



Rural mothers' awareness of reproductive health needs for their adolescent girls

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ABSTRACT

Adolescent is the period of transition from childhood to adulthood. It is an important segment of life. Evidence has shown that adolescents and youth in Bangladesh are particularly vulnerable to health risks, especially in the area of reproductive health. They need proper direction and considerable confidential care during this time. This descriptive cross sectional study aimed to examine the rural mothers' awareness of reproductive health needs and care for their adolescent girls in selected rural areas from Sadar Upazila of Dinajpur district, Bangladesh. It was hypothesized that mothers' awareness on reproductive health needs and care of their adolescent girls would have significant association with their adolescent girls' reproductive health (RH) condition. The technique of purposive sampling method was applied to recruit 225 rural mothers who had adolescent girls. Data was collected by face to face interview with a semi-structured questionnaire and analyzed with statistical package for social science (SPSS). The awareness was assessed by Likert scale. Most (91%) of the participants were Muslim and 73.3% was house wives. Significant statistical association was found between awareness of reproductive health needs and mothers' educational level, number of child, number of family member as well as monthly family income. Based on the finding rural mothers' awareness of RH needs and care for their adolescent girls was far from satisfactory level. These findings may be considered as baseline information and can benefit the policy makers and programme planners in developing further strategy to increase the rural mothers' awareness of reproductive health needs and care for their adolescent girls.

INTRODUCTION

Adolescence marks the period between childhood and adulthood when hormonal changes transform boys and girls into young men and women (Raddi et al., 2010). World Health Organization defines adolescence as the period of life between 10 to 19 years of age. During this time the body is going through a rapid physiological growth, emotional development and sexual maturation (Goldenring, 2004; Hindin & Fatusi, 2009; Kotecha et al., 2012; Sabageh et al., 2014). Reproductive health (RH) of adolescent girls is crucial in determining the health of future generations. The needs of adolescents vary with their sex, stage of development, the life circumstances and socio-economic conditions. It is a period of increased risk taking and therefore susceptibility to behavioral problems at the time of puberty and new concerns about RH (Hofferth et al., 1987; UNFPA, 1995; UNICEF, 2006; Nagaraj., 2014). They learn about RH and sexual matters by observing the behavior of the adults around them by listening to peers and the older siblings,

through the media in all its forms and by acquiring the knowledge of parents or other trusted mentors. Such information however is limited and sometimes even erroneous (Bearinger et al., 2007; Das & Roy, 2015).

As per the 2014 data, published by U.S Census Bureau, adolescents (10–19 years of age) count approximately 1.2 billion across the globe (Kar et al 2015). Estimated 580 million are girls; and 88% are live in low middle income counties (Santhya & Jejeebhoy, 2015). From many years, the health of adolescents has been neglected as they are less vulnerable to disease than young children or the very old. Specific sources of about RH information are rarely available or accessible to them (World Health Organization & UNICEF, 1989; World Health Organization, 1993; Barua & Kurz, 2001; Rob et al., 2002; Sridevi, 2011).

In Bangladesh, one-fifth of the country's total population are adolescence; among that 14.4 million girls (BBS, 2011). Despite the size of this subpopulation and their unique sexual and

reproductive health (SRH) needs, the scope of adolescences sexual and reproductive health (ASRH) programming in Bangladesh has remained limited (Haque, 2010; BBS, 2011). They often enter their reproductive years poorly informed about protection from pregnancy and infection and their reproductive choices (IPPF, 2009). Furthermore, 'what is known' is often incorrect and derived through communication with friends who are equally unknowledgeable (Ahmed, 1991; Ali et al., 1996; Nahar et al., 1999; Rob et al., 2002; Ahmed et al., 2005). Proper direction and care is important during this time, otherwise it might lead to poor health (Shankar et al., 2017). In this study an attempt made to identify the "Rural Mothers' Awareness of Reproductive Health Needs and Care for their Adolescent Girls".

METHODS AND MATERIALS

This descriptive cross sectional study was conducted on the "rural mothers' awareness on reproductive health needs and care of their adolescent girls" who live the rural area of Bangladesh. The respondents were selected purposively from rural areas of Sadar Upazila of Dinajpur district, Bangladesh. After getting ethical approval, data was collected from 225 respondents by face to face interview with a pre- tested semi-structured questionnaire and analyzed with SPSS version 20. The rural mothers' RH awareness assessed by a four point Likert scale (Brown, 2010); as good awareness, average awareness, fair awareness and poor awareness. The level of awareness was graded on the basis of weighted marking twenty awareness related questions. Each question was four marks. On the basis of correct answer, awareness was graded according to Likert scale.

