Chattagram Maa-O-Shishu Hospital Medical College Journal
Volume 14, Issue 1, January 2015

Original Article

Reproductive Characteristics and Nutritional Status of Coastal Women

Nuruzzaman[1*]
Md Ashraful Alam[2]
Md Parvez Iqbal Sharif[3]
Parveen Akter[4]
Nabeela Mazid[5]
Shah Niaz Md Rubaid Anwar[6]

[1]Nandail Upazila Health Complex
Mymansing, Bangladesh.

[2]Department of Maternal and Child Health
National Institute of Preventive and Social Medicine (NIPSOM)
Dhaka, Bangladesh.

[3]Department of Community Medicine
Chattagram Maa-O-Shishu Hospital Medical College
Chittagong, Bangladesh.

[4]Population Services and Training Centre
Dhaka, Bangladesh.

[5]Medical Officer (Former)
Chattagram Maa Shishu-O-General Hospital
Chittagong, Bangladesh.

[6]Marie Stopes Clinic
Dhaka, Bangladesh.

*Correspondence to:

Dr. Nuruzzaman
Medical Officer
Nandail Upazila Health Complex
Mymansing, Bangladesh.
Mobile : +88 01717 443467
Email: nuruzzamansakil@gmail.com

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Abstract

Women are more vulnerable in health and family planning and this vulnerability is more in–depth in coastal area. The study was done to determine the reproductive characteristics and nutritional status of women in coastal area. It was conducted in Moheshkhali upazila of Cox's Bazar district in 2013 among 220 purposively selected coastal women of reproductive age. Face to face interview was done through pre-tested questionnaire. Average age of the respondents was 26.5 years. Almost 60% of them were Muslims and 44% were illiterate. The average monthly family income and family size was Tk-6968.18 and 5.8 respectively. More than half (56%) of the respondents had history of regular use of contraceptives and oral pill was the most common type of contraceptive. Average number of children was 2.95. More than half of them (54%) had history of home delivery. More than one-third (34%) of them were under nourished. Nutritional status was significantly associated with income ($p<0.05$). Majority of them got early marriage (70%) but early marriage was not significantly associated with their nutritional status. Age at first pregnancy and parity of the respondents were in significant state with the nutritional status of women of coastal area ($p<0.05$). Socio-demographic disparity should be reduced to improve the nutritional status by improving the reproductive health of coastal women.

Key words: Early marriage; Nutritional status; Socio-economic disparity; Coastal area.

INTRODUCTION

Over the last three decades the world has witnessed a dramatic change in reproductive behavior of women in Bangladesh. The Total Fertility Rate (TFR) has dropped dramatically from a high level of 6.3 births per woman in the mid-1970s to 3.00 births in 2004. Meanwhile, the Contraceptive Prevalence Rate (CPR) has increased from a low level of 7.7% to a high level of 61.2%. These achievements in reproductive behavior of Bangladeshi women have been viewed as 'success in a challenging environment'. However, these average pictures hide the wide variations in reproductive behavior that are prevailing across regions and subgroups of women by socioeconomic strata. One such region is coastal area[1]. This challenging environmental condition also makes there nutritional status more vulnerable. This study was undertaken to describe the reproductive characteristics of coastal women of reproductive age and to find out its impact on and nutritional status. Women of reproductive age are defined by the World Health Organization (WHO) as someone within 15-49 years of age. Family planning program and use of contraceptives have no doubt effect directly on fertility of women. If family planning program served most women with unmet need, the demographic impact would be substantial contraceptive prevalence would rise, reducing fertility and population growth[2]. Currently more than half of the pregnancies in the world are unintended- that is they occurs too soon, too close together. Consequently many women give birth more then they want or can care for, and other turn to unsafe abortion. Maternal and infant mortality are unacceptably high, especially among disadvantaged women- those who are poor, live in rural areas or have little education[3].

Another important factor is the economic status and living condition of individuals. A change in income will change the desire family size[4]. On the basis of preliminary findings from 1991 Population Census, the 1981-1991 per anum population growth rate 2.17 %. If this rate continues, the population of Bangladesh will double in the next 32 years to roughly 224 million, aggravating further the existing population density[5]. The people among the coastal belt area are the most vulnerable for any kind of natural disaster like cyclone, flood etc. Life style, custom, norms, belief etc. are totally different as because they have to fight with this atypical challenging environmental condition. Lack of life security, food security, huge losses of assets make them think a bit differently. As there is increase chance of death due to any natural disaster so they might be used to take many children. Beside these, as this coastal area is hard to reach area, family planning and other reproductive health services are supposed to be not easier to get.

