1.1.0 Introduction to Health

As a popular saying goes, “Health is Wealth” and many will argue on behalf of this. Though lot can be achieved in life even when human beings suffer from chronic illness, yet no one can deny the fact that one can enjoy life and achievements a lot more if he/she is healthy than if he/she is continuously ill. Humans or Homo sapiens in this universe can be credited to be the species with the largest brain size and brain activity, resulting in them being the most sophisticated outcome of evolution. Today’s world is the result of his/her intelligence. With the growing need for progress and invention to suit the complexities of modern world, one of the major shortcomings of humankind is revealed in terms of ill health, disease, ageing and inability to work. In addition, this implies that ill health reduces the well-being of humans. For the complex modern states and their economies to function efficiently, there is the pressing need for prevailing good health among all which acts as the basis for fully functional individuals and human resource, which can further lead to economic growth and development.

Economic growth, social well-being and human capital development are closely related. Sustained growth cannot be achieved without at least a minimally educated, healthy populace. Improved health and nutrition are critical to improve productivity in general and agricultural output in particular. Thus, health is an asset of every
community. The wellbeing of people is one of the founding pillars of the strength and prosperity of any nation.

It is also an essential component of industrial, economic and social development. Diseases and poverty causes adverse effect on human energy. Depletion of human energy leads to low productivity and low earning capacity which ultimately leads to the low standard of health and well-being.

As the role of state changed from the police state to welfare state, the state’s welfare functions increased. A welfare state can be defined in many ways but most popularly a Welfare State is a system of governance in which the government is seen as the key service provider and it is the responsibility of the government to upkeep the overall welfare of the citizens. The government plays an active role in the protection and promotion of social economic, and political rights of the citizens in terms of provision of health care, employment, education, housing and social security especially for those who lack in opportunities or are the so called marginalized and downtrodden. A salient feature of the welfare state is also the provision of social insurance which covers periods of greatest crisis like illness, old age and unemployment.

The concept of Welfare State can be understood in 3 major ways

1. It denotes that all welfare services are provided by the State.

2. Includes every group or individual in its ambit of welfare provision, which is safe guarded by rights of the citizens.

3. Based on the principles of equitable distribution of resources and endowment of equal opportunities to the citizens.
To summarize we can say that, one of the major task of the welfare state is the assurance of the provision of health care services to all sections of the society with special benefits for the marginalized groups so that equality can prevail and so that the welfare of the state in general can be obtained. In this regard, the strategy usually followed by the government is that of progressive taxation, where citizens pay an allowance to the government proportional to their income and this money in turn is invested by the government to build up economic social and political infrastructure and public facilities which are meant for the wellbeing of the citizens. The welfare state is responsible for providing the basic services which are essential for the day to day life of the citizens.

India is a socialist, secularist, democratic republic as laid down by the preamble to the Indian Constitution and is therefore responsible for the overall wellbeing of the citizens. The birth of Independent India is recent and its constitution was drafted at a time of modern economic, social and political outlook. Therefore, while drafting the constitution, stress was laid on the concept of India being recognized as a welfare state. Welfare of the citizens is safeguarded by the constitution as it puts down fundamental rights for the citizens namely

1.) Right to Equality: It Ensures equality before law primarily but it also ensures right against discrimination in any of its relevant and present forms like discrimination on the basis of race, class, caste, sex, religion or place of birth and also puts forth the abolition of untouchability.
2.) Right to Freedom: Freedom of speech and expression, movement, freedom to reside in any part of the state, freedom of profession and right to education. This right also closely concerns writ Habeas Corpus which protects a citizen against illegal detention and arrest.

3.) Right against Exploitation: Safeguarding forced labour, child labour and human trafficking.

4.) Right to freedom of Religion: This ensures the freedom to profess any religion without imposition of any particular religion.

5.) Cultural and Educational rights: For maintaining the rights of minority and ethnic groups and sustaining the cultural richness and heritage of India.

6.) Right to Constitutional Remedies: This acts as the guardian right for the proper enforcement and upkeep of all other fundamental rights. This right plays the role when one or more of the fundamental rights are breeched to reinstate the rights of citizens.

Along with the fundamental rights, the Constitution of India also puts down certain Directive Principles of State policy which acts as guidelines to frame future legislation keeping in mind the welfare of the citizens. Though the term ‘welfare state’ is not mentioned clearly in the constitution of India, the Directive principles clearly lay down that Indian Constitution is supposed to thrive for the welfare of the citizens by all means and health is a concurrent subject to be addressed by both centre and state. The constitution of India has not put down the ‘Right to Health’ as a part of the Fundamental Rights but however ‘health’ has been mentioned obliquely in many sections of the constitution. For example, the Preamble to the Constitution
of India lays down “social, economic and political justice and also equality of status and opportunity.” Therefore under social justice it can be said that equal opportunities for access to health care facilities by everyone in need of health care is implied.

The Article 47 of the Indian Constitution charted in the year 1949 states that “It is the duty of the State to raise the level of nutrition and the standard of living and to improve public health. The State shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties and, in particular, the State shall endeavor to bring about prohibition of the consumption except for medicinal purposes of intoxicating drinks and of drugs which are injurious to health.” Therefore though Right to Health has not been mentioned, health has been referred to in many articles of the Constitution. Along with access to health care, the Constitution also provides for the equality of opportunity for medical practice and medical education by any fit candidate in government organizations subject to fulfillment of certain criteria that might be fixed from time to time.

The next section would deal with one of the most important aspect of the life of individuals namely ‘health’ which is of prime importance and the major task of a welfare state is also to provide quality health care facilities to all sections of the society irrespective of any discrimination. Sound health is the basic assumption for individuals to enjoy any part of free life.
1.2.0 Meaning of Health

Health is a common theme in most cultures. In fact all communities have their own concepts of health, as part of their culture. Among definitions still used, probably the oldest is that health is the absence of ‘ease’. In some cultures, health and harmony are considered equivalent; harmony being defined as being at peace with the self, or at ease with oneself like the community god and cosmos.

1.3.0 Definitions of Health

Webster defines **health** as “the condition of being sound in body, mind or spirit, especially freedom from physical disease or pain.” Oxford English dictionary defines health as “Soundness of body or mind; that condition in which its functions are duly and efficiently discharged”.

The widely accepted definition of health is that given by the World Health Organization in the preamble to its constitution- “Health is a state of complete physical, mental and social wellbeing and not merely an absence of disease or infirmity.”

1.4.0 Historical Development of Health Care Services

According to the World Health Organization, health system can be defined as follows:

"A health system consists of all organizations, people and actions whose primary intent is to promote, restore or maintain health. This includes efforts to influence determinants of health as well as more direct health-improving activities. A health
system is therefore more than the pyramid of publicly owned facilities that deliver personal health services. It includes, for example, a mother caring for a sick child at home; private providers; behaviour change programmes; vector-control campaigns; health insurance organizations; occupational health and safety legislation. It includes inter-sectoral action by health staff, for example, encouraging the ministry of education to promote female education, a well-known determinant of better health."

Despite its overwhelming importance, health continues to be a neglected aspect. It is often taken for granted, and its value is not fully understood until it is lost. Ancient times never saw institutionalized health care organizations and hospitals to take care of the sick and the suffering. Britain has a long standing social history and the health care systems have evolved and adapted over the time to meet the needs of the day and to reflect the necessities of the civilization. In the middle ages, the provision of health care services was considered to be a prerogative of the landlords and the feudal lords. Security against illness and old age also was provided by the lords. This followed by the rule of the church. In this era all the Infirmary Almshouses and the Houses of Pity for the poor and the destitute were run and managed by the Christian missionaries, directly controlled by the church. The 16th century saw the rise of Henry VIII when the power of the church was ripped off and all the institutions managed and run by the missionaries were made secular and they were managed by the charitable organizations. In the 18th and the 19th century, the Voluntary Hospital Movement led to the mushrooming of hospitals for treatment of illness (Stevens, 1966); though in this age primary health care was considered to be the responsibility of the individuals themselves. Only in the 19th century, due to rapid urbanization and the growth of slums, the government became aware of its
responsibilities towards health and sanitation which led to rapid health legislations and setting up of hospitals to extend public medicine. Even at this time the salaried people had to pay for the services provided by the hospitals whereas the poor and the destitute were provided free medical aid.

However, it was only during the Second World War that there was a widespread reform in the health care services. At this time the need for health care services and hospitals was pressing and as such, the shortcomings of the present health care system were noticed. The hospitals run by local authorities were incompetent in dealing with the treatment of the war victims and therefore the need for reforms in the health care system was felt more than ever. In 1941, a committee was set up under Sir William Beveridge to make necessary suggestions to change the health policy after the war. The Beveridge Report was submitted in 1942 which was accepted by the then Labor government in 1943 leading to the setting up of the National Health Service which was like the stepping stone for the modern health care system in Britain.

India on the other hand, with its rich and varied culture and systems, has the mention of health and wellbeing since time immemorial. The only difference was in the fact that, modern medicine which borrows heavily from science, ancient medicine was based on the belief on the supernatural, magic and other mystical practices. The ancient concept of illness was metaphysical in nature, based not only on the physical aspect but concerning the whole universe in which humans resided considering the spiritual aspect, the environment and its bearing on the individual, the mental and the supernatural essence of existence. Treatment therefore was holistic and mainly
utilized natural forces and resources like plants, minerals, stars, voodoo, magic, spirits and energy.

