

Nutritional Condition And Socio Economic Status Of Women In India**Manash Jyoti Pathak, M. Phil Scholar, Raiganj University, West Bengal**

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ABSTRACT: *The nutritional condition of women in a community is an important determining element of their socio- economic status. Nutrition is an important public health and human development concern especially in developing countries. The main objective of the study is to examine the association between nutritional condition of women and socio economic status in India. The analysis uses both aggregated data and household data from the NFHS-3 conducted during 2005-06. The sample covers 99 percent of India's population living in all 29 states. The multivariate techniques have been used to analyze data. The graphical analysis indicates that proportion of men and women who are too thin is higher in East, central and West region of the country, and lowest in North Eastern (NER) states. Within NER, the proportion is however highest in Tripura followed by Assam and Nagaland, while it is lowest in Sikkim followed by Manipur and Meghalaya.*

Keywords: *Women, Socio-Economic Status, Nutritional condition, NER.*

INTRODUCTION

The nutritional status of women is the culmination of nutrient intake, metabolism and utilization over the course of a lifetime beginning with her nutritional status at birth. Women are vulnerable to malnutrition, for social and biological reasons, throughout their life-cycle. As children, 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 risk early pregnancy and suffer more risk from 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. Malnutrition in women may be a problem insufficiently recognized and inadequately documented. Here, we focus on reproductive-aged women and make a first attempt to describe the problems. To date, much of the emphasis has been on women as mothers. Indeed risks of motherhood including mortality are severe, and intergenerational effects perpetuate growth and developmental failure. But women's malnutrition is also an issue of human rights in itself .

In some societies, preference for boys can start even before birth, leading to selective abortion upon ascertaining the sex of the foetus. Beyond that, infant and child mortality amongst girls may be higher. For example, the sex ratio of females to males is nearly as low as 900 females per 1,000 males in parts of India and Pakistan. Many reasons have been described, for example the less likelihood of girls being brought to clinics when a cost is involved. Thus in some societies girls leave childhood with more growth retardation than boys.

Women's nutrition through the life cycle

“She's 35 years old. When she was born her mother was malnourished and overworked. She was very small and low-weight at birth. She grew slowly. During childhood she had little good food to eat - even less than her brothers. She could not go to school as her brothers did, but remained at home with her mother to help with the housework and child-minding. “By adolescence, her pelvic bones were misshapen and she was shorter than she should have been. As was the tradition, she was married and had her first baby when she was only 14, even before she had fully developed. It was a difficult birth, but she survived it and many more, though once she had so much bleeding that everyone was afraid she would never recover. She's been anaemic ever since, a condition aggravated by the hookworm she carries. During another pregnancy she suffered a malarial fever and miscarried.”

“Like her mother before her, she never went to a health centre when she was pregnant. It was too far away and too foreign. She used the same traditional midwife who delivered her and who helped her sisters. The midwife had no training in cleanliness, and she suffered serious infections after childbirth.”

“She had little time between pregnancies to regain her strength, and little enough food at any time. During later pregnancies her fatigue was draining her.”

“She had so much work in the house and the local brick factory she could not bear the thought of another pregnancy. When it came she went to a woman in the village for something to end it. She was very sick, but it worked.”

“Today she still feels dull pains and soreness in her belly which flare up from time to time. Also after so many pregnancies she probably has a partially prolapsed uterus, which often causes her discomfort, especially after a hard day's work carrying bricks.”

“She is a woman who cares desperately about her family and wants to limit her pregnancies. She heard about family planning from her sisters, but was always too afraid of her husband, who would never allow it. She once got some contraceptive pills, but she felt so nauseated and had so many headaches that she thought it must surely be a punishment for disobedience, and she stopped taking them...” (UNFPA, 1989).

Source: Hammer (1981).

