CHAPTER - 2

REVIEW OF LITERATURE

There are many literatures on the different aspects of the health status. Some of these literatures are especially on the women's health. The literatures are both on Indian perspective and as well as other countries perspective. These literatures are reviewed sequentially in the following:

Amruthavall and Venkataramana (2015) examine the impact of socio-economic factors on health problems of Menopausal Muslim women in Anantapuramu District, Andhra Pradesh, by using purposive sampling technique. The association between socio-economic factors and health problems of menopausal women is tested by using chi-square test. The results of the study shows that most of the women 153 (53 per cent) are suffering the problem of menopause at the age of 41-45 years. The findings of the study further shows that most of the women are suffering from joint and muscle pain followed by weight gain, vasomotor symptoms, vulvo-vaginal symptoms etc. Most of the women under low economic status, poor education, low income, adverse living and working conditions and stress of the social and economic factors associated with poor health.

Lata et. al. (2015) examine the prevalence of anemia among non-pregnant and non-lactating women of reproductive women (15-45 years) belonging to urban slum area of Lucknow city and identify the factors who are affected in anemia. They have used cluster-sampling method. Further, they have used hemocue method for hemoglobin estimation and anthropometric measurement for nutritional assessment. To find the responsible factors for anemia logistic regression is used. They find that the prevalence of

anemia is high in the entire BMI groups. Ninety per cent of the underweight women are anemic. Even among overweight women who are taking adequate calories and proteins in their diet, about sixty per cent of the women are anemic. Prevalence of moderate to severe anemia ranged from 15 per cent for the overweight women to 30.0 per cent for the underweight women. From the logistic regression analysis, intake of iron, body mass index of the women, access to media and use of the contraceptives by the woman are the predictors found to be significantly associated with prevalence of anemia.

Mahapatra (2015) identifies the various equity issues at individual and community levels that influence women's choice affecting the utilization of maternal health services in a district in southern Odisha. The study reveals that social and spatial inequity influenced health care seeking behavior and utilization of maternal health services in the study area. The important barriers emerging from the study are transportation and financial constraints. In addition, it is also find that divergent etiological concepts and perceived hospital culture and care are equally important determinants to control maternal health care seeking behavior. Further, the study reveals that the perceived attitudes of women towards supernatural healing further reduced their readiness to seek care at the health-facility level.

Patage and Badesab (2015) examine the health status of pregnant women and their health care utilization in rural area of Karnataka, India. They have conducted a cross sectional study among the antenatal women for a duration of one year from December 2013 to November 2014. Complete enumeration of all antenatal women who are nearing term is conducted to collect relevant information using predesigned semi-structured questionnaire and followed by antenatal examination. The study reveals that there is

improvement in health status of pregnant women and antenatal care utilization by them after the implementation of NRHM. The study further depicts that one fifth have bad obstetrics history, one fourth consanguineously married, one third have hyper emesis which directly or indirectly increased the health risk to mother and unborn child. Problem of anemia and pre-eclampsia still persist even after good number of antenatal visits which reflect poor quality of antenatal care services. In conclusion they suggest that there is a need for improving the quality of antenatal services and health education.

Subhaprada (2015) examines the morbidity pattern among the geriatric patients attending outpatient department of a Primary Health Center at Kurnool. A cross-sectional study is carried out from January to February 2014 among 49 geriatric patients, aged 60 years or above. The study reveals that the elderly suffer from multiple morbidities and the most prevalent morbidity is found to be hypertension followed by osteoarthritis, respiratory ailments, cataract and diabetes.

Viswanathan et. al. (2015) has attempted to explore the nature of relationship between agriculture and dietary diversity and women's Body Mass Index (BMI) in rural areas of India. The study reveals that women in cultivator household's ore those who have a higher share of agricultural income have lower rates of under nutrition than the women in non-agricultural wage labour household. The study further explores that agricultural variables influence dietary diversity that is nutrition intakes, which in turn influence nutritional outcome that is BMI. Dietary diversity improves with higher income, better wealth status and larger area under cultivation. Religion, caste and regional variables also play significant roles in influencing both intake and outcomes

while education and empowerment play a limited role in an individual's nutritional status.

Agrawal and Keshri (2014) examines morbidity patterns and health seeking behavior among older widows in India by taking the 60th round of National Sample Survey (NSS), 2004 data. Multivariate logistic regression model is used to estimate the effects of socio-demographic conditions on morbidity prevalence among older widows and their health care seeking behavior. The study shows that prevalence of morbidity is 13 per cent greater among older widows compared to older widowers. The study further shows that the likelihood of seeking health care services for reported morbidities is substantially lower among older widows.

Devi (2014) examines the impact of education on socio-economic development of Muslim women in India. The study reveals that educational status of Muslim women in India is worse than that of men and women of other communities. Muslim women have lowest work participation rate and most of them engage in self-employment activities. Further the study suggest that state govt. need to make special provisions, over and above the normal, for drawing and retaining in school till class 8th as a fundamental right, and for improving their participation in secondary and higher technical education and professional education so that they can contribute effectively in the socio-economic development of the nation.