In these times, illness was seen as the wrath of gods for some sin committed by humans and hence to cure diseases, it was believed that the gods had to be appeased and to do away with the curse, sacrifices were made so that the disease sent upon humans is cured by the gods.

This ancient system of health care has to an extent given way to the modern medicine in recent times but India still has its indigenously developed systems of medicine popularly called Ayurveda and Siddha. These are the systems of parallel healing which originated in India and are used effectively for treatment. The inception of modern medicine can be said to be first established in India when the East India Company arrived in India in the year 1600 as they had appointed medical officers to accompany them to India. After the establishment of Company’s rule in India in the year 1757, the first medical department was established in Bengal in the year 1764, which led to the formation of the Civil Medical Department in the year 1857. Meanwhile Hospital Boards had already been appointed for proper administration of the medical facilities. In 1869, the first Public Health Commissioner and a statistical officer were appointed to the Government of India. In the year 1896, after the abolition of the Presidential system, the 3 main Civil Medical Departments namely in Bengal, Madras and Bombay Presidency were joined together to become the Indian Medical Services. In the year 1919 however the health care system was decentralized giving more responsibilities to the provincial governments as far as health was concerned. In the year 1946, the Bhole
Committee was appointed and the report that they submitted in a way gave structure to the modern medical system in India. The basic infrastructural facilities for health care are provided by the government.

The structure of here is a three-tier system which was developed post-independence according to the Directive principles laid down in the Constitution.

Pattern of health care

1.) Sub-Centers

2.) Primary Health Centers

3.) Community Health Centers

According to the National Rural Health Mission, by March 2010, there were about 147069 Sub-Centers, 23673 Primary Health Centers and 4535 Community Health Centers in the country. The structure of health systems in urban areas is also similar but the only difference is the presence of private hospitals which have come up in great numbers to provide quality health care. Also public private partnership has become common in the urban scenario to intervene in areas where the government has failed to provide adequate attention.

As regards the scenario of the world in general, the need and the importance of ‘health’ was completely neglected when the covenant of the League of Nations was drafted during the First World War in 1919.

However, during the past few decades there has been a reawakening that health is a fundamental human right and a worldwide social goal; that it is essential to the satisfaction of basic human needs and to an improved quality of life. In 1978, an international conference on Primary Health Care was held at Alma Ata in the Soviet Union, sponsored jointly by the WHO and UNICEF. In this conference “Health for
all by 2000 A.D” was adopted as the national goal by participating countries and India was one of the signatories to this resolution. By 1988 as many as 166 members states of WHO were found to be unanimously committed to Health for All.

With the adoption of health as an integral part of social and economic development by the United Nations in 1979, health while being an end in itself has also become a major instrument of overall social economic development and the creation of new social order “Health for all”.

1.5.0 Meaning and Nature of Inequality

Inequality can be described in simple terms as ‘lack of equality’. It is a situation in which people are not equal because of lack of equitable distribution of resources. Equality means the condition of something or someone having the same quantity value or measure at any particular point in time. It means ‘existing as similar’ with respect to something. Therefore, by implication it is not possible to define the meaning of Inequality as ‘the condition of someone or something being unequal or existing as dissimilar’. Two attributes of Inequality could be established perhaps in this way. First, Inequality is a notion and it is an appositional force. For instance, it does not make sense to say that two things are equal or unequal, unless, an apposition that two things or people are equal or unequal with respect to weight, height, breadth, income, health etc. is added. Thus, the statements on inequality have to be qualified statements and an unqualified statement on inequality does not make any sense. Second, the notion of Inequality has a duality attached to it- it is very simple and at the same time very complex. The simplicity of the notion of inequality is the way in which it can move human appeals through human gestures such as
charity, compassion, sympathy and the like. At the same time, it is one of the most potent human ideals that have an intimate relation with rebellion.

The complexity of the notion of inequality does not end at it being a relational concept, instead it begins there. The beginning of the complexity of the notion of inequality could be evidenced by the presence of one too many a protagonists of equality championing a particular type of equality and there by appealing to the undesirability of that type of inequality. These protagonists of equality can be categorized on the type of equality they choose to champion, like libertarians a positioning liberty to inequality, income egalitarians seeking equality of income, wealth egalitarians wanting equal wealth and entitlement egalitarians calling for equal entitlements. Hence, the term ‘Inequality’, is a qualitative dimension of the society as a whole along with its various components. Money, knowledge, beneficial social networks, power, prestige etc. all form the fabric of the notion of ‘Inequality’. Justice, equality, freedom and rights are the counter forms to combat Inequality. Thus, the nature of Inequality gains a totality with all its forms and counter-forms in vogue. Natural Resources and Institutional Resources and its distribution form the core aspect of Inequality.

1.6.0 Types of Inequality

One of the approaches towards understanding the notion of Inequality is perhaps by distinguishing between natural inequalities and institutional inequalities. Natural Inequalities are established by nature based on age, sex, health, physical and mental abilities. These differences make human beings diverse and heterogeneous and these differences are at all times dynamic changing every minute of existence.
On the other hand, institutional inequalities are not derived from nature but are more functional and they imply directly or indirectly to the relationships that exist between human beings and the institutions that they have created, like the social, economic, and political institutions, which in some inherent way give out the hierarchical structure of the society that human beings reside in. Based on these structural differences, society determines and distinguishes the rich from the poor, the strong from the weak, basically the fundamental differences between the resourceful and the marginalized. To talk about the present world would be to say that more than the natural inequalities the institutional inequalities are stressed upon thus making these institutional inequalities more evident and vicious. The raging gap in between the rich and poor, the strong and weak, the resourceful and the paupers are thus perpetuated. This diversity among the haves and the have-nots have brought us face to face with a situation in which the group of disadvantaged are discriminated upon and they hardly can claim any benefits even so under the state machinery. Perhaps it is in this context, that Douglas Lummis (1992) says that “equality does not mean equal treatment of individuals; on the contrary, it means unequal treatment of unequal individuals.” Similarly, the second wave of Feminist movement (1960-1980s) shifted focus from demanding equal rights for men and women to gender sensitive rights or ‘special rights’ for women which could put an end to discrimination against women. This was particularly taken up because women belonged to a very different physical, cultural and mental context which was not similar to that of men. Thus, inequality should be dealt in a manner as to equip the disadvantaged rather than forcing everyone on the same platform. As long as man has lived, the society has been cut up in various possible ways and constructs.
Social institutions made by man like caste, class, race, religion, ethnicity and many more have done more harm to society than good. These institutions have in a way perpetuated the concept of inequality that prevailed in the society. Though the marginalized sections of the society can acquire wealth and do away with the economic inequality, yet the other forms of classification like caste, religion, gender and ethnicity cannot be done away with since a person is born into it. The institution of caste system which can be said to be one of the base stone of the Indian society is based on the concept of inequality and hierarchy of how certain castes are purer than certain others. This creates an inherent inequality in the society. Racism and ethnic differences also act as a base for discrimination since every race and ethnic group engages in ethnocentrism and profess the superiority of their own race. This fragmentation of the society on the basis of social institutions has in a way built the Indian society the way we see it now.

Two broad forms of inequality can be said to be

1.6.1 Economic Inequality

Economic inequality (also known as the gap between rich and poor, income inequality, wealth disparity, or wealth and income differences) comprises disparities in the distribution of economic assets (wealth) and income within or between populations or individuals. The term typically refers to inequality among individuals and groups within a society, but can also refer to inequality among countries. The issue of economic inequality is related to the ideas of equity, equality of outcome, and equality of opportunity.
Observers differ on both the morality and utility of inequality, whether, and/or how much inequality is necessary in society and how it can be affected. Inequality has been praised as necessary and beneficial and attacked as a growing social problem. Early studies suggesting that greater equality inhibits growth have been shown to be flawed greater equality has been conclusively linked to economic growth.

Economic inequality varies between societies and historical periods; between economic structures or systems (for example, capitalism or socialism), ongoing or past wars, and differences in individuals' abilities to create wealth are all involved in the creation of economic inequality. Economic inequality can refer to cross sectional descriptions of the income or wealth at any particular period and to the lifetime income and wealth over longer periods of time. There are various numerical indices for measuring economic inequality.

There are many reasons for economic inequality within societies. "The single most important driver has been greater inequality in wages and salaries (OECD 2011-12-05).

The acknowledged factors that impact economic inequality include

- Greater inequality in wages and salaries
- Wealth concentration
- Labor markets (globalization technological changes; and policy reforms);
- More regressive taxation
- Tax loopholes and shelters such as tax havens;
- Increasing education costs;
• Computerization and increased technology
• Racial inequality
• The gender pay gap
• Nepotism.

1.6.2 Inequality in Rural and Urban Areas

The ratio of hospital beds to population in rural areas is fifteen times lower than that 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. Currently spending on healthcare is 1.4% of gross domestic product (GDP), which is one of the least expenditure on health care, compared to all other countries in the world.

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). As a result of this dismal and unequal spending on public health, the infrastructure of health system itself is becoming ineffective. The most peripheral and most vital unit of India’s public health infrastructure is a primary health centre (PHC). In a recent survey it was noticed that only 38% of all PHCs have all the essential manpower and only 31% have all the essential supplies (defined as 60% of critical inputs), with only 3% of PHCs having 80% of all critical inputs.

