

Impact of socio-economic status (SES) and nutrition health education on nutritional status of adolescent girls

Kusum Bharti, Manoj Kumar and Pramila Prasad

The present status of nutrition disparities in Asia is considered to vary by economic level of the country. For developing countries in Asia, India and Vietnam, SES associates with BMI positively in women. For relatively developed countries in Asia, Korea and Japan, SES associates with BMI negatively in women. Low SES groups consume more carbohydrate, and less protein and fat, so not only micronutrient but also macronutrient intake is affected by SES both in developing and in developed Asian countries. There are some studies on the pathway from SES to diet/nutrition. **Objective:** To assess the impact of socio-economic status (SES) and nutrition health education (NHED) on their Nutritional status of non-school going and school going AGLs. **Method:** A pre test post test experimental design questionnaire was employed and the study was a cross sectional study. From 4ICDS Project areas of Banka district, total 600 Adolescents girl selected for this research study in which 300 school going and 300 non-school going girls were randomly selected. **Result:** AGLs clearly shows the declining trend of malnutrition with the increasing education of mothers, *i.e.* Highest per cent of undernourished AGLs were the daughters of Illiterates mothers (98%) and lowest per cent of undernourished AGLs were the daughters of intermediate mothers and graduate mothers. The per cent of normal AGLs was highest with the highly educated fathers lower with poorly educated and lowest with illiterate fathers. The prevalence of normal AGLs was higher with better income though their number is less. But even the little increase of income has shown the better performance. However, the data confirms, the effect of income on nutritional status of AGLs.

Key Words : Socio economic status, Nutrition education, Adolescent girls, Undernutrition

How to cite this article : Bharti, Kusum, Kumar, Manoj and Prasad, Pramila (2020). Impact of socio-economic status (SES) and nutrition health education on nutritional status of adolescent girls. *Food Sci. Res. J.*, 11(2): 134-139, DOI : 10.15740/HAS/FSRJ/11.2/134-139. Copyright@ 2020: Hind Agri-Horticultural Society.

INTRODUCTION

Socio-economic disparity in nutrition is well

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documented which helps to explain some of the observed social inequalities in health. People with high socio-economic status (SES) are more likely to have healthier food habits, whereas people with low SES have dietary profiles less consistent with nutritional recommendations or dietary guidelines, hence contributing to their poorer health status. Therefore, both social inequity and diet quality, reflected by healthy dietary behaviours are areas of active public health concern.

Despite the importance of these two areas, research with regard to SES is still challenging and characterised by a number of conceptual and methodological problems

that hinder advances in knowledge about how and why SES is related to diet. A single 'best' indicator approach, to determine social classification among societies is not theoretically compelling because it may emphasise a particular aspect of social stratification which may be only relevant to specific health outcomes and at different stages of the life course. The most widely used SES indicators (education, occupation and income) are limited in their ability to capture the complex multidimensional forces that dominate social structure. While education and occupation are markers of social relationships and command over life-long skills, income is more indicative of a current standard of living. Additionally, these traditional SES are inter-related, which makes it difficult to determine the specific contribution of each factor to food choices

Evidence of health disparities has been reported around the world. One of the intermediate factors between socio-economic status (SES) and health is nutrition. Many studies reported socio-economically disadvantaged people had more risk of obesity and lifestyle-related diseases than others in western society. Micronutrient intake affected by SES, but little evidence indicates that SES affects either energy intake or the macronutrient composition of the diet in western countries. In contrast, there is not enough evidence of a consistent relationship between SES and nutrition in Asian countries at present. The present status of nutrition disparities in Asia is considered to vary by economic level of the country. For developing countries in Asia, India and Vietnam, SES associates with BMI positively in women. For relatively developed countries in Asia, Korea and Japan, SES associates with BMI negatively in women. Low SES groups consume more carbohydrate, and less protein and fat, so not only micronutrient but also macronutrient intake is affected by SES both in developing and in developed Asian countries. There are some studies on the pathway from SES to diet/nutrition. The association between low SES and obesity may be mediated, in part, by the low cost of energy-dense foods, concern about food price and dietary knowledge. Nutrition policy research is required to reduce nutrition disparities in Asia. We need a collaborative study of the impact of potential political options on diet and on health with other academic fields.