Gan and Frederick (2010) examine the household willingness to spend on health care by using time series data from 1970 to 2006. They have used log linear regression to analyze the dynamics of demand for health care. The study shows that willingness to

spend on health care is positively related to age of the population, literacy rate, ratio of price of other goods and services to the price of healthcare, and the establishment of Singapore's mandatory health savings plan.

Islam et. al. (2004) examines the influence of socio-economic status on energy intake, anthropometric characteristics and body composition of pre-menopausal Bangladeshi women in two socio-economic groups. They use biceps and triceps skin folds to calculate total body fat (TBF), fat-free mass (FFM) and body fat (BF) percentage. FAO/WHO/UNU (Food and Agricultural Organization/World Health Organization/United Nations University) are used equations to calculate basal metabolic rates. They find that socio-economic status have a significant effect on body weight, height, biceps and triceps skin folds, BMI, TBF, FFM and BF percentage. Based on the dietary and anthropometric results, they find that malnutrition is a common feature among low-income rural women.

Khandat (2014) attempts to determine the prevalence of anemia and to explore the factors associated with anemia in rural Indian pregnant women, in Beed district of Maharashtra state. She find that the prevalence of anemia is significantly higher in the study area and the contributing factors for anemia is literacy, occupation and low standard of living of the study women, their awareness about anemia and its prevention by regular consumption of iron foliate tablets and increase in food intake. Further, she observes that age of marriage, parity and fetal loss also contributed to hemoglobin level.

Rabbi and Karmaker (2014) have conducted a study to identify the significant determinants of child malnutrition in Bangladesh. They have used Mulvariate technique

for the analysis. The study reveals that pre birth factor like mother's age at birth, preceding birth interval, adequate ante natal care of mother play a vital role on infant physical condition and later on nutritional status of the children. The result finally suggests that consciousness should be raised to improve socio-economic and maternal health conditions.

Yogaraj et. al. (2014) investigates the morbidity patterns among the workers in leather industry. Cross-sectional survey health complaints among 230 workers in eight different leather factories in Sripuram, Chennai are interviewed using pre tested questionnaire. The result of the study reveals that around 78 per cent of workers are suffers from health problems. Majority of them are affected with muscular-skeletal disorder, skin problem, respiratory problem, eye problem, ear problem, dental problem, cardiovascular problem, abdomen problem and Uro-Genital problem. The study further depicts that there is association between certain factors like gender, occupation, nourishment, past history of illness with the morbidities among the leather workers. The study finally suggests that there is a need to improve the health status and health needs of the workers in the leather industries. Protective measures should also be provided to reduce the various morbidities.

Ali and Noman (2013) analyze the determinants of the demand for health care from 276 samples in Bogra district of Bangladesh. The study reveals that the price of health care has negative effect on the demand for health care. However, the cost of drug, distance, waiting time and quality of care are statistically significant and positively affect the demand for health care. On the overhand age, duration of illness and income are statistically insignificant and negatively related with the demand for health care.

Asrafi and Jha (2013) examine the reproductive health problems of rural Muslim women of Gaya district, Bihar. They find that the most important factor affecting women health is their poor economic condition. They also observe that lack of awareness makes women careless about reproductive health and antenatal care that can cause maternal deaths: obstructed labor, abortions, sepsis, toxemia etc. The social status, religious factors and traditional practices are also responsible for effecting reproductive health of women. Muslim women face many social problems related to reproductive health. One burning social issue is to give birth of a son and they refuse to use any type of precaution related reproduction. They do not prefer to go to hospital for antenatal checkups or for delivery. Most of them recommend that it is much easier to deliver a child at home through "Dagrin" (Dai).

Asteraye (2013) attempts to identify the factors that determine the medical treatment seeking behavior during illness and the demand for health care services in a small woreda town in Western Gojjam. The study employs maximum likelihood estimation technique and the factors that are expected to have an influential impact are categorized as individual and or household specific variables and choice specific variables. The study depicts that individual and or household specific variables such as sex of the patient, severity of illness, monthly income of the household, family size and distance to reach the nearest health facility are found to significantly affect whether treatment is required at the times of illness. On the other hand patients' choices of health care services is influenced by age of the patient, sex of the household head and educational level of the patient and by medical cost of treatment per visit and waiting time for treatment.

Bansal et. al. (2013) examine the severity and distribution of anemia among 500 pregnant women aged 18 to 35 years in urban and rural sectors of Western Rajasthan and its association with certain economic factors and religion. They find that anemia is highly prevalent in pregnant women. 30-35 years age groups of women are mostly affected by anemia. The prevalence of anemia is relatively much higher among Muslim women than that of non-Muslim women. They argue that this is because of less health awareness, extreme poverty, large family size and overcrowding leading to recurrent infection in this caste resulting into anemia. They further concluded that problem of anemia can be treated by making effort to educate women and enhance their level of economic status.

Bukola (2013) attempts to assess willingness to pay for community based health care financing scheme among rural and urban households in Osun State. Tobit model of contingent valuation method for willingness to pay is adopted in this study for the multivariate analysis. The study reveals that rural household heads are more willing to pay for community based health care financing scheme than the urban household heads. Further the study shows that the major factors that contribute to willingness to pay of the households are family size, level of education, income, and distance to the health centers from home, marital status, age and male gender. Moreover, the study reveals that women, the poor family and people with low level of education are less willing to pay.