The reduction on public health spending and the growing inequalities in health and health care are taking its toll on the marginalized and socially disadvantaged
population. The Infant Mortality Rate in the poorest 20% of the population is 2.5 times higher than that in the richest 20% of the population. In other words, an infant born in a poor family is two and half times more likely to die in infancy, than an infant in a better off family. A child in the ‘Low standard of living’ economic group is almost four times more likely to die in childhood than a child in the ‘High standard of living’ group. Child born in the tribal belt is one and half times more likely to die before the fifth birthday than children of other groups. Female child is 1.5 times more likely to die before reaching her fifth birthday as compared to a male child. The female to male ratios for children are rapidly declining, from 945 girls per 1000 boys in 1991, to just 927 girls per 1000 boys in 2001. Children below 3 years of age in scheduled tribes and scheduled castes 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 of 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 of a well off mother, from the richest quintile of the population. A tribal mother is over 12 times less likely to be delivered by a medically trained person. A tribal woman is one and a half times more likely to suffer the consequences of chronic malnutrition as compared to women from other social categories. These figures speak for themselves and bring to the fore unequal distribution of resources and the effect of it on public health parameters.
This unequal distribution of resources is further complimented by inability of universal access to healthcare due to various access difficulties.

1.7.0 Health Inequality

The word ‘equity’ means ‘fair’ in Latin or the absence of any relevant forms of discrimination or bias. Therefore inequality in health care would mean the dearth of proper allocation of health care services or the presence of disparities in the delivery of health care to all sections of the society. One of the major challenges being faced by the health care system far and wide has been the task of achieving equality or equity in the delivery of healthcare services. The reason for the existence of such inequalities lies in the inherent nature of the society where there is an existent bias and difference in terms of incidence of resources both natural and manmade. These factors in turn determine the health conditions of people and the accessibility of resources which they need to exploit in order to restore the state of well-being.

Inequality touches upon all segments of the society. Health inequalities are often observed along a social gradient "a stepwise or linear decrease in health that comes with decreasing social position" (Marmot, 2004). Though health inequalities can be prevented and unjust differences in health status experienced by certain groups of the population can be rubbed away, it can be said generally that people belonging to the lower socio-economic groups are more likely to experience chronic ill-health leading to early deaths as opposed to those enjoying better social standards. Health inequalities are apparent not only between people of different socio-economic groups; they also exist across different gender and ethnic groups.
While there is a significant gap between the wealthy and the poor, the relationship between social circumstances in health is in fact a graded one. In the context of India, people belonging to the lower caste groups or belonging to the SC/ST categories are more vulnerable to ill health. According to the Bulletin of the World Health Organization, 2002 by Wag staff Adam, “poverty breeds ill-health and ill-health keeps poor people poor.” The standard of living of the marginalized is poor resulting in widespread diseases. The other setback to their health condition is the fact that they are not able to acquire timely and quality health care therefore resulting in early deaths and chronic illness. Though the system of untouchability has been abolished, yet even today the people of lower caste are treated like untouchables. They are not given beds in the hospital and are neglected in the hospitals. Private care is not affordable and therefore they are left at the mercy of the government hospitals making their situation even worse.

1.8.0 Explanations of Health Inequality

Inequalities in health care can arise from a number of causes. While ‘race’ or ethnicity is a poor indicator of genetic makeup, certain diseases are more common in population groups which can be described in ‘ethnic group’ terms especially those such as sickle cell disease which are inherited, when people may be more likely to choose partners from the same ethnic background. Exposure to environmental factors may also be an issue, especially in immigrant groups, and among groups who may travel to visit families abroad. If certain ethnic groups have different patterns of disease, either at present or historically, their knowledge of these conditions may affect their response to symptoms and the likelihood of seeking treatment.
Another category of explanations is that both members of minority ethnic groups, and health care providers, belong to cultural groups with established ways of behaving and traditions, as well as specialized or specific knowledge which is passed on, within families and cultures or through professional education. These ‘behavioural’ explanations may suggest that minority groups have diseases related to their diet and customs or react to them and seek help according to their cultural norms. On the other hand, health care providers may also lack knowledge about language, cultural ways of expressing need, or religious and other aspects of lifestyle and preferences which affect the best way to help service users. Health service agencies may lack the ability or knowledge to respond to language and cultural needs. Across all of these factors also are the effects of social class, poverty, education, location and occupation, which also affect health inequalities in the majority population.

There have been few studies which have been successful in the attempt to 'disentangle' the influence of ethnic group membership from other correlated factors. Clearly, the direction of causation of associated factors is important. Low use of a service may arise from a low level of need or from lack of access, or from problems in the quality of the service. Only the latter two require intervention in policy and practice, while the former may be a justifiable reason to ignore apparent inequalities. On the other hand, many traditional aspects of some minority ethnic cultures, religions and lifestyle are associated with relatively good health outcomes (such as reliance on vegetarian diets, or avoidance of tobacco among Sikhs and alcohol among Muslims). Low use of services to deal with alcohol or tobacco-related problems may indicate difficulties in accessing them among those who do have
specific needs, or be a temporary phenomenon relating to generations or individuals who have not adopted ‘western’ British lifestyles. That said, if an inequality is said to be ‘explained’ in terms of another causal factor, that process should be examined in case it is itself an indirect expression of societal racism or ethnic inequality, such as fear of racial harassment leading to living in ‘ghettos’.

1.9.0 Causes of Health Inequalities

"Inequalities in health arise because of inequalities in society – in the conditions in which people are born, grow, live, work and age” (Marmot, 2010). The causes of health inequality are complex but they do not arise by chance. The social, economic and environmental conditions in which we live strongly influence health. These conditions are known as the social determinants of health, and are largely the results of public policy. Health inequalities exist because of unequal distributions of social, environmental and economic conditions within societies, which determine the risk of people getting ill, their ability to prevent sickness, or ease of access to proper treatment and health care services.

1.9.1 Racial and Ethnic Inequalities in Health

There is a working consensus that inequalities exist in the health and health care experiences of minority ethnic groups. This is referred to frequently in policy documents and reviews. Tackling inequality and promoting racial equality are both issues which have been given high priority in national Government and Departmental policy, and are also objectives for local and regional bodies.
The Race Relations Amendment Act (2000) places an explicit general duty on all public bodies to reduce inequalities between ethnic groups, and to promote racial harmony, while the NHS Plan (as reiterated in the Public Health White Paper (“Choosing Health A Public Health Strategy” DH 2004) has the reduction of inequality in health outcomes as a key objective, which is to be achieved through local action as well as national planning. This review draws upon an extensive collation of recent research reports and reviews to bring together the evidence relating to the scope, nature and scale of ‘racial’ inequality in health in England and Wales.

Evidence of inequality in health outcomes between ethnic groups, as measured by crude death rates and self-reported levels of health is well documented, although relying in most cases on proxy measures of ethnicity. Information on morbidity (disease levels) suggests that certain areas of health also demonstrate considerable variations in prevalence between ethnic groups. The reasons for these variations are not always well established and may reflect real genetic or biological differences, differences in reporting, or differences in the environmental conditions that lead to ill health. There also appear to be noteworthy differences between minority ethnic groups (and the majority white population) in the use made, and experience of, health care services, both in terms of levels of uptake and in terms of satisfaction or quality of care. These differences also may be a product of differing levels of need, or the result of inequalities in service delivery that may respond to intervention.
1.9.2 Caste Based Inequality

Caste is a major indicator of health outcomes and mandates the need for interventions that change social structures. The caste system, with its societal stratification and social restrictions, continues to have a major impact on the country. The system, generally identified with Hinduism, is also prevalent among Christians, Sikhs and Muslims. While some barriers are broken in urban settings, many continue to persist in rural India. While the secular, socialistic and democratic principles enshrined in the Constitution demand equality of outcomes, the inherent caste-related inequality continues to dominate reality in Indian society. Much of the debate has focused on reservation in educational institutions and employment, and rarely highlights the inequalities in health.

Social constructs Many studies have documented that the caste system is a social construct in the absence of any real genetic differences among castes. Caste, in many ways, is similar to race, which is also a social concept without genetic basis. Nevertheless, these social constructs seem to have a stranglehold on human thought, perpetuating prejudice and propagating unjust societal structures.

Health indicators Data from the National Family Health Survey-III (2005-06) clearly highlight the caste differentials in relation to health status. The survey documents low levels of contraceptive use among the Scheduled Castes and the Scheduled Tribes as compared to forward castes. Reduced access to maternal and child health care is evident with reduced levels of antenatal care, institutional deliveries and complete vaccination coverage among the lower castes.
Stunting, wasting, underweight and anaemia in children as well as in adults are higher among the lower castes. Similarly, neonatal, postnatal, infant, child and under-five statistics clearly show a higher mortality among the SCs and the STs. Problems in accessing health care is higher among the lower castes. The National Family Health Survey-II (1998-99) documented a similar picture of lower accessibility and poorer health statistics among the lower caste and class of the society.

