INTRODUCTION

“One is not born a woman, One becomes one”

- Simone de Beauvoir

In any human society, there are some differences, at different levels between the role of men and women. These differences are social and cultural constructions of masculinities and femininities. Every culture gives varied meaning to disparity between men and women in its own way by narrating how these two kinds of people’s biological, and social variations related to one another and to the world at large.

Gender differences are as old as human culture and arose from the biological differences between early human males and females. With human evolution, cultures have maintained some differentiation of gender roles ever since (Ghose and Malik 2007) but the extensive transformations have taken place with passage of time.

Gender beliefs and practices define roles, opportunities and limitations for women and men, greatly influencing their life in all societies. Aspects of daily life shaped by gender include use of language and means of self expression, dress and appearance, education, work opportunities, family structure and size and each individual’s health (Paulson, 2005).

A developing country like India has a long history of activism for women’s welfare rights, which has increasingly focused on women’s economic rights. A range of government programmes have been launched to increase economic opportunity for women, although there appear to be no existing programs and limited studies to address the discrimination against their physical and mental health maintenance that leads to her abject conditions (Coonrod, 1998).
The lives of women and men, the work they do, the income they receive and control, the roles they are given and the relationships that they share are all shaped by social norms, traditions, family practices, and the family structure, especially joint family which treats women and men differently in a more rigorous manner.

The patrilocal joint family is still the common family concept in India, though more and more challenged by the neo-local nuclear family scheme. Living together with parents, grandparents, aunts, uncles and cousins, improves social understandings, but the joint family system has some negative implications especially concerning gender equality. With few exceptions, joint families adhere to patrilocal residence. Gender discrimination has its roots not only in the seemingly senseless traditions and old-fashioned religious beliefs, but is deeply woven into the socio-economic fabric (Mullatti, 1992).

Growing dialogue has developed recently between those promoting enhanced opportunities for women in the third world and those concerned with child survival and development (Mayers and Indriso, 1987). The objective of this dialogue is to promote development policies and programmes like universal immunization programme, maternal and child health programme and so on, that look at preventive and curative health care as one of several competing needs that households attempt to meet, and that ‘do not sacrifice the need of a mother for those of her child’.

In terms of structures of social inequality, research has documented a relationship between health inequalities and socio-economic inequalities in income, education, occupational status and employment status (Denton et al., 2004).
Gender inequality and equality is most perceived as pertaining to women and their related issues in which men are seen as a dominating force, but the issues related to women and their problems are rooted deeply into the minds of not only men folks but also into the women as well. Women play subordinate roles and are oriented accordingly. This pattern of approach is identified not only in India, but all over the world, irrespective of developed, developing and under developed countries.

**THEORIES**

Sociologists have turned to all the major theoretical perspectives to understand how and why social distinctions between males and females are as established. In terms of gender roles, functionalists would argue that from pre-industrial societies women’s mobility has been more limited by pregnancy, child birth and nursing have been labour and time-intensive. The mobility was constrained by these roles. Thus the gender stratification is inevitable due to biological differences. Conflict theorists contend that, the relationship between females and males have been one of unequal power, due to economic contribution of male (Linda, 1990).

A structuralist would argue that health outcomes are mainly the direct results of the impact of material conditions and in particular of the unequal access to resources related to welfare regimes. A ‘health lifestyles’ approach also suggests the concept of structuralists saying that culturally shared practices formed by socialization and experiences and shaped by material circumstances result in materially deprived groups leading unhealthy lifestyles and showing higher level of inequality in allocating resources, especially to women (Abbott et al., 2005).
An ‘action theory’ approach would identify social capital as a major intervening variable, with a particular emphasis on psychosocial responses to inequality due to lack of social cohesion and social support.

The roots of health inequalities are many, interconnected and complex. According to socio-biological theorists, in addition to health inequalities being linked to genetic and biological differences, social variables have been identified as a source of health inequalities (Denton et al., 2004).

The bio-medical theory argues that the analysis of maleness and femaleness starts and ends with sex difference in reproductive system. This is also a useful starting point for thinking about equity in public policy since it is an area in which women start off at a considerable disadvantage in comparison with men (Doyal, 2000).

The modernization theory goes with bio-medical theory and sees women as reproducers and not as producers; welfare cases, not workers. If this is the case, then women will never fully be included in the process of modernization though there is increased access to technology, modernized views of educational opportunity and access to education, improved sanitary and health care conditions. The developments affects child mortality but there may gender differentials in this impact. At low levels of development even strong gender bias against female is offset by greater susceptibility to disease and poor nutritional conditions (Christian, 2008).

The gender theories provide many diverse perspectives of look at gender. Each perspective focuses on culture, rather than biology, as the primary determinant
of gender differences. They have developed materialist and structuralist accounts to explain the major causes of health inequalities. In contrast socio-biological theorists stressed the need of identifying social variables as source of health inequalities.

With a review of different theoretical perspectives about gender inequality in health the researcher adopt the essence of all the major theoretical perspectives and proposed to make out the inequalities in health maintenance and treatment components i.e. preventive (immunization) promotive (breastfeeding, supplementary feeding, allocation of food) and curative aspects (type and duration of medical treatment).

**Gender in Health Disparity**

The child’s health and survival depend upon the degree of care with which the child is brought up. Child care starting from birth to the end of childhood is an important consideration in understanding the determinants of child health. Child health in the form of breastfeeding, immunization and timely and appropriate treatment in case of illness can reduce the health risk during the childhood. The type of care provided to the child may be divided into two main groups: medical and non-medical care.

The medical care comprises immunization, timely and appropriate treatment of illness and medical attention at birth. The non-medical care consists of feeding practices, timing of initiation and duration of breastfeeding and introduction of supplementary feeding.

South Asia is well known as being a region of the World where the normally higher number of females than males in the total population is reversed. The factor
which is worrying India is the continuing decline of sex ratio indicating that morbidity and mortality are higher among females than among males. The sex ratio in the age group 0-6 years has been declined drastically from 1981 to 1991 (Census of India, 2001). This deteriorating trend may be due to lack of medical and non-medical support to females.

Policy-makers have been aware of this trend and have attempted corrective measures. As Prime Minister Manmohan Singh quoted after inaugurating the National Meeting on "Save The Girl Child", was emphatic about the issue “India was living with the "ignominy" of an adverse gender balance. The last census showed a declining sex ratio. Multiple deprivations all with roots in the oppressive structure of patriarchy has resulted in a bias against girls and women. This is a shame and we must face the challenge squarely” (Daily News & Analysis, 2009).

In India there have been significant improvements in the health, employment, and education status of women over time. Yet, health indices for girls and women compare much less favourably with those of boys and men. The government has recognized the inequalities in health indices and has implemented many schemes to improve women’s health like National Rural Health Mission, providing care for women, especially during pregnancy and delivery and after child birth. Family planning programmes offer services related to contraception for women, improving their health eventually. All these programmes and governmental efforts have contended and shown improvement in women’s health and reduction in maternal and infant mortality. But the detailed analysis of national data disaggregated by gender, show far greater improvement for males than for females (The Hindu Editorial, 2009).
Though women are born with an advantage; their healthy life expectancy is two years longer and their life expectancy six years longer than those of men but widespread gender discrimination at each stage of the female life cycle, prevalent in a few societies in South Asia, reduces the life expectancy of girls and women and diminishes their chance of survival. This may be attributed to health disparity, sex selective abortions, and neglect of girl children, reproductive mortality and poor access to health care. The perinatal mortality rate, infant mortality rate and under-5 mortality rate are poorer for girls. It is mostly because they are malnourished and brought to hospital later in their course of illnesses than boys (The Hindu Editorial, 2009).

The maternal mortality rate in rural India is among the worlds highest. From a global perspective India accounts for 19 percent of all live births and 27 percent of all maternal deaths. The deaths of young girls in India exceed those of young boys by over 300,000 each year and every 6th infant death is specifically due to gender discrimination. Women face discrimination in several respects right from the childhood. Gender disparities in nutrition are evident from infancy to adulthood. In fact, gender has been the most statistically significant determinant of malnutrition among young children and malnutrition is a frequent, direct or underlying, cause of death among girls below the age of five years.

Girls are breast-fed less frequently and for a shorter duration in infancy. In childhood and adulthood, males are fed first and better. Adult women consume approximately 1,000 fewer calories per day than men according to one estimate. Nutritional deprivation has two major consequences for women: they never reach their full growth potential, and suffer from anemia, which are risk factors in
pregnancy. This condition complicates childbearing and results in women and infant
deaths, and low birth weight infants. The tradition also requires that women eat last
and least throughout their lives even when pregnant and lactating. Malnourished
women give birth to malnourished children, perpetuating the cycle. Adult women
consume approximately 1000 fewer calories per day than men according to one
estimate from Punjab (Horowitz and Kishwar, 1991). Additionally, comparison of
household dietary intake studies in different parts of the country shows that nutritional
equity between males and females is lower in northern than in southern states in India

Women receive less healthcare facilities than men. A primary way that parents
discriminate against their girl children is through neglect during illness. As an adult
they tend to be less likely to admit that they are sick and may wait until their sickness
has progressed far before they seek help or help is sought for them. Many women in
rural areas die in childbirth due to easily preventable complications. Women's social
training to tolerate suffering and their reluctance to be examined by male personnel
are additional constraints in their getting adequate health care.

