### **ABSTRACT**

# HEALTH STATUS AND DEMAND FOR HEALTH CARE OF THE RURAL MUSLIM MARRIED WOMEN IN CACHAR DISTRICT

## (AN ABSTRACT OF THE THESIS SUBMITTED TO ASSAM UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN THE DEPARTMENT OF ECONOMICS)

By

### ALFINA KHATUN TALUKDAR

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### DEPARTMENT OF ECONOMICS

MAHATMA GANDHI SCHOOL OF ECONOMICS AND COMMERCE

ASSAM UNIVERSITY

SILCHAR-788011, INDIA

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#### **1. Introduction**

Health is an important dimension of the country's development. Now-a-days the concept of health and illness are universal phenomenon. Both health and illness are differently understood and are an integral and essential part of life for an individual, family, community and society. Many definitions of health have been offered from time to time. However, the widely accepted definition of health is that given by the World health organization (WHO). It defines health, as a state of complete, physical, mental and social well-being and not merely an absence of disease or infirmity.

"A woman's health is her total well-being, not determined solely by biological factors and reproduction, but also by effects of workload, nutrition, stress, war, and migration among others" (Kwaak, 1991). Women's health is important not only for themselves but also for future generations. Women's health affects the well being of the households and that of the society. A core problem around women's health is the multi-dimensionality of women's lives. Kennedy (1997, 2002) has argued that most women have three roles to carry out in their lives: caregiver, earner and life giver. Women often neglect their own health because they prioritize their commitment to others. Poverty, negligence on themselves and dedication to the family members affect women's health. Though women live longer than men but almost everywhere they suffer more illness and disabilities throughout their lives. According to Ronzio (2004), women are usually vulnerable to malnutrition for both social and biological reasons, throughout their life

e cycle. In some parts of the world, girls are discriminated against in access to health care, to food and education and in other ways. As teenagers, they suffer from early pregnancy and are at a greater risk of retarded growth than boys. Reproductive aged women are subject to numerous stresses affecting their health and well-being. Elderly women in many societies are deprived too. Women look after their entire family with giving less self attention. It has been reported that women receive less health care than males (Chatterjee 1990).

The health problem is more acute for Muslim women compare to Hindu women as Muslim women are belonging to different social structure in India. In terms of overlooked health disparities, Muslim women are fast growing, less educated and undeserved population. Islamic traditions are based on Quranic instruction, Hadith and Sunnah. The tradition of Prophet (Peace be Upon Him) and Quranic instruction both contain elements of health and healing. Several studies have revealed that modesty may be a barrier to health care (Scheinberg, 2006). Muslim women carry more of the work burden of the household and hence have little time to seek out health care services, thus putting themselves at a disadvantage relative to men in their access to and utilization of health care services.

In most of the Muslim societies, men play a paramount role in determining the health needs of a woman (Shaikh and Hatcher 2004). Power or control in family decision-making is exercised more often by husband than by wives (Piet-Pelon, 1999). Since men are decision makers and in control of all the resources, they decide when and where woman should seek health care. The low status of women prevents them from recognizing and voicing their concerns about health needs.

Muslims represent the second largest religious group in India, and they form the largest single minority. Muslims are described and observed to be poor and marginalized groups. The conditions of Muslims are reflected in the following quotation that is worth noting. "Muslims are not only poor, there is also poor understanding of their human conditions, which has more long lasting effect, for a change can come from knowledge and understanding" (Shariff 2004).

#### 2. Statement of the Problem and Relevance of the Study

Women represent half the world's population and contribute greatly to the functioning of society. Their poor nutritional status presents adverse health and socioeconomic consequences in society. The potential consequences include poor reproductive health outcomes such as maternal death during and or after childbirth (Gemeda et. al. 2013). Women's nutritional status does not only affect them but the family at large especially the young children. Low level of understanding about the determinants of malnutrition is one of the challenges faced in addressing the problem of women malnutrition.

Health concerns are regulated by religion (Ahmed 2005; Scheinberg 2006; Hasan T 2008). Muslims are generally described as economically and educationally backward community. Many researchers have reported in their research work that the morbidity rate is higher among Muslim community. In terms of overlooked health disparities, Muslim women are fast growing, less educated and undeserved population.