Masibo et. al. (2013) examine the prevalence and determinants of over and under nutrition among Kenyan adult women. They have used the data from the Kenya Demographic and Health Survey (KDHS) (2008-09). As a measurement of nutritional status, Body Mass Index (BMI) is used. The study reveals that majority of women are belonging to normal range BMI. The study further depicts that over-nutrition is higher

than under-nutrition among Kenyan women. The key determinants of under nutrition are household wealth, province of residence and education achievement while the key determinants of over nutrition include women's age, marital status, smoking status and partner's educational status.

Mittal (2013) has conducted a study to assess the nutritional status, dietary intake and morbidity patterns among 100 non-pregnant non-lactating rural women of reproductive age group in the village Bashahpur, Gurgaon. She finds that the mean BMI of the women is found to be 21.12 with 25 per cent of them being underweight and 16 per cent being overweight or obese. The study reveals that overall quality of food and nutrient intake is poor reflecting their effects in the clinical signs like pale conjunctiva, menstrual problems and pregnancy complications, etc.

Shewale et. al. (2013) examine socio-demographic, nutritional status and morbidity profile of brick kiln worker. To measure the nutritional status Body Mass Index is used. They find that majority of the worker are illiterate and they do not have access to even basic amenities like safe water, separate place for food, toilet facility etc and social security measures. Undernourished is widely prevalent among the workers which reflect high morbidity and low socio-economic status. Musculoskeletal like joint pain, body ache and backache are the commonest morbidity.

Ashraf and Ahmed (2012) analyze the Muslim women education and empowerment in rural areas of Aligarh district. The study reveals that socio-economic conditions are the major determinants of women liberation than the religion. It illustrates the fact clearly that family structure has an association with the participation of women in the decision making process as well as the status of women. Women are conscious about

their family welfare but still they are to depend on husband because in most of the cases they are out of access to money. Further, the study shows that most of the respondents are agreed for existing equal rights in society but they are not enjoying freedom of exercise regarding their opinion about vote, freedom of movement away from home without husband's permission, daily household expenditure and child health care. Finally, they suggest that for the overall socio-economic development women should be allowed to pursue their own path in respect of education and employment and also be allowed to participate, particularly in decision making.

Das and Das (2012) examine the health status of women in rural area of Barak Valley, the availability of health infrastructure and the demand for health care of rural women. They construct a dimensional index and use the binomial logit model. They find that number of disease increases according with the increase in age and so the women under the old age brackets are suffering more than the other age groups. They further observe that there is shortage of health care facilities and due to this, there is high demand for that and they are willing to pay for availing this facility.

Das and Das (2012) examine the health status of rural women. The study is based on three stage stratified random sampling. They find that health status of rural women in Barak Valley is very poor. The study reveals that there is a positive correlation between the increase in health problem and the increase in ages. They also find that Hindu women are mostly affected from diseases compared to Muslim and Christian women but the health condition of each affected Muslim women is very poor in terms of disease intensity compared to Hindu women and Christian women. The study explores that women are mostly affected during their reproductive age and rural women mostly rely on

traditional preventive measures due to poor economic condition and poor health infrastructure in Barak Valley.

Das (2012) examine the functioning of ASHA in providing health care services. The study reveals that ASHA the lady health activist in the rural area is smoothening and promoting the health scenario of the rural women. Being a female she is working as custodian of the promotion of health status of females in her village. The study also finds that about 90.50 per cent of the rural people are aware about the providing polio drop and nearly 69.93 per cent about complete immunization and almost 96.09 per cent of children are fully immunized which reflects better performance of the ASHA.

Dube and Sharma (2012) examine the knowledge, attitude and practice regarding reproductive health among 200 school girls in the age 15-19 years from rural and urban settings of Jaipur. The study reveals that majority of the respondents are unaware of the physiological rationale of menstrual process and it is observed that the rural girls are less aware and lack of knowledge regarding the reproductive health than the urban girls. Further it reveals that social prohibitions and conservative attitude of parents has blocked the access of adolescent girls to scientific information.

Goli (2012) attempt to quantify and decompose health inequalities among older population in India and analyze how health status varies for populations aged between 60 to 69 years and 70 years and above. Data for the 60^{th} round of National Sample Survey (NSS) is used for the analysis. Socio-economic inequalities in health status is measured by using concentration index (CI) and further decomposed to find critical determinants and their relative contribution to total health inequality. The findings of the study shows

that CI estimates are negative for the older population as a whole which suggests that poor health status is more concentrated among the socioeconomically disadvantaged older population. The study also reveals that poor economic status and illiteracy of older population, place of residence in rural areas, being Muslim as a religion and marital status emerged as key predictors for the health inequalities**.**

Kamble et. al. (2012) conduct a study to assess the health status and morbidity pattern among the rural elderly persons. All the peoples are examined clinically and necessary information is collected from them. The study reveals that the elderly suffers from multiple morbidities and the most common morbidity observed among the elderly people is depression followed by musculoskeletal disorder, hypertension, gastrointestinal problems, diabetes mellitus and neurological problems.

