



Full Length Research Article

LAST AMONG THE LEAST AND UNFORTUNATE PEOPLE: GRASS ROOT LEVEL NUTRITIONAL STATUS IN MALDA DISTRICT (W.B)

Md. Julfikar Ali and *Mohidur Rahaman

Department of Geography, Aliah University, Kolkata, India

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ABSTRACT

Nutritional status of human population is one of the important indicators of 'human good' and 'social well being' as well as 'Human Development'. Deficiency of certain vital nutrients in the human diet is responsible for occurrence of malnutrition in human health. Malnutrition effects the growth and development of physical health, mood behaviour and malfunctioning in the body. Present research endeavours to assess the nutritional status of people based on qualitative and quantitative data collected through field observation and direct interaction with local people. Body Mass Index (BMI) and upper arm circumference have been analysed and used as toolkits for further assessment of nutritional status. About 24 percent adult people and 57 percent of children are reported to be underweight.

INTRODUCTION

Nutritional status is the mirror of health condition of human being. Government of India has introduced many programmes to reduce malnutrition among the children and mothers and also to improve the health and nutrition condition of them. Most popular programmes are Mid-Day Meal, I.C.D.S. programmes etc. Besides, Primary Health Centre provides Micro-Nutritional support to the people. As per Human Development Report, the study area is found to be least developed in the district as well as in the state (HDI Report 2004). Malnutrition is a condition which occurs due to deficiency of certain vital nutrients in a person's daily diet habit. The deficiency fails to meet the demands of human body BMR (Basal Metabolic Rate) which effects the growth and development, physical health, mood, behaviour and other functions of the body. The nutritional status did not affect the clinical course of previously-healthy infants with acute viral bronchiolitis. The duration of exclusive breastfeeding, but not type of breastfeeding, was inversely related to the length of oxygen-use and the length of hospital stay (Cristina, 2007). Malnutrition commonly affects children and the elderly people. The individuals may be overweight or obese but are still considered malnourished (Mandal, 2014).

Few general terms need to be familiar with BMI, Mid-upper arm diameter for analysing the realities. Body Mass Index (BMI) is calculated by the weight in kilograms divided by the height in metres squared. A healthy BMI for adults usually lies between 18.5 and 22.9. Those with BMI between 17 and 18.5 could be mildly malnourished, those with BMIs between 16 and 18 could be moderately malnourished and BMI less than 16 could be severely malnourished (Mandal, 2014 & WHO 1995). Use of Mid Upper Arm Circumference is the indicator to evaluate the nutritional status of children (Roy, N. C., 2000). Mid Upper Arm Diameter may also be used parameter for measuring the nutritional status of children. An upper arm circumference with less than 110 mm are categorised as severe malnourished children (Mandal, 2014). World Health Organization (WHO, 2015) noticed that malnutrition is by far the largest contributor to child mortality globally. Leading causes of death in under-5 year children are pre-term birth complications, pneumonia, birth asphyxia, diarrhoea and malaria. About 45% of all child deaths are linked to malnutrition. Mujeeb-ur-Rehman, *et al.*, (2000), revealed that the nutritional status of children is directly associated with socio-economic conditions and adequate nutrition. Khalifa *et al.*, (2004) and Andre *et al.*, (2007) observed the interrelationship between the healthy nutritional status and participation in sports activities and concluded that those children participate more in the sports and belongs to high

socio-economically well-off family and vice-versa. Ravi and Radhakrishna (2004) depicted that nutritional status is not same everywhere. Some middle income states like Kerala and Tamil Nadu have comparatively better nutritional status than high income states like Maharashtra and Gujarat. Fernstrom and Upadhyaya (2001) examined intelligence test method for assessing the nutritional status of children and observed a significant difference in the performance of well-nourished and undernourished children during intelligence test. Ghosh *et al.*, (2009) opined that nutritional status is one of the most important non-genetic determinants of economic status. But there exists wide variation in the association between economic and nutritional status.