A girl between her first and fifth birthday in India and Pakistan has a 30-50%
higher chance of dying than a boy. This neglect may take the form of poor nutrition,
lack of preventive care (specifically immunization), and delays in seeking health care
for disease.

The most important health problems faced by Indian women arise from
general conditions that affect both sexes, such as respiratory diseases (tuberculosis,
pneumonia, and bronchitis); fevers related to malaria and typhoid; and gastroenteric
and other infectious diseases. Women are less likely to be promptly treated for such
problems, however, and their poorer general condition makes them more susceptible in terms of the severity of the disease. Women face added risks during two critical periods in their lives: early childhood and the reproductive years. Discrimination against girls results in higher mortality rates for females below age 5, and poor reproductive health services and high rates of reproductive tract infections pose added risks to women in adulthood.

Women’s health risks are affected both by poverty and by gender inequality in the household. Women in rural areas face greater health risks than those in urban areas. Women in richer households are better fed than women in poorer households. But although poverty is an important cause of women’s inadequate nutrition and access to primary health care, gender inequality in the household places the burden of poverty disproportionately on the shoulders of women. Hence, within any social class, men usually receive better food and health care than women.

Four critical areas of women’s health and physical wellbeing deserve special attention: discrimination against girls resulting in higher female mortality; poor nutrition; poor reproductive health; and lower use of medical services when sick. The primary way in which parents discriminate against girls is through neglect during illness. A study in Punjab villages shows that medical expenditures for boys are 2.3 times higher than for girls (Das Gupta, 1987). Additionally, several studies have argued that throughout South Asia, discrimination against girls in food intake leads to higher female mortality (Miller, 1981; Chen, Huq and D’Souza, 1981; Basu, 1989).

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. Though the health of women in general and
reproductive health in particular pertaining to women biologically but by and large decisions about seeking care, type of treatment, duration of treatment are made by the husband or the elder member of his family.

**The Global Perspective**

In many parts of the world, simply being a woman is a health risk. Gender inequities undermine women’s and their children’s health, limit their access to health services and constrain women’s decision making power in governing health and well-being. Yet health research has tended to overlook the specific consequences of disease and illness on women and men (Programme for appropriate Technology in Health, 2003). The gender inequality directly affects women’s health; it also undermines the possibility of reducing their poverty.

According to the United Nations Population Fund State of World Population Report (2005), gender inequality hinders not only the growth of affected individuals, but also have slower economic growth, lower quality of life and the development of countries. Several studies have shown that the societies with the greatest gender discrimination are poorer in availability and accessibility of food, health care and other resources than those with less discrimination. In essence gender discrimination tends to manifest most under insufficient resources to support all.

A growing number of countries have adopted population and development policies like universal immunization, food security and minimum standard of life to meet the health care and education needs of women. Yet gender inequality persists in most countries around the world (Chelala, 2005).
In Europe, North America and all other developed nations women tend to outnumber men. In the United Kingdom, France and the United States the ratio of women to men exceed 1.05. In many Third World Countries, especially in Asia and North Africa, the female: male ratio is as low as 0.95 (Egypt), 0.94 (Bangladesh, China and West Asia), 0.93 (India), and 0.90 (Pakistan). Sen (2001) maintains that these differences are relevant to an assessment of female inequality across the world.

An age specific mortality is another significant index. In India, age specific mortality for females consistently exceeds that of males. Comparative neglect of female health and nutrition, especially during childhood, would seem the prime reason (Chen, Huq and D’souza, 1981). Sen (1992) asserts that, though the position in India has been more extensively studied than in other countries, similar evidence of relative neglect of the health and nutrition of female children may be found in other countries as well. In China some evidence suggests that, extent of neglect may have increased sharply in recent years, particularly since compulsory restrictions on the size of families were introduced in some parts of the country in the late 1970’s.

**Gender discrimination in India**

In India, women’s work at home, because of its invisibility is rarely recognized, although they work for roughly twice as many hours as men. Women’s work is also socially devalued and autonomy in decision making related to their life, especially about their health rarely exists for the majority of women.

Gender injustice is often viewed in the socio-cultural context and usually in terms of social outcomes. The analysis of health data clearly documents the importance of gender and its impact on women’s health. Women are the largest
discriminated group in India. Social determinants have a significant impact on the health of girls and women (The Hindu Editorial, 2009).

In India, to be a female is often less than to be a human as she is the recipient of unfavorable treatment as compared to her male counterpart. From the very beginning girls are made to accept the norms of patriarchal and male-dominated society and they grow up accepting themselves to be inferior to boys. Deprived of their childhood, and compelled into early marriage and child bearing, young girls’ prospects of all-round development are severely constrained.

The UNICEF in its report on the progress of Indian states illustrated the fact that forty to fifty million girls and women are ‘missing’ from Indian population. The status of female child will vary markedly not only among different categories of the population but across regions as well, depending upon the region, culture, and attitudes of community.

Since the Independence the Indian government has enacted variety of laws like, equal write to claim property, claim divorce if she faces any problem from her partner with the objective to improve the status of women. Despite this modern constitution, discriminating attitudes, mindsets and traditions seem to be very persistent and gender discrimination in various forms is widespread (Dubey, 1996).

India is still a society with a strong preference for sons. This is reflected in female foeticide and selective abortion, apart from other practices. Health care neglect and shorter school duration for girls are common. Women are facing brutal consequences of male preference pattern.
The indifference at all levels towards women and girls will adversely influence India’s developmental goals. A female child is usually discriminated against in most spheres of life, be it health care, nutrition, education, employment and social justice. This is reflected in their declining sex ratio which is a powerful indicator of women’s overall status and India is one of the few countries where sex ratio is adverse to female with lower nutritional status and higher rate of maternal mortality.

**Sex Ratio**

The census in 2001 showed a sex ratio of 933 women per 1000 men for the country as a whole. The sex ratio of the population in the age group 0-6 years has been registered as 927, in 2001, declining from 945 in 1991 and 962 in 1981. The child sex ratio (0-6) in the country in villages and towns is low when compared to the sex ratio of the total population reflecting prevalence of bias against the girl child in certain parts of the country both in villages and towns.

The magnitude of the decline can be seen by the fact that 31 States / Union territories have registered a decline in Child Sex Ratio during 2001. Alarming trends are discerned in some of the major states like Punjab, Haryana, Himachal Pradesh, Gujarat, and Delhi. Only Kerala, Pondicherry and Lakshadweep have shown an increasing trend between the years 1991-2001.

Further, the census showed an improvement of the overall sex ratio when compared with the data from 1991 census, possibly due to policies and programmes initiated in recent years to secure equal opportunities. This upward trend is not caused by an increase in birth rates of girls relative to boys but changing death rate patterns. The girls up to the age of 14 years are more likely to die than boys. It is more
likely that it is because of diarrheal diseases, respiratory infections, malaria, ill-defined conditions, nutritional deficiencies and cultural factors like health care neglect of girls (Primary Census Abstract India, 2001).

According to the West Bengal Human Development Report (HDR) (2004) on life expectancy data indicate the improved health position of women relative to men. West Bengal has been successful in bringing down both birth rates and death rates, with one of the most rapid declines in the birth rate in India (Ghouse, 2004).

In India, many of the state interventions to promote access to schooling, work, health facilities take note of some constraints specific to women. But such interventions do not address the broader structural constraints of women (Mukhopadhyay and Sudarshan, 1997).

Gender related difference in health status led to an unbalanced sex ratio for the past 100 years, which is declining further. An estimated 60-100 million girls are “missing” world wide, and the imbalanced sex ratios of South Asian countries contribute a large proportion of this numbers. In some parts of the Indian subcontinent the sex ratio has fallen to as low as 770 women per 1000 men (Fikree and Pasha, 2004).

THE TAMIL NADU PICTURE

Tamil Nadu’s population stood at 62,110,839 as of 00.00 hours of March 1st, 2001. It is the sixth most populous state of the Indian union behind Uttar Pradesh, Maharashtra, Bihar, West Bengal and Andhra Pradesh. Tamil Nadu accounts for 6.05% of the country’s population.
The population sex ratio for Tamil Nadu has increased from 974 females per 1000 males in 1991 to 986 in 2001. Yet Tamil Nadu’s child sex ratio (CSRs), defined as the number of girls per 1000 boys, in the age group of 0-6 years shows a decline from 948 in 1991 to 939 in 2001. At the Census 2001, overall sex ratio of the population in the age group 0-6 years has been registered as 927, in India, declining from 945 in 1991 and 962 in 1981.

Seven districts in Tamilnadu have a CSR below 930 in 2001: Salem (826), Dharamapuri (878), Theni (893), Namakkal (896) Karur (923), Madurai (927) and Dindigul (929). Vellore has shown a sharp decline in CSR from 962 to 937 (Athreya, 2001).