Sharma and Pasha (2012) examine the use and knowledge of contraceptive methods of Muslim and Hindu ever-married women aged 15-49 years in India. District level Household Survey (DLHS) data and National Family Health Survey (NFHS) data is used. Multivariate logistic regression is used to determine the factors affecting the use of traditional methods. The study reveals that the use and knowledge of traditional methods was significantly higher within Muslim women compared to Hindu Women. They find that the religious obligation and tenets of the religion require Muslim women to defer from using any contraceptive method. The study also reveals that education significantly contribute to the use of traditional contraception in India. Age, rural residence, and wanting another child are significant in the socio-economic factors.

Moli et. al. (2012) examine the extent of overweight and obesity among adult women in Kerala and the determinant of these overweight by using NFHS 3 data. The analysis is based on 3370 ever-married women of age group 15-49 years in Kerala. Body Mass Index (BMI) is used to define the overweight and obesity. Logistic regression is used to identify the determinant of overweight or obesity. The study reveals that wealth index, occupation, consumption of milk or curd, fruits, fish, chicken or meat and alcohol are significant predictor of BMI. They also find that the frequency of reading newspaper and watching television have a significant association with BMI. Finally, they observe that there is a significant association between overweight and diseases like diabetes, asthma, and goiter and thyroid disorder.

Sahu and Kumar (2012) examine the past performance in relation to availability of health institution at the village level and the performance of these institutions. The study demonstrates that majority of the villages are not having health institutions and they were not connected with all weather roads. In relation to free distribution of medicine a very less number of people are benefited and the mobile medical unit is not working properly and there is no registered medical practitioner at the village level.

Saikia and Das (2012) examine the progress in health infrastructure and health care facilities, the status of manpower and the quality of health care services in the rural areas across the north-eastern states. They find that all the northeastern states are in better position compared to the all India average in terms of progress in physical health care infrastructure. However, the condition of the region has been atrocious in terms of other components of health care infrastructure, especially in terms of the facilities available in

health centers, quality of health care services, and availability of specialists and well-trained manpower.

Shraddha et al (2012) examine the morbidity pattern of the elderly in urban population of Mysore. They find that most of the system disorders are almost equally distributed among elderly men and women. Disorders of oral cavity are more prevalent among aged males while diseases of skin are more prevalent among aged females. Most common disorder reported among elderly are diseases of the eye followed by endocrine, nutritional and metabolic diseases. They suggest that awareness among the elderly population should be created for regular medical check-ups to ensure prevention and early detection of the chronic diseases.

Bhatt et. al. (2011) examine the socio-demographic profile and morbidity pattern among aged population in an urban area of Ahmadabad. The study depicts that majority of the respondent are suffering from loco motor, visual and hypertension problem. Gender-wise association is found significant when comparison is done between normotensive and pre-hypertensive but not with hypertensive. Relation between weights of male and female is statistically significant. Among tobacco users, gender-wise difference is statistically significant. Paleness is common in both the gender.

Kumar (2011) examines the interstate variation in status of women and investigate how the status of women is related to economic development of the 14 states in India. Women status index for 14 states is estimated. To compute women status index, Principal Component analysis is used. Multiple Regression analysis is used to identify the impact of economic development on women's status. She finds that there exist extreme disparities with respect to various indicators of women's status at the state level and there

is a strong positive and significant correlation of female literacy in improving their status. She also finds that there is a positive rank correlation between the women's status and economic development of the states. She suggests that policy should lay stress on the issues of growing feminization of poverty, inequality in access to health, education, training, and productive employment.

Madhavi and Singh (2011) examine the prevalence of anemia amongst pregnant women, the socio-demographic factors associated with anemia and utilization of health services by pregnant women. They use the B.G Prasad classification, Salhi's method and WHO criteria (Park, 2005) for socio-economic status, hemoglobin estimation and classification of anemia respectively. They find that most of the pregnant women are suffered from anemia and the prevalence of anemia is high among illiterate, Hindu and moderately working women. The study reveals that age of women, age at marriage, age at first child, weight, consumption of protein and calorie per day are insignificant determinant for the prevalence of anemia. Further they observe that most of the anemic women use the health services provided by Govt.

Pandit et. al. (2011) examine the various aspects of maternal and child health among 52 tribal migratory families in Vadodara district of Gujarat. They find that majority of the women are illiterate and most of them are getting married before legal age of marriage i.e. 18. The study also explores that 58 per cent females had institutional delivery of last child and aware about birth control measures and only one child out of 11 children between 12-23 months are fully immunized. Further they find that women are suffering from different diseases such as backache, vaginal discharge, lower abdominal

pain etc. Finally, they conclude that the group is more vulnerable and there is need to focus on this group to achieve goals of MCH.

Saravanan et al. (2011) examines the status of lactating women whose age lies between 15 to 38 years and child health. The study reveals that most of the respondents are getting married before they become 21 years old especially Scheduled Castes and Other Backward Castes women. However, the majority of the Backward Caste and Forward Caste respondents are getting married after 21 years of age. The study further depicts that illiterates and primary level educated women become pregnant before 20 years of their age in contrast to women with higher education, who conceived only after 20 years of age. It is also seen that there is a linear positive relationship between educated lactating women and child's health. The study finally suggests that more awareness programmes like Child Health Care, Breast Feeding Awareness and Nutrition during pregnancy should be conducted by the health care personals periodically.