Shastri (1989) studied the educational level of mother/guardian has considerable influence on the malnutrition status of their children. The inverse relationship between prevalence of malnutrition and education of mother is manifested by the existence of lower proportion of malnourished children of mothers with some formal education. Goswami *et al.*, (2010) pointed that illiteracy and poverty are the main contributing factors for poor nutritional status. So, better educational attainment will lead to more scope for employment which in turn will fortify their nutritional status. The present study attempts to analyse the malnutrition status of the children and adults. It tries to find out the causes of malnutrition and its prevalence in the study area. Finally it furnishes comprehensive details of remedial measures to minimize the gap between the levels of nutrition in the study area. Malnutrition occurs when a person do not receive adequate nutrients from diet. This causes damage to the vital organs and functions in the human body. Lack of food is the most cause of malnutrition in the poorer and developing countries. However, in developed countries like UK and USA the cause may be more varied. Those with a high calorie diet deficient in vital vitamins and minerals are also considered malnourished. This includes the obese and the overweight, (Mandal, 2014).

Database and Methodology

The analysis is mainly based on the empirical observation and primary data collected through a well-designed survey schedule and direct interview with the respondents of the sample households. The entire work is also based on secondary information whichever and wherever required.

Selection of Sample

Since the area is Muslim dominated, all samples households have been selected from Muslim community. Through a long time observation in the entire most lagged behind block (Harishchandrapur-II block of Malda district, WB), 03 Gram Panchayats (GP) namely Sultan nagar, Sadlichak and Malior-I were observed as most deprived bearing all characteristics of socio-economic backwardness, have been selected as sample GP for close observation and analysis the ground reality. A total 240 households have been selected at random from sample 24 revenue villages. Total 08 revenue villages have been taken as sample from 03 poor and most backward GP each. A total 10 households have been selected at random from each of 24 sampled villages. Those households are backward found in empirical observation have been selected for study.

Study Area

Harishchandrapur-II Community Development block of Malda district in West Bengal of Indian national has been taken as study area for grass root analysis of nutritional status which is very much closely associated with human development or human performance. The study area has been selected on the basis of Human Development Index Report (WBHDI, 2004). The study area is an administrative division of Chanchal sub-division of Malda district. It is located at 25°23'41"N latitude and 87°51'32"E longitude and spreads over 217.22 sq km. It is surrounded by Katihar District of Bihar State on the East and South of it. Headquarters of this block is located at Barduari. The block comprises 09 Gram Panchayats namely Sadlichak, Sultannagar, Malior-I, Malior-II, Islampur, Doulatnagar, Bhaluka, Doulatpur and Masaldah; and 205 inhabited villages under 74 Mouza (Census of India, 2011). As per 2011 Census, Harishchandrapur-II block has total population of 251345 persons comprising 130367 males and 120978 females. As per 2011 Census, Harishchandrapur-II block accounted for average literacy rate of 44.84 percent, of which male records 54.78 percent and female 45.22 percent. However, Scheduled Castes people records 17.48 percent and Scheduled Tribes 2.88 percent literacy rate.

Study area as Last among the least

Harishchandrapur-II block (Study area) has recorded a worst performance in Human Development parameters in Malda district. Malda district as a whole also performed worst in entire state of West Bengal. In nutshell the study area is last block in the last positioned district in the state meaning to refer as last position with least performance in Human Development. As per world *Human Development Report 2014* India positioned at 135th rank and grouped in medium Human Development level. West Bengal, as per *National Human Development Report 2011* West Bengal state stood at 13th rank with HDI 0.492 far below Kerala state (1st rank) scoring HDI 0.790 (data base referring time 2007-08). As per *West Bengal Human Development Report 2004*, Malda district stood at last position (17th rank of 17 districts) in West Bengal state with least score of HDI 0.44, against the state average HDI 0.61.