Among the municipal corporations in Tamilnadu, Salem has shown the highest growth rate of 25.63%, followed by Tirunelveli (21.11%), Tiruchirappalli (15.64%), and Coimbatore (13.08%) have registered moderate levels of growth. Chennai (9.76%) and Madurai (-1.92%) are the rear with low negative rates of growth. When compared to all the municipal corporations, Tirunelveli has returned the best sex ratio with 1024 females for every 1000 males. Tiruchirappalli ranks second with a figure of 997. Madurai (977) and Salem (965) are in the middle. Chennai (951) and Coimbatore (939) are in the rear. The sex ratio of the population in the age group of 0-6 years for all the municipal corporations is 955. Among the corporations; Chennai has returned the best sex ratio with 968 females for every 1000 males. Coimbatore (908) comes in the rear (Municipal corporations.gisd.tn.nic.in, 1995).
### Municipal corporations – Population by Sex and Sex Ratio, 2001

<table>
<thead>
<tr>
<th>Name of the municipal corporation</th>
<th>Population</th>
<th>Sex Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Person</td>
<td>Male</td>
</tr>
<tr>
<td>Chennai</td>
<td>4,216,268</td>
<td>2,161,605</td>
</tr>
<tr>
<td>Coimbatore</td>
<td>923,085</td>
<td>476,056</td>
</tr>
<tr>
<td>Madurai</td>
<td>922,913</td>
<td>466,909</td>
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<tr>
<td>Tiruchirappalli</td>
<td>746,062</td>
<td>373,541</td>
</tr>
<tr>
<td>Salem</td>
<td>693,236</td>
<td>352,770</td>
</tr>
<tr>
<td>Tirunelveli</td>
<td>411,298</td>
<td>203,173</td>
</tr>
<tr>
<td>Total</td>
<td>7,912,862</td>
<td>4,034,054</td>
</tr>
</tbody>
</table>

As of the 2001 census, Coimbatore had a population of 930,882 in Municipal Corporation limits. More recent estimates peg the population of Coimbatore at some 15 lakhs (1.5 million) people. Males constitute 52% of the population and females 48% with 11% of the population under 6 years of age. The census further denotes that, rural Coimbatore has the best under 6 sex ratio (963 female of 1000 males) of any district in Tamil Nadu except Thiruvarur (968), the Nilgiris (968) and Nagapattinam (965). Sex ratio among the children under 6 in Coimbatore rural South (947) and rural North (943) was lower when compared to overall sex ratio (963) (Census of India, 2001).

Though the rural Coimbatore showing better sex ratio than the urban area which comes under the municipal corporations, however overall declining trend of sex ratio has been a cue for the present research to study.
In the present study the researcher intended to find out whether there is any discrimination shown between the male and female children in health maintenance and treatment in the rural communities of Coimbatore focusing on the mothers who have children of both sexes. Despite the fact that many studies have approached the problem of gender inequality by addressing particular gender issues, but the current study is unique in the way that it encompass all the components of gender disparity towards health of the children like, general health, breastfeeding, immunization and nutritional status and the reproductive health of the mother and her role in reproductive health decision making.
REVIEW OF LITERATURE

Survival and healthy development of children, and the social, economic and health roles of women are receiving increasing attention in the social science research in the developing world. As an one sided view, researchers and planners concerned with child survival and development, usually coming from backgrounds in medicine, or public health, have tended to view women as an instrument to achieve child health, ignoring or minimizing the opportunity cost of women’s time and the genuine need in most low income households for mothers to earn income as well as to care for the children.

The persistence of hunger and abject poverty in India and other parts of the world is due in large measure to historical reasons eventually leading to unstable (governance) political systems because of their subjugation, marginalization and disempowerment of women. Women suffer from hunger and poverty in greater numbers and to a greater degree than men. Looking through the lens of hunger and poverty, there are seven major areas of discrimination against women in India are malnutrition, poor health, lack of education, over work, unskilled, mistreatment, and powerlessness.

Many societies have established social distinctions between the sexes, which do not inevitably result from biological difference. This largely reflects the impact of conventional gender-role socialization. The application of traditional gender roles leads to many forms of differentiation between men and women (Richard and Robert, 1995) such as allocation of resources, utilization of medical services, and provision of
preventive and promotive services to protect the health of the children in general and
the girl child in particular.

Gender difference in children's nutritional status and access to health care is an
age old issue still needs to be addressed further. Hazarika (2000) analyzed gender
difference in allocation of nutrition and health care in Pakistan with a view to uncover
parents’ motives for the favoring of sons in South Asia. He found that among 0 to 5
year-old children, boys are favored in the allocation of health care. However, girls
appear as nourished as or better nourished than boys. This is taken to be evidence that
Intra-household gender discrimination has primary origins not in parental preference
for boys but in differential returns to parents from investment in boys and girls.

Similarly, the results of a cross-sectional household survey in a poor agrarian
region of South India found evidence of "pure gender bias" in non-treatment operating
against both non-poor and poor women, and evidence of "rationing bias" in
discontinued treatment operating against poor women (Iyer et al., 2007).

A follow-up observational study examined gender disparities in terms of
seeking healthcare services and in terms of home management of diarrhea, acute
respiratory infections, and fever among 530 children (263 boys and 267 girls) aged
less than five years in a rural community of West Bengal state in India. The results
showed that at the household level, girls were less likely to get home fluids and oral
rehydration solutions (ORS) during diarrhea. Similarly, qualified health professionals
were consulted more often and sooner for boys than for girls. The boys were 4.9 times
more likely to be taken early for medical care and 2.6 times more likely to be seen by
qualified allopathic doctors compared to girls (Pandey et al., 2002).
Pokhrel (2007) also assessed the role of gender in child health care utilization in Nepal and the findings are consistent with those in India and Pakistan. Gender role not only affects illness but also affects the decision to choose a health care provider and how much to spend on the sick child and it also affects the entire steps of a health seeking action.

However Sauerborn, Berman and Nougtara (1996) compare household allocation of resources in time and money for child care versus adult care and boys versus girls in West African country of Burkina Faso, suggest that children on the whole were perceived as "unproductive" and hence valued provision of health care to productive adults. The finding did not support gender discrimination in use of health care and households aimed to maintain production and income as a parameter in allocation of resources to their children irrespective of sex.

**Gender and Immunization**

An important indicator of child health status in a given country is the proportion of children protected through immunization against potentially life-threatening diseases. Protection level in a population of children not only assesses the prevalence of specific disease protection but also provides an indication of the parental awareness, attention and the extent of the preventive health services available and accessible. In India, nearly 20 to 25 percent of child deaths are due to six common immunisable childhood diseases like diphtheria, pertussis, tetanus, polio, measles and tuberculosis.

There are marked gender differences in immunization and acute polio statistics. These gender differences grow larger with the age of the children and with the intensity of care received. Data from rehabilitation centers and polio camps show
gender differences too; these differences are very large in the villages, and are reflected in the marked absence of girls with polio from these villages seeking care. These differences may be attributed to lack of health care for girl babies, to neglect of girls with polio, and to high mortality of girls with polio (Wyatt, 2004).

A study in Rajasthan reports greater incidence of immunization among males for each vaccine. In Jaipur about 8 percent female and 17 percent male children were fully immunized. For Tonk the corresponding ratios were 13 percent and 17 percent respectively. As for reasons for not immunizing the children, lack of knowledge stands first and cultural belief follows next in both areas. In Jaipur 57.9 percent female and 54.5 percent male children have not received any vaccine (Saha, 2003). Similar findings are reported by Vani (2004) on the basis of the econometric estimates, which are based on unit-record data for over 4000 children, between the ages of 1 and 2 years living in rural households drawn from the 16 major states in India. Out of 4333 children analyzed 55 percent of the boys had been fully vaccinated and 26 percent received a nutritious diet while, of the 2064 girls 50 percent had been fully vaccinated and 23 percent received a nutritious diet. The proportion of children who were fully vaccinated and who received a nutritious diet was substantially higher when their mothers were literate (66 percent and 32 percent respectively) than when their mothers were proximate literate (59 percent and 28 percent) or illiterate (42 percent and 18 percent).

An analysis made using the second wave of the Indian National Family and Health Survey (1998-1999) data suggests that the situation in 1992-1993 was mostly dismal with 70 percent of children aged 12-60 months in rural areas still not fully immunized, and close to 40 percent with no immunization at all. When looking at no-
immunization versus full-immunization there was significant difference in improvement in gender differentials. In no-immunization, while the gap between boys and girls remains statistically significant in 1999, it decreased from 5.4 to 1.3 percent points in 2005. The fact that results on gender differences in full-immunization are not as good as those in no-immunizations indicates that the problems of discrimination are more likely the result of household decisions rather than health-care system failures (Gaudin and Yazbeck, 2006).

Pande (2003) examines the role of sex composition of surviving older siblings in gender differences in childhood nutrition and immunization, using data from the National Family Health Survey, India (1992-1993). Selective neglect of children with certain sex and birth-order combinations that operate differentially for girls and boys and the preference for sons persists, and boys who were born after multiple daughters have the best possible outcomes.