Kumar and Khan (2010) examine the health status of women in India. They use National Family Health Survey III (2005-06) data and BMI in their analysis. They find that women face many serious challenges to their health. Most of the health problems of Indian women are related to high levels of fertility and only 49 per cent of currently married women aged 15 to 49 use modern contraceptives. Malnutrition is another serious health concern that Indian women face and mother education plays a significant role in deciding the level of malnutrition among her children. The study also reveals that girls and boys are not getting equal treatment in their families. Furthermore, data indicate that violence against women is one of the causal factors related to health problems. In addition, the HIV/AIDS pandemic in India is spreading rapidly.

Mostafa and Islam (2010) examine the prevalence and socio-economic correlates of malnutrition among ever-married, non-pregnant women of reproductive age of Bangladesh. The study uses the data from nationally representative 2007 Bangladesh Demographic and Health Survey (BDHS). Body Mass Index is to measure the nutritional status. Both bivariate and multivariate statistical analyses are used to assess the relationship between socio-economic characteristics and women's nutritional status. The findings of the study shows that over one fourth of the women are underweight at national level and in rural and urban areas the proportion is one third and one fourth respectively. The multivariate logistic regression analysis reveals that wealth index and women's education are the most important determinants of underweight. The study depicts that the risk of being under weight is almost seven times higher among women with no formal education as compared to those with higher education and the likelihood of underweight is significantly 5.2 times in the poorest as compared to their richest counterparts. Finally the study concludes that poverty alleviation programme should be strengthen targeting the poor and effective policies and information and health education programmes for women are required to ensure adequate access to health services and to understand the components of a healthy diet.

Rao et. al. (2010) examines diet and nutritional status of tribal and rural population in nine states of India. They find that the intake of all the foods is lower than the suggested level among rural as well as tribal women. They further observe that tribal women are vulnerable to under nutrition compared to women in rural areas. The prevalence of chronic energy deficiency is higher among tribal non-pregnant non-lactating women compared to rural women.

Shankar et. al. (2010) examine the magnitude of malnutrition and the factors associated with nutritional status among newly married women. They use the body mass index (BMI) and find that majority of women have normal BMI. They also observe that most of the underweight women belonged to the Hindu religion and low socio economic status and the percentage of underweight women decreases with the increase in education status.

Babar et. al. (2009) examine the impact of socio-economic factors on nutritional status in primary school children aged 5 to 11 years from public and private schools of Lahore. Body Mass Index is used for assessing the nutritional status. The study reveals that poverty, low literacy rate, large families, food insecurity, food safety, and women's education appears to be the important underlying factors responsible for poor health status of the children.

Gupta and Greve (2009) investigate whether overweight or obese individuals demand more medical care than normal weight individuals do or not. To estimate the demand for medical care a finite mixture model (FMM) is estimated which splits the population into frequent and non-frequent users of primary physician (PP) services according to the individual's latent health status, health risk and attitudes. The study depicts that body weight effects vary across latent classes and show that being obese or overweight does not increase the demand for primary physician care among infrequent users but does so among frequent users.

Kulkarni et. al. (2009) conduct a study on the cause of death in reproductive age group women by verbal autopsy method. Information on death is obtained from the

relatives of the deceased and cause of death is assigned using the standardized algorithm prepared. International classification of Diseases–ICD-10 is used to code the assigned cause of death. They investigated total 103 deaths in reproductive age group, of which 5.6 per cent are maternal while 93.2 per cent are due to non maternal causes. Six out of seven maternal deaths are in rural area. They find that injury, poisoning, and cancers are the major killers among reproductive age group of women. Among communicable diseases, tuberculosis is at the top and various factors such as general health status of women, literacy and living standard and compliance to treatment by the women, contributed to the occurrence of deaths due to tuberculosis. Non-communicable diseases and suicides also take toll of deaths in not only urban but also in rural areas.

Poluru et. al. (2009) examines the trends in the shift from underweight to overweight and identify the major determinants of the co-existence of double burden of malnutrition among women of reproductive age 15-49 years. They have used the data from NNMB and NFHS 2. Multivariate logistic regression is used for the study. They observe that household standard of living and age are significantly associated with both underweight and overweight or obesity while work status, residence and caste are not significant on women's nutritional status. They find that women who watch television more than once a week and consume daily fruits, chicken, meat or fish are more likely to be overweight or obese than those who ate them occasionally or rarely. Finally, the study observes that the risk of chronic energy deficiency or underweight is significantly higher among never married women and lower among literate women.

Dewan (2008) finds the malnutrition among women. She uses the Body Mass Index to estimate the malnutrition among women. She finds that there is gender

inequality in nutrition from infancy to adulthood. Women never reach their full growth potential due to nutritional deprivation. Malnutrition in women is related to poverty, lack of development, lack of awareness and illiteracy.

