effects associated with its long-term usage. Many chronic diseases can be treated and advancement of diseases can be arrested by modifying the diet, lifestyle and with less intake of drugs. In effect, to a great extent it is true that the underlining factor for extensive usage of drugs is uncontrolled vending of drugs without medical prescriptions. India has become the destination for testing new drugs in view of its massive market. Many drugs manufacturing companies have seen India as a massive profiteering center. In view of this, drug companies have escalated prices so alarmingly that they pinch even the pocket of rich.

It would be worthwhile for the government to step in and manufacture critical drugs at affordable prices. In fact, an action of this nature will ensure that the drugs reach to the rural poor because they are the section who are in dire need. A nation that is healthy reduces the social spending for basic health care and this saving accrued can be invested in more facilities in rural health care management. Government’s initiatives in manufacturing critical care drugs at affordable prices will simultaneously dampen the prices manufactured by private companies.

The role of the essential medicines takes the center stage especially when patients are hospitalized. For example, a patient who has met with an accident and hospitalized is administered drugs as part of the treatment. This process during treatment in the hospital cuts further into the pockets of people.

Many are not aware of the quality of service in backward areas of India of the state managed hospitals. Statistics reveal that the conditions are very grim. It is here that the government must take proactive steps to strengthen rural healthcare management because continuous apathy in this regard may have disastrous effects.
A very unnerving factor today, is the high prices of even generic drugs. In reality this need not be the case as drug companies profit in volume sales. Yet, the insatiable appetite for profit keeps these prices high. As all drug companies have a share holding pattern in the public participation their prime concern has become the dividend declaration. Unfortunately, the WTO regime instead of lowering the prices of medicine has encouraged restrictive trade practices through IPR and patenting.

The philosophy of the globalization was to ensure “medicine sans borders” but unfortunately free trade has imposed a lot more restrictions than the previous GATT agreement into movement of medicine to the poorest of the poor in the world.

Speaking on the diseases of the poor Jeffrey D Sachs, (2007) Director of the Earth Institute of Columbia University, said “they are hellish infections whose combined impact of disease, disability and death rivals the impacts of AIDS, tuberculosis and malaria, yet they are far less known, partly because they are diseases that afflict only the poor in the tropics”.

In this context of escalating drug prices it is important for us to observe the importance of Ayurveda, which has a rich tradition of manufacturing medicines at affordable prices. Ayurvedic treatment does not discriminate between the rich and the poor nor does it exhibit class distinctions.

Health is a function, not only of medical care but also of the overall integrated development of society-cultural, economic, education, social and political. Each of these aspects has a deep influence on health, which, in turn, influences all other aspects. Hence, it is not possible to raise the health status and quality of life of people unless such efforts are integrated with the wider effort to bring about the overall transformation of a society (Basu 1993).

Effective and timely reach of health care benefits is a precursor to poverty reduction. Sickness compromises the earning capacity of the rural families. Following quote from WHO has this description in it.
“This year’s World Health Report comes at a time when only a decade is left to achieve the Millennium Development Goals (MDGs), which set internationally agreed development aspirations for the world’s population to be met by 2015. These goals have underlined the importance of improving health, and particularly the health of mothers and children, as an integral part of poverty reduction” (WHO 2005).

**Tribal Health Care System**

Mahatma Gandhi, father of the nation, coined the word Girijans for tribals in India meaning, children of forest God. The tribal welfare has been a concern in India and across the globe alike. United Nations had declared 1993 as the International Year of the Indigenous Peoples.

The tribal population of India (67.6 million) is larger than that of any other country in the world. In fact, it is almost equal to the tribal population of nineteen countries with substantial tribal populations. Mynamar, with a tribal population of 14 million, has the second largest tribal population. India has a tribal population, which is much more than four times that of Myanmar and more than six times that of Mexico (10.9 million), which has the third largest tribal population in the world. The tribal population of India is more than the total population of France and Britain and four times that of Australia. If all the tribals of India had lived in one state, it could have been the fifth most populous state after Uttar Pradesh, Bihar, West Bengal ad Maharashtra. (Singh1993).

Tribals remain the most backward ethnic group in India despite the protection given to the tribal population by the Constitution of India on the most important issues like health and education. Tribal health and treatment are closely interrelated with the environment, particularly the forest ecology. Tribal populations, generally have poor health outcomes, because, often a healthcare delivery system does not cater to their needs. The mode of utilization of available natural resources often determines the long-term impact on health of tribals in India.

It is due to a combination of many factors that tribals continue to use their own model of health care products and health care delivery system in India. Principal
factors among them are urban and rural divide, economic disparity, governmental neglect and illiteracy. This forced shift of the tribals from their environment, which they had co-habited for generations made them forego their traditional arts. It was also a dire necessity that in the absence of any modern health care system they had to use their own home remedies.

Post independent era witnessed displacement of tribal habitats in many parts in India due to infrastructure developments like roads, water irrigation, bridges etc. This forced shift of tribal habitat, as they had learnt to co-habit with environment for several generations, made them, forego many arts. One of the many important valuable arts that we lost, as a consequence in India is tribal medicine. Non-availability of herbs in their new area also contributed to degeneration of tribal medicinal knowledge. At the same time, helplessness during the health breakdown made tribals overtly dependent on the degenerated version of the tribal health care system. Most of the time, it is their strong immune system that helps them overcome minor ailments.