The district found to be performed poorest in the state. However, according to *District Human Development Report Malda 2007*, Harishchandrapur-II block positioned last (15th rank of 15 blocks of the district) with least score of HDI 0.474 (the lower end) against highest HDI 0.547 upper end) performed by Bamangola block. Harishchandrapur-II block performed worst in every dimensions of Human Development, scoring least Livelihood Opportunity Index for last position, highest Human Poverty Index of 0.504 for first position and further highest record of BPL households. All of the parameters expose distinct poor socio-economic condition of the block of socio-economically lagged behind Malda district. The validity of the Human Development Index (HDI) is used widely to measure health inequality and standard of living (Antony, 2001). Further as per the report (WBHDI, 2004) Harishchandrapur II block has recorded least nutritional index in Malda district. In very close observation since as long time as birth of authors who belongs their native area, within this block, three Gram Panchayats namely Sultannagar, Sadlichak and Malior-I are Muslim dominated and characterised by poor socio-economic condition.

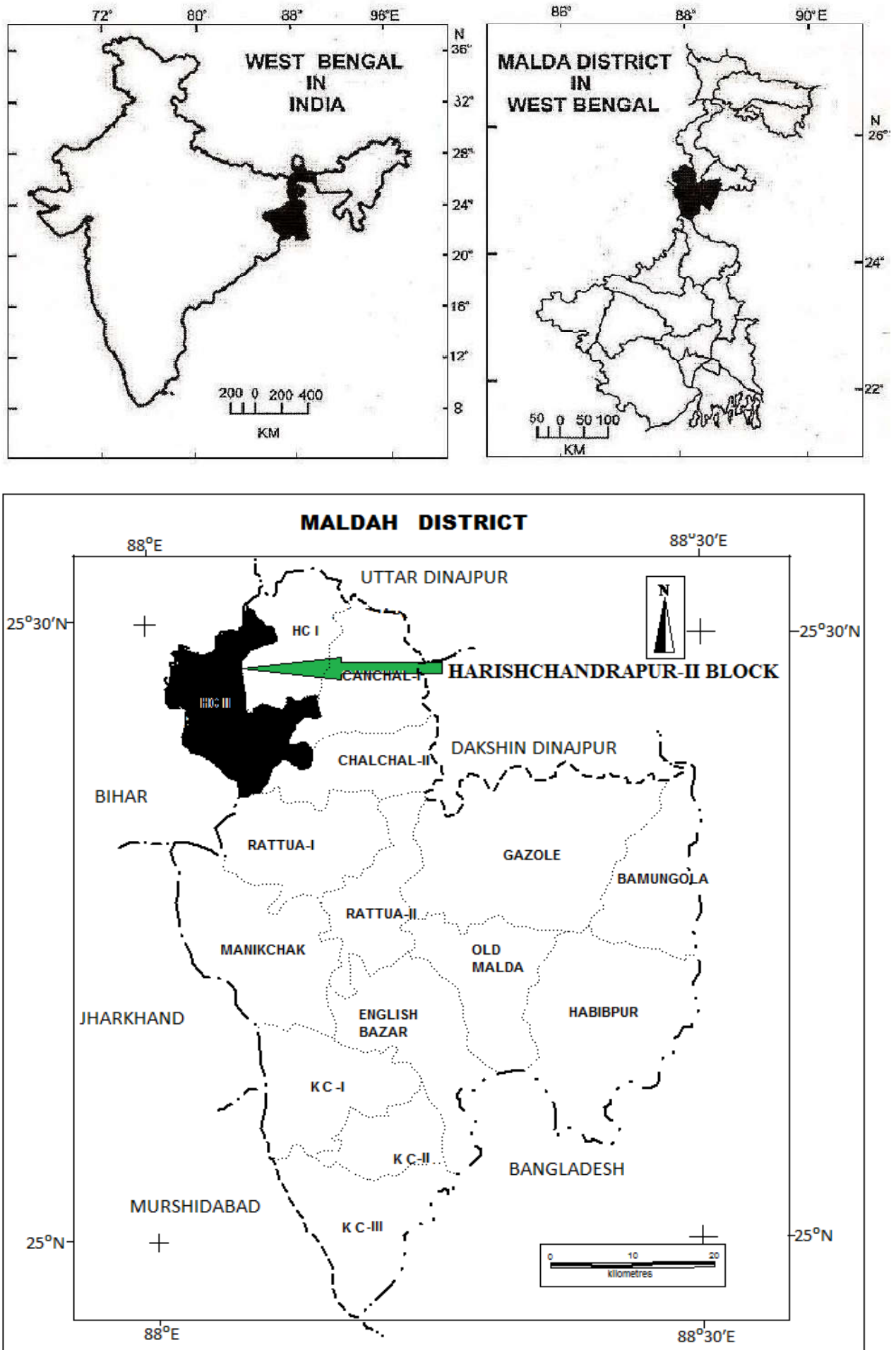


Figure 1. Location of study area

Socio-economic deprivation in these areas are mainly associated with prevalence of agricultural labourer, out migrant and cultivator, however far larger work force are still unemployed. In nutshell, very large section of human population is living in crisis and dearth of economic pursuits.

Analysis and Description

Nutritional status of Children (0-6 years)

Children are the utmost important part of population of our society. Their growth and development are largely dependent on nutritional status. Nutritional status of children is one of the valuable indicators to trace the development of our society. The nutritional status can be measured in various ways. Some of the important methods are Body Mass Index (BMI), and upper arm circumference etc. Children who are severely malnourished experience slow behavioural development as well as physical development, even mental retardation may occur. Under-nutrition causes long-term ill-health of children, with impairments in mental function and digestive problems.

Body Mass Index (BMI) of Children

Body Mass Index is calculated on the basis of weight divided by height square (WHO, 1995). WHO 1995, earmarked four groups of BMI namely, underweight, healthy weight, overweight and obese weight. Underweight is further divided into three categories i.e. severe, moderate and mild weight. Table 1 reveals that 56.60 percent children are found in the underweight group. It also shows that the underweight among male children is higher (57.40 percent) than female (55.76 percent). Healthy weight group of children constitutes 39.62 comprising 