Hidayat (2008) examines the effects of health insurance on healthcare demand in Indonesia, using samples that are both unconditional and conditional on being ill, and compared the results. Multinomial logit regression is used for the analysis. The result shows that both unconditional and conditional estimates yield similar results in terms of the direction of the most covariates. The magnitude effects of insurance on healthcare demand are about 7.5 per cent (public providers) and 20 per cent (private providers) higher for unconditional estimates than for conditional ones. Further, exogenous variables in the former estimates explain a higher variation of the model than that in the latter ones. Findings confirm that health insurance has a positive impact on the demand for healthcare, with the highest effect found among the lowest income group. Based on the findings the study concludes that conditional estimates do not suffer from statistical selection bias. Such estimates produce smaller demand effects for health insurance than unconditional ones do. Whether to rely on conditional or unconditional demand estimates depends on the purpose of study in question. Findings also demonstrate that health insurance programs significantly improve access to healthcare services, supporting the development of national health insurance programs to address underutilization of formal healthcare in Indonesia.

Naved and Person (2008) examine the prevalence and characteristic of physical spousal abuse during pregnancy in rural and urban Bangladesh and the factors associated with such violence. Multilevel logistic regression analysis is used. They find that most of

the pregnant women are abused by their husbands and there is a positive association between a women's abuse and her family history of abuse. They also observe that age of rural women is not associated with abuse during pregnancy whereas urban women being older than 19, having a husband with more than 10 years of education and being from certain higher income quartiles are negatively associated with abuse. They find that rural women, being able to depend on natal family support in a crisis is negatively associated with abuse and the marriage that involved dowry demands and being Muslim are positively associated with abuse.

Pathak et. al. (2008) examines to assess serum zinc levels during pregnancy in Haryana. They conduct a community based cross sectional study amongst 283 pregnant women with gestational age of 28 weeks or more. They find that 64.6 per cent of the pregnant women had zinc deficiency due to the low dietary intake of zinc. They also suggest that there is a need to undertake multi-centric studies in various parts of the country to assess the serum zinc levels, magnitude of zinc deficiency and factors leading to zinc deficiency amongst pregnant women in India.

Patra (2008) examines the state-wise gender bias in child health by using Borda Rule and Principal Component Analysis. He finds that the gender bias against girl children in child health is not present among the Indian states over the three rounds of NFHS. However in Uttar Pradesh, Madhya Pradesh, and Bihar there is high gender bias which is followed by Andhra Pradesh, Punjab, and Gujarat. In Gujarat, Himachal Pradesh, Rajasthan, West Bengal, Uttarakhand, Chhattisgarh, and Jharkhand are reducing gender bias against girl children. But for the states of Jammu and Kashmir, Punjab, Uttar

Pradesh, Madhya Pradesh, Bihar, Maharashtra, Andhra Pradesh and Tamil Nadu gender bias against girl children has consistently increased over time relatively.

Sharma (2008) examines the knowledge and awareness of contraception of Muslim women in India. District level House Survey (DLHS) and National Family Health Survey (NFHS) data for the period 2007-08 is used. Multivariate logistic regression is used. They find that Islam prohibits family planning. They find that more Muslim than Hindu women know of and use traditional methods of contraception. The study reveals that education significantly contributed to the use of traditional contraception in India.

Sogarwal and Dwivedi (2008) examine the association between domestic violence and reproductive health problems by using NFHS-2 data. Logistic model is used for the analysis. The study reveals that there is a high incidence of self-reported symptoms of gynecological morbidity and only a few sought treatments from public health care while a majority uses the private health care. They find that a majority of women do not seek any medical assistance even with multiple symptoms of gynecological morbidity. They observe that work status of women, domestic violence and contraceptive use is playing a significant role in prevalence of self reporting gynecological problems. The study stresses the need for greater attention to the quality of care in reproductive health programmes in connection with gynecological morbidity.

Amarech (2007) examine the determinants of health care provider choice of urban households of Ethiopia by using multinomial logit model. The results of this study reveal that for a given rise in health care cost, the poor will reduce the demand for health care significantly in greater proportion relative to the better-off. The study also depicts that

the poor are required to pay significantly greater proportion of their income to health care than the better off in order to get treatment. This will aggravate the existing inequality in access to basic health care services.

Khetarpal (2007) conducts a study on health and well-being of rural women and find that majority of the women are suffering from anemia and complained of backache, headache and pain in the body. They argue that this may be due to considerable workload for women who spend 10-11 hours at working in fields, continue doing their work at home also and consume less food.

Kumar and Nair (2007) examine the influence of socio demographic factors in the treatment seeking behavior for gynecological morbidity among women of different regions. The study reveals that south Indian women are more conscious about their health compared to north Indian women. In south India, the highest rate of treatment seeking is among Muslim women.

Mandal et. al. (2007) examine the role of religious faith and female literacy on fertility regulation in a rural community of West Bengal. They find that average number of pregnancies ever occurred among Muslim mothers are higher in comparison with Hindu mothers. Regarding fertility, live births is more among Muslim mothers as compared with Hindu community. In both cases differences is found to be statistically significant. They also find that female literacy have no impact on fertility as a whole. But while stratified, it has been found that female literacy has a positive impact on fertility regulation among Hindu mothers but not among Muslim mothers. They argue that influence of different factors such as religious faith, decision making role of male partners and in-laws, high infant and child mortality, poverty, community pressure, lack

of awareness about the services available, failure of health workers in confidence building, deep-rooted faith that child birth results at God's will, indifferent attitudes etc. might have undermined the impact of literacy.