Ethical considerations

It was maintained according to Helsinki Declaration (Morris, 2013): and considered: autonomy, confidentiality, beneficence and non-maleficence. All participants were informed regarding the purposes of the study and their right to withdraw from the study at any time without any consequences. Approval was taken from the Institutional Review Board (IRB) of the National

Institute of preventive and Social Medicine (NIPSOM), Dhaka, Bangladesh; and written and oral consent taken from the participants prior to data collection.

RESULTS AND DISCUSSION

This cross-sectional study was done on 225 rural mothers who had adolescent girls identified by the village leader, during the study period at selected rural area of Bangladesh. The mean age of the participants was 36.69 years, ($SD \pm 4.950$). Among them most (73.3%) of the participants was house wives and 12.9% was working as day laborer and rest of them others. Almost one-third (32.4%) of the participants were illiterate. Approximately 60.4% of the participants had 4-5 family members. The average family size found 4.88 with $SD \pm 1.759$. The present study observed that having average number of children was 2.96 with $SD \pm 1.260$. Regarding the monthly family income; 47.6% of the participants monthly family income was below 10,000 BD Taka and average 13581.33 with $SD \pm 8827.590$ BD Taka (Approximately 80 BD taka equal 1\$) (Table 1). 36.69; ($SD \pm 4.950$)

The present study observed that most (36.4%) of the participants' source of RH information was others followed by 25.4% from health workers, 19.5% from multiple sources and 18.7 from the media (Table 2). Majority (72%) of the participants had good awareness about puberty. Albeit more than 60% stated they discussed menstruation with their adolescent girls after onset. A semi-similar study conducted at Dhaka city (capital city) in Bangladesh and found the opposite finding; that 76.3% of the adolescents' mothers provided information to their adolescent girls about menstruation before menarche (Zaman et al., 2010). This indicates urban mother of adolescence are more aware about their adolescent girls' RH needs. The highest number (65.8%) of participants had poor awareness about the management of menstruation (maintained menstrual hygiene) (Table 3). This is alarming because physiology of menstruation and management of menstruation is an important part of female reproductive life cycle (Dasgupta & Sarkar 2008; Dhingra, Kumar & Kour, 2009; Thakre et al., 2011). Good hygienic

practices are essential during menstruation (Singh, 2006). Most (72.0%) of the participants had good awareness about consequence of early marriage; although only 31.1% of them had good awareness on adverse impact of adolescent pregnancy followed by 20.4% average, 16% fair and 32.4% poor.

Table 1
Socio-demographic characteristics.

Characte- ristics	Findings		Mean
		%	
Age	≤30 years	14.2	36.69; (SD± 4.950)
	>30 years	68	
	>40 years	17.8	
Family members	≤ 3	12.9	4.88; (SD± 1.759)
	4-5	60.4	
	>5	8.9	
Children	1-2	44.9	2.96; (SD± 1.260)
	3-4	42.2	
	≥5	12.9	
Occupation	House wife	73.3	-----
	Day laborer	12.9	
	Government Service	1.8	
	Others	12	
Religion	Islam	91	-----
	Hindu	08	
	Christian	01	
Type family	Nuclear	79	-----
	Combined	21	
Level of education	Illiterate	32.4	-----
	Primary	22.2	
	Secondary	23.1	
	Higher secondary and above	22.3	
occupation	House wife	73.3	-
	Secondary	38.4	
	Higher	35.3	
	secondary and above	24.8	
Monthly family Income (*BD Taka)	<10,000	47.6	13581.33; (SD± 8827.590)
	10,000- <15000	24.4	
	15000- <20000	15.1	
	>20000	12.9	

* Note: (Approximately 80 BD taka equal 1\$)

This issue is also alarming because adolescent girls are two to fivetimes more likely to die during pregnancy or childbirth than women in their twenties (Kesterton & de Mello, 2010). Higher number of respondents had poor awareness about STDs (48.8%); symptoms of STDs (64%) and consequences of STDs (87.1%) (Table 3).

Table 2
Distribution of the respondents by their source of information on RH (n=225).

Source	Frequency	Percent
Media	42	18.7
Others	82	36.4
Health workers	57	25.4
Multiple Source	44	19.5
Total	225	100.0

Table 3
Distribution of respondents by their level of awareness (n=225).