MATERIALS AND METHODS

This cross sectional study was conducted among the coastal women of reproductive age group of Moheshkhali upazila of Cox's Bazar district to find out the reproductive characteristics and nutritional status of women in coastal area. Data were collected through face to face interview of 220 women of reproductive age using a semi-structured questionnaire. Before starting the procedure informed consents were taken properly and data were collected maintaining privacy as much as possible. Nutritional status was measured by BMI and categorized according to WHO guideline. Reproductive characteristics were described by age at marriage, age at first pregnancy, contraceptive use and parity. Data processing and analyses were done using SPSS (Statistical Package for Social Sciences) version 16. Ethical permission was obtained from the Ethical Committee of National Institute of Preventive and Social Medicine (NIPSOM).

RESULTS

This cross-sectional study was carried out among 220 married women of reproductive age in coastal area. Majority of the respondents (78%) were within 21 to 30 years and average age was 26 years with ± 6.09 years Standard Deviation (SD). Almost half of them (48%) were income group of 5001 – 10000 taka. There average income was 6968.18 Tk. More than 40% had at least five family members. Women were more literate. Majority of them 193 (88%) were house wives. Almost half of the husbands were fisherman 104 (47%). More than half of them were Muslims and lived in nuclear family. Kacha (44%) and tin-shed houses (47%) were commonly found.

Average age of menarche was 12 years. About 70% had history of early marriage. There mean age at 1st pregnancy was 18 years with standard deviation (SD) of± 2.60 years. Almost 60% had more than 2 children and average number of children was 2.95. More than half of them (54%) had history of home delivery and rest of them experienced institutional delivery. Only 16% had history of caesarian section. Less than one-third (30%) had history of complication during pregnancy.

Table 1 : Distribution of age, family income and family size

	Character	Frequency	Percentages (%)	Mean ± SD
Socio-demographic characteristics	**Age of the respondents (in years)**			
	< 20	16	7.3	
	21 to 30	172	78.2	26.5 ± 6.1
	> 31	32	14.5	
	Age of the husbands (in years)			
	≤ 21	2	0.9	
	21 - 35	154	70	33.4 ± 7.8
	≥ 35	64	29.1	
	Monthly family income (Tk.)			
	≤ 5000	92	41.8	
	5001 - 10000	106	48.2	6968± 33-49
	≥ 10001	22	10	
	Family size			
	≤ 4	67	30.5	
	5 to 6	93	42.3	5.8 ± .2.3
	≥ 7	60	27.2	

Source: Survey Report

Table 2 : Distribution of reproductive characteristics of coastal women

Character	Frequency	Percentages (%)	Mean ± SD
Age at menarche			
≤ 12	146	66.4	
			12.23 ± 0.99
>12	74	33.6	
Age at marriage (in years)			
< 18	156	70.9	
			16.66 ± 2.13
≥ 18	64	29.1	
Age at 1st pregnancy (in years)			
< 20	176	80	
			17.85 ± 2.60
≥ 20	44	20	
Age at 1st delivery			
< 20	179	81.4	
			17.79 ± 2.23
> 20	41	18.6	
Number of children			
≤ 2	91	41.4	
			2.95 ± 1.43
>2	129	58.6	
Average Birth spacing			
≤ 2 years	109	49.5	
			1.50 ± 0.50
>2 years	111	50.5	

Source: Survey Report

Table 3 : Education and family income with nutritional status of the respondents

Characteristics	Nutritional status (BMI) < 18.5 n (%)	≥ 18.5 n (%)	Total n (%)	χ2	P value
Educational status of the respondents					
Illiterate	38(39.6)	58(60.4)	96(100)	2.69	0.10
Literate	36(29.0)	88(71.0)	124(100)		
Monthly family income					
≤ 5000	43(46.7)	49(53.3)	92(100)	12.16	0.01
> 5000	31(24.2)	97(75.8)	128(100)		

Table 4 : Reproductive characteristics and nutritional status of the respondents

Characteristics	Nutritional status (BMI) < 18.5 n (%)	≥ 18.5 n (%)	Total n (%)	χ2	P value
Age at marriage (years)					
< 18	57 (36.5)	99 (63.5)	156(100)	2.02	0.15
≥ 18	17 (26.6)	47 (73.4)	64(100)		
Age at 1st pregnancy (years)					
≤ 19	66(37.5)	110(62.5)	1 76(100)	5.8	0.01
> 19	8(18.2)	36(81.8)	44(100)		

