

Nutritional Status of Reproductive Aged Women of Santal Ethnic Community

Mohammed Abu Naser^{1*}, Md Monoarul Haque², Md Zahid Hasan Khan³, Md Shahjalal⁴ and Subal Chandra Roy⁵

¹Master of Public Health, State University of Bangladesh

²Director, Research & Information, BSA

³Master of Public Health, Northern University Bangladesh

⁴MSc, Applied Nutrition and Food Technology, Islamic University

⁵Research Assistant, Training and Research Institute of medicine, Acupressure and Nutrition

*Corresponding Author: Mohammed Abu Naser, Master of Public Health, State University of Bangladesh.

Received: September 06, 2015; Published: September 15, 2015

Abstract

The nutritional issues of women themselves have rarely been investigated. In earlier nutritional research, only a few publications made women's own health. As a result, insufficient attention has been paid to the extent, causes, and consequences of malnutrition among women. A cross sectional study was done to explore nutritional status among 100 conveniently selected reproductive aged Santal women residing Sadar Upazila of Thakurgaon district by utilizing of structured questionnaire through face to face interview. Weight machine and height measuring tape were used. Most of the study subjects (40%) came from 15-24 years age group. Most of them (86%) completed below Secondary School Certificate level education. Housewife, agriculture and day labor distribution were nearly same. Majority of participants had monthly income \leq 5000 BDT. About 88% subjects were malnourished. All of them took rice 2-3 times daily. More than half of the respondents took fish 2-3/week. Vegetables were randomly taken daily. Association between nutritional status and education was statistically significant. Immediate action should be implemented to reduce malnourishment.

Keywords: Nutritional status; Reproductive age; Santal ethnic community

Introduction

Santals are known as one of the oldest ethnic groups of South Asia [1]. About 1% of the population of Bangladesh consists of what are locally termed 'tribal groups' due to their distinct and unique languages, cultures, traditions, religions, and customs [2]. Isolation from mainstream development activities, together with a high level of poverty and difficult accessibility to the existing health facilities, made the tribal communities specifically vulnerable to various health problems. Several reviews have emphasized the vulnerability of women throughout their life cycle [3-5]. Evidence suggests that one third women are malnourished; approximately 60% women are suffering from reproductive morbidity in Dhaka city [6]. It is known in Bangladesh tribal population living in different ecosystem and depends on primitive agricultural practices; they often face uncertainty of food supply and tend to suffer from under nutrition but we do not know the original scenario. Hence to fill up some of this information gap, the present study will carry out to assess the nutritional status of reproductive age women of Santal ethnic community.

Materials and Methods

A cross sectional study was conducted on Sadar Upazila of Thakurgaon district among 100 women aged 15-49 years among different ethnic communities from 01 February to 30 April 2015. This area and women were purposively selected to get adequate sample. Non probability purposive sampling method was used for data collection. We set malnourishment (BMI < 18.50) and nourishment (BMI > 18.50). For anthropometric measurements, height was measured with a standiometer and body weight was measured using a platform beam scale. Three measurements were taken three times and if the difference among reading was less than 1 cm, the mean measurement was taken and recorded to the nearest 0.1 cm. If the reading fell between two values, the lower reading was recorded. Weight was

Citation: Mohammed Abu Naser., *et al.* "Nutritional Status of Reproductive Aged Women of Santal Ethnic Community". *EC Nutrition* 2.3 (2015): 365-368.

recorded to the nearest 0.1 kg. Before data collection, verbal permission had taken from the Head of ethnic community. All the tribal people were informed about the study and local language interpreter from ethnic community was taken to translate questionnaire. Data were collected using pre tested semi structured questionnaire by face to face interview. Information about nutritional status along with socio-demographic characteristics was also obtained. The respondents were selected consecutively who meet the inclusion and exclusion criteria. After data collection, data were sent to the researcher, which was sorted, scrutinized by the researcher and then data were analyzed by personal computer by SPSS version 16.0 program.

Results

| Variables | Number | Percentage | |
|--------------------------------|--------|------------|--|
| Age (in years) | | | |
| 15-24 | 40 | 40 | |
| 25-34 | 29 | 29 | |
| 35-44 | 18 | 18 | |
| ≥ 45 | 19 | 19 | |
| Education | | | |
| < Secondary School Certificate | 86 | 86 | |
| ≥ Secondary School Certificate | 14 | 14 | |
| Occupation | | | |
| Housewife | 31 | 31 | |
| Agriculture | 29 | 29 | |
| Day labor | 29 | 29 | |
| Student | 11 | 11 | |
| Monthly income (BDT) | | | |
| ≤ 5000 | 45 | 45 | |
| 5001-10000 | 49 | 49 | |
| > 10000 | 6 | 6 | |

Table 1: Socioeconomic characteristics of study subjects (n = 100).

Table 1 reflects that 40%, 29%, 18% and 19% respondents came from 15-24, 25-34, 35-44 and \geq 45 years age group. Almost 86% completed below Secondary School Certificate level education whereas only 14% passed Secondary School Certificate. Housewife, agriculture and day labor distribution were nearly same and rest of them was students. In terms of monthly family income 45% and 49% had \leq 5000 and 5001-10000 BDT.

| Nutritional status | Frequency | Percentage | |
|--------------------|-----------|------------|--|
| Malnourish | 88 | 88 | |
| Nourish | 12 | 12 | |

Table 2: Nutritional status of study subjects (n = 100).