35.18 percent male and 44.24 percent female. In the overweight and obese weight are found among the male and female children accounting 3.70 percent each. It is noteworthy that overweight and obese weight is totally absent among the female children (Table 1). In the study area, children are malnourished because majority of their family belongs to Below Poverty Line (BPL). They do not have sufficient resources for their sustenance or well-being. The education level among the children is very low in the sample households. They are engaged in work at the early mature period. The child labours are found in prominent in the study area leading taking of improper nutritional food items.

Table 1. Body Mass Index of children

BMI groups	Male	Female	Total
Underweight	57.40	55.76	56.60
Healthy weight	35.18	44.24	39.62
Overweight	3.70	00	1.89
Obese weight	3.70	00	1.89
Total	100%	100%	100%

Source: Field Survey, 2015

Table 2 depicts that in the segment of underweight group, 8.33 percent children are severely suffering of malnutrition of which male children recorded higher (12.9 percent) than female (3.44 percent). Moderate malnutrition is found about 11.66 percent among all children accounting male is 9.67 percent which is lower than female (13.79 percent). Female children are more in moderate malnutrition than male children. Mild malnutrition is higher (82.75 percent) in the female children group than male children group (77.41 percent). It is found that the study area is affected in malnutrition more severely (Table 2).

Table 2. Status of underweight children

Underweight groups	Male	Female	Total
Severe	12.90	3.44	8.33
Moderate	9.67	13.79	11.66
Mild	77.41	82.75	80.00
Total	100%	100%	100%

Source: Field Survey, 2015

Upper Arm Circumference of Children

Table 3 reveals that the status of Upper Arm Circumference among the children in the study area. The upper arm circumference is determined by measurement of mid upper arm circumference in centimetre. According to Mandal (2014) below 11 cm or 11 cm is termed as malnutrition. It is mainly measured for children's nutrition. Table 3 states that 28.3 percent children are below 110 mm or 110 mm upper arm circumference, out of which 33.33 percent is male and female 23.08 percent. On the other hand, above 110 mm upper arm circumference is constituted with 71.70 percent, of which 76.92 percent is female higher than male 66.66 percent. It is considered that the important segment of children is suffering from malnutrition in the study area. They are also suffering from low physique, poor health condition, low intake of energy, poor medical care and diseases etc. In the study area, the medical facilities are few and availability of medical facility is to be found at the long distance. They do not get treatment at proper time. The accessibility to the government hospital is too long distance in the study area.