Source: Survey Report

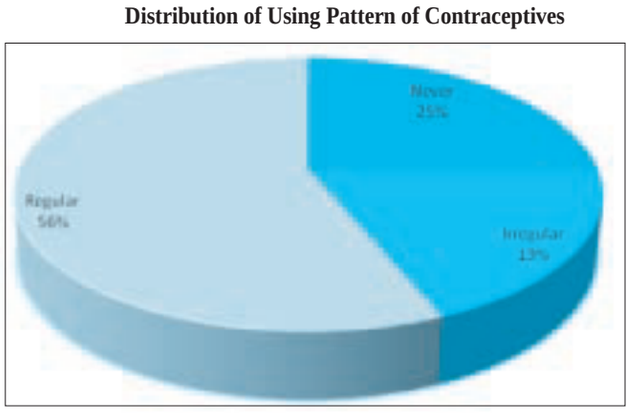

Figure 1 : Contraceptive Prevalence Rate (CPR)

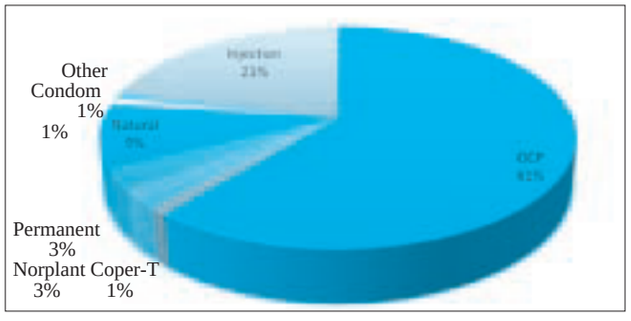

Figure 2 : Distribution of types of contraceptive

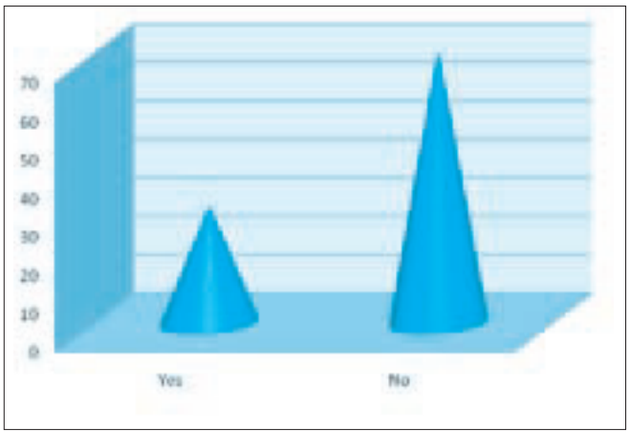

Figure 3 : Pregnancy complication

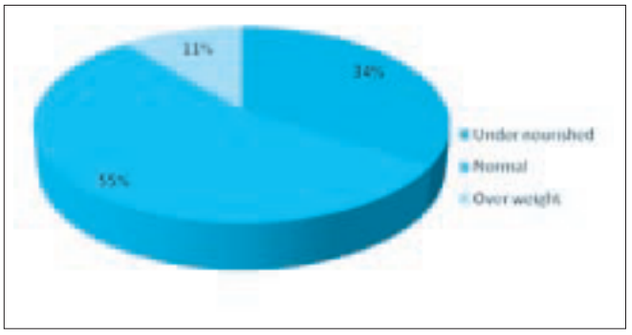

Figure 4 : Nutritional status of the respondents

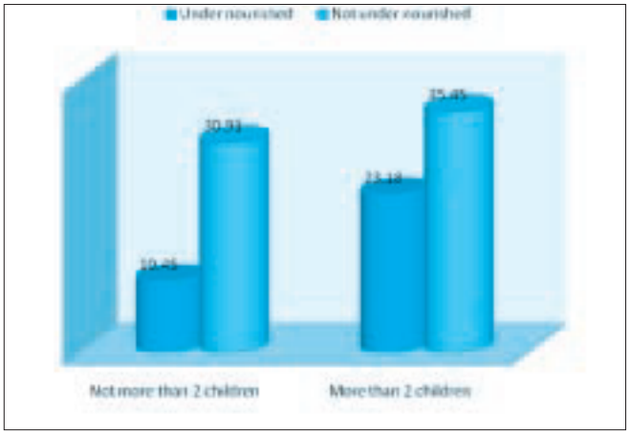

Figure 5 : Association of number of children and nutritional status

More than half (56%) of the respondents had history of regular use of contraceptives and 19% used contraceptives irregularly and rest of them (25%) never used any kind of contraceptive. Among the contraceptive users 61% used OCP, 21% used injection and only 3% had history of using permanent method. Male participation in contraceptive use was only 1% with condom and about 9% of the respondents practiced natural methods of contraceptives. The nutritional status of the respondent was measured by BMI. According to WHO guideline BMI < 18.5 is under weight, 18.5- 24.99 is normal range and ≥25 is defined as over-weight[5]. One-third (34%) were undernourished, 55% had normal BMI and only 11% found overweight.