Sharma et. al. (2007) attempt to evaluate menopausal symptoms in women above the age of 40 belonging to the middle socio-economic strata from Jammu as well as to evaluate the correlation of age on these symptoms by interviewing 117 menopausal women. The study reveals that the mean age at menopause in Indian women is less in comparison to women from developed countries. It is find that menopausal problems among the different group of women are different and it increases with the increase in age. It is also observed that the most frequent menopausal symptoms are fatigue and lack of energy followed by headache, hot flushes, cold sweats, and cold hand and feet weight gain.

Rayhan and Khan (2006) examine the nutritional status and determinants of malnutrition among below five years of children in Bangladesh. They use bivariate and multivariate technique by taking Bangladesh Demographic and Health Survey 1999-2000 (BDHS 1999-2000) data. The study reveals that 45 per cent of the children are suffering from chronic malnutrition, 10.5 per cent are malnourished and 48 per cent have under weight problem. The study further depicts that previous birth interval; size of the children at birth; mother's BMI at birth and parent's education are the important determinants of malnutrition among these children.

Rout (2006) has attempted to find out the gender inequalities in health expenditure in urban Orissa. The study reveals that irrespective of sex and gender, urban people spend more on health than rural because of their high income and more

consciousness about health and this may be due to the impact of education and modernity. The study also shows that there is a significant difference between male and female health expenditure in urban Orissa. Male health expenditure is more than that of the female. It also reveals that female health expenditure in urban area is more than that of rural and tribal areas.

Siddiqui and Salam (2006) attempt to quantify the socioeconomic gap in relation to availing of maternal health care services during pregnancy and delivery. They have taken the data from National Family Health Survey (NFHS) published in 2002. They also find that there is a positive association between socioeconomic status of women and the use of maternal health care services. Those women who were better educated, economically well off and resided in urban areas availed the delivery care services to the maximum. Poor women cannot afford the cost of health care services. Further, they also find that Christian and Sikh women utilized the reproductive health services far better than Hindu and Muslim women did.

Nagar and Dave (2005) examine the perception of middle-aged women regarding physiological problems faced during menopausal period in Baroda city. Samples of 30 married women in the age range of 39 to 52 years are collected through snowball technique. The study reveals that the mean age of women at menopause is 44.59 years. The study reveals that during this period, women face different health problems like backache, uneasiness, fatigue, increased headache, hot flushes and sleep disturbances. This type of problem arises due to earlier pregnancy, malnutrition, irregular health check up etc. This study explores that most of the women who are facing irregular periods with heavy menstrual flow perceived more physiological difficulties during menopause. It

concludes that menopausal health is one of the neglected areas in our country and it needs timely vital attention.

Banerjee et. al. (2004) examines the health care delivery available in rural Rajasthan and finds the public and private provision of health care. They find that the consumer of health services spend lot of money to get health care but they are not satisfied with the services provided by the public sector, on the other hand private providers who are often unqualified provide the bulk of health care in that area. They also find that low quality public facilities seem to be correlated with worse health.

Bhat and Maheswari (2004) investigate the health facilities provided by any private company depends on its profit and its financial status. Like the private company, the facilities provided by the government also depend on its budget allocation, which further depends on the financial soundness of the government. For their study, they used unstructured interview method.

Sidramshettar (2004) examines the indicators of women's health status and identifies the strategies for improving the health and nutrition of girls and women in Karnataka. The study reveals that socio-economic and cultural factors such as illiteracy, low education, early age at marriage, rural residence etc. are the responsible factors for poor health status of women. The study also depicts that improved health infrastructural facilities, family planning method, vaccination programme and awareness programme improves the health status of women.

Bentley and Griffiths (2003) investigate the prevalence and determinants of anemia among women in Andhra Pradesh. They find that women from the low standard

of living group have the highest anemia problem compared to high standard of living group belonging to urban area. They also find that women who are over weighted, drink alcohol and eating pulses are likely to be less anemic. Muslim women are observed to be significantly less likely anemic than Hindu.

Ghuman (2003) examines the correlation of infant and child mortality and autonomy of 15 pairs of Muslim and non-Muslim communities in India, Malaysia, the Philippines and Thailand. He observes that women's autonomy in various spheres is not consistently lower in Muslim than in non-Muslim settings. Mortality among infants and children are often higher in Muslim communities, particularly in parts of Thailand, Philippines, and Malaysia. Both across and within communities, the association between women's autonomy and mortality is weak.

Sharma (2003) investigates the determinants of demand and health status of the people. He has estimated nested multinomial logit. He finds that price, income, age and household size have positive impact on demand for health care. Distance and lack of safe drinking water is negatively related with the demand for health care.

Shan et. al. (2003) examine the demand for health services in rural Tanzania and find that as prices of public services rise there is substantial substitution into private services. They also find that doubling the prices of public clinics or public hospitals results in a decline in the probability of their use of 0.10, while doubling the prices of private clinics is accompanied by a large increase in the use of public clinics.

Mohamed et. al. (2002) examine the gender related issues in Kerala. The study reveals that men have comparatively higher levels of well being and mental health than

women and women face more stress problem than men do. It is also observed that male members of female-headed households have significantly higher well being than female members of female headed households. The study also reveals that education, marital status, quality of housing, availability of electricity, gender, age, religion, region and employment status are significant factors which affect well being and mental health of the individuals. Migration, housing condition, education have a positive influence on mental health and early marriage, age, marital status have negative effect on mental health and well being of individual.