Importance of nutrition education:

The importance of nutrition education as a means

for improving nutrition of the community in the developing countries has increased rapidly during the recent past. Lack of awareness about the dietary requirements and nutritive value of different food is the main cause for prevailing malnutrition among school children, pregnant women, lactating mother and other vulnerable sections of the community. Nutrition education should be practical and should be easily adaptable to the socio-economic status, food habits and the available local food resources generally needed for the purpose of demonstration and feeding of the locally available audience. Nutrition education programme should become a part of the community.

Objectives:

The main objective of the research study were to assess the impact of socio-economic status (SES) and nutrition health education (NHED) on their Nutritional status of non-school going and school going AGLs the age group of 11-18 yrs, enrolled at AWCs under SABLA Scheme of Banka district.

METHODOLOGY

A pre test post test experimental design questionnaire was employed and the study was a cross sectional study. From 4ICDS Project areas of Banka district, total 600 Adolescents girl selected for this research study in which 300 school going and 300 non-school going girls were randomly selected. The quantitative instrument was used to collect the information on Demographic Profile and socio-economic status (Education, Income, occupation and category) and Anthropometry measurement of the respondents. Nutrition health Education and Pattern of NHED sessions was observed and collected data by the help by pre tested questionnaire and interpersonal communication interview method of the AGLs. The collected data was analysed by using standard percentile technique and statistical method.

OBSERVATIONS AND ASSESSMENT

The results obtained from the present investigation as well as relevant discussion have been summarized under following heads :

Nutrition health education service (NHE):

NHE is the one of the main services of ICDS scheme. The Researcher has discussed its details during

data collection, include encouraging healthy traditional practices and dispelling harmful myths, healthy cooking and eating habits, use of safe drinking water and sanitation, personal hygiene, including management of menarche, ARSH (Adolescent reproductive sexual health) Education etc. The AWWs should conduct NHE session for the Adolescent Girls with the help of health dept. in monthly for the awareness of the nutritional and personal hygiene and sanitation knowledge.

The Table 1 and Fig. 1 show Nutrition health education session conduct status of AWCs and Awareness level of AGLs. The result explains that out of 50 AWCs only 8 per cent AWCs conducted regular session of NHED service *i.e.* Monthly and covered the topic of Diet Health and Nutrition, ARSH Education, Personal hygiene and Sanitation etc. Most of the AWCs (42%) did not conduct the NHED sessions for the improvement of the awareness level regarding health and nutrition AGLs.

When the awareness level regarding health and nutrition of AGLs was assessed, it was found that only 6 per cent AGLs knew the how to maintain the ideal health in Adolescent age. The awareness levels of 24 per cent AGLs were satisfactory. Most of the AGLs (70%) did not know about balanced diet, nutrition personal hygiene, sanitation education.

| Table 1 : NHED Session status (n=50) | |
|--------------------------------------|--------------|
| NHED Sessions | AWCs |
| Regular | 08(16%) |
| Irregular | 42(84%) |
| Remarks | Satisfactory |

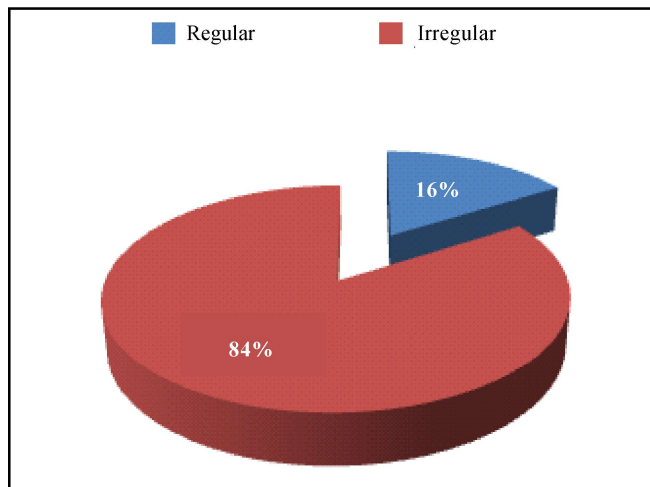


Fig. 1 : NHED Sessions

| Table 2 : Awareness level of of AGLs by NHE (n=600) | |
|---|----------|
| Awareness level of NHED topics | AGLs |
| Good | 36(6%) |
| Satisfactory | 144(24%) |
| Poor | 420(70%) |