Many researchers have attempted to review the effects of the growing socio-economic inequality in Indian population and its effect on the healthcare system. Although government has exhibited a great degree of concern and tried to provide health care infrastructure to tribals, it appears that there has been little effort to identify the factors responsible for the difficulties in healthcare delivery in tribal society and its effect on the health of the tribal society as a whole. It is also a fact that though innumerable studies on tribals are made, a systematic knowledge about tribal healthcare system is very limited leading to many myths.

Dr A K Singh (1993) has brought out a voluminous book “Tribes and tribal life” which is a painstaking twenty years of study. He has examined the effects of planned developmental intervention in the tribals from 1961 to 1981. He has concluded that twenty years of intervention has not made any significant impact in improving the conditions of the tribals.

The health care policies in recent times were expected to improve the situation. Till date the situation remains the same. A study done by Dr Nirmala
Murthy (2006) suggests that the poor still find it difficult to avail the health care services. “Notwithstanding these policy level efforts, the two main impediments affecting our ability to reach services to the poor are: (i) corruption and (ii) negative attitudes of health staff towards the poor. Many studies have documented that workers extract money from the poor tuberculosis patients to give them a sputum cup, to provide them a bed at hospital, sometimes even to allow them to see their newborn babies”.

It is an unequivocal opinion of many social researchers that good health and good society go together. But this is possible only when supportive components such as nutrition; economic conditions and education reach a certain level. It is quite interesting to note that there exists a definite correlation between forests and nutrition in the context of tribals. It has been noted by many researchers that tribals living in remote areas have a better overall health status and eat a more balanced diet than tribal living in less remote, forest free areas. Many tribal groups use different parts of a plant for the treatment of diseases. There are a few time tested herbal medicines, knowledge of which is passed on down the generations in a few tribal families. It is worth considering to preserve this knowledge before it becomes extinct.

It may be mentioned that health related studies about tribals are limited. Among the available studies, many are fragmentary in nature without an adequate sample size and standard methodology. Many studies are written in the form of articles with glamorous outlook, which may fall short of giving a clear and complete picture.

The tribals are more backward not only compared with the general Population, but also compared to the Scheduled Castes, the other acknowledged backward social group with a constitutional protection. In fact, the conditions of tribals in post-independence India have, in many ways, worsened. This has been discussed in a special issue of Social Change entitled “Status of the Tribals in India (1993, vol. 2&3)”. The tribals are the most adversely affected ethnic group due to the developmental projects of dams, factories and mines. While tribal population constitutes approximately 8 percent of the total national population about 40 percent of displaced persons due to developmental projects are tribals.
A disturbing dimension of the tribal habitat is the pace of commercial exploitation of the land resources where tribals lived for centuries. This range of land accounts for nearly 20 percent of the country’s space with 8 percent of its population living on it. The tribal rights in basic resources such as land, forest and water in fact in the entire environment have been seriously eroded. This is due to the consequence of non-tribal peasants, traders, businessmen and other categories of aliens having moved into tribal land with the concept of profiteering commercial ventures. Rapid industrialization moves mooted by modern policy makers also has its share in it.

Prolonged denial of modern health care benefits to tribals has been an undisputable fact. Disparity coupled with illiteracy has paved the way for many chronic diseases including genetic abnormities. Chronic diseases like leprosy, malaria and typhoid are rampant in tribal areas.

Malnutrition, often is, a causative contributory factor for children and women to fall sick. Maternal and childcare is an important aspect of health seeking behavior, which is largely neglected among the tribal groups (Basu et al 1990).

Many studies show a gross deficiency of vitamin C and calcium in tribal populations. General insensitivity of society in general and governmental neglect in particular has resulted in poor health care reaching the tribals. Many studies in tribal areas have been done from a clinical and epidemiological perspective. There are yet other studies investigating their social life styles, cultural factors, mortality etc. But there are hardly any studies to suggest a comprehensive model to reach the benefits of modern health care systems to these areas.

It is but natural that tribal women and children are the most affected due to the social conditions and traditional practices in tribal societies. Tribal groups are isolated and maintain homogeneous social systems. They are also culturally very firm. Thus they develop their own health care system and understanding of disease along with medicines from plants, minerals and other natural resources. Many tribal groups have their magico-religious healthcare system. Innumerable studies have been done on the socio-cultural issues of tribal society including food, marriage systems, herbal
treatment etc. but they are not focused on the actual basic health care need of the tribal society.

Health care professionals, medical equipments and basic infrastructure with laboratory facility are the basic components in a health care center to provide health care services to the tribals. Paucity of manpower, lack of infrastructure and medicine often make a poor tribal unable to get even a basic treatment facility. It is a matter of concern that while urban society benefits from a modern and preventive health care facility, the counterpart in tribal area does not even have an access to treatment facility.