Table 3. Shows upper arm circumference of children

Upper Arm Circumference	Male	Female	Total
Below 110 mm	33.33	23.08	28.30
Above 110 mm	66.66	76.92	71.70
Total	100%	100%	100%

Source: Field Survey, 2015

Nutritional Status of Adult Population

As per World Health Organization (WHO, 1995), there are four major groups of BMI which are used to categorise the various nutritional status of the people like underweight, healthy weight, overweight and obese weight. The physique of a man is positively related with nutrition (Brozek, 1956). Table 4 portrays that the nutritional status of adult population in the study area. Nutritional level is low among the people in the study area because there is lack of awareness of nutritional value, carelessness of treatment of diseases. As per empirical observation they are more backward on economically, socially, educationally as well as politically. Table 4 shows 24.71 per cent of population are underweight (Table 4). Table 4 reveals that 58.04 per cent population is in the category of healthy weight, but 15.52 per cent population is under the overweight and remaining 1.72 per cent population is the obese weight. Analysis reveals in the Table 4 that the important portion of population comes under the malnutrition status in the study area. Such a situation is consequent upon the massive unemployment, low income, large family size, unawareness about the balance diet, after effect of malnutrition, prevalence of unhygienic indoor environment, lack of medical facility, higher dependency ratio etc. During empirical field observation many of the respondents reported that their family exist with ten to fifteen members but having only one or two earning member, leading to face food deficiency during slag season and children cry on hungry.

Table 4. Nutritional status of adult's people in the study area

BMI Groups	BMI range	Male (%)	Female(%)	Total Population(%)
Underweight	Below18.5	16.38	33.33	24.71
Healthy Weight	18.5 – 22.99	59.89	56.14	58.04
Overweight	23.0 – 24.99	21.47	9.36	15.52
Obese	25.0 & Above	2.26	1.17	1.72
Total		100	100	100

Source: Field survey, 2015

Table 5. Age group specific nutritional status

BMI Groups	7-15 years		16-30 Years		31-45 Years		46-60 Years		Above 60 Years	
	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)
Under Weight	38.46	43.18	13.79	39.74	1.82	15.56	0	0	0	0
Healthy Weight	61.54	52.27	55.17	47.44	61.81	71.11	80	100	0	0
Over Weight	0	4.55	29.31	10.26	32.73	13.33	10	0	100	0
Obese Weight	0	0	1.73	2.56	3.64	0	10	0	0	0
Total	100	100	100	100	100	100	100	100	100	0

Source: Field survey, 2015

Table 6. Distribution of nutritional status in the various occupation groups

BMI Groups	A.L.(%)	CUL.(%)	O.M.L.(%)	S.L.(%)	H.W.(%)	S.(%)	N.W.(%)
Under Weight	2.81	00	40.00	44.00	17.64	39.02	35.29
Healthy Weight	57.74	78.57	55.00	36.00	64.70	57.31	54.90
Over Weight	33.80	21.42	5.00	20.00	15.29	3.65	9.80
Obese Weight	5.63	00	00	00	2.35	00	00
Total	100	100	100	100	100	100	100

Source: Field survey, 2015

Note: A.L=Agricultural Labour; CUL=Cultivation; O.M.L=Out Migrant Labour; S.L=Skilled Labour; H.W=House Wife; S=Students; N.W=Not Working

Gender inequality analysis in nutritional status

The weight of female population observed to be low, especially in case of pregnant women and girl child due to less intake of micronutrients supplementary nutrition (HDI, 2004). It is observed that male population have more immunization power than female. Table 5 reveals that majority of female population (33.33 percent) are underweight as compared to male population (16.38 percent). Overweight and obese weight populations of male are more percentage (21.47 percent) than female populations (9.36 percent). They are suffering from malnutrition in the study area. Table 5 also depicts that the male populations (59.89 percent) are healthier than female population (56.14 percent). The pregnant mothers are suffering from malnutrition due to lack of acceptance of pre natal medical care in the study area. The people of study area have lack of awareness about the child nutrition at the infant stage. They do not care their children at the birth time of baby because they are more backward economically, socially as well as educationally. They are not able to support nutrition for their children due to shortage of food resources leading to food starvation.