Women generally ignore their health problems until their problems touch at serious levels and become too sick. The rural women are regularly facing different health related problems viz; anemia, gastroenterological problem, calcium deficiency, high fertility, thyroid problem, breast cancer, low blood pressure, heart disease, hair falling, menstrual and white discharge problem etc. which need to be monitored. But, these problems are quite often ignored both by family member and the women herself. These problems arise mainly due to lack of nutritional consumption, poverty, lack of awareness, improper family planning and so on.

Getting good health care facilities for maintaining their good health is a fundamental human right. It is the responsibility of the government to provide health care to all people in equal proportions. The health status of a country depends largely on the availability of health-related infrastructure. At the same time to maintain a sound health, access to safe drinking water, toilet and housing is also essential. The Government of India has launched the National Rural Health Mission (NRHM) on 12<sup>th</sup> April 2005. The aim of NRHM is to bring about significant improvement in the health system and the health status of the people. The primary focus of the mission is to improve access to health care for the rural people. It seeks to provide equitable, affordable and universal access to rural people, especially women and children. Though govt. has introduced many schemes especially for reproductive women, but no special attention has given for the improvement of old aged women. Moreover, due to non-availability of skilled man- power and infrastructure, the purpose of setting up of health care centers is not successfully achieved in the rural area.

The present study is an attempt to understand the scenario of health status and nutritional status of Muslim married women and its determinants and also to find out the traditional preventive cares, which they used for health problems. The study also attempts to find out the availability and accessibility of rural health infrastructure and their demand for getting health care services in rural area of Cachar district.

#### 3. Area of the Study

The study focuses on the Muslim married women belonging to the rural area of the Cachar district. Cachar district is located in the southernmost part of Assam. The total geographical area of the district is 3,786 Sq. Km. Administratively the district is divided into two sub-divisions viz. Silchar (Sadar) and Lakhipur. There are five revenue circles and fifteen community development blocks (CD) in the district. There are seven Assembly constituencies in this district, viz; Silchar, Sonai, Dholai, Udharbond, Lakhipur, Barkhola, and Katigorah. According to the 2011 census, Cachar district has a population of 1,736,319. The district has a population density of 459 inhabitants per square kilometer which is higher than the state average 397. Out of the total population, 18.17 per cent lives in urban regions and 81.83 per cent population lives in rural areas of villages.

#### 4. Objectives of the Study

The main objectives of the study are following:

- To examine the general and disease wise health status of the rural Muslim married women in Cachar district.
- To identify the socio-economic factors influencing the health status of the rural Muslim married women of different age groups in Cachar district.
- To examine the accessibility of health care facilities and schemes for the rural Muslim women in Cachar district.
- To investigate the traditional preventive measures taken by the rural Muslim married women to escape from health problems what they are facing.
- To examine the demand for health care facilities and to identify the determinants of this demand.

#### 5. Hypotheses of the Study

On the basis of the above mentioned objectives the following hypothesis can be framed.

- The health status of rural Muslim married women in Cachar district is very poor.
- The health status of Muslim married women in Cachar district is poor due to lot of socio-economic problems.
- There is lack of rural health care facilities available in Cachar district.
- Muslim married women depend largely on the traditional measures to get relief from the health problems.
- There is high demand for health care facility among the Muslim married women.

#### 6. Methodology of the Study:

Methodology of the study is analyzed in two following sections viz; methodology for data collection and methodology for data analysis.

#### 6.1 Methodology for Data collection

The study is based both on primary and secondary data. Primary data is collected from the field by preparing a scheduled questionnaire. A three-stage stratified random sampling technique is used for collecting the primary data. In Cachar district there are 15 blocks. Out of these 15 blocks, 50 per cent (approximately) blocks are selected in the first stage. In the second stage, from each selected block, 10 per cent (approximately) villages are selected. The selection of blocks and villages are based on large demographic size of women population. In the final stage, 8 households from each selected village are selected randomly from Muslim community. Therefore, approximately 450 households are the final number of observations for this study and 586 is the final number of respondent from these 450 households.

Secondary data are collected from various sources viz; Census Reports of India, Year Book issued by the Department of Family Welfare of the Ministry of Health and Family Welfare, National Rural Health Mission, Hand Book of Health Statistics of Assam, District Statistical Hand Book and Statistical Abstracts of India and Assam, Medical Bulletins National Family Health Survey (NFHS).