A disease at an advance stage may require surgery under complete medical treatment. Therefore, complete health care would need surgical services as an inherent part of medical treatment. But due to the acute shortage of human resource and lack of adequate infrastructure tribals have to travel to distant places to avail themselves of surgery. Existing infrastructure in tribal areas is not equipped with surgical facility to handle even basic injuries and excisions. Some times, secondary surgical units are too far to reach from the tribal area and may land patients in life threatening situations.

Against this backdrop, it is interesting to note the observations recorded by Patti Chico, a British midwife, who travelled widely in tribal areas of our country. A paramedical staff from England, Patti Chico (2003), while appreciating many of the social disciplines practiced by the tribals, was equally concerned about their lack of access to modern heath care benefits. Patti Chico expressed serous concern about the need for surgeons in tribal areas. In a letter to her home Patti Chico wrote “ I came to India believing that I could teach something to the health care workers of Sittilingi and have found myself truly humbled by the experience. I wish I could have given just a little to these people from whom I have learned so much”.

Patti Chico later launched Rural Surgical Initiative (RSI) in collaboration with “Tribal India Health Foundation”. Rural Surgical Initiative (RSI) was launched with the purpose of increasing the quality of surgical care in rural areas of India, beginning with tribal areas of South India.
The Foundation aims to fulfill the following under the RSI program:

1) Continue to collect and send surgical supplies, including sutures, pulse oximeters, gloves, scalpels, etc. to partner tribal health initiatives.
2) Recruit surgeons from the United States on a voluntary basis to assist in providing basic surgical care at partner tribal health initiatives for a short period of time.
3) Secure funds for expansion and development of basic surgical facilities in tribal areas.
4) Provide rural surgeons with education materials on the latest developments and methods in basic surgery.
5) Ally with rural surgical groups in India to jointly increase the scope and standard of surgical care in rural India.

The Foundation invites individuals, organizations, and surgeons to take part in its organizational activities, which include:

1) Collecting surgical supplies for partner tribal health initiatives.
2) Volunteering to provide surgical services at partner tribal health initiatives for a span of around 2 weeks (surgeons only).

Health is a function, which goes much beyond medical care. Overall integrated development of social, cultural, economical, educational and mental conditions have great impact on health in general. Each of these aspects has a deep influence on health, which, in turn, influences all these aspects. Hence, it is not possible to raise the health status and quality of life of tribal people unless such efforts are integrated with the wider effort to bring about the overall transformation of a society.

It appears that the common beliefs, social customs and practices connected with tribal life have been found to be closely related to their pattern of treatment of diseases. Therefore, it is necessary to take a holistic view of all the cultural dimensions of the tribal life before the health of the tribal community is studied. For instance, in most of the tribal communities there is a wealth of folklore related to
health. It is an important observation done in many studies that documentation of this folklore available in different socio-cultural systems studies that tribals lead their life in harmony with nature. Systematic collection of folklore may be very worthwhile and could throw light on newer approaches in shaping health care policy. (Hedge 1988)

Tribals of different age groups and gender would require a separate approach in health care. Cultural practices are the determinant elements for a tribal woman to access the education, medical care and other health resources. The cultural norms that particularly affect women's health are attitudes towards marriage, marriage practices, age at marriage, values attached to fertility and sex of the child, pattern of family organization, her status in the society, decision making capability and the ideal role demanded of women by social and cultural conventions (Kshatriya 1992)

The pattern of marriages in Indian society is largely governed by three important regulations, namely

a. Endogamy (marrying within the group of birth)

b. Exogamy (marrying out of the group)

c. Consanguineous or sapinda marriage. The regulation of consanguineous marriages does not permit marriages between two individuals related though a common male ancestor up to the seventh generation on the father's side, there is a greater incidence of consanguineous marriages specially among the populations of the southern States, Muslim groups, Parsees and various tribal communities (Basu 1985).

In many tribal communities, cross-cousin marriages are preferred and practised. The system of cross cousin marriage had proved to be beneficial to the females in terms of care and treatment at husband's place. It also avoided high bride price/dowry and maintained the property of the household intact.

While a tribal woman found a social comfort in the cross-cousin marriages, modern science does not support it due to serious side effects associated with progeny. Some of the proven undesired effects are Chances of abortions, miscarriage, stillbirth, and neo-natal death increase due to consanguineous marriages. Also, there is
higher risk of infant and juvenile death, greater probability of child being born with physical and mental defects. Children born of consanguineous marriages are also more prone to infections.

Very little information is available on maternal mortality and some information can be found on infant mortality among tribal population.

Woman plays a significant role in the tribal society. The tribal woman from the forest procures all the family’s need for food, Medicine, fuel and house building material. The woman plays a key role in providing basic needs for her family and hence most tribal economies are women-centric. The forest provides tribals with all their needs and tribals are economically dependent on it. Food is obtained from the fruits and flowers found in the forest. Tribals take up cultivation of vegetables during the non-monsoon seasons. Tribal medicine is usually made from extracts of roots, herbs and animals and sometimes minerals.