Age groups specific nutritional status

Age is the important variable for demographic studies as well as socio-economic planning. But age misstatement is found in census data which effects on malnutrition (Bairagi, *et al.*, 1991). Table 5 reveals the percentage of individuals in the different age groups and their nutritional status. Nutritional status differs over the different age groups. Mature people are more immunized than old and child people because they have more stamina power and take more intake of nutrition. It is observed that lower age groups and higher age groups of populations are come under the underweight and overweight category, they are malnourished (Table 5).

Between the ages 7-15 years, 43.18 percent female are observed in underweight, 52.27 percent healthy and 4.55 percent overweight category, however 38.46 percent and 61.54 percent male populations are under and healthy weight respectively. In the 16-30 years of age group, share of underweight and overweight populations less as compared to healthy weight (Table 3). In the 31-45 years of age group, healthy populations (61.82 percent male and 71.11 percent female) are more as compared to nutritional categories i.e., underweight, overweight and obese weight. In the 46-60 years of age groups, healthy populations are more as compared to other populations but few percent populations are found obese weight. Overweight populations are found in the age groups of 60 & above. The old age group of people are affected in malnutrition (Table 5). The people at the old stage are not cared properly due to heavy burden of family and low income. The lower age groups of children are ignored by their family member to raise their status because family members are tensed with their livelihood.

Occupationspecific nutritional status

Table 6 depicts the occupation wise nutritional status in the study area. Most of the people are engaged in agricultural labour, out migrant labour and cultivation. Their income is very low i.e. why they are more backward economically as well as socially. Most of the women are house wife, they are not involved to any economic activities. They have no enough energy to support their nutrition. Majority of the students are lack of nutrition. As a result, Mid-Day Meal programme has been started by the govt. of India to support nutrition of the students. Table 6 depicts that house wife, students and not working lower age group populations are come under more malnutrition than cultivators. They are comprised with 17.64 percent house wife, 39.02 percent students and 35.29 percent

not working are underweight but overweight populations are more in the occupation of agricultural labours and cultivators. They are also come under malnutrition. Most of healthy weight populations are in the categories of cultivators, out migrant labours and skilled labours. They share 78.57 percent cultivators, 55 percent out migrant labours and 36 percent skilled labours. Few people are engaged in other occupations like business and services. The government job holders are limited in the study area. Most of the people are working outside the states to the other people at the daily wage earner. Their economic condition is very bad among the sampled household.

Income group specific nutritional status

Table 7 shows the distribution of nutrition in the different income groups in the study area. Nutritional status is not evenly distributed in the various households. Some of the households belong to high income groups but they are suffering from malnutrition due to their consumption of resources is divided among the more family members. The dependency burden is more in these households. On the other hand, low income groups of households are also malnourished due to lack of adequate resources. In the study area, most of the people are engaged in agricultural labourer, cultivators, out migrant labours and house wife.

dependency burden is less in these households (Table 7). In the study area the high profile of income group of people is absent. Very few people are engaged in the service sector and business sector. The income level of sampled household is very less.

Education specific nutritional level

Table 8 reveals the educational level in the various BMI groups in the study area. Majority of the people are illiterate. They have lack of awareness about educational value. They have no idea regarding nutrition. They are not attempted of higher education because of economically more lagged behind. Most of the adolescent people are engaged in economic activities for their survival. But they are not able to provide adequate nutrition to their family. Table 8 reveals that in the underweight group of people more than 21.43 percent illiterate, 57.14 percent people are educated up to class 4th standard level, 25 percent up to class 10th level, 16.66 percent up to class 12th level and 12.5 percent up to graduation level. No people are found in the higher education above the graduation level. Higher secondary and under graduation passed out people are very few and their nutritional level is also low. Table 8 depicts that a wide gap in the people's participation in the educational activities. The education is key tool to change the society. Educated people can change their family status and quality of life or standard of living.