#### 6.2 Methodology for Data Analysis

Analytical tools of the study are discussed according to the objectives of the study.

I. In order to examine the health status of the Muslim married women is analyzed on the basis of some diseases which are common in case of women. As per medical sciences, women are categorized into four groups based on the biological changes of the women<sup>1</sup>. These groups are adolescence stage i.e. 12-18 years of age group, reproductive stage i.e. 19-35 years of age group, pre-menopause stage i.e. 36-45 years of age group, and menopause stage i.e. 46 year and above age group. As the study is focused only on the married women group, therefore only the last three groups are considered for this study. However, here the reproductive group is considered from 15 years of age group to 35 years because practically rural women especially Muslim women in rural area are getting married before 18 years of age. The health problems are analyzed according to the different age groups because patterns and nature of most of the diseases are different for different age group. For the study, dimensional index is used to show the health

<sup>&</sup>lt;sup>1</sup> The groups are divided into four groups with consultation of registered medical practitioners. In Indian situation generally it is difficult and in most cases it is problematic for a woman to conceive an issue after the age 35, though there may be exception. Accordingly, from the age 19–45 is divided into two groups viz; reproductive and pre-menopause.

status of the women in different blocks of the Cachar district and show which block has better health status compare to others. The health status or nutritional status of Muslim married women is also analyzed with the help of Body Mass Index (BMI).

- II. In order to identify the socio economic determinants of health status, a multiple regression model is used with considering a set of quantitative and qualitative variables.
- III. In order to check the availability and accessibility of the health facilities in the health centres, a tabular representation is done by using primary information collected from the respondent women.
- IV. To investigate the traditional preventive measures taken by the rural Muslim married women to escape from health problems what they are facing the percentage of women who has taken traditional preventive care is observed from the reported diseased women in a particular disease. Again, the percentage of women who takes different traditional preventive measures for different disease and even for the same disease are also calculated by the number of women who takes specific traditional preventive measures for the specified disease dividing by the total reported diseased women who are taking traditional preventive cares for these diseases.
- V. In order to examine the determinant of the demand for health care facilities of the women for which binomial logit model is used in the study through contingent valuation technique. The primary use of contingent valuation method is to elicit the women's willingness to pay for getting health care facilities. This approach has been used to check whether they are interested to pay or not. The response option will be binary type i.e.; 1 for yes and 0 for no. If the response is in favor of yes then that implies there is a demand for getting better health facilities or the people agree to share the cost for its

maintenance. For estimating the probability of willingness to pay (WTP), binomial logit model is used. Here, both quantitative and qualitative explanatory variables are used which have theoretical influence on the demand for rural health care but empirically it should be examined whether they have any significant impact on the demand for health care in this study area

#### 7. Findings of the Study

The main findings of the study are mentioned as follows:

- The study reveals that the total number of diseases reported by the 586 respondents is 2248, which implies that an ill woman is facing on an average more than three (3.84) types of diseases. It is also seen that the affected women of each group are suffering by multiple types of diseases. Out of the total women, the women of menopause (94.89 per cent) group are mostly affected followed by pre-menopause (82.35 per cent) and reproductive (71.82 per cent) group of women. It is observed that the percentage of affected women or the number of average disease increases according to the higher age bracket.
- Out of 586 respondents, approximately 81 per cent of the women are suffering from different types of health diseases.
- It is seen that affected women of each group are suffering by multiple types of diseases. Out of the total women, the women of menopause (94.89 per cent) group are mostly affected followed by pre-menopause (82.35 per cent) and reproductive (71.82 per cent) group of women.
- Among these three groups the health condition of reproductive group of women are comparatively better than other age group of women. Affected reproductive women

suffer on an average approximately 2.73 types of diseases. On the other hand, an affected pre-menopause woman and menopause woman suffer on an average more than four (4.1) and more than five (5.48) types of diseases respectively. Therefore, it is observed that rural Muslim married women of Cachar district are facing multiple types of health problems and as the age increases, number of diseases also increases.