Rapid deforestation was witnessed in our country after independence due to urbanization. Deforestation has led to a chain of unfavorable consequences for tribals. The government has sought to increase its control over forests thereby making the life of tribals even more difficult. This has resulted in sacrificing the age-old practice of collecting forest produce from forest and making a living. The task of collecting fuel has become very difficult for tribal women due to appointment of agents for collecting forest produce. This has also adversely affected the livelihood of tribals.

This has resulted in decreasing incomes leading to poor nutrition. Wood is less accessible and hence collecting fuel has become a time-consuming task. With fuel collection itself taking up so much time, tribals are left with little time to earn wages. As government control over forests increases, hunting is also not possible. It is noticed that in the early seventies almost 20 percent of women were found to be participating in activities other than agriculture. All they were provided with were a few tin sheds in the forest area near by. But today less than 10% of tribal women are involved in activities other than agriculture.
One of the pertinent examples is that of the national park around Nagarhole forest in Karnataka. The Wildlife Protection Act (1972) has resulted in the tribals losing all rights to reside in the national park. This has led to mass evacuation of tribals from forests. Almost 32000 tribals living in and around the national park have been constantly on the move with no place to reside permanently.

Subsequently, the act was modified in 1988 and the area was adapted to 643.39 Sq. Kms. Due to this modification the tribals were able to live in some parts of the national park area once again. A consequence of this evacuation was that the indigenous system of medicinal practice of tribal was lost to some extent.

One more similar example would be about the Kabini river project in Heggaddevankote (H.D.Kote) in Karnataka. In this ambitious project by government of Karnataka 18 tribal Haadis (or settlements) were ousted to make way for the Kabini river project. None of these displaced tribals have received compensation of any kind.

Yet another relevant example is that of Taraka dam. The Taraka dam constructed in the early 70s again displaced two tribal Haadis without any compensation. Some were accommodated in tin sheds in nearby forest areas. In the new places they were unable to get the herbs they used as medicine. At the same time these tribal population were not given any health care facilities.

In most tribal communities maternal and child health care is non-existent. In several studies it was found that expectant mothers were neither inoculated against tetanus nor did they take any specific nutritious food during pregnancy. On the other hand, the expectant mothers in much of tribal society consume less food so that the baby is born small and delivery is easier.

In most cases poor intake of iron, calcium and vitamins was observed during pregnancy. Women continued consuming alcohol during pregnancy and also went on with their regular chores even during the advanced stages of pregnancy. Due to unavailability of qualified medical practitioners in tribal areas, help of paramedics (Nurses/midwives) is sought only during a difficult delivery. Elderly women of the
Tribe handle most deliveries. Also it was observed that no specific precautions were taken at the time of delivery resulting in greater risk of infection to the infant.

There are some problems, which are specific only to the tribal community in India. Basu (1992). While a large number of these problems are inbuilt, a few of these problems have been imposed on them. This has proved detrimental to their health, overall development and progress. One of the ways to improve the health status of tribal women would be to develop health care systems for each tribal community, keeping in mind the specific needs and their associated health problems. Also efforts should be made to ensure the tribals’ involvement in all the projects.

Basu (1992) made an analysis of the health status of the tribal women in India and he recommends following guidelines

1. Formulation of realistic development health plans based on needs as felt by tribal women of the specific tribal groups.
2. Need for promotion of nutritional and health education among the working, lactating and pregnant tribal women.
3. Healthy nutrition should be encouraged through the local produce and local recipes. The tribal women themselves, through a better utilization of their locally available cheap but nutritious food should fulfill their nutritional needs.

- Development of poultry and fisheries are to be encouraged.
- The local tribal women should impart health education with the guidelines provided by health functionaries.
- The nutritional and health status of pregnant tribal women need to be improved by adequate intake of nutritious diet, including iron and minerals and also by hundred percent immunizations.
- Tribal women in their advanced stage of pregnancy should be advised to reduce their workload and take adequate rest.
- The habit of taking alcohol and drugs during pregnancy should be discouraged.
- The children should be properly immunized, the harmful practices of discarding colostrums, delayed initiation of breastfeeding and complementary
feeds should be discarded and health education aspects should be properly explained to tribal women.

- Tribal girls should be properly trained as "dais"/nurses. Specific precautions need to be observed at the time of conducting deliveries at home; aseptic conditions need to be followed for cutting the naval cord.
- Primitive practices of parturition are to be discarded and necessary health education should be imparted to tribal nurses.
- Tribal nurses or “dais” should properly explain the maintenance of personal hygiene in connection with childbirth, abortion or menstruation in order to prevent the infections of the female genital tract.

A number of studies have revealed that regular counselling can bring out great changes in the health condition of tribals. The fundamental question is about trained human resource to be made available in tribal areas. A study was conducted by the Indian Council of Medical Research (ICMR’s Regional Medical Research Centre) Jabalpur, about the health problems of several tribes in Madhya Pradesh. The study reveals that certain inherited disorders such as Thalassemia and sickle cell anemia can be prevented through proper counselling.

But this observation of the advantages of mass awareness could not be translated into action due to the lack of trained health care professionals in tribal areas. A casual glance at the number of medical and paramedical colleges creates a sense of euphoria. The fact that nearly 15,000 new graduate doctors and 5,000 postgraduate doctors are trained every year makes it appear that an abundant number of medical personnel are being trained in our country.