The gender difference of immunization coverage (BCG, DPT, Polio, and Measles) for children in Chitwan District, Central Nepal, concluded that son preference was observed in the perception of mothers; however, it was not related to completion of immunization (Funabashi, 2000). Pandey (1995) argues that a girl child faces discrimination and inequality; breast feeding was short and they were not immunized at all in his field study in Maharashtra state.

Importance of disaggregating national averages for a better understanding of social disparities in health, using the data from the India National Family Health Survey 1992-93 to analyze socioeconomic, gender, urban-rural and regional inequalities in immunization in India for each of the 17 large states. Results show that on average, southern states have better immunization levels and lower immunization
inequalities than many northern states. Gender inequalities persist in most states, including in the south, and seem unrelated to overall immunization or the levels of other inequalities. This suggests that the gender differentials reflect deep-seated societal factors rather than health system issues per se (Pande and Yazbeck, 2003). Yu (2004) also observed after analyzing the 1998-99 India National Family Health Survey (NFHS) data that female disadvantages in childhood immunization concentrate among girls with one or more surviving older sisters.

Other evidences suggest that with all the governmental efforts the universal immunization programme become a big success in eradicating diseases and covering all corners of the country to make sure everyone is equally receiving all the immunization as per their age requirements. Sharma et al., (2008) also confirms after assessing the Measles Immunization Coverage in a Urban Slum of Chandigarh, that the relatively better utilization of immunization services for females as compared to other services like proper nutrition, proper treatment during illness, timely admission to hospitals etc. may be because immunization is available free of cost and also many times at door-steps or else at a walking distance from home as compared to other services requiring money and / or time.

Using NFHS-2 data Sharma (2005) reveals that the overall figure for immunization coverage in India suggests that girls are slightly more likely to be fully vaccinated than boys. However, girls are slightly less likely to have received each of the individual vaccinations. A carried out in Chandigarh reveals that males were immunized with measles vaccine more than females but sex differences were not statistically significant (Sharma et al., 2008).
Gender and Nutritional Status

Gender disparities in nutrition are evident from infancy to adulthood. In fact, gender has been the most statistically significant determinant of malnutrition among young children and malnutrition is a frequent direct or underlying cause of death among girls below the age of five years.

Nutritional deprivation has two major consequences for women; they never reach their full growth potential and they also suffer from anemia. Both are risk factors in pregnancy, with anemia ranging from 40-50 percent in urban areas to 50-70 percent in rural areas. Sinha (2001) asserts that existing discrimination against the girl child in access to nutrition and physical and mental health services endangers her current and future health. As estimated, 450 million adult women in developing countries are stunted as a result of childhood protein-energy malnutrition.

James (2001) confirms that females are 28 percent more severely underweight than males in the 0-4 age groups and there is a certain degree of disparity in the levels of nutrition and provision of health facilities by using the data from National Family Health Survey Reports of Andhra Pradesh.

Several studies on nutritional status of the children highlights that prevalence of anemia is more among females than males due to inequality in allocation of food and lack of timely medical attention. Coonrod (1998) supports and finds anemia in over 95 percent of girls aged 6-14 years in Calcutta, around 67 percent in the Hyderabad area, 73 percent in the New Delhi, and about 18 percent in Chennai area in his study. Further, the prevalence of anemia among women aged 15-24 and 25-44 years follows similar patterns and levels.
A study conducted by Nutrition Foundation of India (2003) in three different centers in Delhi namely, Lady Harding medical college, Srinivaspuri and Nangal, concludes that the problem of anemia in pregnancy continues to be a serious challenge and present measures to contain it are proving inadequate. National Institute of Nutrition (1990) conducted a study on 230 girls in the age group 10-17, attending schools in Hyderabad, considered anthropometric parameters and deficiency signs also confirm that the nutritional status of both the rural and urban girls was poor as compared to boys. Anemia was common, with 45 percent of the girls having hemoglobin less than 11 g.

Gender inequality and poverty are the two issues that always go hand in hand. A study on the nutritional status of women of low socio-economic groups in and around Delhi substantiate that all samples (urban and rural) have nutritional status below the National Nutrition Monitoring Bureau (NNMB)/ National Centre for Health Statistics (NCHS) standards. And all the anthropometrics data showed that women of the low socio-economic group had a poor growth status, highlighting the fact that adolescent girls, particularly are below par. In the urban Delhi, 61.38 percent of the subjects were anemic whereas in the rural Delhi around 85 percent of the subjects have Iron Deficiency Anemia (Nutrition Foundation of India, 2003).

Using the data from NFHS-2 Sharma (2005) reveals that in Punjab discrimination against girls and favor of boys is inherited by each generation of parents. Studies reflect that people living in both the rural and the urban parts of Punjab prefer sons to daughters. Also, nutritionally girls have lower ratings than boys. The living status of a family does not matter in the biased preference for a boy child;
whether the family is rich or poor, the lower nutrition food is confined to a girl child only.

A case-controlled study conducted in a rural area in Tamil Nadu also authenticates that the gender of the child and socioeconomic factors are stronger risk factors for malnutrition than health-care availability and health-care-seeking attitudes (Saito, 1997).

A study conducted in southern Ethiopia found that children in poorer families tend to be in better nutritional status relative to their parents. In contrary the adult female children are in a better nutritional status than male and birth order has a positive effect on nutritional status (Kimhi and Sosner, 2000).

Kharbanda (1990) endorses and asserts that nutritionally, the female child struggles for survival with her dietary intake inferior in terms of both quality and quantity than the male. Discrimination starts at the mother’s breast, with the girl children getting less milk, less fat, less sugar and hence less calories compared to the male children.

A multicentric community-based survey from 23 districts in India too indicates that gender bias may adversely affect the nutrition of the female child and an adolescent likely to begin pregnancy with a negative nutrition balance (Oumachigui, 2002). Similar findings by Choudhury et al., (2000) in a remote rural area of Bangladesh that gender inequality in nutritional status persisted with female 1.44 times more likely to be severely malnourished than male.

Gender differences in survival probabilities and whether this leads to differences in child nutrition have been examined by Dancer and Rammohan (2008).
The results suggest that male children have a significantly lower likelihood of surviving their first year relative to female children, should they survive they have significantly better height-for-age due to better nutrition and the vaccination.

A cross sectional study conducted in urban slum of Kolkata reveals a significant increasing trend of malnutrition was observed with increase of birth order in the girls, but no such trend was observed in boys (Banerjee, 2005).

The nutrition related morbidity and mortality is very common among poorer section of Indian continent that lack both accessibility and affordability of resources. The issue was observed from a study conducted in Rajasthan that childhood mortality due to the malnutrition-cum-infection syndrome is very high in rural areas in India; it is a matter of concern that only 15 percent female and 11 percent male children in Jaipur and 14 percent female and 11 percent male children in Tonk area were given supplementary food by less than six months of age (Saha, 2003). Murty and Reddy (1994) too substantiate that the dietary intakes of all the women in the urban slums are lower than the Indian Council for Medical Research (ICMR) recommended daily allowances; it may be improved by making nutritional education and supplementary nutrition to the pregnant women.

A longitudinal study on the nutrient intake of pregnant women show that intake of calories, protein, calcium and iron by the pregnant women in all the trimesters was far below the recommended dietary value (Reddy and Pande, 1994). Iron intake of girls is about half of the recommended allowance especially during adolescence and the condition of anemia worsens with further loss of blood due to menstruation. During adolescence and early adulthood, the multiple-burden of
reproduction, domestic work and productive labour placed on women results in their lower rate of survival (Narayan, 2000).

Data based on household expenditure show a discrimination against women on the sharing of food and other items in the normal household. Reviewing available data on dietary consumption among 1 to 18 years old Mittal (1992) concludes that girls consume much less than boys. This situation has a decisive adverse consequence on the health status of young mothers and their offspring, more so when nutritional deprivation, in terms of calorie adequacy, continues throughout pregnancy and lactation.

However a 16-month longitudinal study on child growth measuring anthropometric and socio-economic status in rural area of Jamalpur district, Northern Bangladesh suggests that there was no evidence of gender bias in general but landless female children had significantly poorer height-for-age and weight-for-age than their male counterparts and the gender bias within this population depends on changes in food availability and the rural economy (Rousham, 1996).

High risk of malnutrition and disease is faced by women at all the three critical stages viz. infancy, childhood, and adolescence and reproductive phase. Attention should be paid to meet the nutritional needs of women at all stages in the life cycle. Special efforts should be made to tackle the problem of macro and micro nutrient deficiencies especially amongst pregnant and lactating women as its leads to various diseases and disabilities (National Policy for the Empowerment of Women, 2001).
Gender and Breastfeeding

Breastfeeding has its socioeconomic, psychological, biological and immunological aspects. Human milk is known to be an ideal, safe and complete food for infants, and being available at a suitable temperature, it helps promote normal dental and facial development. Biologically, it leads to earlier uterine involution, thereby restoring the size of the extended uterus. Further, it is known to enhance the child immunity, and saves the additional cost of milk and fuel.