- The study shows the health condition of rural reproductive Muslim married women in different blocks of Cachar district is not satisfactory and among the blocks, the health status of women in Borjalenga block is relatively better than other blocks of Cachar district. The crucial diseases faced by reproductive women among the selected blocks are anemia, calcium shortage, gastroenterological, gynecological, hair falling, menstrual, sexual, skin and white discharge.
- The study also shows the health situation of Pre-menopause and Menopause age group of Muslim married women in different blocks of Cachar district are not satisfactory. The crucial problems faced by menopause women among the selected blocks are gastroenterological problem, arthritis, rheumatism, dental problem, eye problem, calcium shortage, menopause, anemia, giddiness, mental problem, skin disease, headache, blood presser problem, piles etc.
- The study also reveals a block-wise comparison shows the relative position of the blocks in response to the health status of Muslim married women. The illness index value is very high in all the blocks, which show a poor health status of the Muslim married women.
- In this study, BMI is taken as a proxy of health status of women. The problem of malnutrition is highest in reproductive group and lowest in pre-menopause group. On

the other hand, overweight problem is highest in menopause group followed by premenopause group. However, obesity cases are rare in all the groups. The condition of health is relatively better among reproductive group of women.

- The respondent's education, family size, food expenditure, medical expenditure, marital age, area of house and housing condition are the significant determinants of BMI (Body Mass Index is proxy of health status).
- There is a huge shortage of both physical and human health infrastructures in Cachar district. The condition of Block Primary Health Centre (BPHCs) is relatively better in comparison to Sub Centre (SCs) and Community Health Centre (CHCs). However, the situation of Mini Primary Health Centre (MPHCs), State Dispensary (SDs) and Subsidiary Health Centre (SHCs) is very miserable. Non-setting up of the required health centre as per population norms resulted in non-achievement of the primary objective of improving accessibility to health facilities in rural areas.
- Most of the MPHCs are running by a nurse or pharmacists and as a result, patients are not getting proper treatment. Though some doctors are present in these PHCs, but specialist doctors are still not present in these health centers. For the treatment of women related diseases viz; menstrual problem, white discharge, sexual problem, gynecological problem etc. female doctor are not available in these health centres which affect the rural women especially Muslim women because they are conservative as well as shy to discuss these problems with male doctor.
- The health infrastructure of the Cachar district is not sufficient compare to the need of the women and the health care facilities of the existing health centres are not up to the

mark. Though govt. has introduced many schemes especially for reproductive women, but no special attention has been given for the improvement of old aged women.

- Most of the Muslim married women follow either traditional preventive measures for getting relief from their diseases or neglect their diseases which they face mainly due to the poor family income.
- The shortage of health infrastructure and health care facilities in rural areas of Cachar district creates a huge demand for medical care. It is observed that almost 72 per cent Muslim women are willing to pay for getting better health care facilities or for sharing cost of maintenance if any voluntary organization comes forward or public health sector establishes in their locality. Willingness to pay of the people reflects the demand for health care facilities because they are ready to get better facilities in lieu of some payment.
- The significant factors that affect the demand for health care are viz; age of the respondents, more number of married women, value of BMI, level of education of the rural married women, household size, per-capita income, distance of health centres from their house, area of house, poor housing condition etc.

#### 8. Conclusion

The health status of Muslim married women in the rural areas of Cachar district is not at all satisfactory. It is found that approximately 81 per cent of the women out of total women are suffering from different types of health diseases. Out of the total women, the women of menopause group are mostly affected followed by pre-menopause and reproductive group of women. Most of the women belonging to reproductive age group are facing the diseases such as anemia, menstrual, calcium shortage, white discharge, sexual problem, gynecological problem, hair falling, skin problem, stress, headache etc. Women belonging to pre-menopause group are mainly facing the diseases such as gastroenterological problem, anemia, menstrual, calcium shortage, arthritis, headache, gynecological problem, hair falling, skin problem, stress, eye, dental etc. Women of menopause age group are facing multiple crucial problems such as gastroenterological problem, arthritis, rheumatism, dental problem, eye problem, calcium shortage, menopause, anemia, giddiness, mental problem, skin disease, headache, blood presser problem, forgetfulness, respiratory problem, piles etc.

. The illness index value is very high in all the blocks, which show a poor health status of the Muslim married women. It is found that the total numbers of illed married women are highest in Borkhola block and lowest in Barjalenga block.