However, a closer look reveals that most of the trained personnel prefer to provide their services in urban areas creating an unequal distribution of resources between the urban and the rural areas. This gap in the health care resources has been a serious concern as even bare minimum services are not accessible to the tribals. A lot of reasons can be attributed to this incongruity.

In the hierarchy of rural public health facilities, Community Health Centres come first, Primary Health Centres next, and finally the subcentres. Each subcentre is expected to serve a population of around 5000. (WHO 2005)
Effective delivery of the local public healthcare in India is choked. Government programmes with independent planning and implementation operate with little or no coordination with the other programmes on the ground. At present, the availability of specialist and surgical services at the rural hospital level is very low. “According to a country wide facility sample survey in the year 2000, less than 30% community health centers (CHCs) had an obstetrician available; less than 10% had an anesthetist. Government spending on health is grossly inadequate at this point of time. It is around 1% of the GDP which is roughly one fifth of the total health related expenditure in the country. But the government has acknowledged this shortcoming. If the extra activities are to be managed within the same level of government spending it is clear that the services cannot be improved. Government is committed to spending 2-3% of GDP and this commitment needs to be fulfilled if these new plans have to succeed. Additional budgetary provisions must be made which has already been promised”(Abhijit 2005)

But the disappointment with the Union Budget 2007-08 has been the reduction in the allocation for the reproductive and child health programme, compared with the 2006-07 budgetary estimates, from Rs 1,765.83 crores to Rs 1,672.2 crores. This, despite the fact that India’s infant and maternal health indicators are among the worst in the world. What’s more alarming is the fact that what is allocated shows poor utilisation, as, between the 2006-07 budgetary estimate and the revised estimate, there is a decline of over 24%. In fact, allocation for child health has fallen for the second consecutive year -- from 0.55% in 2006-07 to 0.48%. In the 2005-06 budget, its share was 0.52%. By neglecting child health in favour of education, the government has once again failed to take a holistic view of the needs of children. The budget neglects two important areas -- child health and child development. Out of Rs 3,2958.33 crore promised to children of this country, education hogs a 72.4% share and development 16.65%; health gets 10.02% and protection 0.92%.( Haq–Centre 2007)

For instance, the incentives given to doctors and nurses to move to rural areas are not sufficient and they choose to be in urban areas. It is difficult to maintain understaffed health care centers in remote areas. Since these centers are not well equipped, people hesitate to use even the existing facilities in these health centers.
The tribal patients are at a great health risk due to the conditions in which they live. This is further aggravated by their exposure to extreme climate, poor housing facilities, their susceptibility to diseases and air water and soil pollution.

At the same time better medical facilities are available in the private health care centers located in taluk headquarters. However, these are not easily accessible to the tribal poor due to their high cost. This has increased the gap between the facilities available for the rich and the poor. Due to control of the private players in health care sector, the poor are denied good medical facilities.

Also, private health care services are concentrated in urban areas and the main motive is profit. Higher the payment better will be the services offered. A recent World Bank report acknowledges the facts that doctors over-prescribe drugs, recommend unnecessary investigations and treatment and fail to provide appropriate information for patients even in private healthcare sector. This report also points out the relation between cost and quality that is the bane of the private health care system. Sometimes, even though the services offered are excellent, the common man cannot afford them. (World Bank Report 2005) Thus the availability of health care services for tribals is influenced by socio-economic factors.

There have been a number of developmental works conducted by governmental agencies in the post independent era in our country. The impact of development programmes has been different on different sections of tribal population. The tribal woman has been in a more disadvantageous position compared to her nontribal counterpart. Although a small number of tribal women have taken advantage of education and the new opportunities for employment, majority of them still lead a pathetic life.

This is due to the fact that Development has had its drawbacks. Some of the negative effects of development are listed below. (Rajyalakshmi.et al 1993)

- The workload on women has increased considerably.
- With increasing use of modern agricultural equipments, women are marginalized in agriculture. This leads to their migrating to other areas as labourers.
• Due to greater government control over forests, women cannot profit much from the forests.
• Women are exploited in various ways. Some of the ways of exploiting women are as follows: -

  a) Due to the enactment of various acts such as Rural Land Ceiling Act, Tribal Land Transfer Act, etc, in order to purchase land from tribal poor non-tribal men marry tribal women just to avoid legal complications. Sometimes they get monetary benefits from the govt. also for marrying tribal women. However, such women may not get the status of a wife.

  b) Sometimes mine owners take away land for development purposes. No other land is given in exchange nor do these mine owners bother to rehabilitate the displaced tribals. Whenever a vacancy is there, they prefer to employ men rather than women who are the sole inheritors/owners of the land.

  c) In nationalized mines women are not allowed to work in the evenings & night shift. However, they are permitted to work in private mines but private mine owners prefer to employ men as women have to be given maternity benefits, rest shelters, equal remuneration and also créches have to be provided.

  d) Voluntary retirement schemes are aimed at relieving women of their jobs. A woman may retire after 36 years and give her job to a man who will then continue with her PF account and get all the benefits.

  e) Tribal women often become easy targets for immoral trafficking.

  f) Rejas (women labourers) are sexually and socially exploited. Most of them are not married and parents do not want to get them married fearing loss of income. Men also prefer to marry non-rejas.
Data available on tribal women suggests the following:

1. All tribal women are working women. Tribal women are overworked. They get up early in the morning and set out to find fuel. Then they fetch water, assist in agricultural activities, do household chores etc.