The poor, a majority from the lower castes, migrate to different parts of the country in search of work. Their migrant status means they lose many benefits generally offered to the poorer sections as their below poverty line and ration cards are not valid across State borders. The migrants find it difficult to register with the National Tuberculosis Programme at their place of work, resulting in out-of-pocket expenditure for treatment, discontinuation of medication when symptoms improve, relapse of the disease, medication resistance and premature death. Illness and its treatment usually wipe out all savings and are a common reason for indebtedness. Migrants are often considered vectors of communicable diseases and are not engaged by the public health system as they drive down indicators of health. The complete absence of schooling for their children implies a continuation of the cycle of poverty. Their inability to register with local electoral bodies means they fall off the radar of politicians and political parties.

Therefore, broadly health determinants can be classified into

1. General socio-economic, cultural and environmental conditions
2. Living and working conditions
3. Social and community influences

4. Individual lifestyle factors

5. Age, Sex and Hereditary factors.

This may include differences in the presence of disease, access to health care across racial, ethnic, sexual orientation and socio-economic groups. The term “Inequalities” also refers to a lack of health equity, which is evident in the developing world, where the importance of equitable access to health care has been cited as crucial to achieving many of the Millennium Development Goals. It cuts across a broader social factors like discrepancies in food habits, use and abuse of drugs like smoking, alcoholism, income inequalities, inequalities in the health system and the immediate environment which directly or indirectly affects health experiences, disease and mortality rate. Thus, “thinking in broad terms about the causes of ill health may offer cost-effective opportunities in the long run” (Bunker, Gomby and Kehrre 1989; Marmot and Wilkinson 1999). With the advancement of medicine and sciences, there has been an improvement in quality of life. However, traditional public health measures like safe drinking water, better sanitation, immunization, food safety etc. have not been stressed upon in the developing nations therefore leaving them almost stagnant and taken for granted. The other inherent factors significantly influence the nature of inequality includes- “Social stratification, the integrity of governmental process, economic and cultural arrangements, available technologies, mode of production and the environment itself.” (Benjamin 1965; Dorn 1959; Kunitz 2007; Mechanic 1978).
1.10.0 Health Inequality in India

The multiplicities of factors contribute over the life course to chronic disease and mortality. The analyses of mortality often center on specific determinants that appear amenable to intervention. Access to health services here plays a very important role. Accordingly, the role and importance of any single factor for any particular outcome are likely to depend on time, place, life stage and the social context. Impressive achievements and intolerable shortcomings have characterized the Indian health scenario from the past 45 years. Given India’s overall achievements on health are not so encouraging. Per capita income, for instance, have steadily increased over the years and spectacular gains have been made in the field of food production. An enormous pool of scientific skills, technical and managerial manpower has been built up. Massive investment has gone into infrastructure development and building of the industrial base. Despite these achievements millions of people lack access to food, shelter, safe drinking water etc. diseases arising out of acute malnutrition persists and more than a third of the population remains illiterate. Severe shortages continue in spite of the recent expansion in provisioning public health services. India is a country experiencing demographic, epidemiologic and health transition simultaneously and differentially. While India’s mortality has been underway for the past 60 years, fertility has begun to decline over the past 20 years. At the same time, India appears to be in the midst of an epidemiologic transition in which chronic and degenerative diseases are increasingly displacing the poverty related health problems of infection, malnutrition and reproduction. India represents a striking picture where people in the same country live in entirely different health worlds, reflecting at many levels, an unfortunate
polarization of health between different groups of people in society. The issues of health financing and pricing of services are also in lime light.

Inequalities pervade equally in all sectors of India. A recent study by the National Council for Applied Economic Research (NCAER) reveals that the richest 20 per cent enjoy three times the share of public subsidy for health compared with the poor quintile. The poorest 20 per cent of Indians have more than double the mortality rates, fertility rates and under nutritional levels of the richest 20 per cent. The poor suffer disproportionately more from transition diseases such as Malaria and TB. On an average they spent 12 per cent of their income on the health care, as opposed to only 2 per cent by the rich. A look at some of the statics on Health Inequalities in India brings out the stark realities in force. The table reflects the reality and we can make out the extent of subsidy on health services that the rich get against the poor. For example, in Bihar for every ten rupees of subsidized health service that a rich man gets a rupee of health service subsidized. Similarly in states like Orissa, Madhya Pradesh and Uttar Pradesh, Rajasthan and Himachal Pradesh the extent of the subsidy that rich get over the poor is highly unjustifiable. Further there is a degree of correlation between the rank of the State and the extent of Income bias in public spending on health. The top four ranked state in India have a lesser degree of income bias compared to the bottom four states.
Table 1.1 Income Bias in public spending on curative curve across States in India by State

<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>Ratio of subsidy to richest versus poorest quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kerala</td>
<td>1.1</td>
</tr>
<tr>
<td>2</td>
<td>Gujarat</td>
<td>1.14</td>
</tr>
<tr>
<td>3</td>
<td>Tamil Nadu</td>
<td>1.46</td>
</tr>
<tr>
<td>4</td>
<td>Maharashtra</td>
<td>1.21</td>
</tr>
<tr>
<td>5</td>
<td>Punjab</td>
<td>2.93</td>
</tr>
<tr>
<td>6</td>
<td>Andhra Pradesh</td>
<td>1.85</td>
</tr>
<tr>
<td>7</td>
<td>West Bengal</td>
<td>2.73</td>
</tr>
<tr>
<td>8</td>
<td>Harayana</td>
<td>2.98</td>
</tr>
<tr>
<td>9</td>
<td>Karnataka</td>
<td>3.58</td>
</tr>
<tr>
<td></td>
<td>All India</td>
<td>3.28</td>
</tr>
<tr>
<td>10</td>
<td>North East</td>
<td>3.16</td>
</tr>
<tr>
<td>11</td>
<td>Orissa</td>
<td>4.87</td>
</tr>
<tr>
<td>12</td>
<td>Madhya Pradesh</td>
<td>4.16</td>
</tr>
<tr>
<td>13</td>
<td>Uttar Pradesh</td>
<td>4.09</td>
</tr>
<tr>
<td>14</td>
<td>Rajasthan</td>
<td>4.95</td>
</tr>
<tr>
<td>15</td>
<td>Himachal Pradesh</td>
<td>5.88</td>
</tr>
<tr>
<td>16</td>
<td>Bihar</td>
<td>10.3</td>
</tr>
</tbody>
</table>

Source: India Raising the sights- Better Health Systems for India’s poor, World Bank 1997  Note: No Studies have been done after 1997 on “Ratio of subsidy to richest versus poorest quintile:
Table 1.2 Comparisons between the poorest and the richest quintiles of the population on Health Status Indicators-India

<table>
<thead>
<tr>
<th>Health Status Indicators</th>
<th>Poorest 20%</th>
<th>Richest 20%</th>
<th>Poor/Rich Risk Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMR(Deaths under 12 months per 1000 births)</td>
<td>109.0</td>
<td>44.0</td>
<td>2.5</td>
</tr>
<tr>
<td>Under 5 mortality rate(per 1000 births)</td>
<td>155.0</td>
<td>54.0</td>
<td>2.8</td>
</tr>
<tr>
<td>Childhood underweight</td>
<td>60.0</td>
<td>34.0</td>
<td>1.7</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>4.1</td>
<td>2.1</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Source: India Raising the sights- Better Health Systems for India’s poor, World Bank 1997

This implies that even the comparison of health status indicators between the poorest and the richest quintiles of the population brings out unacceptable levels of inequalities prevailing in India. In all the four indicators, we can clearly see that the poor are more vulnerable compared to the rich.

Social and Economic Inequality

Social and economic inequality is detrimental to the health of any society. Especially when the society is diverse, multicultural, overpopulated and undergoing rapid but unequal economic growth. In the beginning, there was desire which was the first seed of mind,” says Rig-Veda, which probably is the earliest piece of literature known to mankind. This desire for a healthy family, healthy society and a
healthy country drives individuals and governments alike. The government is supposed to create settings that will provide equal opportunity for an individual to fulfill these desires. There is an undisputed association between this social equality, social integration and health. The effect of social integration on health is conclusively documented in the theory of ‘social support’ [Cassel, 1976]. The effect of social and economic inequality on health is profound too. Poverty, which is a result of social and economic inequality in a society, is detrimental to the health of population. The outcome indicators of health (mortality, morbidity and life expectancy) are all directly influenced by the standards of living of a given population. More so, it is not the absolute deprivation of income that matters, but the relative distribution of income [Wilkinson, 1992]. Various international studies have documented a strong association between income inequality and excess mortality. In a study by Kennedy et al, income inequality was shown to directly affect the total mortality in a given population. The same study measure income inequality by ‘Robin Hood Index’, which is the part of 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.

When applied to Indian context these social theories translate into millions of lives that perish due to a lack of socio-economic equality. Since the emergence of free India in 1947, economic egalitarianism dominated the economic policies. Socialism and government-centered economic policies were favored over the profit-making private enterprise and capitalism.
Though admirable for its motives, these policies led to over-dependence on the bureaucracy and stifled the growth of free enterprise. Slow and unequal social mobilization in various parts of India led to an uneven economic growth. Caste and social polarization, literacy and educational levels, natural resources, levels of corruption and role of political leadership has resulted in some Indian states doing better than others on the economic front. This basic inequality was magnified by the rapid but unequal economic growth that India has witnessed in the last two decades. Amidst the rising standards of living, lie pockets of terrible poverty and deprivation.