Therefore, it is concluded that the first hypothesis i.e. health status of the Muslim married women in rural area of Cachar district is not satisfactory that is the hypothesis is accepted.

The problem of malnutrition is also very high in all these three groups. The problem of malnutrition is highest in reproductive group and lowest in pre-menopause group. On the other hand, overweight problem is highest in menopause group followed by pre-menopause group. However, obesity cases are rare in all the groups. The condition of health is better among reproductive group. There are several significant responsible factors of poor health status which are both quantitative and qualitative factors viz; age of the respondent, educational level of the respondent, household size, monthly food expenditure of the family, monthly medical expenditure of the family, marital age of the respondent and area of the house and semi pucca and pucca housing condition. Therefore, it is

concluded that the second hypothesis i.e. there are various factors that affect BMI or health status of the Muslim married women in rural area of Cachar district is accepted.

Health infrastructure of Cachar district is not satisfactory. There is a huge shortage of both physical and human health infrastructures in Cachar district. Non-setting up of the required health centre as per population norms resulted in non-achievement of the primary objective of improving accessibility to health facilities in rural areas. It is also seen that the Govt. has introduced many schemes especially for reproductive women, but no special attention has given for the improvement of old aged women. Though govt. has introduced many health schemes especially for reproductive women but still only 42 per cent respondent argued that they are benefitted from these schemes. Therefore, it is concluded that availability and accessibility of rural health infrastructure especially for women in Cachar district is not satisfactory ie; the third hypothesis is accepted.

Due to shortage of poor health infrastructure and low economic status a significant number of Muslim married women are either using traditional preventive measures to get relief from the diseases or neglecting such problems. Only a few numbers of women are using modern medical treatment either from private or government health institution. It is observed that out of the total reported diseased women (2248), majority of the respondents (53.91 per cent) are neglecting their health problems and only a few number of women are going for either traditional preventive measures (30.16 per cent) or modern measures (25.88 per cent). Most of the married women neglect the problems such as mental, white discharge, low blood pressure, anemia, mouth ulcer, diabetic, eye etc. without taking any measures. Married women are following the traditional measures for the problems such as dental, calcium shortage, skin related problem, hearing problem, headache, rheumatism, menstrual, hair etc; only in case of heart, mental and thyroid related problem, no traditional measures are taken. For gynecological and heart related problem the married women are not following traditional measures whereas they keep faith on modern measures. Therefore, it is concluded that fourth hypothesis i.e. Muslim married women mainly depends on traditional preventive measures is rejected.

Shortage of rural health infrastructure especially for women creates a huge demand for health care facilities in their locality. The survey result shows that 72 per cent Muslim women are willing to pay for getting better health care facilities or for sharing cost of maintenance if any voluntary organization comes forward or public health sector establishes in their locality. Moreover, it is also observed that the demand for health care facilities is relatively higher in Kalain block followed by Borjalenga and Katigorah block whereas it is relatively lower in Narshingpur block. Further, it reveals that the responsible factors of this demand are age of the respondent, educational level of the respondent and her husband, BMI of the respondent, household size, per capita income, per capita medical expenditure, distance of the health centre from home, area of the house and semi pucca house. Therefore, the fifth hypothesis i.e. there is a huge demand for health care facilities is accepted and this demand is affected by various factors.

#### 9. Suggestions

From the study, it is found that the health status of Muslim married women in rural area of Cachar district is not at all satisfactory and there is a huge shortage of both physical and human health infrastructure which leads a very high demand for health care facilities among them. Thus, on the basis of the above findings and conclusion of this study the following suggestions can be framed.