It is important that the baby gets the initial breast milk called ‘colostrums’ that is thick and yellowish liquid and it comes only in small amounts in the first few days after delivery. Park and Park (1989) observed that majority of the mothers believed that colostrums was harmful to new born infants and breast milk should not commence until the third day after birth.

Colostrum is discarded because it is dirty, ‘like pus’, and therefore potentially harmful to the infant. Many Asian infants are routinely denied colostrums, for what seem to be reasons of traditional preference. With respect to peninsular Malaysia, breastfeeding does not commence until ‘the letdown of milk proper’. Amongst Malays in Singapore other liquids were given to an infant ‘for a day or so until his mother would have milk to suckle him’. In Mysore, India, babies are bottle-fed sugar water until the mother's milk comes in. In Thailand colostrums is considered useless and a cause of diarrhoea in the infant (Dixen, 1992).

A vast majority of newborn in our country (70-90 percent) is not fed with colostrums. Saha (2003) reveals that, 99 percent of females and 96 percent of males in Jaipur and 98 percent of females and 97 percent of male children in Tonk were not fed with colostrums, instead they received pre-lacteal feeds. Further the study findings
suggest that though young mothers were found aware of the importance of first milk but they were unable to practice it because they do not get permission from the elders.

World Health Organization’s work concerning infants and young children suggest that appropriate feeding practices are of fundamental importance for the survival, growth, development, health and nutrition of infants and children everywhere. The duration of exclusive breastfeeding, the timely introduction of adequate, safe and appropriate complementary foods in conjunction with continued breastfeeding (WHO, 2001).

Exclusive breastfeeding for six months reduces gastrointestinal infection, does not impair growth, and helps the mothers lose weight (Kramer and Kakuma, 2006). Recent trends and differentials in breastfeeding practices have been shown to have a major impact on fertility. It is considered as a natural birth space (Deepika Puri, 1992). Carol (1990) explains the practice of breastfeeding to female children for shorter periods of time reflects the strong desire for sons. If women are particularly anxious to have a male child, they may deliberately try to become pregnant again as soon as possible after a female is born.

The data in relation to duration of breastfeeding from the study conducted by Saha (2003) in Jaipur and Tonk shows that lower percentage (27.9 percent) of females were breast fed for 24 months as against 34 percent of male children in Jaipur. The corresponding percentages in Tonk area were 46.6 percent and 28.4 percent respectively. Further the reasons for discontinuing breast milk of which the leading cause was pregnancy, which accounted for 66.2 percent, followed by child refusal (12.7 percent), custom (11.6 percent) and insufficient milk (2.3 percent).
A study in Tamil Nadu found that male children were breastfed for five months longer than female children on the average, but the male children in landowning families were breastfed almost ten months more than female children (World Bank Country Study, 1991). Weaning practices and infant mortality in rural Haryana has clearly demonstrated the existence of discrimination in breast-feeding according to the sex of child (Kumar, 1983).

Pebley and Amin (1991) found preferential treatment of sons from the two studies (one from Punjab, Ludhiyana district and another one from Matlab area, Bangladesh) in the subcontinent. In the Ludhiyana district girls were breastfed on average for a shorter period. However, Huffman et al., (1987) found totally contrasting findings that the median duration of breast-feeding was, in fact, slightly higher for girls than for boys in Matlab area.

A study conducted by Premrajan and Srinivasan (1991) in Pondicherry region reveals that 90 percent of both male and female infants were breastfed from the 1st day and no difference existed in time of introduction of supplementary foods. No gender bias was evident in terms of health care or even breast feeding and supplementary feeding practices.

The median duration of breastfeeding is two months shorter for girls than for boys. This pattern is often observed in societies where son preference is strong, because parents may stop breastfeeding girls at a younger age to increase their chances of having another child earlier but there were no marked differences in terms of median duration between family income groups (Victoria et al., 2008).
With regard to initiation of supplementary feeding the data from NFHS-3 (2005-06) reveals that the percentage of children given food from the appropriate number of food group’s (milk or curd, pulses, fruits, dark green leafy vegetables, eggs, chicken or meat, and fish) increase steadily with age and the wealth index and with the mothers’ education. Among castes, feeding practices are worst among scheduled tribes and scheduled caste. The differences in feeding practices for girls and boys are minor.

**Gender and Reproductive Health**

Poverty is characterized by limited access to resources. It limits the household’s ability to fulfill basic needs, such as food, shelter and education. Poverty adversely affects health directly, and fertility behaviour indirectly. It limits the household’s capacity to spend on food and medical services in times of pregnancy and otherwise. This results in poor health, especially of women and children.

In socio-cultural context, the violation of fundamental human rights, and especially reproductive rights of women, plays an important part in perpetuating gender inequity (Fikree and Pasha, 2004).

Reproductive behaviour is also strongly influenced by maternal health. On the basis of data from different parts of India, it has been argued that many factors such as household expenditure on food, the nutritional status of the women and children, and timely receipt of vaccines help in decreasing mortality and morbidity levels. These factors are themselves closely related to the socio-economic status of the family.

A study conducted by using lagged cross-sectional and path analysis with a sample of 79 less developed countries reveals that women’s status, as measured by
indicators such as level of education relative to men, age at first marriage, and reproductive autonomy is a strong predictor of maternal mortality (Shen and Williamson, 1999).

The risks of reproduction borne by women alone and poor outcomes for both mother and child are inevitable for a large proportion of the population as long as many South Asian mother are too young, receive minimal antenatal care, and are malnourished or anemic during pregnancy. Women cite economic circumstances and spousal or familial opposition to delivery in hospital as the most common reason for delivery at home. Decisions about seeking care in such emergencies are made largely by the husband or the elder members of his family (Fikree and Pasha, 2004).

Swapna and Savithri (1998) perceived reproductive health as an essential ingredient of reproductive rights. Reproductive choice in its turn is perceived as something that requires as precondition the existence of a feasible set of acceptable options on matters relating to reproduction and sexuality that is available to the individual woman to regulate her own sexuality; by conceiving when she wants, and as often as she wants, by terminating unwanted pregnancies and carrying the desired pregnancies safely to term. Reproductive behaviour is also influenced by a number of gender-related factors such as gender roles and relationships; these in turn influence gender gaps in education, work and household responsibilities.

Women are bearers of children, with no right to decide if, when and how many to have. The notion of son preference further dehumanizes women to machines, which have to produce children until the desired number of sons is reached (Pitre and Bhagyasheer, 2004). For all of the above reasons there is a social stigma attached to abortions which further regulating or limiting this option.
The findings of a study conducted in rural China in rural Yunnan reveal that the extent to which the husband shares household work and childcare, as an important marker of rural Chinese women's position within the family, is positively associated with the likelihood that a woman receives prenatal examinations, stops heavy physical work before birth, and gives birth under aseptic conditions. The mothers who already have a son in the family reduce the chances that the mother will stop heavy physical work before birth for a subsequent pregnancy. Further it’s evident that the family planning policy has a negative impact on women and their families, whose fertility and son preferences conflict with the birth control policy (Li, 2004).

Das and Sanghamitra (1999) depict women with only three or more daughters from West Bengal (34 percent) as compared to Assam (22 percent) did accept sterilization. Son preference was observed in both the states in that women, who did not have a son were more likely to use a traditional method (57.6 percent in Assam and 46.7 percent in West Bengal), and their choice shifted towards sterilization as the number of sons increased to two for 52.8 percent and 80.2 percent respectively.

The results of 1996 Nepal Demographic and Health Survey also shows that son preference in Nepal has a moderate impact on both contraceptive use and fertility and that women who married at the earlier age are most likely to stop childbearing as soon as they have a son (Tiziana, 2003).

Data obtained from the study conducted in Mali in 1996-1997 explore the social networks of Bamanan women and their impacts on fertility decisions narrated that contraceptive use acceptable for spacing, but for limiting births is not gaining acceptability and younger women are more likely than older counterparts to be
exposed and receptive to contraceptive information through heterogeneous network (Sangeetha and Simon, 2003).

The data from a study conducted among 425 currently married women aged 30-49 years in Himachal Pradesh indicates that women desire not one but at least two living sons, after which they were the most likely to accept contraception, especially sterilization (Prahbhjot et al., 1999).

**Decision Making on Reproductive health**

Decision-making in the family is a complex process. Reproductive decision-making and behaviour are in the ‘private’ domain of social life. Gender inequality stemming from an entire range of values and practices that privilege men, have a significant constraining effect on the choices available to women in reproductive decision-making or behaviour. Women’s work primarily refers to their economically remunerative activities significant for their autonomy, promoting their decision-making authority that in turn positively influences reproductive choice (Swapna and Savithri, 1998).

Customs and norms have strong influence on household decision-making. Involvement in decision-making in families may vary because of the ways in which resources are distributed in particular settings, enduring social traditions about the right of women and men and of senior, junior generations. The extent to which women’s voices are heard within the home varies widely by culture and region.

The role of women in decision-making as related to family building processes is particularly critical because the major responsibility of bearing and rearing children
falls upon them. An increased role of women in decision-making related to family building is likely to increase acceptance of family planning measures.