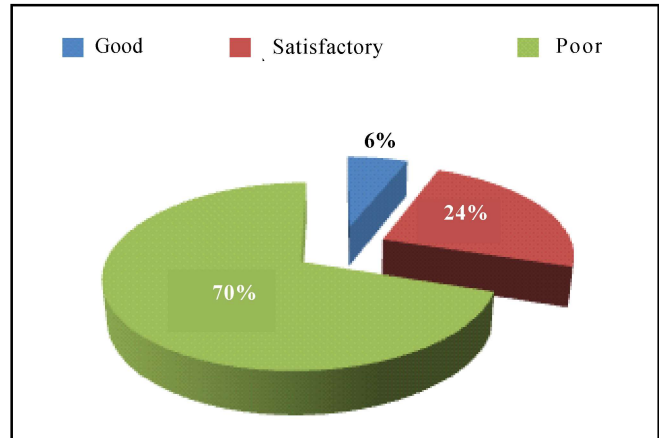


Fig. 2 : Awareness level of of AGLs

The Fig. 3 show the personal hygiene and sanitation of AGLs. On the basis of the data of clinical sign and interview of respondents on personal hygiene and sanitation (including bath, cleanness of body and cloth, use of sanitary napkin during menstrual cycle) it has been found that only 22.16% were Hygienic in istotal. 30.34% of school going AGLs and 4.54% non-school going girls were satisfactory on hygiene. Rest of the 78.16 % AGLs of both groups were unhygienic like (Dirty hand, body, hair, teeth, nose, neck, and dress etc.). In which 69.65 of school going girls and 95.54% non-school going girls were Unhygienic. During assessment of the status of personal hygiene and sanitation, it was found that most of the AGLs did not have available napkin or clean cloth for use during menstrual cycle which is a major cause for the illness or infection of urinary tract infection.

The Fig. 4 show the nutritional status by caste. It shows that in unreserved (UR) categories 12.10% AGLs were normal, and 87.87% moderately undernourished. In OBC categories, 3.70% were normal, 95.80% moderate and 1.02 were severe, whereas in SC, 1.51% AGLs were normal, 96.12% moderate and 2.27% were severe. In categories of ST 16.66 % were normal, 75% moderate and only 16.66% were severe. The findings explain that UR AGLs did not bother to go to AWCs, OBC categories also were not better whereas the SC

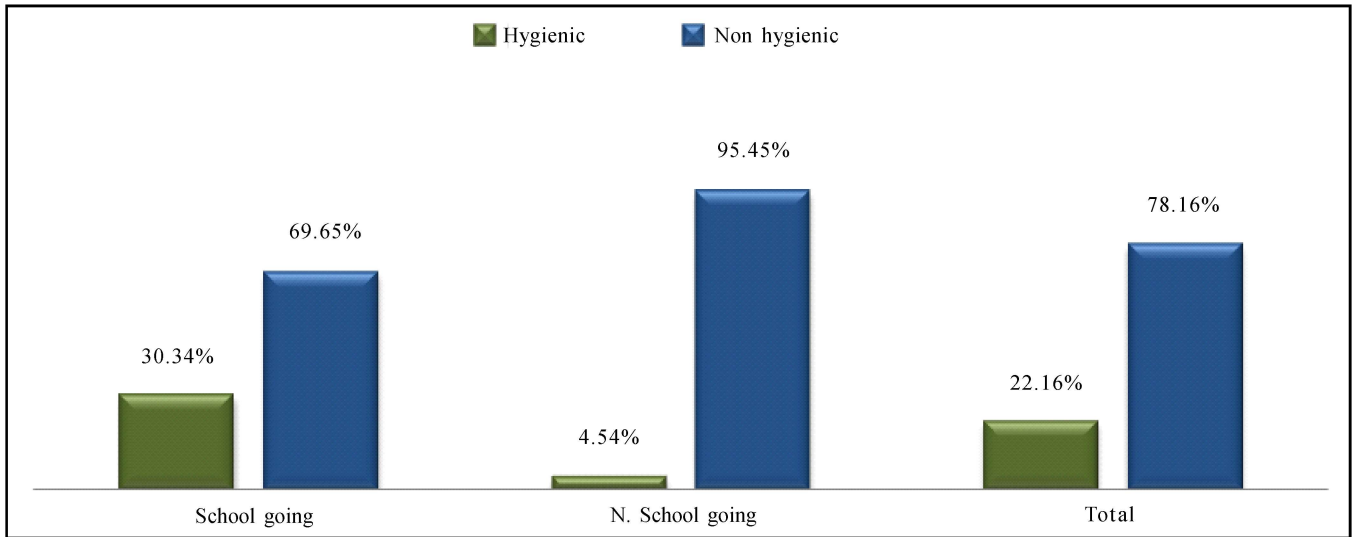


Fig. 3 : Personal hygiene and sanitation of AGLs

and ST AGLs were miserable.