The past decade has observed an unmatched change in standard of living of the people which affects the health of populations in many ways. Some of these have been pleasing such as in communication sector providing newer and faster channels, while others have had a negative impact on health of people. The nutritional transition is characterized by an improved food supplies and advances in food processing techniques, while making more food available to people, has also resulted in imbalanced nutrient intakes changing healthy life styles. People are consuming different types of diets which results in changes in the body composition and occurrence of chronic diseases at an

unprecedented rate which is not seen before. Unhealthy diets and physical activity are two of the main risk factors for increased blood pressure, increased blood glucose, abnormal blood lipids, overweight / obesity and for major chronic disease such as cardiovascular disorders, cancer and diabetes. Low fruit and vegetable intakes and sedentary lives have been postulated as definite risk factors for lowering life spans of the people. The nutrition status in low income countries is being characterised by an emerging crisis due to changing in the life styles of the people. While the problem of undernutrition is not mitigated to a large extent, it coexists along with overnutrition in countries such as India. Chronic diseases are becoming major contributors of death and disability adjusted life years. The nutrition transition in low income countries is being recognized as an emerging crisis due to changing health profiles (Popkin , 1994). A classical example of changing health profile is evident from the nationwide surveys mapping the nutritional profile of women (NFHS, 2007).

OBJECTIVES

The broad objective of our study is to examine the association between nutritional condition of women and socio economic status in India. To explore this association we have taken two specific objectives, that are as follows:

a) To assess the extent of malnutrition among women in India and the inter-state disparities thereof.

b) To determine the socio-economic factors which influence the nutritional status of women on the basis of unit level data.

DATA AND METHODS

Our analysis uses both aggregated data and household data from the NFHS-3 conducted during 2005-06. The unit level data has been obtained from the Demographic and Health Survey Project funded by USAID. The survey employs a multi-stage sampling design to choose the eligible woman for the interview. The research investigations of the present study are based upon a nationally representative sample of 109,041 households, and 124,385 women (15-49 years). The sample covers 99 percent of India's population living in all 29 states. The multivariate techniques have been used to analyze data. To identify the prevalence of malnutrition we consider the Body Mass Index (BMI) which is measured by the formula $BMI = \text{Weight} / \text{Height}^2$. Following the standard methodology, a woman with BMI less than 18.5 is treated as being malnourished. This is then used to compute a dichotomous variable (Y_i) such that $Y_i = 1$ if $BMI < 18.5$ & $Y_i = 0$ if $BMI \geq 18.5$. Thereafter, we run a logit regression of Y_i on different household and locational level factors to determine the factors that impact upon the nutritional status of women. The regressors used in the model are shown by the following table.

Table 1:

REGRESSORS	INDICATORS
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Age	Age of the respondent in completed years
Sex	=1, if Household head is Male, 0 otherwise
Religion	=1, if Household is Hindu, 0 otherwise
Occupation	=1, if respondent has worked in the last 12 months, 0 otherwise
SC	=1, if Scheduled Caste, 0 otherwise
ST	=1, if Scheduled Tribe, 0 otherwise
OBC	=1, if Other Backward class, 0 otherwise
Residence	=1, if respondent lives in Rural areas, 0 otherwise
Education	Number of years of completed education of the respondent
HOS	Number of Household Members
Fuel	=1, if Household uses clean fuel for cooking, 0 otherwise
Toilet	=1, if household has access to safe sanitation, 0 otherwise
Unmarried	=1, if respondent is unmarried, 0 otherwise

In order to examine the association between nutritional status and socio economic variables, we have estimated the following model:

$$Z_i = \alpha + \beta'X' + u_i \dots\dots\dots (1)$$

Where, Z_i stands for log of odd ratio of nutritional status (NS), X' stands for vector of control variables which vary across states and can influence contraceptive prevalence rate, and u_i stands for white-noise error term. Specifying the control variables, equation (1) can be re-written as:

$$Z_i = \alpha + \beta_1 AGE_i + \beta_2 SEX_i + \beta_3 REL + \beta_4 OCCUPATION_i + \beta_5 SC_i + \beta_6 ST_i + \beta_7 OBC_i + \beta_8 RESIDANCE_i + \beta_9 EDUCATION_i + \beta_{10} HOS_i + \beta_{11} FUEL_i + \beta_{12} TOILET_i + \beta_{13} UNMARRIED_i + \mu_i$$

Where variables are specified in the Table given above. These are all control variables and supposed to influence nutritional status some way or other.