2. They are always paid lower wages than men even though the workload is the same on both.

3. Deforestation and development project have adversely affected tribal women.

4. Employers are always devising ways and means to lay off tribal women.

It is important to study the above-mentioned points to formulate any health care delivery system, as tribal families are matriarchal. In the eventuality of health break down it is the woman folk of tribal society who have to take a lead to avail of the health care facility. Emphasis on educating tribal woman would be a giant leap in the developmental programme of tribals.

A Case Study done by Jayalakshmi (2003) in Andhra Pradesh where tribal women were trained bears testimony to it. The above paper is an empirical study conducted in one of the International Tribal Development Agencies (ITDAs) of Andhra Pradesh. It took a look at the health care system provided to the nine mandals in the region through the World Bank IPP-VI project. In an attempt to make modern health care facilities available to tribals, women from the community were trained as Community Health Workers (CHW). They were given sufficient training so that they could provide basic curative services, health education and take preventive measures against diseases at the village level. The Community Health Workers (CHW) formed the link between the tribals and health care personnel.

They served a dual purpose of both providing health care and performing the role of building up rapport within the community. The Village Tribal Development Agency (VTDA) overlooked the activities of health care units in the area. This agency is, in turn, aided by the Village Health Committee (VHC) and Village Development Fund. The activities are meant to be implemented jointly by the Village health Committee and village development fund, which in turn encourages people to participate in its activities. The system has been developed in such a way as to ensure that it continues functioning effectively even after the government role is gradually
reduced. It is commendable to note that the participation of tribal women led to success of healthcare programme.

Basu’s (1993) extensive work in the field of tribal health care and the health problems of the tribal population can be summarized as follows:

1. Deficiency of essential components in diet leading to malnutrition, protein calorie malnutrition and micronutrient deficiencies are common. Goitre of various grades is also endemic in some of the tribal areas.

2. Water borne and communicable diseases: Gastrointestinal disorders, particularly dysentery and parasitic infections are very common, leading to marked morbidity and malnutrition. Malaria and tuberculosis still remain a problem in many tribal areas, while the spectrum of viral and venereal diseases have not been studied in-depth.

3. High prevalence of genetic disorders mostly involving red blood cells: Genetically transmitted disorders like sickle cell anaemia, deficiency and different forms of thalassaemia are also common. All these defects lead to the early destruction of red blood cells and add to the overall anaemia.

4. Excess consumption of alcohol: The brewing of alcohol from Mohua flower and fruits has been practised traditionally. However, the switch over to commercially available liquor is likely to be a major threat.

5. Superstitions particularly related to health problems.

Need of the study

Although a vast body of knowledge about tribals has been accumulated under different branches of knowledge, it is always felt that the information on health care delivery is far from complete. India’s health care system is driven by patient’s demand. In nongovernmental health organizations, resources by and large are ploughed in, in response to patient’s ability to pay and there is little incentive for quality care among staff workers. In Government health care centers efficient use of resources is not a primary consideration. This field being perpetually incomplete attracts more and more researchers to explore gray areas and to add newer dimensions.
It is interesting to note that the government taking great interest and building infrastructure periodically but the system is ineffective to deliver the value hence has a poor “customer perceived value”. This aspect of poor health care delivery creates a need for the systematic study

“It may, however, be mentioned that (Tribal) health related study is found to be limited, most of the available studies fragmentary in nature without an adequate sample size and standard methodology” (National Commission for Women.1993).

“The data sources commonly utilized for such purposes are one or a combination of following: registration and surveys- both complete enumeration surveys and sample surveys. Administrative reporting also provides information in many cases .For informed decision making it is pertinent to check the coverage, reliability and timing of different resources”. (Roy 2003)

In view of the poor health care infrastructure available in the tribal areas there is a need to survey the tribal environment to reason out the moderate to poor functioning of the value delivery system in Health Care

Most studies, which have been undertaken so far, are dealing with the reasons for poor health condition of Tribal-health but unproductive health care system and its delivery remains an important grey area due to certain distinctions inherent in them. Unmet health care need has a direct bearing on hard working capacity (Physical Labour) of a member in tribal society. Thereby quality of work suffers. (Sinha, et al 1980).

It has been noted that there is paucity of studies on many urgent issues affecting the health status of tribal women (National Commission for Women.1993).

The poor in the tribal areas cannot afford to spend on health from their family budgets and, therefore, are destined to suffer. An acceptable factor could be the indirect cost which is, many times the amount of direct medical expenses. The ratio (between) of the loss caused to the demoralized families due to traumatized experience associated with the health breakdown and, avoidance of overt expenditure,
needs to be determined. Their primary earning hover around agriculture, fisheries, forestry, live stock, and allied activities. Poverty in agriculture sectors, at times, force tribals to take up jobs in non-farm activities. This distress diversification in their occupation makes their earning less remunerative. Therefore, the loss of productivity, which is beyond directly attributable cost of medical treatment, is not considered as a very important factor in Government policy formulation.