- Effective policies and programmes are required to reduce both forms of malnutrition. Hence, health education programs for women of the district are needed to help them to understand the components of a healthy diet and to ensure adequate access to health services.
- Effective health awareness programs need to be introduced to change the perception of illness of Muslim households.
- Perspective to health status is highly influenced by socio-cultural beliefs and practices. Thus, socio-economic status and income saving opportunities of the Muslim married women needs to be developed by education and employment programmes of the govt.
- Integrated Child Development Schemes (ICDS), the package of services includes physical and obstetrical examination: monitoring weight, blood pressure, supplying iron and folic acid tablets, food supplements, identification and referral of high-risk mothers and health education on antenatal care, breast-feeding, child rearing and family planning should be highly implemented among Muslim women.
- Though govt. has initiated to improve the health infrastructure but still it is not sufficient compare to the need because of poor administrative monitoring. Therefore, it is suggested that the administrative monitoring should be improved for the improvement of the health care facilities.
- The study reveals that due to the absence of female doctor women are reluctant to go to the hospital for treatment of gynecological problem. Therefore, it is suggested that female doctor should be appointed in these health centres for the treatment of women patient.

- As there is huge demand for health care and people are ready to pay some amount of money for getting better health care facilities so some volunteer organizations, NGOs should come forward on the cost sharing basis. Even mobile medical unit for the interior area may be a possible solution where there is no health service.
- Since most of the health schemes are related for reproductive women. Therefore, govt. should take policies for the older women too.
- Muslim women are weaker sections of the society who have lagged behind in all fields. Hence, it is suggested that more importance should be given to improve the accessibility of getting available health care facilities by governmental and non-governmental programmes with their close monitoring, early detection of problems in implementation and midcourse correction for the upliftment of Muslim women's' health status.
- Since in Cachar district especially in rural area the road infrastructure is very miserable and as a result, women mainly pregnant and old aged women are facing difficulty to reach the health centre. Therefore, the government should improve the rural infrastructure, transport facilities, or establish more health infrastructure in rural areas.

#### 10. Limitations of the Study and Scope of Further Research

Though the study highlights many aspects but there are some limitations which are discussed in the following for pursuing further research in this field:

• Health status is measured by using BMI in this study. Nutritional calorie index is another important index for showing health status in terms of nutritional deficit or surplus though it is not done here due to time limitation.

- There is a problem of authentication related to income and expenditure information as most of the women are housewives and their husbands are daily workers. Here, the information has been provided the respondent based on their memory.
- Estimation of cost structure of alternative health facilities is essential for which the people are ready to pay. After estimation of the cost structure an actual required contribution can be estimated and accordingly an open ended bidding could be asked to the respondent for getting the absolute value of willingness to pay.
- In the present study a cross-sectional data are used. A time series data could be used. It is difficult to include all the socio-economic and other aspects in a particular study due to time constraint. However, these limitations of the present study may open up for pursuing further researches.

#### **References:**

- Ali, K. J. and Noman, A. N. K. (2013): "Determinants of demand for health care in Bangladesh: An econometric analysis", *World Journal of Social Sciences*, Vol. 3, Issue. 6, pp. 153-163.
- Amarech, G. (2007). "Challenges of healthcare financing: economic and welfare effects of user fees in urban Ethiopia", <u>http://hdl.handle.net/123456789/2549</u>.
- 3. Das, S. and Das, D. (2012): "Demand for health care of the women in rural Barak Valley: An alternative co-operative approach", *Samabayika*, Vol. 4, Issue.1, pp. 26-36.
- Das, S. and Das, D. (2012): "Women's health status and health care in rural India– A case study of Barak Valley in Assam", *Journal of Social and Economic Policy*, Vol. 9, Issue. 1, pp. 53-66.

- Duraisamy, P. (2001): "Health status and curative health care in rural India", *National Council of Applied Economic Research*, Working Paper Series No. 78, pp. 1-40.
- Gemeda, D., Fekadu, B., Wondu, G. and Habtamu, F. (2013): "Assessment of nutritional practices of pregnant mothers on maternal nutrition and associated factors in Ethiopia", *Science, Technology and Arts Research Journal*, Vol. 2, Issue. 3, pp.105-113.
- Indira, V. (1993): "Nutritional status and dietary habits of Irulas of Attappady", Thesis submitted for the partial fulfillment for the degree Doctor of Philosophy in Home science. Faculty of Agriculture, KAU, Vellayani, Thiruvananthapuram.
- Kabir, M. (1992): "Effects of social change on the health of the elderly: Evidence from a micro study", *Journal of Family Welfare*, Vol. 38, Issue. 1, pp. 28-37.
- Kumar, A. and Khan, M. E. (2010): "Health status of women in India: Evidences from National Family Health Survey-(2005-06) and future outlook," *Research and Practice in Social Sciences*, Vol. 6, Issue. 2, pp. 1-21.
- Kumar, N. P. (2011): "Status of women and economic development a decadal analysis based on Indian states," Socio Economic voices, pp-1-23
- Patra, N. (2008): "State-wise pattern of gender bias in child health in India", *Munich Personal Re PEc Archive*, pp.1-35, <u>http://mpra.ub.uni-muenchen.de/21435/</u>
- 12. Piet Pelon, N. J., Rob, U. and Khan, M. E. (1999): "Man in Bangladseh, India and Pakistan: reproductive health issues", *Karshaf publishers*, Vol. 12, pp. 1-184.
- 13. Raghupathy, S. (1997): "Unwanted pregnancies and preventive health care use in Thailand," *Population Research and Policy Review*, Vol. 16, Issue. 6, pp. 579-595.
- 14. Ramachandran, M., Kumar, K. S. and Viswanathan, B. (2006): "Vulnerability to