The Fig. 5 indicate the relation between Mother’s education and nutritional status of AGLs. The percentage of normal AGLs was highest (33.33%) whose mothers were graduate and above. Intermediate pass mother’s AGLs were also normal with good percentage (66.66%), and then comes matric pass mother’s AGLs (25%). The % of moderately undernourished AGLs and severely malnourished AGLs clearly shows the declining trend of malnutrition with the increasing education of mothers, *i.e.* Highest % of undernourished AGLs were the daughters of Illiterate mothers (98%) and lowest % of undernourished AGLs were the daughters of intermediate mothers and graduate mothers. It is pleasant to see that

mother’s education has direct effect on AGLs nutritional status.

The Fig. 6 make it obvious that % of normal AGLs was highest with the highly educated fathers (5.55%), lower with poorly educated (18.51%) and lowest with illiterate fathers (1.99%). When % of moderately and severely undernourished AGLs was seen, here also the effect of father’s education was observed. The Prevalence of moderately malnourished AGLs was highest (97.51%) with illiterate fathers and lowest (77.77%) with inter fathers. Similarly, % of severely undernourished AGLs was highest with illiterate fathers and lowest with inter and graduate fathers. This clearly shows the relation between education of fathers and

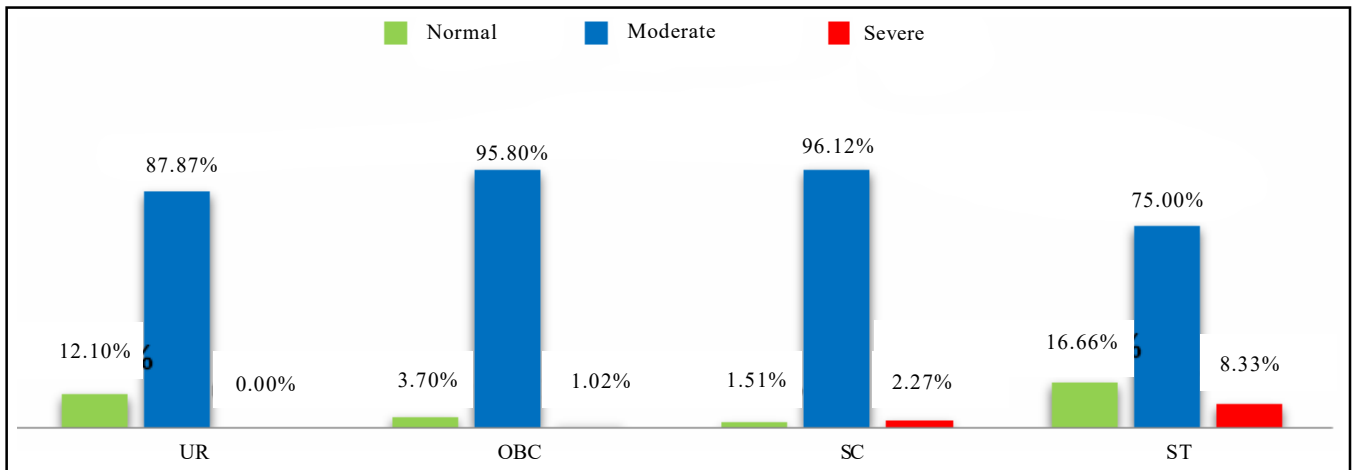


Fig. 4 : Nutritional Status of AGLs by caste

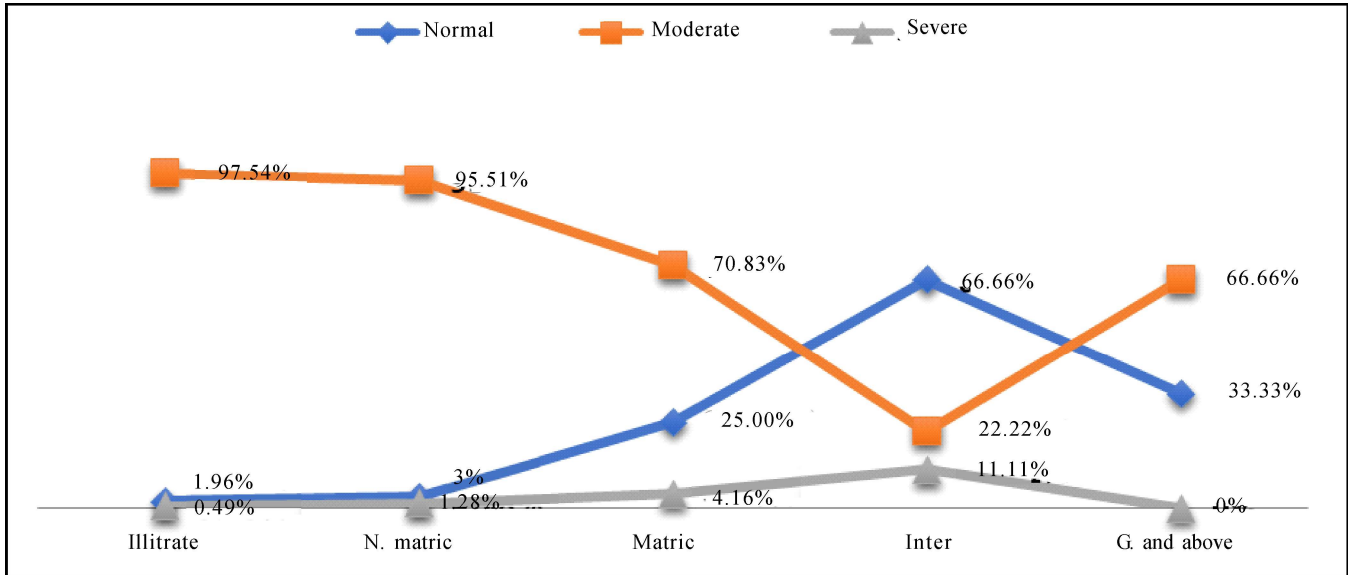


Fig. 5 : Nutritional status of children by mother's education

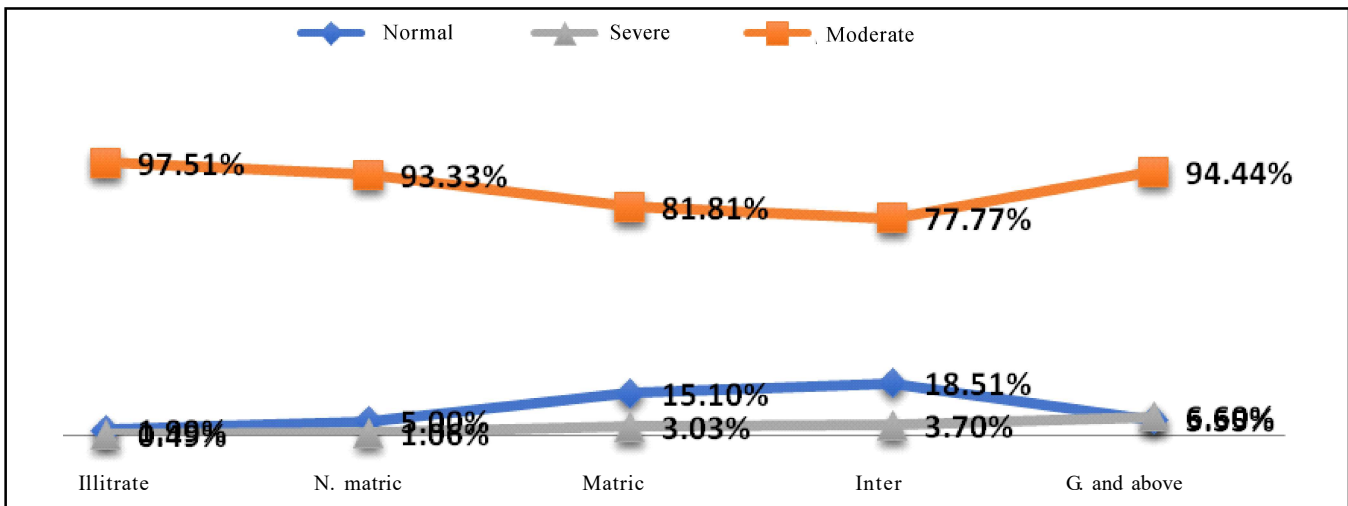


Fig. 6 : Nutritional status of AGLs by father's education

nutritional status.