Children below 3 years of age in scheduled tribes are twice as likely to be malnourished than children in other groups. A person from the poorest quintile of the population, despite more health problems, is six times less likely to access hospitalization than a person from the richest quintile. This means that the poor are unable to afford and access hospitalization in a very large proportion of illness episodes, even when it is required. The delivery for a mother, from the poorest quintile of the population is over six times less likely to be attended by a medically trained person than the delivery by a well off mother, from the richest quintile of the population. (India Ministry of Tribal Affairs 2004).

Anam Ramanarayana Reddy, Minister (2007), A.P. Government observed at the second pre-annual conference, held in Nellore on 9-Dec-2007 that Producers in rural non farm sector are not able to get due price for their products because of the exploitative role played by middle men. This has significance because many of the Tribal families who have been forced off their forest homes have sought to cultivate degraded, infertile and often non-irrigated forest tracts on the outskirts of the forest. Tribals are also engaged in live stockbreeding.

There is a greater need for undertaking a region-specific study of the status and role of tribal women which alone can throw up data that will make planning for their welfare more meaningful and effective (.Singh. 1988).

The Health of Tribals is intertwined with the nature and eco system. The disturbance/ destruction in the forest eco- system has resulted in an urgent need for reviewing the health care system delivery. The bio-diversity pressures in the area include losing crop & livestock production, man-animal conflicts, timber & grazing, poaching and smuggling and of course, increasing tourism. A study among the Pauri
Bhuniyas of Orissa showed that 52 women as against 17 men in a sample of 268 persons suffered from diseases related to malnutrition. (Ali 1980).

In the present health care system there is some lacuna (there is a gap between the health care needs of the tribals and the care given by the governmental health care delivery agencies). It is an oft-felt need by all, which is reflected in electronic and print media often that the health care system for these Tribals, needs improvement.

“The sub optimal health status of indigenous peoples and the health inequalities between indigenous and non-indigenous populations reflect a fundamental failure to ensure the freedom of indigenous peoples to fully realize their human, social, economic, and political capabilities ” (Sen 1999).

A number of studies on the social aspect of tribes, their culture and the impact of acculturation on the tribal society have been done. There have also been studies on the status of women relating to their socio-cultural problems, their economic rights, their rituals, their access to employment, food, etc. But these issues have not been properly focused in relation to the tribal Health care. The complications of pregnancy and of childbirth and of illegally induced abortions in areas where environmental and health conditions were adverse resulted in large numbers of tribal female deaths (United Nation Report 1984).

Although many in our country have given their opinion that privatization of the health care system can provide a meaningful solution, experience of other countries must discourage us with their unpleasant outcome. Moreover in India tribal population is spread across different terrain and climatic conditions. Therefore, each area may need a different strategy for effective Health care delivery system.

Although United Nations observations go hand in hand on poor health of the tribal people with that of many Indian researchers, it would be apt to quote the National Health survey on key elements that disconnect in different stages the service delivery to be effective.


“Due to lapses at different points, the health care management system suffers a setback. There is a wide gap between the need and the supply. National Health Surveys provide adequate data on this topic” (National Health Survey).

Statement of the problem

There is a growing socio-economic inequality between rural and urban population. Basic inequality in health care benefits between rural and urban is increased by the rapid but unequal economic growth that India has witnessed in the last decade and half. Appalling poverty results in deprivation of even basic needs in general and health care in particular among the rural poor like tribal society.

Although a good number of researchers have put in efforts to identify the factors responsible for the difficulties in healthcare delivery in rural society, yet, one always feels that there are some dimensions, which are not explored. The fact that meeting health care need adequately is highly individualistic in nature which adds complexity to research work, but not conducting research work to identify the gaps will have ill-effect on the overall equilibrium in rural (Tribal) society and productivity besides the long term sustainability of the health care system in these areas.

A researcher needs to dig out and evaluate the influencing factors. Upon extraction of the information, crystallize and present it so that a long-term sustainable and effective health care delivery system can be formulated. This study evaluates the current healthcare model for tribals, and explores it in combination with the health status of the target population, placing emphasis on the long-term sustainability and cross-implementation of the health care delivery model.

Present study aims at analyzing various aspects of Health Care Services Delivery (HCSD) in tribal settlements, organizational setup and its operational management with a focus on conceptualizing operational problems by conducting field study of health care needs in selected tribal settlements.
Objectives of the study

1. To understand the perception of Tribal Society about the various dimensions of present health care system and its attitude to modern health care system.
2. To identify the problems faced by Tribals in seeking health care benefits.
3. To analyze the level of sensitivity of the health workers at ground level to the health needs of Tribals.
4. To determine how the organization climate is perceived by health care professionals to be optimally delivering the services and compare with the perception of the tribals.
5. To evaluate the health status of tribal school going children and explore the impact of education.
6. To suggest the main approaches through which the problems of health care services delivery could be dealt with.