Chronic Energy Deficiency: An Empirical Analysis of Women in Uttar Pradesh, India", Paper provided by East Asian Bureau of Economic Research in its series Development Economics Working Papers No. 22508.

- 15. Rao, K. M., Balakrishna, N., Arlappa, N., Laxmaiah, A. and Brahmam, G. N. V. (2010):
  "Diet and nutritional status of women in India," *Journal Human Ecology*, Vol. 29, Issue.
  3, pp.165-170.
- 16. Rayhan, I. and Khan, M. S. H. (2006): "Factors causing malnutrition among under five children in Bangladesh", *Pakistan Journal of Nutrition*, Vol. 5, Issue. 6, pp. 558-562.
- 17. Rout, H. S. (2006): "Gender inequality in household health expenditure: The case of urban Orissa," *Munich Personal Re PEc Archive*, Vol. 38, Issue. 3, pp. 44-48.
- Saikia, D. and Das, K. K. (2012): "Rural health infrastructures in the North-East India," *Munich Personal Re PEc Archive*, pp. 1-10.
- Salam, A. and Siddiqui, S. A. (2006): "Socio-economic inequalities in use of delivery care services in India", *The Journal of Obstetrics and Gynecology of India*, Vol. 56, Issue. 2, pp.123-127.
- Saravanan, R., Raman, R. G., Thiruppathi, G. and Vinoth, R. (2011): "Status of lactating women in Salem district, Tamilnadu: A Study", *International Journal of Pharma Tech Research*, Vol. 3, Issue.1, pp 393-396.
- Shan, D. E., Younger, S. D. and Genicot, G. (2003): "The demand for health care services in rural Tanzania", *Oxford Bulletin of Economics and Statistics*, Vol. 65, Issue. 2, pp. 241-260.
- 22. Sharma, S. (2008): "What Do Indian Muslim women know of contraception? Examining the counterintuitive", http://www.auamii.com/proceedings\_Phuket\_2012/Sharma.pdf

- 23. Sharma, R. K. and Dhawan, S. (1986): "Health problems of rural women," *Health and population perspective and issues*, Vol. 9, Issue. 1, pp.18-25.
- Sharma, S. and Pasha, A. (2012): "Modern and traditional contraceptive choices for Muslim women in India," *International Journal of Physical and Social Sciences*, Vol. 2, Issue. 6, pp. 238-252.
- 25. Sharma, S., Tandon, V. R. and Mahajan, A. (2007): "Menopausal symptoms in urban women", *Journal of Medical Education and Research*, Vol. 9, pp.13-17.
- 26. Shraddha, K., Prashantha, B. and Prakash, B. (2012): "Study on morbidity pattern among elderly in urban population of Mysore, Karnataka, India," *International Journal of Medicine and Biomedical Research,* Vol. 1, Issue. 3, pp. 215-223.
- 27. Sidramshetter S C (2004): "Health status of women in Karnataka: problems and future needs", *Journal of Family Welfare*, Vol.50, Issue. 2, pp. 48-54.
- Sogarwal, R. and Dwivedi, L. K. (2008): "Reproductive morbidity among tribal and non-tribal women in India: A special focus to domestic violence," *Journal of population and social studies*, Vol. 16, Issue. 2, pp.35-50.