The Fig. 7 show the picture of income and nutrition. The prevalence of normal AGLs was higher with better income though their number is less. But even the little increase of income has shown the better performance. Highest percentage of normal AGLs was in income group of >3000 and lowest (2.4) in <3000-6000 income. As the percentage of moderately and severely undernourished children was seen, moderately undernourished were highest (96.6%) in income group <3000-6000 and lowest (89.28) in comparatively higher lower group. However, the data confirms, the effect of income on nutritional status

of AGLs.

Conclusion:

The nutritional status by caste that UR AGLs did not bother to go to AWCs, OBC categories also were not better whereas the SC and ST AGLs were miserable. AGLs clearly shows the declining trend of malnutrition with the increasing education of mothers, i.e. Highest % of undernourished AGLs were the daughters of Illiterates mothers (98%) and lowest % of undernourished AGLs were the daughters of intermediate mothers and graduate mothers. It is pleasant to see that mother's education

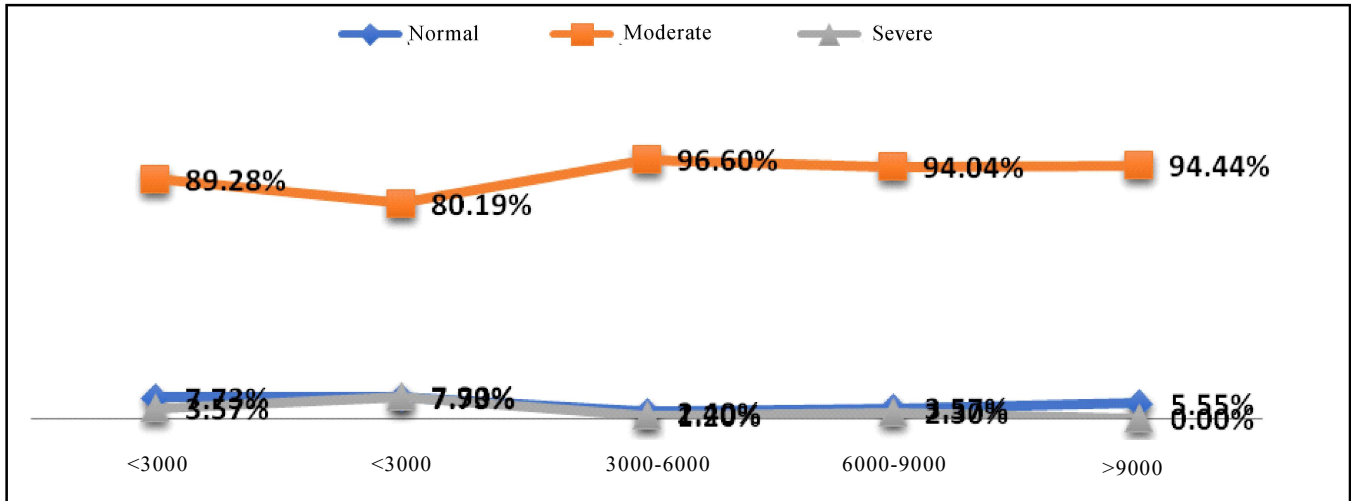


Fig. 7 : Nutritional status of AGLs by income

has direct effect on AGLs nutritional status. The % of normal AGLs was highest with the highly educated fathers lower with poorly educated and lowest with illiterate fathers. The prevalence of normal AGLs was higher with better income though their number is less. But even the little increase of income has shown the better performance. However, the data confirms, the effect of income on nutritional status of AGLs. It is clear from the results that the education level of the Adolescents girls and his parents affects his health and nutritional status. Therefore, it seems necessary to be educated for good nutritional status. There is a need for awareness by organizing Health and Nutrition Education sessions regularly for the community and beneficiary through government and other related agencies.

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Received : 05.07.2020; Revised : 25.08.2020; Accepted : 25.09.2020