Table 7. Percentage of households share in nutritional status in different income groups

BMI Groups	Rs. 3000 – 4000	Rs. 4001 – 5000	Rs. 5001 – 6000
	% of Household	% of Household	% of Household
Under Weight	8.79	8.33	20.00
Healthy Weight	60.43	58.33	60.00
Over Weight	26.37	33.33	20.00
Obese Weight	4.39	0	0
Total	100%	100%	100%

Source: Field survey, 2015

Table 8. Educational attainment of the people in the various BMI groups

BMI Groups	I – IV	V – X	XI – XII	U.G	Illiterate
	% of people	% of people	% of people	% of people	% of people
Under Weight	57.14	25.00	16.66	12.5	21.43
Healthy Weight	35.71	61.84	75.00	50.00	58.93
Over Weight	7.14	11.84	8.33	37.5	17.41
Obese Weight	0	1.32	0	0	2.23
Total	100	100	100	100	100

Source: Field Survey, 2015

Table 9. Daily working hours of the people and BMI groups

BMI Groups	1 – 5	6 – 7	8 – 9	Not working
	Working Hours	Working Hours	Working Hours	
	% of people	% of people	% of people	% of people
Under Weight	25.64	32.81	13.04	38.46
Healthy Weight	62.39	59.37	55.65	51.92
Over Weight	10.26	7.81	27.82	9.61
Obese Weight	1.70	0	3.48	0
Total	100	100	100	100

Source: Field survey, 2015

Their income is not adequate to fulfil their requirements of nutrition. Table 7 indicates that 8.79 percent households (income Rs.3000-4000 per month), 8.33 percent households (income Rs.4001-5000 per month) and 20 percent households (income Rs.5001-6000 per month) are come underweight. The healthy weight populations are concentrated in the income groups Rs.3000-4000 and 4001-5000 per month because

Low level of education leads the low quality of life i.e. why they are suffered in the malnutrition.

Nutritional level of daily working people

Most of the people are engaged in agricultural labour and out migrant labour. They work 8-9 hours daily (13.04 percent

underweight and 27.82 percent overweight), but 55.65 percent is healthy weight (Table 9). The consumption of nutritional calorie is high because they are hardworking labour. Table 9 also reveals that 38.46 percent not working people are underweight followed by 32.81 percent in 6-7 hours working people. Overweight people is high (27.82 percent) in the hardworking people followed by moderately working people like house wife. Majority of people are hard worker. They have needed more calories to support their work. But they do not get that much of calorie due to low income and high dependency burden prevailed in the family. They don't have adequate job opportunity because they are educationally lagged behind.

percent under, 5.23 percent over weight populations are come under malnutrition.

Family status

All sample households comprise of above and Below Poverty Line in the study area. Majority of the sample households observed in Below Poverty Line. Table 11 indicates that 45 percent people are Below Poverty Line. They are suffering from malnutrition due to lack of adequate resources for their consumption. In the Above Poverty Line, many people are also suffering from malnutrition because their dependency burden is high.