Malnourish and nourish were 88% and 12% respondents.

| Food item | 2-3/d | 1/d | 2-3/w | 1/w | Never |
|-------------|-------|-----|-------|-----|-------|
| Rice | 100 | 0 | 0 | 0 | 0 |
| Ruti | 6 | 44 | 26 | 8 | 16 |
| Muri | 6 | 14 | 42 | 22 | 16 |
| Milk | 0 | 0 | 0 | 14 | 86 |
| Fish | 20 | 16 | 52 | 2 | 10 |
| Meat (pork) | 0 | 6 | 28 | 36 | 30 |
| Egg | 6 | 16 | 32 | 26 | 20 |
| Vegetables | 74 | 2 | 20 | 4 | 0 |
| Fruits | 36 | 4 | 12 | 12 | 36 |
| Soyabean | 100 | 0 | 0 | 0 | 0 |
| Lentil | 44 | 2 | 36 | 0 | 20 |

Table 3: Food frequency of study subjects (n = 100).

Table 3 states that all of them took rice 2-3 times daily. Only 14% consumed milk 1/week. More than half of the respondents had fish 2-3/week. More than one third of women took meat 1/week followed by egg 2-3/week. Vegetables were randomly taken daily. Soyabean was common menu. More than one third of participants consumed fruits and lentil 2-3/daily.

| Variables | Nutritional status | | Total | χ^2 | p value |
|-----------|--------------------|---------|-------|----------|---------|
| | Malnourish | Nourish | | | |
| Education | | | | | |
| < SSC | 61 | 25 | 86 | 44.408 | 0.000 |
| ≥ SSC | 5 | 9 | 14 | | |

Table 4: Association between nutritional status and education.

Lower educated respondents were suffered more in malnourishment than higher educated people and it was strongly statistically significant.

Discussion

Nutritional status is the result of complex interactions between food consumption, overall health status and health care practices. Poor nutritional status is one of the most important health and welfare problems that are faced by Bangladesh. Women of reproductive age are especially vulnerable to nutritional deficits and micronutrient deficiencies. Diet and nutrition are important factors in the promotion and maintenance of good health throughout the life cycle. Income, prices, individual preferences and beliefs, cultural traditions, as well as geographical, environmental, social and economic factors all interact in a complex manner to shape dietary consumption patterns and affect the morbidity and clinical status of women. 7 the present study showed that most of the study subjects were suffering from malnourishment. Faulty food habit, poverty and diverse life style may be possible reason of widespread malnourishment of Santal vulnerable group. Income generating capacity should be increased as well as commencement of nutrition education should be promoted. A study showed that overall 28.5% of the reproductive aged women were found to be underweight [8]. Another study showed that a total of 34% of the reproductive aged rural women suffer from malnutrition [9]. Hoque M., et al. found normal, underweight and overweight was 69%, 20% and 11% in their study. Rice, soyabean, nappy and vegetables were consumed by almost all at 2-3/day. Fish, meat and egg were eaten weekly basis. Pork and kuiccha fish was special traditional tribal diet [7]. Similar findings were seen in this study. UNI-CEF stated that the nutritional status of women in Bangladesh is also alarming. The body mass index (BMI) of 52 percent of women of reproductive age is less than 18.5; this means they are very underweight. They are also very stunted. Higher prevalence and higher risk

for underweight among the younger women is a matter of concern. This is because, the higher incidence of underweight among women aged 15-29 may cause low birth weight of their child as well as other adverse maternal complications due to malnutrition, as the rate of pregnancy and childbirth is higher among these groups of women in Bangladesh.

Conclusion

Overall nutritional scenario of Santal ethnic community was not so good. Effective nutrition education programme should be started to accelerate nourishment.

Acknowledgment

The authors express their sincere thanks to all the participants of this study. No external funding was provided for this study.

Bibliography

- 1. Siddiquee AR. "Ethnicity and Intelligence: A Cross Cultural Study in 1984 Qureshi (ed.) Tribal Cultures in Bangladesh".
- 2. Chowdhury BH. "Building lasting peace: issues of the implementation of the Chittagong Hill Tracts accord. Champaign, IL: Program in Arms Control, Disarmament, and International Security, University of Illinois at Urbana-Campaign; 2002". p. 33 p. (ACDIS occasional paper series). (accessed on 3 March 2014).
- 3. Leslie J "Women's nutrition: the key to improving family health in developing countries?" *Health Policy Planning* 6.11 (1991): 1-19.
- 4. Tinker A., et al. "Women's health and nutrition". World Bank Discussion Paper No. 256. Washington, DC: World Bank, 1995.
- 5. Merchant KM and Kurtz KM. "Women's nutrition through the life cycle: social and biological vulnerabilities". In: Koblinsky M, Timyan J, Gay J, eds. San Francisco, Calif, USA: Westview Press, 1993:63-90.
- 6. Tahmeed Ahmed., *et al.* "Nutrition of Children and Women in Bangladesh: Trends and Directions for the Future". *Journal of Health Population and Nutrition* 30.1 (2012): 1-11.
- 7. Hoque M., *et al.* "Anthropometry of Reproductive Aged Women of Rakhaine Ethnic Community: BMI is the key". European Academic Research Vol. III, Issue 1/ April 2015
- 8. Mostofa SM and Islam A. "Socio-economic Correlates of Malnutrition among Married Women in Bangladesh". *Malaysian Journal of Nutrition* 16.3 (2010): 349-359.
- 9. Milton AH., et al. "Prevalence and determinants of malnutrition among reproductive aged women of rural Bangladesh" Asia Pacific Journal of Public Health 22.1 (2010): 110-117.

Volume 2 Issue 3 September 2015 © All rights are reserved by Mohammed Abu Naser., *et al.*