1.11.0 Unequal Distribution of Healthcare Resources in India

Healthcare resources in India though not adequate, are ample. There has been a definite growth in the overall healthcare resources and health related manpower in the last decade. The number of hospitals grew from 11,174 hospitals in 1991 (57% private) to 18,218 (75% private) in 2000. In 2000, the country had 1.25 million doctors and 0.8 million nurses. That translates into one doctor for every 1800 people. If other systems including Indigenous System of Medicine (ISM) and homeopathic medicine are considered, there is one doctor per 800 people. It not only satisfies but also betters the required estimate of one doctor for 1500 population. Approximately 15,000 new graduate doctors and 5,000 postgraduate doctors are trained every year. The country has an annual pharmaceutical production of about 260 billion (INR) and a large proportion of these medicines are exported.
1.11.1 Difficulties in Access to Health Care

Universal access to healthcare is a norm in most of the developed countries and some developing countries (Cuba, Thailand and others). In India though, pre-existing inequality in the healthcare provisions is further enhanced by difficulties in accessing it. These access difficulties can be either due to

1. Geographical distance

2. Socio-Economic distance

3. Gender distance

The issue of geographic distance is important in a large country like India with limited means of communication. Direct effect of distance of a given population from primary healthcare centre on the childhood mortality is well documented. It has been shown that the effect of difficult access to health centers is more pronounced for mothers with less education. The same study also states that distance from private hospitals does not affect the health parameters but the distance from public health centre does. Those who live in remote areas with poor transportation facilities are often removed from the reach of health systems. Incentives for doctors and nurses to move to rural locations are generally insufficient and ineffective. Equipping and re-supply of remote healthcare facilities is difficult and inadequacies due to poor supply deter people from using the existent facilities. Maternal mortality is clearly much higher in rural areas as trained medical or paramedical staff attends fewer births and transport in case of pregnancy complications is difficult.
Geographical difficulties in accessing healthcare facilities thus is an important factor, along with gender discrimination, that contributes to higher maternal mortality in women who live in remote areas especially the tribal women in India.

A different aspect of healthcare access problem is noticed in cases of ‘urban poor’. Data from urban slums show that infant and under-five mortality rates for the poorest 40% of the urban population are as high as the rural areas. Urban residents are extremely vulnerable to macroeconomic shocks that undermine their earning capacity and lead to substitution towards less nutritious, cheaper food. People in urban slums are particularly affected due to lack of good housing, proper sanitation, and proper education. Economically they do not have back-up savings, large food stocks that they can draw down over time. Urban slums are also home to a wide array of infectious diseases (including HIV/AIDS, tuberculosis, hepatitis, dengue fever, pneumonia, cholera, and malaria) that easily spread in highly concentrated populations where water and sanitation services are non-existent. Poor housing conditions, exposure to excessive heat or cold, diseases, air, soil and water pollution along with industrial and commercial occupational risks, exacerbate the already high environmental health risks for the urban poor. Lack of safety nets and social support systems, such as health insurance, as well as lack of property rights and tenure, further contribute to the health vulnerability of the urban poor. Though the healthcare facilities are overwhelmingly concentrated in urban areas, the ‘socio-economic distance’ prevents access for the urban poor. These socio-economic barriers include cost of healthcare, social factors, such as the lack of culturally appropriate services, language/ethnic barriers, and prejudices on the part of providers. There is also significant lack of health education in slums.
All these factors lead to an inability to identify symptoms and seek appropriate care on the part of the poor.

The third most important access difficulty is due to gender related distance. It is said that health of society is reflected from the health of its female population. That is completely disregarded in many of the south Asian countries including India. Gender discrimination makes women more vulnerable to various diseases and associated morbidity and mortality. From socio-cultural and economic perspectives women in India find themselves in subordinate positions to men. They are socially, culturally, and economically dependent on men. Women are largely excluded from making decisions, have limited access to and control over resources, are restricted in their mobility, and are often under threat of violence from male relatives. Sons are perceived to have economic, social, or religious utility; daughters are often felt to be an economic liability because of the dowry system. In general an Indian woman is less likely to seek appropriate and early care for disease, whatever the socio-economic status of family might be. This gender discrimination in healthcare access becomes more obvious when the women are illiterate, unemployed, widowed or dependent on others. The combination of perceived ill health and lack of support mechanisms contributes to a poor quality of life.

1.11.2 Private Healthcare and Economic Inequality

The growth of private healthcare sector has been largely seen as a boon, however it adds to ever-increasing social dichotomy. The dominance of the private sector not only denies access to poorer sections of society, but also skews the balance towards
urban-biased, tertiary level health services with profitability overriding equality, and rationality of care often taking a back seat.

The increasing cost of healthcare that is paid by ‘out of pocket’ payments is making healthcare unaffordable for a growing number of people. The number of people who could not seek medical care because of lack of money has increased significantly between 1986 and 1995. The proportion of people unable to afford basic healthcare has doubled in last decade. One in three people who need hospitalization and are paying out of pocket are forced to borrow money or sell assets to cover expenses. Over 20 million Indians are pushed below the poverty line every year because of the effect of out of pocket spending on health care. In the absence of an effective regulatory authority over the private healthcare sector the quality of medical care is constantly deteriorating. Powerful medical lobbies prevent government from formulating effective legislation or enforcing the existing ones. 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. The same report also states the relation between quality and price that exists in the private healthcare system. The services offered at a very high price are excellent but are unaffordable for a common man. This re-emphasizes the role socio-economic inequality plays in healthcare delivery.

1.11.3 Bias in Policies and Health Inequalities

An effective policy is one which achieves both an absolute and a relative improvement in the health of the poorest groups (or in their social conditions and in the prevalence of risk factors). Analyses of policy impact therefore still require data
on absolute changes in the targeted outcomes among those groups defined as the worst off.

In addition, information is required on absolute changes in the same outcomes among those with whom they are being compared for example, among the highest socioeconomic group or among the population as a whole. Such information is needed to estimate whether the rate of improvement in disadvantaged groups is greater than that in the comparison group a faster rate of improvement is the essential criterion of effectiveness when narrowing gaps is the policy goal. However, focusing on health gaps can limit the policy vision

• The problem and the policy response are again confined to a small proportion of the population. The life expectancy target is aimed at the 20% of areas with the lowest life expectancy; the infant mortality target includes around 40% of births, but it has been criticized for not focusing sufficiently on the disadvantaged groups with the worst health outcomes

• It can encourage perspectives which identify the lifestyles of disadvantaged groups as the cause of health inequalities. Much less attention is given to how the privileges enjoyed at the top of the socioeconomic hierarchy facilitate rates of health improvement which have consistently outstripped those of other socioeconomic groups

• It can obscure the pervasive effects which socioeconomic inequality has on health not only at the bottom, but across the socioeconomic hierarchy.
1.11.4 Effect of Economic Inequality on Health

Health care and income might be said to be directly proportional as we find that better health care opportunities can be achieved only if the is economic stability. According to the Robert Wood Johnson Foundation Commission, America, income and health have a relation which is in fact deeper than just the literal meaning of the terms. A better income would assure an overall wellbeing in terms of better localities and better standards of living which would then directly imply that people belonging to this category will be less prone to communicable diseases borne by unhealthy lifestyle and low standards of living. In fact the relation between income and health is evident as much in the early years of life as a child born into a family with low income is 40% more likely to suffer from low birth weight and other chronic illness later in life as compared to their richer counterparts. While the marginalized and the lower income groups experience the worst health conditions, even the so called middle class suffers bad health conditions as compared to the highly affluent people in society.

Income influences health in more than one way. Firstly, economic resources can be used to achieve goods and services directly promoting health conditions. People belonging to a lower income group usually do not have a much access to these resources as compared to the richer section of the society. Next, the opportunities of employment have an impact on the psychology and the people with lower incomes usually are ill affected as they do not have proper employment opportunities throughout their lives and as a result they are never able to have sufficient money in their hands. This causes a psychological setback. Thirdly, people with low incomes have an overall disadvantage over health care facilities and other facilities which
shape the future of well-being. In modern society, the health care services have become so expensive that the marginalized section of the society can hardly afford these services and on top of everything, the public sector is hardly efficient in meeting out care to the people as expected.

Health standards of a country reflect the social, economic, political and moral well being of its ordinary citizen.

Economic and social growth of a society and country is directly dependant on the health of its constituents. Healthy living conditions and access to good quality health care for all citizens are not only basic human rights, but also essential prerequisites for social and economic development. Any inequality in social, economical or political context between various population groups in a given society will affect the health indicators of that particular society. The most sensitive indicators of health of the society are infant and maternal mortality rates (IMR and MMR). IMR is still significantly high in India. Around 2.2 million infants die every year. In fact the National Health Policy 1983 target to reduce Infant Mortality Rate to less than 60 per 1000 live births has still not been achieved. The National Health Policy had also set a target for 2000 to reduce Maternal Mortality Rate to less than 200 per 100,000 live births. However, 407 mothers die due to pregnancy related causes, for every 100,000 live births even today. In fact, as per the NFHS surveys in the last decade Maternal Mortality Rate have increased from 424 maternal deaths per 100,000 live births to 540 maternal deaths per 100,000 live births. Apart from these avoidable deaths, India has seen persistence and resurgence of many infectious diseases. About 0.5 million people die from tuberculosis every year in India and this number has hardly changed in last five decades. Other communicable diseases like Malaria,
Encephalitis, Kala Azar, Dengue and Leptospirosis to name a few, are far from being eradicated. The number of reported cases of Malaria has remained at a high level of around 2 million cases annually since the mid eighties. The outbreak of Dengue in India in 1996-97 saw 16,517 cases and claimed 545 lives.