Research Hypotheses

The present study attempts to test the hypotheses that there is a poor healthcare delivery in Tribal area. Tribals remain deprived of the benefits of health care from modern medical facilities. In spite of meticulous planning by government authorities some areas of health care needs are not covered due to the limitations of the system. A big achievement in health care will be to create a new system to address how the rural population in general and tribals in particular will be provided with overall health care coverage. Inequalities in health care between rural (Tribal) and urban areas have continued to increase. To ignore this problem is to invite problems in the future productivity and development of the country. This study tries to identify the factors responsible for the difficulties in healthcare delivery.

Following hypotheses are set for the study:

1. Better health care infrastructure results in better health care services delivery
2. The perception of quality in health care services delivery are negatively associated among health care professionals and Tribals
3. There is an inadequate knowledge about the merits of modern health care system among tribals.
4. The lack of communication between health care professionals and tribals has resulted in ineffective delivery of the benefits of the health care system.
5. The sense of accomplishment or achievement is low among the health care professionals serving in tribal belt.

6. Schools going tribal children are deprived of health care coverage, which has adverse effect on their education.

**Research Methodology**

The study is based on primary data collected from Tribal settlements to seek the health care problems faced by tribals. Survey questionnaire is framed in a way that clearly elicits the required information like their awareness on health, need to visit qualified health care professionals, frustration with unmet health need, medicine etc. Survey method is adopted on the basis of simple random sampling. {Survey – Researcher read out the questionnaire explaining to them the details and purpose}.

In order to collect first hand information a direct personal interview was carried out. Interview method involved collection of data through direct verbal interaction between the interviewee and the interviewer (Sidhu 1989)

Observation method was adopted to assess the physical manifestation of illness among target groups. In the present study, both interview and observation methods course were adopted “where the budget and type of subject allow a combination of methods may provide a more valid estimate than any single method (Nicola et al .1986)

**Pre-testing the Research Instrument**

An informal testing of instrument was carried out with a small group of members of tribal society before finalizing the final draft of the instrument to confirm that they were universally held beliefs.

Osgood et al. conducted a classical research based on extensive factor analytic studies across culture. This study has shown that people understand, or give meaning to words or concepts along three dominant dimensions.

- The evaluative (Good-Bad) Dimension
- The Potency (Strong-Weak) Dimension
- Activity (Active-Passive) Dimension
This process involved two steps

a. Standardization - At the outset Instrument was examined by a panel of experts for expert comment in order to assess the ability of instrument to elicit the response from the respondents to meet the attributes sought in the research.

b. Reliability co-efficient of the Instrument- In order to ensure accurate response and to eliminate possible vacuum arising out of gap in communication, questionnaire was administered twice to the random sample of twenty-five respondents with the time-interval of about 20-25 days.

These respondents involved in pretesting were deleted from the mainstream of study. Pre-testing played a major role, as it was necessary to outline the perception of the respondents (Tribals) and to examine the meaningful outcome towards the requirement of the questionnaire. This process also ensured to capture adequate reflection of feelings, perceptions, experiences and delinquent behavior of the respondents.

Apart from the primary data, percentage, tabulation, ratios are used as a statistical devise to arrive at an inference. The data is collected from 535 samples. Simple random sampling was adopted for tribal universe of adults. A comprehensive schedule is used to collect data from target group covering tribal heads, members of the tribal families, Tribal primary school teachers and health care professionals around the settlements. Health care delivery system in tribal areas under study was examined from the perspective of the base hospital, by concentrating on mortality patterns, inpatient flow of selected infectious and non-infectious illnesses, the preventive and curative health services administered by the hospital to the community.

Design of the main study

The present study is descriptive in nature. The main theme of questionnaire was intended to measure the (a) perception, awareness and utility of health care services by tribal population (b) Intricacy, inconvenience and operational (on job) limitations of health care service delivery by health care professionals (c) First hand
information, with regard to sickness of school going tribal children by school teachers.

Thus three group of respondents were chosen namely:

1. Respondents from adult tribal population
2. Health care professionals.
3. School Teachers of primary schools for tribals.

Total number of respondents were 535, spread across three above-mentioned groups. Upon deciding the variables, the sources and nature of the data were explored. This was done using the Chi-Square.

The data obtained was properly coded and analyzed with the help of a statistician using statistical package of social sciences (Nie et al. 1975).

Frequency distribution of the two variables against each other was cross-tabulated. Frequency distribution of one variable is set out in columns and frequency distribution of the second variable was set out in rows. This enabled us to look at the distribution of one variable broken down within the different categories of another variable (Matt henn. et al 2006).

“Heuristics optimization routines” was adopted to shape the outcome of data analysis (Kotler 2004).

Limitations of the study

1. Respondent’s memory had to be relied upon to collect data. At times, incoherence and inconsistency in the statement were observed.
2. Some respondents aggrieved by unsatisfactory emergency health care might have given an exaggerated version of the problems, which would have resulted in some bias in the statement.
3. The geographical area for the data collection was restricted to three districts.