RESULTS AND DISCUSSION

In order to analyse the nutritional status of men and women, we have considered 22 states for which data are available in National Family Health Survey-3 (NFHS-3). These states have been classified into six regions as North Eastern Region, Eastern region, Central Region, Southern Region, Western Region and Northern Region. Though NFHS-3 reported two indicators of nutritional status, but for our purpose, we have considered a body mass index (BMI). The BMI is defined as weight in kilograms divided by height in meters squared (kg/m²). A BMI of 18.5 or less is used to define thinness or acute under-nutrition. Figure 1 portrays the proportions of men and women falling into high -risk categories of the body mass index by broad regions.

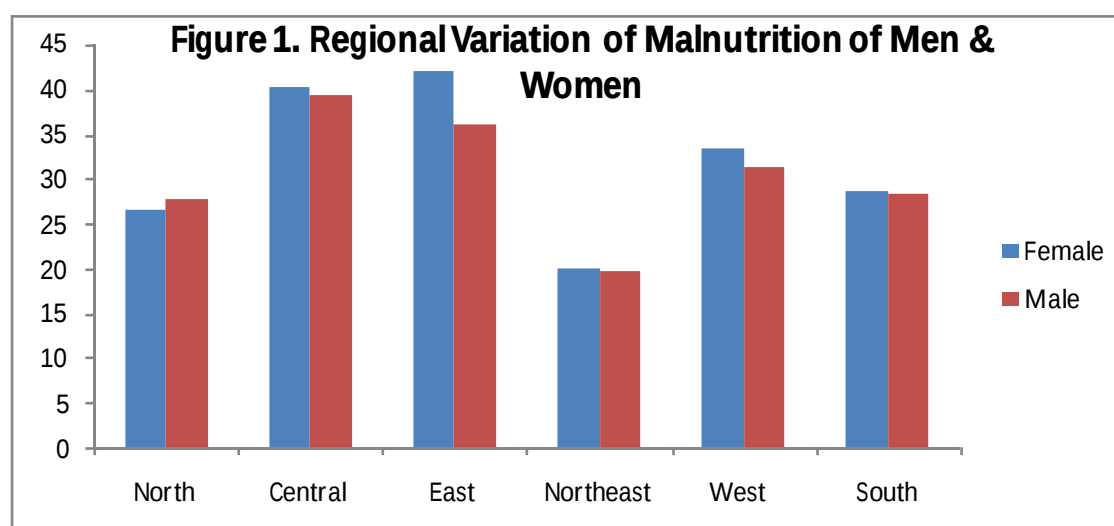
Table 2: Percentage of total thin women for age 15-49 by state,2005-06.

States	<18.5 Total Thin
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Andhra Pradesh	33.5
Arunachal Pradesh	16.4
Assam	36.5
Bihar	45.
Delhi	14.8
Gujarat	36.3
Haryana	31.3
Jammu & Kashmir	24.6
Karnataka	35.5
Kerala	18.0
Madhya Pradesh	41.7
Maharashtra	36.2
Manipur	14.8
Meghalaya	14.6
Mizoram	14.4
Nagaland	17.4
Punjab	18.9
Rajasthan	36.7
Sikkim	11.2
Tamilnadu	28.4
Tripura	36.9
West Bengal	39.1

Source: NFHS-3.

From the above table it is seen that within NER, the proportion is highest in Tripura followed by Assam and Nagaland, while it is lowest in Sikkim followed by Manipur and Meghalaya.