Simple curable diseases like diarrhea, dysentery, acute respiratory infections and asthma also take their toll due to weak public health system and lack of awareness. Around 0.6 million children die each year from an ordinary illness like diarrheal.

While diarrhea itself could be largely prevented by universal provision of safe drinking water and sanitary conditions, these deaths can be prevented by timely administration of Oral Re-hydration Solution (ORS), which is presently administered in only 27% of cases. Cancer claims over 0.3 million lives per year and tobacco related cancers contribute to 50% of the overall cancer burden, which means that such deaths might be prevented by tobacco control measures.

These health outcome indicators reflect a very disappointing state of public healthcare. The unfortunate fact is, these indicators have failed to improve in spite of various state run programs, mushrooming of private healthcare and a perceptible increase in the GDP. This underscores the importance of social and economic inequality as the stumbling block.

### 1.11.5 Environmental Influence and Health

Minority populations have increase exposure to environmental hazards that include lack of neighbourhood resources, structural and community factors as well as residential segregation that result in a cycle of disease and stress. The environment that surrounds us can influence individual behaviours and lead to poor health
choices and therefore outcomes. Minority neighbourhoods have been continuously noted to have more fast food chains and fewer grocery stores than predominantly white neighbourhoods. These food deserts affect a family’s ability to have easy access to nutritious food for their children.

This lack of nutritious food extends beyond the household into the schools that have a variety of vending machines and deliver over processed foods. These environmental conditions have social ramifications and in the first time in US history is it projected that the current generation will live shorter lives than their predecessors will.

In addition, minority neighbourhoods have various health hazards that result from living close to highways and toxic waste factories or general dilapidated structures and streets. These environmental conditions create varying degrees of health risk from noise pollution, to carcinogenic toxic exposures from asbestos and radon that result in increased chronic disease, morbidity, and mortality. The quality of residential environment such as damaged housing has been shown to increase the risk of adverse birth outcomes, which is reflective of a community’s health. Housing conditions can create varying degrees of health risk that lead to complications of birth and long-term consequences in the aging population. In addition, occupational hazards can add to the detrimental effects of poor housing conditions. It has been reported that a greater number of minorities work in jobs that have higher rates of exposure to toxic chemical, dust and fumes.

Racial segregation is another environmental factor that occurs through the discriminatory action of those organizations and working individuals within the real estate industry, whether in the housing markets or rentals. Even though residential
segregation is noted in all minority groups, blacks tend to be segregated regardless of income level when compared to Latinos and Asians. Thus, segregation results in minorities clustering in poor neighbourhoods that have limited employment, medical care, and educational resources, which is associated with high rates of criminal behaviour. In addition, segregation affects the health of individual residents because the environment is not conducive to physical exercise due to unsafe neighbourhoods that lack recreational facilities and have nonexistent park space. Racial and ethnic discrimination adds an additional element to the environment that individuals have to interact with daily. Individuals that reported discrimination have been shown to have an increase risk of hypertension in addition to other physiological stress related affects. The high magnitude of environmental, structural, socioeconomic stressors leads to further compromise on the psychological and physical being, which leads to poor health and disease.

1.12.0 Need for Inequality Reduction Methods

In the preceding sections an attempt has been made to understand the nature of the problem of health inequality. Throughout the preceding discussions, need for the inequality reduction has been covertly said as well being or what is it that ‘ought to be good’ in the absence of inequality. Therefore, at this juncture it is intended that well-being or welfare be defined and also the chronological progression of the idea of welfare- in so far as it annexes inequality reduction- be presented so that, it would be easier to appreciate assessments of inequality in the context of wellbeing and welfare.

Welfare could be defined as that branch of multidisciplinary study which endeavors to formulate propositions by which it could be said that one situation provides more
‘good’ to society or another situation provides less ‘good’ to the society. It is in the definition itself that one finds normative foundations of the study of welfare. But there is no logical reason as to why it is not possible adopts a positive definition of the term “social welfare”.

If Welfare is considered as a science and science is a collection of truths; art, a body of rules, or directions of conduct (Mill, 1844, pp123-4), any propositions of the science could be verified or falsified. Therefore, there could and ideally should be a two-phase normative or positive study, it is clear that the subject of welfare, for a long time has been debating on different methods for reducing inequalities.

1.13.0 Chronology of Welfare debates Advocating Reduction in Inequalities

Bernard Mandeville(1670- 1731) while observing, bee’s society in a bee-hive in their non-moral state, fond at every part of the bee-hive was full of vice/ at the whole mass a paradise. This perhaps inspired him to write, in his ‘Fable of Bees’ (1720), “that the promotion of the traditional virtues of abstinence and self-restraint was destructive of public welfare”. Influenced by this analogy, particularly, the possibility of a mass paradise being erected upon the foundation of vice, Jeremy Bentham and Adam Smith, in their understanding of the welfare state advocated varying degrees of self-interest at the personal level for human beings as a foundation upon which a good welfare state could be erected. Thus, the concept of “Welfare State”, as propounded by Smith and Bentham relied excessively on the notion of “Laissez Faire” and self-interest respectively. If this, in some ways could be said at the beginning of the modern welfare state, Jeremy Bentham- an aggressive
utilitarian- annexed to ethics to welfare through his somewhat ambiguous claim, that “It is the greatest happiness of the greatest number that is the measure of the right and wrong”, to herald the beginning of the Benthamite tradition of maximized utilitarianism (European Utilitarianism) in welfare economics.

Since then a large number of economists have used utilitarian principles to propound many theories of welfare economics. To name a few important contributions; Sedgwick and Edge worth through their dichotomization of ‘egoism’ and utilitarianism have propounded that, the goodness in any given action is that it produces the greatest possible amount of pleasure. This hedonism, however, is not confined to the self-ego, but involves a due regard to the pleasure of others, and is therefore, distinguished further as universalistic. Vilfredo Pareto through his Pareto optimality propounds a type of redistribution in which a society enjoys maximum optimality when no one can be made better off without making someone else worse off. Kaldor and Hicks propose a compensation principle according to which any economic change or reorganization should be considered beneficial, if after the change, gainers could hypothetically compensate the losers and still be better off. Bergson and Samuelson on the other hand have formulated social welfare functions through the community indifference curves. The social welfare functions are akin to individual consumer utility functions thus enabling evaluation of alternative social states and their possible welfare.

Policy makers need to recognize the primacy of good health as an essential component of human development in India. It is important to view health more holistically and understand how social, cultural, political, economic and other factors interact to constrain people’s access and contribute to human deprivation.
The inter-connections are often complex and policy interventions needs to be more people focused, broad-based and multi-pronged. The entire concept of welfare state should be developed holistically in order to cater to the human needs in a fully-fledged way.

1.13.1 Role of State in reducing Health Inequalities

There lies no mystery as to the fact that that poor, the socially and economically downtrodden suffer from a greater incidence of ill health than their richer counterparts. This can be attributed to the facts that the downtrodden always are exposed to unhealthy living conditions like the unavailability of clean and proper source of drinking water, proper sanitation, housing facilities, and two square meals in a day and so on.

A major reason as to why health inequalities exist in developing countries can be said to be the fact that there is a lack of grass-root level work and the facilities that are supposed to be provided by the so called “welfare states”, hardly ever reach those nooks and corners which would best reap its benefits. Here the role of a State, in true sense of the term, in reducing the inequalities in health can be debated and understood.

To assess the major inequalities in the conditions of healthcare; the World Health Survey (WHS) was conducted by the WHO at a multi-country level, celebrated in 70 countries. Data was collected to throw light on three major areas namely, the degree of health of the citizens, the effectiveness of the public health care system and the intensity to which it reaches out to people, chief ailments of the present population and the amount every household spends on procuring quality health care in times of
illness. The expenditure on illness would in turn reflect the pattern of falling ill of household members and in case of illness whether the public health care system is able to provide treatment or do people have to rely on expensive private care.

In India the World Health Organization along with the Government of India conducted this survey in one of each state from all the geographical regions of India. Data was gathered on the way people were treated when they approached the Health care systems and whether at all the so called State run health systems fulfilled their expectations and whether justice was delivered.

The findings of the survey pointed out that though the health care systems had a good level of efficiency, they were far below the expectations of people and the general level of infrastructural facilities was far below what was expected from such State run health systems.

Though the role of Government is to ensure an overall equality in the health care systems, the levels of corruption and red-tapeism has been enmeshed in the system to such an extent that price is being paid by the general public in terms of poor healthcare conditions, lack of proper infrastructural facilities and sheer negligence on the part of the hospital staff. The way budgeting has been carried out in the five year plans and the way implementation of policies has been done, there is a lack of responsiveness on the part of the Government.

However the position of the male population is still considered to be better when compared to the female population. The screaming gender is evident in the lack of proper maternal healthcare facilities, the high rates of maternal mortality, female feticide; high infant mortality rates still haunt India and openly question the
effectiveness of the health policies prevalent in India. The 11th Five year plan however talks about bridging the gap and concentrating on the marginalized sections of the society like women, adolescents, children, elderly people and the differently able so that healthcare systems respond to their needs in a much better way.