Women living in contexts of limited or no decision-making power are often pressured into early unions and pregnancies and as result have large families. There is growing recognition that reproductive behaviour is strongly conditioned by the wife’s role in family decision-making.

A two-phase household survey carried out by Nath and Donna (1999) in Guwahati reveals that wife’s gainful employment and contributions to the family budget had positive association with decision-making capacity and bearing at least one living male child was positively associated with mother’s participation in the household decision-making process. Women with at least one living male child have more leverage in bargaining within their families than those bearing no surviving male children.

The data from the 2000 Demographic and Health Survey (DHS) from Colombia focusing on 3431 women who had been pregnant in the 5 years prior to the survey or who were then pregnant demonstrate that 34.7 percent of all women had the final say in the household decisions and less than 30 percent had the final say in decisions related to the own lives. In this study, women were coded as having high personal decision-making if they alone made decisions and but women who shared decision-making with their partners were coded as lacking personal decision-making (Pallitto and Campo, 2005).

The results of in-depth interview and focus group discussions conducted in Katmandu, Nepal focused on household decision-making and husband’s roles during
pregnancy shows that joint decision-making between the husband and wife was associated with significantly higher levels of male involvement in pregnancy health. Decisions about family planning use, visits to family, friends or relatives, and decisions concerning health care when a family member becomes sick were the most frequently cited joint decisions, but women have no say regarding their own health and large household purchase (Mullany, Hindin and Becker, 2005).

Becker et al., (2006) also found from the data of 53 communities in 19 districts in the Western region of Guatemala, that husbands were the principal decision-makers in getting their wives to a biomedical care setting for obstetric emergencies. The study also observed that mother-in-law and traditional birth attendants also had considerable influence. In households where the woman has no education husbands make most of the decisions.

Similar findings put forward by Sarma and Rempel (2007) that the level of schooling mothers have attained has a significant, positive effect on decisions to register and utilize these healthcare services in both rural and urban areas.

The pooled data from the 1988, 1993, and 1998 Ghana Demographic and Health Surveys argue that matriliney implies relatively greater female influence in reproductive decisions because this type of lineage arrangement provides women with more autonomy than in non-matrilineal contexts. Matrilineal women who did not want more children would be more likely, and able to use contraception (Takyi and Dodoo, 2005).
NEED FOR THE STUDY

Like most cultures across the world, Indian society has deeply entrenched patriarchal norms and values. Patriarchy manifests itself in both the public and private spheres of women’s lives in the country, determining their ‘life chances’ and resulting in their qualitatively inferior status in the various socio-economic spheres (Mishra, 2006).

Gender differences are as old as human culture and arose from the biological differences between early human males and females. With human evolution, however, the biological differences between the two sexes were radically reduced. Thus, whatever biological basis was there for the gender role difference largely disappeared. But, cultures have maintained some differentiation of gender roles ever since. These differences are far greater in some societies than in others (Ghose and Malik, 2009).

Demographic characteristics that indicate the low status of women seem very resistant to rising incomes. Son preference that characterizes India, and Asia in general, does not disappear with rising incomes. The discrimination evident in a declining sex ratio and in the large numbers of ‘missing women' suggests that there is no reduction of gender bias in a context of economic growth (Dasgupta and Bhat 1997). Indicators reflecting the health status of women show the same patterns. First, the perception of poor health itself varies across gender. Second, there is some evidence that medical intervention is sought more often for boys than girls. Third, there is very inadequate allocation for health needs especially to women (Mukhopadhyay and Ratna, 1997).
If health is defined ‘as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity’, it follows that existence is a necessary condition for aspiring for health. The girl child in India is increasingly under threat. In recent decades, there has been an alarming decrease in the child sex ratio (0-4 years) in the country. Access to ultrasoundography and the liberal laws on abortion in India have been misused to eliminate female fetes. From 958 girls to every 1000 boys in 1991, the ratio has declined to 934 girls to 1000 boys in 2001. In some states in western and north western India, there are less than 900 girls to 1000 boys.

In general, women in India are restricted in matters of decision making, freedom of mobility and access to money, though wide variations exist depending on the socio-demographic context. Certain periods in a woman’s life like early childhood, adolescence and old age may be especially vulnerable to discrimination and neglect (Mishra, 2006).

Cultural practices disadvantage women in many ways and add to their poor nutritional status. It is customary in many households across the country that the women should eat last and eat the leftovers after the men folk have had their food (Dube, 1988).

Gender differences in health and nutrition could be due to biological differences, but also to differences in nutritional requirements as a result of different physical activities. In addition, these differences can be the result of intra-household resource allocation processes (Bolin et al., 2001). Sen (1995) opined that there are systematic disparities in the freedom that men and women enjoy in different societies and these disparities are often not reducible to differences in income or resources.
The girl child, disadvantaged from birth due to her sex, is systematically
denied or has limited access to the often paltry food resources within the household.
National level estimates from the NFHS-2 also show that girls are more likely to be
undernourished or even severely undernourished for the indicators of weight for age
and height. More girls than boys are thus underweight and stunted. Attitudes towards
health and general wellbeing of girls and women, submissive gendered roles that
translate into limited control over household resources and restricted involvement in
decision making, and housework and care giving roles that consume much of
women’s time and energies reflect in their inferior health status and access to
healthcare (Mishra, 2006).

Gender differentials are present in child immunization too. The NFHS-1(1992-
93) data shows that, with the sole exception of the polio vaccine given at birth, higher
proportions of boys are vaccinated than girls and are more likely to be fully
vaccinated than girls. The survey also shows that for common childhood ailments like
acute respiratory infection, fever and diarrhoea, boys are more likely to be taken to a
healthcare provider/facility than girls.

A characteristic feature of access to healthcare in the Indian context is the
‘unevenness’ in the physical and functional provisioning of facilities across the
country. The uneven access to antenatal care, neonatal and maternal tetanus can be
prevented by universal coverage of antenatal services and safe delivery practices.
NFHS-2 indicates that nationally about two-thirds (66.8 percent) of the births in the
three years preceding the survey had received two or more tetanus toxoid injections
during the pregnancies (IIPS and ORC Macro, 2000). In no state is there universal
coverage of such a service, though the southern states and some others in the rest of the country may have more than 75 percent coverage.

Women’s experiences are played out in a variety of contexts, namely, age, caste, class, etc. that women experience inferior health status and restricted access to healthcare. The gendered nature of women’s existences is experientially borne out in diverse contexts to produce consistent patterns of vulnerability therein. Women’s health needs are numerous- nutrition, general morbidity, reproductive health, preventive, promotive and curative care during childhood- and are interrelated.

Moreover, as women progress through the life stages, unresolved health needs can have cumulative burdens on their health. For instance, poor nourishment during childhood and adolescence can lead to unfavourable reproductive health outcomes starting from early adulthood. Thus, throughout the life cycle, childhood, adolescence, old age and also, quite notably, middle age, women in India are vulnerable in terms of their health and healthcare seeking behaviour.

The focus on gender and the magnitude of the inequality related to health is often downplayed even within the medical circle. The second-class status of women in Indian society persists and women’s perspective continues to be missing, marginalized or ignored. There is a definite need to engage communities and population as whole in debate to challenge traditional stereotypes and accepted social norms. The needed focus should concentrate on achieving equality in gender outcomes with a reasonable time frame. Outcomes in general and health outcomes in particular, are measurable with a much great degree of accuracy.
There is need to challenge the normalization of gender discrimination in India. The focus should also be on public health approaches to change social and cultural perspective with the aim of primary prevention of discrimination while continuing medical interventions for early diagnosis and management of the medical consequences. Success of public health measures except immunization, tend to benefit all irrespective of inequalities.

As former UN Secretary General Kofi Annan stated, "Gender equality is more than a goal in itself. It is a precondition for meeting the challenge of reducing poverty, promoting sustainable development and building good governance."

There is a need for new kinds of institutions, incorporating new norms and rules that support equality between women and men and for ongoing research to bring out new outlook for the age old problem of gender.

The major challenge faced by the social scientists and medical researchers are to find out the underlining causes for the problem of gender. There is an imperative need of sincere and in depth research on various gender issues particularly in rural India where the problem is not completely addressed.

Keeping in view of mixed findings the present study seeks to understand and explore the gender disparity in general health, breastfeeding, immunization and nutritional status of children and the reproductive health of the mother and her role in governing reproductive health in rural areas.
METHODOLOGY

Gender inequality is an issue of global importance. Persistent discrimination against daughters is indicative of pervasive discrimination across the course of life. In recent years there has been a shift away from talking about ‘women’ to talking about ‘gender’. Instead of focusing on women as an underprivileged group, the emphasis is now on the nature of the relationship between women and men. This shift is evident in academic discourses where ‘gender studies’ is increasingly replacing ‘women studies’ as framework for generating new knowledge (Doyal, 2000).

Women in South Asia, including in India, are struggling to maintain their health and their unfortunate daughters are also forced to follow the mothers’ tradition. Accessibility to health care is a mere dream for many women irrespective of their age, even though the services are available at their doorsteps.