Characteristics	Level of awareness			
	Good	average	Fair	Poor
Awareness regarding				
Puberty	72.2	2.2	19.1	6.06
Management of ministration (menstrual hygiene)	34.2			65.8
Adolescence risk behaviors	19.6	14.2	20.4	46.0
Consequence of early marriage	72.0	2.2	19.1	6.06
Consequence of adolescent pregnancy	31.1	20.4	16.0	32.4
STDS	20.9	23.6	7.6	48.8
Way of control and prevention of STDs	12.0	10.7	20.0	57.3
Symptoms	12.0	15.6	8.5	64.0
Consequences of STDs	4.9	2.7	5.4	87.1

In this study reveals that 52.9% of the respondents' adolescent girls suffered from dysmenorrhea (Table 4). A previous study found a lower rate (40.7%) of dysmenorrhea in adolescent

girls compared to this study (Singh et al 1999). Regarding suffering from back pain 49% (Table-4) of adolescent girls reported it, this is similar to the findings of a previous study in a similar setting (back pain was 54%) (Kabir et al., 2014). The treatment seeking behavior in the Kabir (2014) was very good with 39% seeking treatment from a qualified physician (one who has a bachelor degree of medicine and surgery or higher) (Kabir et al., 2014). While this study found only 13% took the treatment from qualified physician.

Table 4
Distribution of the respondents experiences of their adolescent girls' reproductive health illness (last 6 months).

Characteristics	Findings	
	Type	%
Experiences of Menstrual problem	Irregular menstruation	13.4
	Dysmenorrhea	52.9
	Excessive bleeding	18.6

	Lower abdominal pain	36
	Back pain	45
	Nausea, headache, vertigo and weakness	53
Experiences	Leucorrhoea	34.2
	Itching genitalia	17.3
Others	Burning micturition	14.7
RH problem	Others	12.9

Table 5
Distribution of the respondents by their treatment seeking behavior for their adolescent girls.

Treatment by	Findings
Qualified physician	13%
Homeopathic	15%
Homemade medicine	14%
Pharmacy (chemist shops)	15 %
Traditional practitioner	21%
Without treatments	22%

Table 6
Level of awareness of respondents in relation to their socio-economic characteristics (n=225).

Characteristic	Awareness				Total	Test of significance
	Poor		Good			
	No	%	No	%		
Maternal education:						
Illiterate	67	91.8	6	8.2	73	$\chi^2=32.458$
Literate	81	53.3	71	46.7	152	$P<0.001$
Family Member:						
≤ 4	67	56.3	52	43.7	43.7	$\chi^2=10.7$
> 4	81	76.4	25	23.6	23.6	$*P<0.002$
Child						
≤ 4	52	51.5	49	48.5	101	$\chi^2=16.726$
> 4	96	77.4	28	22.6	124	$*P<0.000$
Income						
≤ 10000	94	87.9	13	12.1	107	$\chi^2=44.158$
> 10000	54	45.8	64	54.2	118	$*P<0.000$
Age						
≤ 35 years	71	67.6	34	32.4	105	$\chi^2=0.297$
> 35 years	77	64.2	43	35.8	120	$P>0.67$
Occupation						
House wife	103	62.4	62	37.6	165	$\chi^2=3.091$
Others	45	75.0	15	25.0	60	$P>0.07$

Significant statistical association was found between awareness and maternal education ($\chi^2 = 32.458$, $P < 0.001$) family size ($\chi^2 = 10.74$, $P < 0.002$), number of child ($\chi^2 = 16.726$, $P < 0.000$) as well as the monthly family income ($\chi^2 = 44.158$, $P < 0.000$) (Table 6) No statistical association was found between awareness and age ($\chi^2 = P > 0.67$) and occupation ($\chi^2 = P > 0.07$.) These statistical significant association might be influences their illness and treatment seeking behavior.

Adolescent and youth in Bangladesh are particularly vulnerable to risk, especially in the area of RH due to their lack of access to information and services. It is a multi-factorial issue as; no single factor is enough to maintain a healthy reproductive lifestyle. (Uddin & Choudhury, 2008; Kotecha et al 2009; Muhammad & Mamdouh 2012).

CONCLUSION

From the study findings, it may be concluded that rural mothers' awareness of RH needs and care for their adolescent girls was not satisfactory. Awareness level was dependence on their socio-economic condition. There is a need for increased attention to rural women socio- economic status for programming to develop their awareness level of RH needs and care for their adolescent girls'.

IMPLICATION AND LIMITATIONS

This data may be helpful to policy maker and program planer to inform policy to improve the adolescence RH as well as that of maternal and child health.

The study was conducted purposively in a selected rural area with a limited sample size and study design. These study findings do not depict the scenario of the awareness level of all the mothers in Bangladesh who have adolescent girls. Subsequent studies would need to be done to draw a more comprehensive summary of their needs.

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