Yahaya (2002) examines the reproductive health situation in Bida Emirate of Nigeria. The study reveals that majority of respondents are aware of and use natural methods of birth control such as abstinence, breastfeeding and withdrawal but there is low awareness and use of drugs. Forty-five per cent respondents have blamed their husbands for not using family planning methods. He observes that most of the respondents have no idea of regarding the HIV/AIDS. Result further reveals that, rural and urban women significantly differed in their health status. Similar trend is observed for attitude towards family decision-making, sexuality and STD prevention, and maternity / childcare.

Duraisamy (2001) examine the determinants of health status and curative health care of children, adults and elderly in rural India. The study uses the NCAER-HDI (Human Development Indicator) national-level survey data for 1994. He uses probit, tobit and multinomial logit model for the result estimation. The result of the study depicts a U-shaped relationship between age and morbidity. It is also find that both education and income has a negative impact on morbidity. Another interesting finding is that smoking

has a significant negative effect on adult and elderly morbidity. The study also depicts that morbidity is higher among the scheduled caste and scheduled tribes population. Finally, the study shows that the real choice in rural India with the increase in income the adults and elderly people demand private as well as public health care facilities.

Rangaiyan and Surrender (2000) examine the women's perception regarding the gynecological morbidity and find out the perceived causes about the illness and the remedies among rural women. The study reveals that approximately three-fourth of the women are suffering from at least one gynecological morbidity and they prefer to seek treatment from formal medical system. It is also observed women have more faith on home remedies and prevailing misconception regarding the gynecological morbidity prevents the women to seek treatment from qualified doctor.

Hallman (1999) examines how quality, price, and access to curative health care influence use of modern public, modern private, and traditional providers among 3,000 children aged 0-2 years in Cebu, Philippines. The analysis relies on a series of household, community, and health facility surveys conducted in 33 rural and urban communities during 1983-1986. The study reveals that distance to care is important for reducing demand, unlike user fees that show no significant effects on the use of modern public or private services. The availability of oral rehydration therapy and child vaccines, as well as the proportion of doctors to staff, is important for increasing the use of public care, while supplies of intravenous diarrhea treatments raise the demand for private services. Non-modern practitioners are used more if they have recently attended a non-government-or government-sponsored health training session. Parental human capital and household income increase the utilization of private services. Children who are male and

younger than 6 months of age are more likely to be taken to private and traditional providers.

Ahmed et. al. (1998) examine the pattern of complications that women have during pregnancy and childbirth, their care-seeking behaviour, and their knowledge about these complications in rural Bangladesh. The study reveals that sixty-six percent of the women face at least one complication during the pregnancy and childbirth and the most common of which is prolonged labour, fever, bleeding, and pre-eclamptic toxemia. Reporting of complications is found to be associated with women's education, parity, and knowledge about obstetric complications. The study also shows that most women who have complications consulted untrained service providers. The use of institutional facilities and/or trained providers for obstetric complications is positively associated with women's age, education, knowledge of obstetric complications and their husband's education. Further, the study reveals that women's knowledge about complications of pregnancy and childbirth is limited.

Raghupathy (1997) investigates the relationship between pregnancy wantedness and prenatal behaviors related to child health in Thailand. The results indicate that wantedness of births exerts a significant influence on health care. Women with unwanted pregnancies are less likely to seek prenatal care or receive tetanus toxide inoculations. Further, women with high parity disadvantaged socio-economic groups and lower educational levels have the highest proportion of unintended pregnancies.

Indira (1993) conducts a study on the nutritional status and dietary habits of Irulas of Attappady. The study is carried out among 180 families to assess the socio-economic

and food consumption pattern of tribal families and to assess the nutritional status of the children between the age group of 5 to15 years. The results of the study indicate that majority of the families are of nuclear type with an average family size of 4.73. Majority of the members are illiterate. Agriculture labour is the main occupation of the tribes and most of the families are below the poverty line. Housing conditions and personal hygiene of the families are seen to be poor.

Kabir (1992) analyses relationship between the incidence of disease and the socio economic characteristics of elderly respondents in Bangladesh. The study reveals that both education and occupation are inversely related to the incidence of disease among the elderly women. Further it is observed that more than half of the respondents are not taking health care from the govt. hospitals due to lack of proper and systematic care from the doctors. About one sixth of the respondents mention that they have to wait for long time from getting the service from the health centres. The study also shows that the primary health care system has no special provision for providing the health care for the elderly and the health policy depicts no special concern for the elderly.

Sharma and Dhawan (1986) examine the health problems of rural women. The study reveals that a sizeable number of women are suffered from bronchitis, coryza, indigestion, constipation, diarrhea, conjunctivitis, dandruff, tartar deposits on teeth, skin diseases, gynecological diseases and some other diseases like rheumatism, arthritis, etc. Further, the study observes that the treatment given in government hospital is not effective.

The present study attempts to examine the health status of rural Muslim women of the Cachar district of Assam with the help of both primary and secondary information. Further the study also attempts to focus on the demand for health care facilities for the stakeholders which distinguish the present study from others with an exceptional novelty.