From past to present, women played a subordinate and submissive role, though they proved themselves even superior in many fields. Modern technological advancements and western influenced life style brought women out of home and gave them a new identity to perform any role. But the deeply embedded culture keeps the women in the weaker position in all spheres of life denying them their right to protect themselves from all hazards of life.

The present study is an attempt to find out the gender difference in health maintenance process and mode of treatment provided to male and female children 0-15 years in the rural communities of fairly industrialized Coimbatore district.
OBJECTIVES

1. To find out the nature of health care provided to male and female children

2. To analyze the difference in allocation of resources for health maintenance and treatment.

3. To find out the factors associated with the differential health care if any.

4. To assess the overall gender discrimination between the male and female children and the variables associated with it.

5. To analyze the participation of women in decision making regarding their reproductive health.

OPERATIONAL DEFINITIONS

Health Maintenance

Health maintenance refers to the maintenance of health of the children aimed at health preservation and promotion with efforts aimed at improving the general wellbeing and prevention of diseases of the individuals, in terms of initiation, duration and cessation of breastfeeding, initiation of supplementary feeding, immunization, provision of food, and type and duration of treatment while ill.

Gender Discrimination

Gender discrimination in the present study refers to discrimination between the male and female children measured in terms of initiation, duration and cessation of breastfeeding, initiation of supplementary feeding, immunization, provision of food, and type and duration of treatment.
Reproductive Health

Reproductive health in the present study refers to the health of women during pregnancy in terms of food intake and special diet, immunization, extent of physical work performed, care received, and health consultation with physicians and the extent of rest taken.

Reproductive Health Decision Making

It refers to the extent of their role in decision making by the women when they were pregnant with regard to visits to antenatal clinic, plans in case of pregnancy complications, place of delivery, plans for getting to the place of delivery, plans for financing for delivery, desired number of children and the use of contraceptives.

AREA OF THE STUDY

Coimbatore known as Kovai is the second largest city in the state of Tamil Nadu. It is the administrative headquarters of Coimbatore District. It’s known as Manchester of Southern India. Coimbatore has an average literacy rate of 78%, higher than the national average of 59.5%. Male literacy is 81% and female literacy is 74%. Coimbatore is second highest in Tamil Nadu on urbanization, including its hinterland, next to Chennai. Among the districts outside Chennai, Coimbatore is seen as a trend setter in every aspect of development – infrastructure, health sector, hospitality, industrial and educational. It’s a hub for many neighbouring districts for textile, textile machines, pump and other tools.

SAMPLING

At the Census 2001, overall sex ratio of the population in the age group 0-6 years has been registered as 927, in India, declining from 945 in 1991 and 962 in
1981. Coimbatore is a district had total population of 4,271,856 in 2001. According to the 2001 census, rural Coimbatore has the best under 6 sex ratio (963 female of 1000 males) of any district in Tamil Nadu except Thiruvarur (968), the Nilgiris (968) and Nagapattinam(965).

Sex ratio among the children under 6 in Coimbatore rural South (947) and rural North (943) was lower when compared to overall sex ratio (963). The declining sex ratio in this age group has a cascading effect on population over a period of time leading to diminishing sex ratio in the country. One thing is clear – the imbalance that has set in at this early age is difficult to be removed and would remain to haunt the population for a long time to come (Census of India, 2001).

In contrast the urban areas of Coimbatore municipal corporation registered the lowest sex ratio (939 females per 1000 males) as per the census 2001 compared to other municipal corporations of Tamilnadu - Chennai: 951; Madurai: 977; Tiruchirappalli: 997; Salem: 965; Tirunelveli: 1024. The overall sex ratio of Coimbatore had registered a decline from 1991 census (966) to 2001 (963) (Municipal Corporations.gisd.tn.nic.in).

The legacy of a declining sex ratio in the history of the Census of India has taken a new turn with the widespread use of new reproductive technologies. In India, the desirable is the baby boy and the unwanted is the baby girl. The result is obvious; the Census of 2001 revealed that with a sex ratio of 933 female for every 1000 male (Patel, 2003). The important reasons commonly put forward are neglect of the girl child resulting in their higher mortality at younger ages, high maternal mortality, sex selective female abortions, immediate female infanticide, change in sex ratio at birth, lack of appropriate health care support and poor nutritional status.
Hence, with the varying picture on sex ratio of rural and urban Coimbatore the researcher chose Coimbatore Taluk as the area of the study to find out the factors and practices associated with declining sex ratio.

Coimbatore Taluk is classified as North and South divisions, and each division consists of two Panchayat Blocks. Coimbatore North Taluk includes Periyanaickenpalayam and Sarkarsamakulam Panchayat Blocks, and Coimbatore South consists of Thondamuthur and Maddukkarai Panchayat Blocks. Each of these Panchayat Blocks consists of varying number of Village Panchayats, which are listed out in the following table.

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<th>Block</th>
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<tr>
<td></td>
<td>Seerapalayam</td>
</tr>
<tr>
<td></td>
<td>Valukkuparai</td>
</tr>
<tr>
<td>Periyanaicken Palayam</td>
<td>Asokapuram</td>
</tr>
<tr>
<td></td>
<td>Bilichi</td>
</tr>
<tr>
<td></td>
<td>Chinna Thadagam</td>
</tr>
<tr>
<td></td>
<td>Kurudampalayam</td>
</tr>
<tr>
<td></td>
<td>Naickenpalayam</td>
</tr>
<tr>
<td></td>
<td>Nanjundapuram</td>
</tr>
<tr>
<td></td>
<td>Pannimadai</td>
</tr>
<tr>
<td></td>
<td>Somayampalayam</td>
</tr>
<tr>
<td></td>
<td>24.Veerapandi</td>
</tr>
<tr>
<td>Sarkarsamakulam</td>
<td>A.S.Kulam</td>
</tr>
<tr>
<td></td>
<td>Athipalayam</td>
</tr>
</tbody>
</table>
The sampling process involved two stages. First one Village Panchayat from each Block is selected; and then from each Village Panchayat, 20% of the households meeting the criterion of having at least one male and one female child below the age of 15 years are selected. Thus, the first level involves selection of Village Panchayats and the second level involves selection of households from the sample frame.

**I Stage:** Lists of Village Panchayats coming under each Block were obtained from the Block Development Officers. It was decided that from each Block one Village Panchayat be selected. As the number of Village Panchayats in any Block does not exceed 10, it was decided to use lottery method for selecting the Village Panchayat. Using the lottery method, the following four Village Panchayats were selected.
II Stage: Each Village Panchayat consists of certain number of hamlets and it was decided that all the hamlets be covered so as to enable the researcher to have enough number of households meeting the criterion of having at least one male and one female child. Lists of households for all the villages falling under the selected Village Panchayats were obtained from the concerned Village Panchayat records available with them, after getting permission from the concerned Chairmen of the Village Panchayats. Using these lists, the households with both the male and female children were identified and listed out. The latter lists of households with male and female children formed the sampling frames for the selection of households. Assessing the numbers of such households in all the villages, it was decided to select 20% of the households in order to have a sizeable sample. For each village, the number of households to be selected was arrived at. The number of households with male and female children and the sample households for all the villages are as follows.

**Sampling Frame and the Sample**

<table>
<thead>
<tr>
<th>Name of the Village Panchayat / Village</th>
<th>Population</th>
<th>Total Households</th>
<th>Households with Male &amp; Female Children</th>
<th>Sample Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keeranatham Panchayat Villages</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.S. Keeranatham</td>
<td>3032</td>
<td>795</td>
<td>181</td>
<td>36</td>
</tr>
<tr>
<td>Village Name</td>
<td>Population</td>
<td>Households</td>
<td>Area</td>
<td>Taluk</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>------------</td>
<td>------------</td>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>Keeranatham Pudupalayam</td>
<td>720</td>
<td>210</td>
<td>47</td>
<td>9</td>
</tr>
<tr>
<td>Bannariamman Nagar</td>
<td>1060</td>
<td>215</td>
<td>48</td>
<td>10</td>
</tr>
<tr>
<td>Sambaranikuttai</td>
<td>475</td>
<td>105</td>
<td>23</td>
<td>5</td>
</tr>
<tr>
<td>V.G.P. Nagar</td>
<td>269</td>
<td>45</td>
<td>10</td>
<td>2</td>
</tr>
</tbody>
</table>

**Ikkarai Boluvampatti Panchayat Villages**

<table>
<thead>
<tr>
<th>Village Name</th>
<th>Population</th>
<th>Households</th>
<th>Area</th>
<th>Taluk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boluvampatti</td>
<td>1966</td>
<td>650</td>
<td>144</td>
<td>29</td>
</tr>
<tr>
<td>Kamarathur</td>
<td>284</td>
<td>30</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Kottaiyangadu</td>
<td>300</td>
<td>50</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Mullangadu</td>
<td>518</td>
<td>175</td>
<td>39</td>
<td>8</td>
</tr>
<tr>
<td>Kallangadu</td>
<td>525</td>
<td>50</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Semmedu</td>
<td>2192</td>
<td>900</td>
<td>200</td>
<td>40</td>
</tr>
<tr>
<td>Maddagadu</td>
<td>230</td>
<td>65</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>Pattiyaikolpathy</td>
<td>509</td>
<td>60</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>Pachanvayal</td>
<td>70</td>
<td>20</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Muttuthuvayal</td>
<td>482</td>
<td>70</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Sarkarporathi</td>
<td>72</td>
<td>20</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Jakirporathi</td>
<td>74</td>
<td>15</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

