

Nutritional Status and Hygiene Practice of Female: on the Basis of Socio-Economic Variation

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Abstract:

Objective: *This study was conducted to assess nutritional status and hygiene practice of female of different socioeconomic group in Dhaka city. **Methods:** The study was carried out among the 183 female of the upper, middle and lower socio-economic classes in Dhaka city and purposive sampling method was applied to collect data. Pre tested semi structured questionnaire was used and verbal consent was*

taken prior interview. **Results:** The mean age of upper class, middle class and lower class were 35 ± 4 , 25 ± 3 and 21 ± 7 in years. Almost all the upper and middle class societies were washed their hands before preparing food while 9.84% lower class female did not wash their hands. Almost 64% lower class female washed hands before taking meal by water only while it was only 5% among upper class. Middle class female (52%) used soap to wash hand before having meal. Liquid soap was more used by upper class but no upper and middle class female used soil to wash their hands. More than fifty percent (50.82%) in upper class and about forty four percent (44.26%) in the middle class female were within normal nutritional status while only one-third (34.43%) of the lower class were normal in their nutritional status. In case of chronic energy deficient level 3, all three groups showed nearly same result (upper class=33%, middle class=36%, lower class=31%). **Conclusion:** The study result should not be generalized and need further large scale research.

Key words: Nutritional status, Hygiene Practice, Socio-economic group

Introduction

Urban life has been associated with undesirable changes in behavior especially regarding dietary habits and physical activities – factors that are significantly related to obesity¹. Widespread malnutrition throughout the country is a significant public health problem as well as hindrance to national development. Particularly under five year children and woman are the worst victims of hunger and malnutrition². The deprivation to women starts from birth in Bangladesh. The socioeconomic, health and nutritional status of women depict gloomy pictures throughout their life³. Moreover, like most developing countries, the picture of nutritional status of women is far too serious in the poorer socioeconomic groups who live in the rural areas and urban slums of Bangladesh^{4, 5}. It has been

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recognized that infants, children and women of the reproductive age constitute the most vulnerable groups from the stand point of nutrition⁶. It is very much clear that the health and nutritional status of the city people is quite impossible to improve without improving the health and nutritional status of the slum dwellers, especially, slum mothers⁷. Research on urban slum mothers, specially, on nutrition is very relevant and deserves in depth studies⁷. The purpose of the study was to assess the nutritional status and hygiene practice of the women living in Dhaka city. So the findings of the study might provide a comprehensive picture on nutrition of women living in Dhaka city with different socioeconomic condition, which could inform and guide the concerned authorities for undertaking appropriate measures to improve the situation.

Methodology

Type of study

The study was a descriptive cross sectional study.

Study population

This study was conducted among the upper, middle and lower classes female of different selected areas in Dhaka city. 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 groups were: low-income \$75.41 or less (BDT \leq 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 \geq 65762).

Study period

The study was conducted from January 2012 to May 2012.

Sampling technique: Purposive sampling method was used to collect data.

Study area

Gulshan, Badda, Banani, Lalmatia, Dhanmondi, Mohammadpur, Shankar, Magbazar, Tezgaon, Malibag, Baridhara, Mirpur and Ramna.

Data collection tools and methods

Data were collected using pre tested semi structured questionnaire by face to face interview. After data collection, data were sent to the researcher, which was sorted, scrutinized by the researcher himself by the selection criteria and then data were analyzed by personal computer by SPSS version 12.0 program. Data were analyzed by descriptive statistics. Sick women, women with sick babies, mentally retarded and insane women were excluded from the study. For anthropometric measurements, height was measured with a standiometer and body weight was measured by standard procedure. Three measurements were recorded and the mean measurement was taken to the nearest 0.1 cm. Weight was recorded to the nearest 0.1 kg. For assessment of hygiene practice, hand washing practice among study subjects was observed.

Results

The mean age of upper, middle and lower class were 35 ± 4 , 25 ± 3 and 21 ± 7 respectively. Nearly all were married and small family size were more (70%) among upper class. No illiterate and primary level of education was seen among upper and middle class but among lower class it was seen 26% and 30% respectively. Housewife was more (40%) among middle class but service holder was prominent among upper class (Table 1). Almost all the upper and middle class societies were washed their hands before preparing food while 9.84% lower class

female did not wash their hands (Figure 1). Almost 64% lower class female washed hands before taking meal by water only while it was only 5% among upper class. Middle class female (52%) used soap to wash hand before having meal. Liquid soap was more used by upper class but no upper and middle class female used soil to wash their hands (Table 2). More than fifty percent (50.82%) in upper class and about forty four percent (44.26%) in the middle class female were within normal nutritional status while only one-third (34.43%) of the lower class were normal in their nutritional status. In case of chronic energy deficient level 3, all three groups showed nearly same result (upper class=33%, middle class=36%, lower class=31%) (Table3).

