

Socio Demographic Profile and Nutritional Status of Pangkhua Ethnic Community

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Abstract

A cross sectional study was undertaken to assess sociodemographic profile as well as nutritional status of Pangkhua ethnic community in Chittagong Hill Tracts. A total of 112 subjects were estimated. Purposive sampling among respondent's technique was used. Face to face interview was used to collect data. Nutritional status was determined by body mass index (BMI) recommended by World Health Organization (WHO) for Asian people. The socio-economic classification in this study was made according to 2006 Gross National Income (GNI) per capita and using the calculation of World Bank (WB). The mean (\pm SD) age of the respondents was 35.18 \pm 9.80 years. About three-fourth of them was male. Illiterate, primary and secondary level of education was 42%, 13% and 31% respectively. Farmer was 44% followed by service holder 32% and businessman 10%. About 86% respondents represented from lower-middle income (5360-21270 BDT) group. Normal, overweight and obese were 31.20%, 55.40% and 13.40% respectively. No statistical significant association was found between income and their nutritional status ($p= 0.099 > 0.05$). It is concluded that more than half of the respondents were overweight which may lead them non-communicable diseases.

Keywords: Nutritional status; Pangkhua ethnic community

Introduction

Pangkhua is the 10th least minor ethnic group with a present population of nearly 3227. They mainly live in Chittagong Hill Tracts. CHT is thought economically underdeveloped and that is why numerous NGOs have already taken economic development programmers to improve the life of the ethnic minority groups [1]. Unlike other ethnic groups, modern lifestyle is not predominated to Pangkhua community due to their dwelling place in the middle of dense forest and hilly regions. They still rely mostly on the gift of the nature for their livelihood. Anthropometry is an important technique for identifying individuals, groups or communities whose growth is not keeping up with the expected pattern [2]. Malnutrition is a prevalent issue in all developing countries [3,4]. In our country this situation is more critical because of unbalanced diet and poverty stress. Nutritional status is a sensitive indicator of community health [5]. So if we want to fight against malnutrition first of all we have to know nutritional status.

Methodology

A cross sectional study was undertaken to assess sociodemographic profile as well as nutritional status of Pangkhua ethnic community in Chittagong Hill Tracts. The study area was selected purposively. A total of 112 subjects were estimated. Purposive sampling technique was used. Face to face interview was used to collect data. Prior interview verbal consent was taken from both respondents and headman (community chief). We used body mass index (BMI) category as World Health Organization (WHO) recommended for Asian people [6]. For anthropometric measurements, height was measured with a standiometer and body weight was measured using a platform beam scale. We took three measurements and then counted mean of them. The socio-economic groups were low-income \$75.41 or less (BDT ≤ 5360), lower middle-income \$75.5 - \$299.58 (BDT 5361-21270), upper middle-income \$299.68 - \$926.25 (BDT 21271-65761) and high-income \$926.33 or more (BDT ≥ 65762) [7]. All interviewed forms were reviewed and individual questionnaire were checked and cleaned to avoid any possible mistakes.

Results

The mean (±SD) age of the respondents was 35.18±9.80 years. About three-fourth of the respondents were male and one-fourth were female. Illiterate, primary and secondary level education completed 42%, 13% and 31% respondents. Farmer was 44% followed by service holder 32% and businessman 10%. About 86% respondents represented from lower-middle income (5360-21270 BDT) group (Table 1). Figure 1 shows normal, overweight and obese were 31.20%, 55.40% and 13.40%. Table 2 shows no statistical significant association was found between income and their nutritional status (p= 0.099 > 0.05).

Variables	Number	Percentage
Age (in years)		
19-28	32	28.6
29-38	43	38.4
39-48	27	24.1
49-58	6	5.4
59-68	4	3.6
Mean ± SD	35.18 ± 9.80	
Sex		
Male	87	77.7
Female	25	23.3
Education		
Illiterate	47	42
Primary	15	13.4
Secondary	35	31.2
Higher-secondary	6	5.4
Graduate	7	6.2
Post graduate	2	1.8
Occupation		
Housewife	1	0.9
Farmer	49	43.8
Student	9	8.0

Business	11	9.8
Service	36	32.1
Others	6	5.4
Monthly Income(BDT)		
Lower income <5360)	9	8.0
Lower-middle income (5360-21270)	96	85.7
Upper middle-income income (21271-65761)	7	6.2

Table 1: Socio-Demographic Characteristics (n=112).

Results are expressed as number (%) and M±SD.

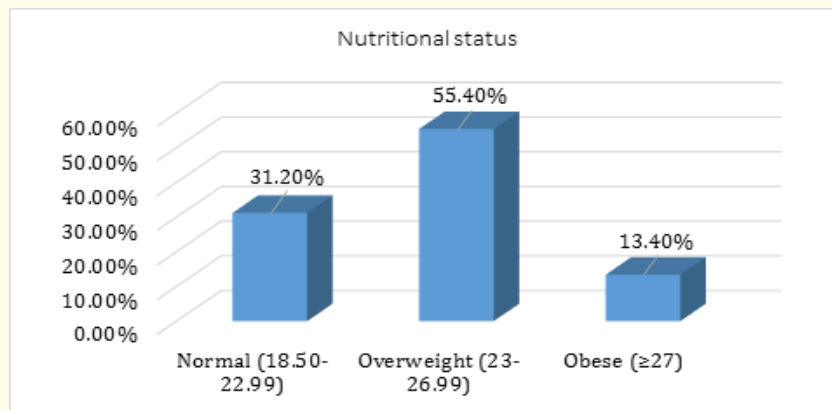


Figure 1: Nutritional status of respondents (n=112).

Variables	Nutritional status			Total	χ ²	p value
	Normal	Overweight	Obese			
Lower income	2 (1.8)	6 (5.4)	1 (0.9)	9 (8.0)	7.800	0.099
Lower-middle	33 (29.5)	52 (46.4)	11 (9.8)	96 (85.7)		
Upper-middle	0 (0)	4 (3.6)	3 (2.7)	7 (6.2)		

Table 2: Association between income and nutritional status.

Discussion

There is very little information available regarding the socio-demographic condition and nutritional status of Pangkhua ethnic community in Bangladesh. They are very minor group. It was very hard to reach them because they like to keep them separate. The present study was carried out to explore the scenario. The present study found nearly half of the Pangkhuas were involved in cultivation which showed similarity with Indian study [8]. Actually they practiced primitive cultivation technique that is called “Jume Cultivation” and they often depend on nature. Cultivation in hill is not so easy. Normal, overweight and obese were 31.20%, 55.40% and 13.40% in this study. Now gradually they are becoming habituate in Bengali food instead of traditional tribal diet and this is why half of the respondents were overweight. A study conducted among tribal groups residing in different parts of India and they found high prevalence of under nutrition which influences health and nutritional status in non-satisfactory level [10,11]. But in our country particularly in hilly area many donor

agency are funding to improve nutritional awareness as well as nutritional status [11] of ethnic people. Finally, socio-demographic condition and nutritional status of Pangkhua ethnic community showed similarity with Haque., *et al* study [12].

Conclusion

No underweight was found. One third of the respondents were normal whereas more than half of the respondents were overweight and rest were obese. Further large scale study can be conducted to get more precise result.

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