**Pannimadai Panchayat Villages**

<table>
<thead>
<tr>
<th>Village Name</th>
<th>Population</th>
<th>Households</th>
<th>Area</th>
<th>Taluk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pannimadai</td>
<td>1765</td>
<td>1614</td>
<td>358</td>
<td>71</td>
</tr>
<tr>
<td>Kasthurinaickenpudur</td>
<td>286</td>
<td>173</td>
<td>38</td>
<td>8</td>
</tr>
<tr>
<td>Thaliyur</td>
<td>375</td>
<td>245</td>
<td>54</td>
<td>11</td>
</tr>
<tr>
<td>Kanuvai</td>
<td>1145</td>
<td>1024</td>
<td>227</td>
<td>45</td>
</tr>
<tr>
<td>Kasinanjanakavadanpudur</td>
<td>247</td>
<td>170</td>
<td>38</td>
<td>8</td>
</tr>
</tbody>
</table>

**Arisipalayam Panchayat Villages**

<table>
<thead>
<tr>
<th>Village Name</th>
<th>Population</th>
<th>Households</th>
<th>Area</th>
<th>Taluk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arisipalayam</td>
<td>1488</td>
<td>365</td>
<td>81</td>
<td>16</td>
</tr>
<tr>
<td>Thoppampalayam</td>
<td>549</td>
<td>176</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>Rayagoundanur</td>
<td>300</td>
<td>58</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>Vallukuparaipudur</td>
<td>140</td>
<td>22</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Thambagoundampalayam Mulakkadu</td>
<td>161</td>
<td>74</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Eallurgadu</td>
<td>190</td>
<td>38</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>19424</td>
<td>7434</td>
<td>1674</td>
<td>335</td>
</tr>
</tbody>
</table>
Each list was subdivided into blocks from which required number of households was to be selected. For instance, S.S. Keeranatham village has 181 households with male and female children and the desired number of households to be selected is 36 (20%). Hence the 181 households were subdivided into 36 categories, each consisting of 5 households. From each category, one household was to be selected systematically. First, from the first category a household was selected by the lottery method. Based on the serial number of that household, the subsequent samples were drawn, i.e. every $n^{th}$ household was selected. For instance, if the first selected household was the third in the first category, then the third household in each category was selected. Thus a total of 335 households were selected from 1674 households from all the four Village Panchayats.

**Tool for Data Collection**

Based on the existing literature on gender discrimination, especially concerning the upbringing of children, questions were developed to elicit information on gender discrimination. As the study population is rural women who in turn would be the respondents and who would be with varying levels of literacy, it was decided to use the interview method with the schedule rather than using the questionnaire. Thus the tool for data collection of the present study is interview schedule, which consisted questions pertaining to personal profile, family particulars, housing, reproductive health and child care and gender discrimination.

The section on personal profile and family particulars consists of such items as age, community, religion, educational status, occupation, income, number of family members, birth order of the child, mode of savings, migrational status, type of house, toilet facilities, water source and storage, electricity facility, waste water disposal,
land ownership and recreation facilities. The section on reproductive health consists of such items as age at marriage, pregnancy experience and mother’s decision making on reproductive health. The section on child care consists of such items as breast feeding and supplementary feeding, food pattern and food choice, immunization status, and illness and the type of treatment provided.

Pretest

A pretest was conducted among 20 mothers who have children of both sexes below the age of 15 years residing in rural Coimbatore, i.e. in Vattamalaipalayam Village. Based on their responses and the observations of researcher, some modifications were made in the interview schedule, especially with respect to immunization, supplementary feeding and reproductive health decision making. Questions concerning pregnancy experience were added in to the schedule. Thus the interview schedule was finalized.

Data Collection

Data were collected by direct face-to-face interview method, with the help of trained and qualified investigators under the guidance and supervision of the researcher. The informants for the present study were women, since they, as mothers, would know about the various aspects of child care and their own reproductive health. As the data are largely pertaining to women, especially their reproductive health, it was decided that women investigators would be more suitable to collect the data. Hence two women investigators were engaged in the data collection process. For each interview it took about 40 minutes including the establishment of rapport. Data collection was carried out during December 2008 through February 2009.
Variable Measurement

The present study attempts to explore the inequality in allocation of resources if any in maintaining the health of the male and female children. With reference to the available literature, the following variables have been identified as relevant to know the differential treatment of male and female children in preserving their health and the choice of medical treatment. The variables of immunization status of the children, initiation of breastfeeding, duration of breastfeeding, discontinuation of breastfeeding, duration of treatment were identified from the work of Saha (2003). The variable Immunization level was noted from Basu and Stephenson (2005) and Haffman et al., (1987). Intake of diet was drawn from Sikander (1990) and National Institute of Nutrition (1990). Performing and stopping heavy work during pregnancy was identified from research by Becker et al., (2006) and Li (2004). The variable Reproductive health decision making was elicited from Mullany, Hindin and Becker (2005).

The dimensions of gender discrimination for the purposes of the present study are: initiation of breastfeeding, duration of breastfeeding, initiation of supplementary feeding, allocation of food, immunization, type of treatment and duration of treatment.

As for initiation of breastfeeding, it was measured in terms of the early / late / no breastfeeding. Initiation on the first day would get a score of 3, the second day 2, after two days 1, and for no breastfeeding 0.

In the case of duration of breastfeeding, differences are seen in terms of number of months for which children were breastfed. If the child is breastfed for 9
months or longer a score of 3 is assigned; 2 score for 6 – 9 months; and for under 6 months, a score of 1.

For the dimension of allocation of food, the various supplement food items are taken into account such as milk, cereals, pulses and meat, bakery products which are identified in quantity. If the male child gets more compared to the female child, then a score of 1 is given. Otherwise, a score of 0 is given.

For the dimension of immunization, it was seen whether the children were immunized with BCG, OPV, DPT, Measles, DT and TT. If all the vaccines are given according to the age requirement, then the child is said to be fully immunized, and is assigned a score of 2. Even if one dose of vaccine is not given, the child is said to be partially immunized and is assigned a score of 1. If no vaccine is given at all, the child is said to be not immunized, and a score of 0 is assigned.

For the dimension of type of treatment, if the child is provided with allopathic treatment, a score of 2 is assigned; for other kinds of treatment, a score of 1 is given; and for no treatment, the score is 0. The awareness and accessibility for systematic alternative systems practices is limited. Hence a greater score is assigned to allopathic system.

For the dimension of duration of treatment, if there is a difference between the male and female children, then it would indicate discrimination. If the duration is longer for the male child compared to the female, then a score one is given indicating discrimination against the female child; otherwise, a score of 0 is given. Overall, the greater the score the greater is the discrimination.
For each mother, these scores are averaged for the male children and for the female children separately for the purposes of comparison, as a mother might have two or more number of children of the same sex. Then the difference between scores of the male child and the female child is arrived to assess whether there is discrimination. Such difference would be the discrimination score for the respondent.

The overall gender discrimination score is arrived by summing up the scores from all the above said dimensions.

**Data Analysis**

The collected data were coded using a codebook and entered into a master chart. The coded data then were transferred to the SPSS data sheet. The necessary analyses were carried out using SPSS. The statistical methods used include frequency, percentage, mean, correlation and analysis of variance. For analyzing the personal and household particulars as well as reproductive health, the unit of analysis is the mother, i.e. the respondent. For analyzing child care, the unit of analysis is the child for it would enable comparison between the male and female children. For analyzing discrimination in relation to other variables, the unit of analysis is the respondent again, for the discrimination scores are averaged for the varying numbers of male and female children, and discrimination is treated as characteristic of the family in which children are differentially treated. For describing the personal and household data, frequency and percentage are used. For describing the reproductive health and childcare also frequency and percentage are used. For analyzing discrimination in relation to other variables, mean scores and ANOVA test are used. In addition to this, correlation is also used to assess the relationship between the dimensions of discrimination and some quantitative variables.
Chapterization

Chapter one of the report gives a detailed introduction about the study area. It discusses about gender, gender theories, gender inequality and its impact on women in general and female children in particular. It also includes global, national, state and district level sex ratio and related issues so as to provide a comparative perspective and level of development of this region.

The second chapter explores the available literature in the relevant areas. This chapter extensively explains the extent of gender equality in different components based on the findings and results of various studies.

The chapter three depicts with research methods adopted in the conduct of the study: study objectives, operational definitions, variable measurement, area of the study, sampling, tool for data collection, pretest, data collection and the statistical techniques used to analyse the data.

Data analysis and interpretation presented in chapter four. Selection and use of statistical techniques to exemplify the findings of the study are also included.

A comprehensive summary of the study and findings are put in perspective by explanations. Findings reported by other studies are considered to find out the conformity of the present findings.