Though this aspect has been spoken about by all the five year plans, it is yet to be seen whether the 11th Five year plan will be any better in terms of dealing with these wide based problems.

The irony of the situation however lies in the fact that people in need of quality health care are most certainly the ones who are deprived of it. The growing rates of inflation, rapid urbanization of the rural poor, increasing gap among the rich and the poor and the expensive private healthcare system prevailing in India have created a considerable level of inequality in the process of acquiring quality healthcare. Socio-economic discrepancies also add on to the already existing inequalities in the system of healthcare as the socio-economic background of a person clearly determine the availability of resources and healthcare facilities in India.

The State or the government can be called the greatest service provider and as such the role of the government would be the fair and impartial distribution of all services that the citizens are supposed to be given. The role of the State is therefore critical and can be expressed in multiple channels. According to the World Health Organization and its Regional Office for the South-East Asia, the role of the State in reducing health inequalities is most crucial and can be laid down. The general motive is always to improve the overall access to the health care services which can be achieved through increasing public expenditure in the health sector and to by
allocating infrastructural facilities to the existing system of health care. To achieve this, the approach should be multi-disciplinary. At the level of policy making, effort should be made to make policies which are pro-equity, implementation of these policies at all tertiary, secondary and primary levels of service provision must be ensured and government expenditure on the health sector must be increased, which presently is only 5.2% of GDP which is not even closer to the international standard and recommendation of expenditure on health care.

Secondly, reallocation of government resources on need basis must be spread out to geographical regions, especially reaching out to the primary health care sector pertaining to the rural and the under-developed regions for better and improved access to health care by all and sundry irrespective of discriminations. Thirdly, monitoring, evaluating and analysing the indicators of health in all geographical regions and stratifications must be carried out to get an overall view of the pertinent and present health inequalities in various areas.

Fourthly, taking a multi-department approach on the part of the Ministries of Health to ensure inter-sectoral and intra-sectoral participation cutting across various departments of the government is essential to reduce the gap that has been created in the system of health care in reaching out to all sections of the society and not being present for only the well to do. Lastly, the government should also encourage the role of civil society in the process of reducing inequalities in the system of health care as the society should be a place where every section mutually benefits each other and advocates its needs and requirements.
1.14.0 Human Development Index

“Human Development Index (HDI) is a composite static used to rank countries by level of “human development” “Life Expectancy” is one such HDI parameter which if improved will help further the desired goal of broad-based growth, covering larger part of the population and in turn, will help to upgrade India’s ranking based on HDI.

The concept of human development is complex and multidimensional. Human development index (HDI) is extensively used to measure the standard of living of a country. HDI is calculated based on three indices; life expectancy to measure longevity, educational attainment to represent knowledge and real gross domestic product (GDP) to represent income. India made progress on the HDI value that has gone up from 0.595 in 2002 to 0.602 in World Human Development Report (HDR) 2005 On HDI ranking, India is again ranked at 127 of 177 countries. India’s rank on the human poverty index (HPI) is 58 in a universe of 103 developing countries. On the gender development index (GDI), India’s rank is 98 in a universe of 140 countries.

The variations in HDI could be socio-economic status (SES), demographic, health, and diet and nutrition indicators. Therefore, composite indexes of all these indicators can better represent the real human development and poverty status for Indian States.

The Millennium Development Goals (MDGs) aim towards the reduction of maternal and child mortality. Low incomes, relatively higher prices, bad healthcare and neglect of basic education can all be influential in causing and sustaining the
extraordinary level of under nutrition in India. Yet, it has been shown that, even after taking note of low levels of these variables, “one would have expected a much higher level of nutritional achievement. In most of Asia where the Green Revolution boosted food supplies, hunger and under nutrition have continued to decrease since 1981”. Despite the availability of surplus food grains in India and in South Asia, the region is still facing high levels of hunger.

Even though, some of India’s southern cities may be in the midst of technology boom, 1 in every 11 children dies in the first 5 years of life due to malnutrition, non availability of low cost technology, or low cost intervention. Extreme poverty is concentrated in rural areas of northern States while income growth has been dynamic in southern States and urban areas. The incidence of income poverty has fallen from 36 per cent in the early 1990s to about 25 per cent in 2005.

The analysis of the human development and poverty situation in the major States of India is of prime importance to plan any further studies related to health and nutrition. An attempt to study was made to study

(i) The trends in HDI, HPI and incidence of poverty among Indian States

(ii) The socio-economic, health, and diet and nutritional indicators which in term determine the HDI among Indian States. The changes in protein and calorie adequacy status of rural population and situation of malnutrition among children were also analyzed.

Human development is now customarily measured through the human development index (HDI), which is based on four variables covering life expectancy, adult literacy, education enrolment ratios and gross domestic product per capita.
Acknowledging that the concept itself is broader than any of its measures, the chapter next considers how, in a larger context, human development includes not only basic choices but also additional choices encompassing human freedoms, human rights and knowledge. Following a discussion of several freedoms instrumental to human well-being, a key suggestion is put forth that an alternative HDI could help to measure these other key variables that vitally influence human development. The basic goal of development is to create an environment that enables people to enjoy a long, healthy, creative life. This fundamental truth is often forgotten in the immediate concern with the accumulation of goods and money. Preoccupation with economic growth and the creation of wealth and material opulence has obscured the fact that development is ultimately about people. It has had the unfortunate effect of pushing people from the centre to the periphery of development debates and dialogues. The publication of the first Human Development Report (HDR) by the United Nations Development Program (UNDP) in 1990 was a modest attempt to reverse this trend.

With the introduction of the concept of human development, the construction of a composite measure for it and a discussion of the relevant policy implications, the HDR changed the way of looking at development and dealing with the issues it presents.

Each year since 1990 the Human Development Report has published the Human Development Index (HDI) which was introduced as an alternative to conventional measures of national development, such as level of income and the rate of economic growth. The HDI represents a push for a broader definition of well-being and provides a composite measure of three basic dimensions of human development.
health, education and income. India's HDI is 0.547, which gives the country a rank of 134 out of 187 countries with comparable data. The HDI of South Asia as a region increased from 0.356 in 1980 to 0.548 today, placing India below the regional average. The HDI trends tell an important story both at the national and regional level and highlight the very large gaps in well-being and life chances that continue to divide our interconnected world.

1.14.1 Defining Human Development Index

Human development can be simply defined as a process of enlarging choices. Every day human beings make a series of choices – some economic, some social, some political, some Cultural. If people are the proper focus of development efforts, then these efforts should be geared to enhancing the range of choices in all areas of human endeavor for every human being. Human development is both a process and an outcome. It is concerned with the process through which choices are enlarged, but it also focuses on the outcomes of enhanced choices.

Human development thus defined represents a simple notion, but one with far-reaching implications. First, human choices are enlarged when people acquire more capabilities and enjoy more opportunities to use those capabilities. Human development seeks not only to increase both capabilities and opportunities but also to ensure an appropriate balance between them in order to avoid the frustration that a mismatch between the two can create. Second, as already implied, economic growth needs to be seen as a means, albeit an important one, and not the ultimate goal, of development. Income makes an important contribution to human well-being, broadly conceived, if its benefits are translated into more fulfilled human lives, but
the growth of income is not an end in itself. Third, the human development concept, by concentrating on choices, implies that people must influence the processes that shape their lives. They must participate in various decision making processes, the implementation of those decisions, and their monitoring and adjustment to improve outcomes where necessary. In the ultimate analysis, human development is development of the people, development for the people, and development by the people.

Development of the people involves building human capabilities through the development of human resources. Development for the people implies that the benefits of growth must be translated into the lives of people, and development by the people emphasizes that people must be able to participate actively in influencing the processes that shape their lives.

1.14.2 HDI – Parameters

1.14.2a Education

Education is an expression of human development. It helps to develop knowledge, skills, makes people healthier, confident & provides greater access to land, jobs and financial resources; it is a key driving force against poverty.

1.14.2b Gender

Women make up half of the world’s population (more than 3.3 billion people); yet experience the brunt of the world’s poverty, illiteracy and violent crime. The SC/ST’s face natural obstacles everywhere.
1.14.2c Poverty

• 27.5 percent of Indians live below the national income poverty line

• More than 60 percent of women are chronically poor

• 296 million people are illiterate

• 233 million are undernourished (especially Below 3 years)

1.14.2d Health Care

Health is Wealth. A healthy body makes one feel confident makes him highly immune to diseases.

The United Nations strategic Millennium Development Goals (MDGs) have directed focus onto the improvement of the average health status of the population (Pande and Yazbeck 2003).

However, a large number of recent studies on health inequalities have documented evidence that average health status is an inadequate summary measure of a country’s health performance or achievement (Sen 1997; Braveman 1998; Deaton 2003; WHO 2008). The assessment of health inequalities with the comparative analyses of their determinants is critical for determining the most effective health policy agenda (Braveman 1998; Deaton 2003; WHO 2008). It is clear that any evaluation of achievement needs to take into consideration both performance in addressing health inequalities and performance in terms of the average level of health for the population. In India, the levels of inequalities in health by region and state are significant and highly persistent (Pande and Yazbeck 2003; Joe et al. 2008). For instance, the demographically less advanced north Indian states of Bihar, Madhya
Pradesh, Uttar Pradesh, Rajasthan and Orissa are characterized by poor average health high levels of infant and child mortality, low rates of full child immunization coverage and high prevalence rates of child under-nutrition (IIPS and ORC Macro 2007).