Table 10. Marital status and age at marriage of the people in BMI groups

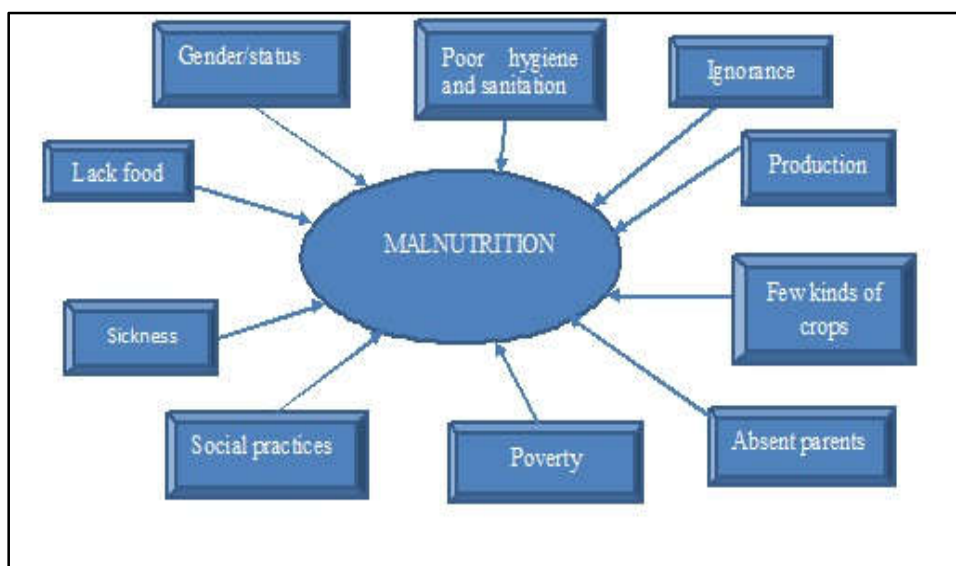
BMI Groups	Marital status		Age at marriage (years)		
	Married	Not married	Below 18	18 – 21	Above 21
	% of people	% of people	% of people	% of people	% of people
Under Weight	15.38	36.60	20.59	19.00	0
Healthy Weight	57.94	58.17	61.76	57.85	55.00
Over Weight	23.59	5.23	17.64	18.18	45.00
Obese Weight	3.08	0	0	4.95	0
Total	100	100	100	100	100

Source: Field survey, 2015

Table 11. Household status

Family Status	Sample Households	
	Number	Percentage
APL	132	55.00
BPL	108	45.00
Total	240	100

Source: Field survey, 2015



Source: Malnutrition and its Causes, Nutritional Education in Primary School.

Model of Malnutrition designed by authors

Nutrition level among married and unmarried people and their age at marriage

Majority of people are Muslim in the Harishchandrapur-II block. They get married at early age because of prevalence of illiterate population there. They don't know about negative impact of early marriage. Table 10 depicts that 20.59 percent under, 61.76 percent healthy and 17.64 percent overweight people married at below 18 years of age. On the other hand, married people 15.38 percent under, 23.59 percent over and 3.08 percent obese weight are considered as malnutrition people. Table 10 also reveals that unmarried people 36.60

The property or assets are too small which are used for their minimum requirement. They don't have surplus income for future use. They are unable to maintain their family's requirement and also unable to give proper education to their children due to lack of money.

The causes of malnutrition based on observation

- **Lack of food/ poverty:** This is common among the low income group as well as those who are homeless.
- **Unawareness:** Those with a limited knowledge about nutrition tend to follow an unhealthy diet with not

enough nutrients, vitamins and minerals and are at risk of malnutrition.

- **Lack of Food among high age group:** Elderly living alone, disabled persons living alone or young students living on their own often have deficiency cooking healthy balanced meals for themselves and may be at risk of malnutrition.
- **Ignorance:** The elderly (over 65 years of age are), especially those living in careless facilities are at a higher risk of malnutrition. These individuals have long term disease that affects their appetite and ability to absorb nutrients from food and they may also have difficulty feeding themselves.
- Those who abuse drugs or are chronic alcoholics.
- Some others which are as below in model.

Conclusion

The above discussion reveals that the study area is suffering from malnutrition. It is stated that 57 percent male and 55 percent female are fallen in underweight among the children (Table 1). Among the adult people, there is 24.71 percent underweight and 15.52 percent overweight prevailing in the study area (Table 4). The malnutrition status of underweight children is severe (12 percent) male and female (3 percent) and moderate 9.67 percent, 13.79 percent male and female respectively. The study reveals that the nutritional status of children and adult groups of population is not so good in the study area. To improve the nutritional status in the study area following remedial measures should be adopted.

- Food security should be ensured to the poor family (backward)
- Suitable programmes should be adopted by the govt. to overcome the malnutrition in the study area.
- Government aids (food) should be provided to the poor family to support their diets for the nutrition.
- The medical facilities and micronutrient capsules should be provided to the pregnant women.
- Nutrition and health should be improved in the children and pregnant women.
- Development of breastfeeding.
- Special attention should be given to weaker sections of the society.
- Special attention should be given on female education, because education has emerged as the single most important factor affecting food and nutrition security.

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