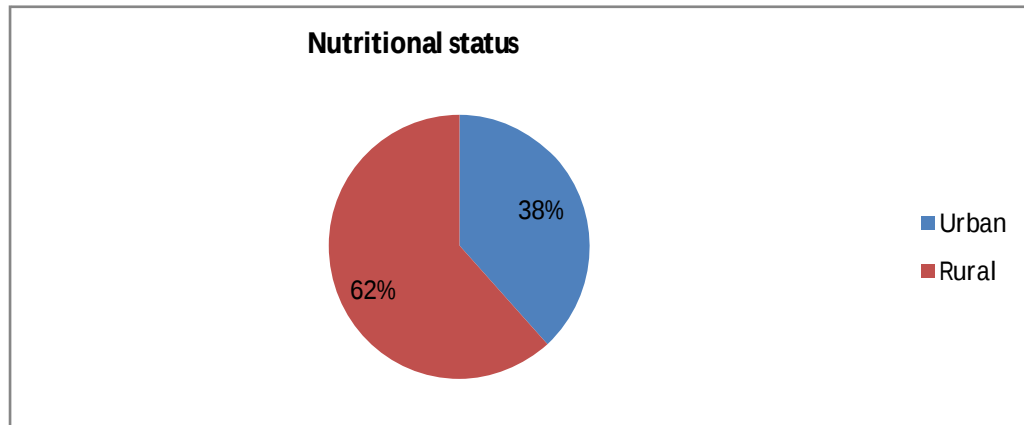


Source: Compiled from NFHS-3

It is observed that the proportion of women who are too thin is highest in East, while, the proportion of men who are too thin is highest in the Central region followed by east and west region of the country, and lowest northeastern (NER) states. Within NER, the

proportion is however highest in Tripura followed by Assam and Nagaland, while it is lowest in Sikkim followed by Manipur and Meghalaya (NFHS-3).

Figure 2: Region wise variation in Nutritional status



Source: Compiled from NFHS-3

From the pie diagram, it is clear that rural area are more prone toward the malnourishment compare to urban areas. 62 percent malnourished people resides in the rural area compare to 38 percent in the urban areas of India.

In this estimation, all estimated coefficients exhibit their expected signs and are statistically significant at one percent level or beyond. The adjusted coefficient of determination in column ($Ad R^2$) is 0.7 is satisfactory. The Chi-statistic is significant at one percent level, attesting to the overall potentiality of the model.

Table 3 The association between nutritional status and socio economic variables: The Multivariate Analysis-

Regressor	Model
Age	-0.01324***
Sex Of Household Head	0.002206*
Cooking Facility	-0.06188*
Household Size	0.000219*
Toilet	-0.01854*
Religion	0.085974***
Occupation	0.00732***
Caste (SC)	0.063018***
Caste (ST)	0.015704
Caste (OBC)	0.038814
Residence	0.131235***
Unmarried	0.067252
Literacy	-0.15845***
Ad R^2	0.07
Chi Stat	12254.08***

Source: Authors' research

*(b) * (**) and *** indicate significant at 10 per cent, 5 per cent and 1 per cent level respectively.*

Turning to analysis of table 3, we find that the estimated coefficient of age has negative sign, and it implies that with every unit increase in age, the probability that the women is malnourished will fall by 1.32 percent. Similarly, you can interpret the other coefficients. Turn into second variable, gender of the household is positive and significant it implies that probability of the female household is more vulnerable than their counterpart and it is increased by .02 percent. Third variable, if the household uses clean cooking materials than probability of malnourishment will fall by 6.18 percent. Moreover, if the household size is increases, the probability of the women is malnourished will increase by 0.002 percent. We also find that estimated coefficient of caste has positive sign it implies that probability of schedule caste, schedule tribes and other backward castes are more vulnerable in terms of malnourished. Moreover, literacy is negatively associated with malnourishment and it implies that probability of malnourishment will fall by 15 percent.

CONCLUSION:

Malnutrition is an important public health and human development concern especially in developing countries. In the present study BMI of 18.5 (kg/m²) or less is used as a proxy of thinness or acute under-nutrition. Our graphical analysis indicates that proportion of men and women who are too thin is higher in East, central and West region of the country, and lowest northeastern (NER) states. Within NER, the proportion is however highest in Tripura followed by Assam and Nagaland, while it is lowest in Sikkim followed by Manipur and Meghalaya.

Thus, the obvious policy suggestion that appears from the study is that among others, strategy should also be taken to increase literacy among men and women to combat the problem of malnutrition. Women really needs unique empowerment programme to enable them to be more autonomous in the household decision making. Women's autonomy of schedule tribes by education, wealth quintile and development region requires a further social science investigation to observe the variations within each stratum. A far more comprehensive approach can enable them to gain access to community resources, to battle traditional norms as well as to access economic resources.

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