Table 1: Socio-economic characteristics of respondents (n=183)

Characteristics		Upper class	Middle class	Lower class
Mean age (yrs)		35±4	25±3	21±7
Marital status	Married	61(100)	60(99.36)	61(100)
	Divorced	0(0)	1(1.64)	61(100)
Family size	<5	43(70.49)	35(57.38)	12(19.67)
	5-8	15(24.59)	20(32.79)	26(42.62)
	>8	3(4.92)	6(9.84)	23(37.70)
Education	Illiterate	0(0)	0(0)	16(26.23)
	primary	0(0)	0(0)	18(29.51)
	SSC	2(3.28)	12(19.67)	12(19.67)
	HSC	15(24.59)	17(27.87)	10(14.75)
	Graduate or more	44(72.13)	32(52.46)	5(8.2)
Occupation	Housewife	10(16.39)	25(40.98)	7(11.48)
	Business	5(8.20)	6(9.84)	12(19.67)
	Govt. service	20(32.79)	10(16.39)	8(13.11)
	Pvt. service	26(42.62)	19(31.15)	13(21.31)
	Labor	0(0)	0(0)	17(27.87)
	Others	0(0)	1(1.64)	4(6.56)
Total		61(100)	61(100)	61(100)

Results were expressed as frequency (%), Govt=Government, Pvt=Private

Figure 1: Washing hands before preparation of foods (n=183)

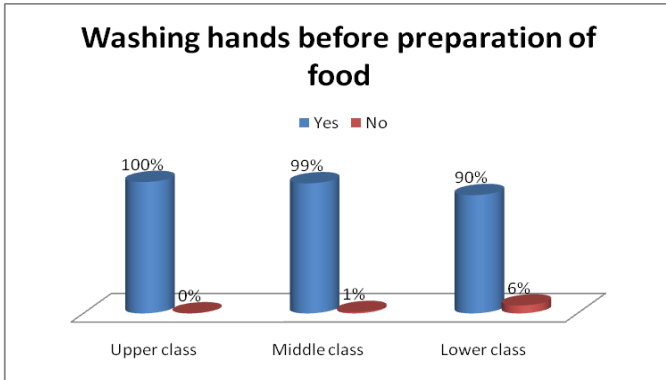


Table 2: Washing hands by using different media before taking meal (n=183)

Items	Upper class	Middle class	Lower class
Water	3(4.92)	11(18.03)	39(63.93)
Soap	17(27.87)	32(52.46)	9(14.75)
Liquid soap	36(59.02)	17(27.87)	0(0.0)
Soil	0(0.0)	0(0.0)	13(21.31)
Others	5(8.20)	1(1.64)	0(0.0)
Total	61(100)	61(100)	61(100)

Results were expressed as frequency (%)

Table 3: Nutritional status of respondents according to socioeconomic class (n=183)

Nutritional status	Upper class	Middle class	Lower class
CED-1 (BMI 17.01-18.50)	1(1.64)	2(3.28)	5(8.20)
CED-2 (BMI 16.01-17.0)	3(4.92)	5(8.20)	12(19.67)
CED-3 (BMI<16)	20(32.79)	22(36.07)	19(31.15)
Normal (BMI 18.50-24.99)	31(50.82)	27(44.26)	21(34.43)
Overweight (BMI 25.01-29.99)	4(6.56)	2(3.28)	3(4.92)
Obese (BMI>30.0)	2(3.28)	3(4.92)	1(1.64)
Total	61(100)	61(100)	61(100)

Results were expressed as frequency (%), WHO cut off value for BMI

Discussion

This study provided some important features of the female, especially their socio-economic, nutritional status, hygiene practice living in different part of Dhaka city with different classes. The present study found that more than fifty percent (50.82%) in upper class and about forty four percent (44.26%) in the middle class female were within normal nutritional status while only one-third (34.43%) of the lower class were normal in their nutritional status. In case of chronic energy deficient level 3, all three groups showed nearly same result (upper class=33%, middle class=36%, lower class=31%) Another study showed that 52.5% respondents were normal, 33.8% respondents were overweight and the rest of respondents 13.7% were obese¹. Haque MJ and Rashid M showed their study⁷ that the weight of about 34% of the respondents was below 40 kg and the height of 15% of them was below 145 cm. The mean weight and height of the respondents were 42.4 kg and 148.7 cm respectively. According to BMI, about 31% of the respondents were suffering from malnutrition (BMI <18.5). More or less similar findings were observed by several studies carried out earlier in slums and rural Bangladesh^{3,8,9,10,11}. In some studies it was found that the average weight and height of Bangladeshi women were 42 kg and 154 cm respectively^{3,9}. The study showed that 25% of the pregnant slum mothers were suffering from severe malnutrition (BMI <17)⁷ and the mean BMI of this study was similar to earlier reports from slums⁸ and rural Bangladesh¹².

Conclusion and Recommendation:

This study provided some valuable information on the nutritional status of women in Dhaka city. The findings of this cross-sectional study presented a gloomy picture of the city women which might reflect the picture of the women in

Bangladesh as a whole. So, further large scale research is needed.

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