However, evidence of this poor average health status is inadequate to inform policy interventions relating to the intensity of health inequalities at the state level, as the level of socio-economic inequalities in health are persistent even in some of the socio-economically well off states like Goa, Kerala and Maharashtra (Joe et al. 2008).

Such mixed trends lead to concern about the distribution in child health indicators across different groups and in particular whether the health of children has improved among the poor households. It is therefore important to measure and report concentration indices (a measure of socio-economic-related health inequality) in addition to average health status (a measure of efficiency). However, it is difficult to obtain a sense of overall achievement looking at each measure separately.

Indeed some states might have done well in improving average health status but might have become more inequitable if most improvements were in richer segments of the population. Other states may have become more equitable but less efficient in improving average health status; yet others may have improved on both grounds.

From the background of such varied contexts and corresponding policy demands, recently developed methodologies allow us to create an achievement index that combines performance on both efficiency and equity grounds. Therefore, the main aim of this paper is to examine comparative evidence on (a) wealth-related health inequalities, (b) average health status and (c) overall health achievement using the
‘achievement index’ proposed by Wagstaff (2002), for child health indicators in Indian states. The objective is to estimate achievement indices for five child health outcome indicators under-2 mortality, full immunization coverage, prevalence of stunting, of underweight and of wasting among Indian children. Comparative assessment of the evidence across states in India will help to determine whether it is equity or efficiency, or both, that requires particular attention.

1.15.0 Health Inequality and Social Work Intervention

Though Social Work is heavily undermined and its importance as a profession is not acknowledged, this is an important profession as far as health care is concerned. The basic principle of social work is to recognize the dignity of human beings and to work towards capacity building. In this regard, often the clientele of social workers are the people who generally belong to the marginalized section of the society or those chunks of the society who are not able to function fully for their own benefit. In the process of empowering people, social workers deal with the unfair structure of the society which heavily endows certain sections of the society while depriving the other sections. The same situation is experienced in health care as well.

As has been discussed and will be discussed further, there exists a widespread gap in the delivery of the health care system, due to various reasons:

- Due to the sharp rise in medical expenses, it is becoming increasingly difficult for the poor and the marginalized section of the society to access quality health care services.

- The recent trend in medical education is seeing doctors who are interested in working only in urban areas due to better living standards and better income opportunities in the urban areas. The rural areas are usually underdeveloped as
compared to the urban areas and therefore there is a lack of quality medical professionals in the rural areas.

- People of the rural areas lack awareness about illness and the general inclination is towards neglecting illness until a time when the illness finally interferes with their day to day employment.

- The primary health centres and Government health units are overburdened and usually face a paucity of doctors and health care workers and therefore treatment offered is usually irregular.

Now to talk about the role of social workers in a health care delivery system, we can take a bottom up approach:

i.) Micro Level: At the micro level or at the level of individual units, the role of the social worker is to intervene and deal with individuals. At the grass root level, social workers aim at awareness building. In this the first step is to identify the health problems of individuals and then building on that to increase the awareness of people especially about certain illnesses that are communicable or terminal in nature like TB, HIV/AIDS, malaria, leprosy and many others which are very commonly found in rural areas. Detail knowledge about these illnesses is imparted and symptoms are identified among people suffering from these diseases by social workers. They are then referred to the nearest health centres for treatment.

ii.) Mezzo Level: At this intermediate level the social worker deals with the community as a whole and also acts as a liaison in between the community and the Government health centre. The people of the community suffering from
various illnesses are taken to the health centres and the social worker negotiates with the staff and the health care workers to make the process of treatment easier for the people of the community.

iii.) The social workers also help in the initiation and implementation of various Government policies for health care and sanitation at the level of the community like construction of toilets for better sanitation, various schemes for pregnant women for safe childbirth etc.

iv.) Macro Level: At the macro level, the social workers directly work the level of policy making and passing of various legislations for the bridging of gaps that exist in the health care system. In this regard social workers work with the Government agencies and through lobbying with the Government, aid in the passing of legislations and policies which would be beneficial for the marginalized sections of the society.

Through public private partnership now, the private sector or the NGOs are partnering with the Government and entering into areas which have been neglected by the Government to provide services that are necessary for the well being of certain marginalized groups and communities in society. Almost every now and then free health check up camps, medical camps, free eye operation camps, vaccination camps, dental check up camps are conducted by NGOs in rural areas to facilitate free health checkups for people who cannot afford quality health care. Though the private hospitals are very expensive and are not affordable by the poor, certain social responsibility activities are being carried out by them as per which the poor are being treated almost free of cost by these hospitals. Hospital social workers help and aid in this regard.
The role of social workers in today’s world cannot be ignored though not recognized fully in India. Presently there is hardly any area of work where the services of a social worker are not required.

The field of health care is of prime importance for a social worker as for the process of capacity building and empowerment of people to be complete; one must have sound health condition.

1.16.0 Measurement Issues in Assessing Health Inequalities

The literature on health inequality measurement has benefited substantially from the literature on income inequality measurement (Wagstaff et al. 1991; Mackenbach and Kunst 1997). For example, concentration curves have been used to identify socio-economic inequality in health variables and investigate whether it is more pronounced at one point of time than another.

In other words, it is the graphical presentation that helps to identify whether ill health is concentrated in the poorer section of the population or distributed uniformly across various income/wealth groups.

The concentration index, which is directly related to the concentration curve, quantifies the degree of socio-economic-related inequality in a health variable (Kakwani 1977; Kakwani 1980; Wagstaff et al. 1989; Kakwani et al. 1997). The concentration index has been used, for example, to measure and to compare the degree of socio-economic-related inequality in child mortality (Wagstaff 2000), child immunization (Gwatkin 2003), child malnutrition (Wagstaff et al. 2003), adult health (van Doorslaer et al. 1997), health subsidies (O’Donnell et al. 2007) and health care utilization (van Doorslaer et al. 2006). The concentration index,
therefore, is a useful tool for measuring inequalities in the health sector. However, as mentioned earlier it has its limitations.

First, the concentration index has implicit in it a particular set of value judgments about aversion to inequality. The second drawback of the index and the generalization of it is that it is just a measure of inequality. Although equity is an important goal of health policy, it is not the only one. It is not just health inequality that matters; the average level of health is also important. Policy makers are, therefore, likely to be willing to trade one off against the other, a little more inequality might be considered acceptable if the average increases substantially. This led to a second extension of the concentration index (Wagstaff 2002) a general measure of health ‘achievement’ that captures inequality in the distribution of health (or some other health sector variable) as well as its mean.

The ‘extended concentration index’, proposed by Wagstaff (2002), allows attributes of inequality to be made explicit, and helps us to see how the value of measured inequality changes as the attributes to inequality change.

1.17.0 Back ground of the Study Area

The Indian State of Karnataka is located within 11.5 degree North and 18.5 degree North latitudes and 74 degree East and 78.5 degree east longitude. It is situated on a tableland where the Western and Eastern Ghats ranges converge into the Nilgiri hill, in the western part of the Deccan Peninsular region of India. The State is bounded by Maharashtra and Goa states in the north and northwest; the Arabian Sea in the west; by Kerala and Tamil Nadu States in the south and by the States of Andhra Pradesh in the east. Karnataka extends about 750 km from north to south and about 400 km from east to west.
Karnataka has a population of 53 million (2001) accounting for 5.13 Per cent of India’s population with the density of 275 persons. The life expectancy at birth in Karnataka is 65 years and the maternal mortality and Infant mortality are stood at 195/ lakh and 57/1000 respectively. The crude death rate is 7.1 per thousand populations (SRS 2008) as against 7.5 in India. Karnataka is one of the important states registered significant economic growths during the last two decades especially in secondary and tertiary sectors of the economy. The state Domestic product (at 1993-94 prices) was Rs.61, 386.40 cores in 2001-02. The progress of the state in the fields of socio-economic, technology, education and health care have resulted in a dramatic change in disease pattern and health status of the people.

1.18.0 Need for this Study

One of the most important targets of today’s welfare states is consolidating healthcare facilities and infrastructure so as to safeguard health conditions of the citizens. A major portion of GDP of every country goes into funding healthcare facilities. Although India’s healthcare system has gradually improved in the last few decades, it no where meets the international recommendations. The United States incurs a total per capita expenditure of $7960, which corresponds to about 17.4% of GDP being spent on Healthcare as compared to $32 of total per capita expenditure incurred by India, corresponding to about 5.2% of GDP. Despite a steady increase in the number of medical establishments in the country, there is still a marked dearth of primary, secondary and tertiary level health centers to meet the requirements of the teeming millions.
Keeping in view this broader picture, the present study aims at understanding health inequalities by comparing health statuses of people of the villages of the three districts of Karnataka which have exhibited the highest levels of Human Development index, that is, Bangalore, Mangalore and Udupi with that of the health statuses of people of the villages being counted as the three districts of Karnataka which have recorded the lowest levels of Human Development index, that is, Chamarajanagara, Gulbarga and Raichur. For this purpose, households in three villages each from Bangalore, Mangalore and Udupi and households in three villages each from Chamarajanagara, Gulbarga and Raichur has been interviewed. Data related to health inequalities has been collected from a total of 245 households from Bangalore, Mangalore and Udupi and from 245 households Chamarajanagara, Gulbarga and Raichur.