



**KNOWLEDGE OF FEMALE ADOLESCENTS ABOUT
REPRODUCTIVE HEALTH IN SOUTH-WESTERN REGION
OF BANGLADESH**

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Abstract: This study assesses the level of knowledge on reproductive health (RH) of female adolescents and to identify the determinants of their know-how about RH in south-western Bangladesh. One hundred and sixteen female adolescents were selected randomly through household listing from two areas of Khulna and Bagerhat Districts, *Boyra* and *Palerhat*, respectively. A pre-tested semi-structured interview schedule, containing three modules on socio-demographic, economic and knowledge of reproductive health, was used. Findings indicate that the participants, with an average 16 years of age and 10 years of schooling, were mostly unmarried. Yet, they have shown extensive knowledge about reproductive health issues, including puberty, safe sex, contraceptives, sexually transmitted diseases (STDs) and gendered dimensions. However, their level of knowledge about reproductive health varies with their age, year of schooling, living arrangement as well as residence. Surprisingly, religion and marital status were found not associated with their knowledge. In contrast, having an elder sister with secondary or higher education was positively associated with participants' knowledge about reproductive health. In addition, parental education and income also had a positive influence on participants' knowledge. In general, RH knowledge among female adolescents from rural areas and from low income families were found low compared to the urbanites with relatively well-off families. Therefore, we strongly suggest to address as well as to integrate reproductive health education as well as demands of the adolescents, especially, female, into national policies.

Keywords: Female adolescents, reproductive health, sex education, family planning, knowledge on reproductive health

Introduction

Adolescence is a period, between 10 to 19 years in general, characterized by significant physiological and psychological change (Abajobir & Seme, 2014; World Health Organization, 1999). The young people, being confused and anxious about unprecedented physical changes together with inability to endure such shame and embarrassment, are increasingly at greater risks of adverse reproductive health outcomes with longstanding consequences through the exposure to drugs, coercive sexual acts as well as violence (Adinew et al., 2013; Khalaf, et al., 2010; Senanayake & Ladjali, 1994; Shiferaw et al., 2014; Yazıcı et al., 2011).

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In recent years, concern about adolescent reproductive health has grown manifold, especially, in countries of Asia and Africa, where adolescents are engaged in unsafe sexual activities at early age, due to heightened curiosity about bodily change as well as early marriage. Evidences show that a significant proportion of young men and women often ended up in unexpected pregnancies and sometimes infected with sexually transmitted diseases, including HIV/AIDS (Ajuwon et al., 2006; Hughes & McCauley, 1998; Wamoyi et al., 2010; Weinstock et al., 2004). Globally, five percent adolescents contact a curable sexually transmitted diseases/infections each year and more than half of total HIV/AIDS positive are late adolescents (Shiferaw et al., 2014).

After the International Conference on Population and Development (1994) held in Egypt, adolescents' reproductive health has been recognized as a priority to be addressed in the health policies across the world (Dehne & Riedner, 2005; Woodward et al., 2011). Yet, it remained almost unnoticed in most parts of the world, especially, in Bangladesh. In fact, in the health policy of Bangladesh in 2011, the adolescent reproductive health issues were ignored and suggested hardly anything to improve the current reproductive health status, knowledge and behavior of young men and women (Ministry of Health and Family Welfare, 2012).

Though the adolescents constitute around one-fifth of the total population, of whom 13.8 million were girls and 14.8 million were boys (Bangladesh Bureau of Statistics, 2015a), majority of these young people, irrespective of age, sex and religion, have no or very little knowledge about reproductive health and barely know about the social and legal provisions that could support them when their sexual and reproductive health rights are violated (Singh, Bankole, & Woog, 2005). Moreover, family members, especially, parents, approach more cautiously, and sometimes they are reluctant to deal with anything related to sexuality and reproductive health of the adolescents rather than clarifying their questions informatively (Adinew et al., 2013; DeJong & El-Khoury, 2006), largely due to their lack of knowledge about this issue or socio-cultural taboo (Tesso, Fantahun, & Enquselassie, 2012; Yazıcı et al., 2011). Education also offers limited knowledge, particularly the syllabi of biology for science students at secondary and higher secondary levels include information about reproductive organs and their functions, but do not cover reproductive health and rights issues. Additionally, the reluctance of the health workers to share their knowledge or to provide reproductive health services to the adolescents, especially, the unmarried, without the permission of the guardians, deepens the problem in both urban and rural areas (Tu et al., 2004).

Surprisingly, least initiative has been taken to address the knowledge, practice and attitude of the adolescents, especially, females, regarding reproductive health issues (Akhter, 2007; Kabir et al., 2014; Khan, 2002), despite its significant social consequences. Moreover, the accessibility to as well as availability of quality reproductive health interventions for female adolescents remained almost unexplored in Bangladesh. Therefore, this study set out to add empirical evidence to the very limited literature on female adolescents' knowledge about reproductive health by setting up two fundamental questions – firstly, do personal attributes influence individual's knowledge about reproductive health? and secondly, what are the impacts of socio-demographic and economic background on young women's knowledge about reproductive health? To answer these questions, this study primarily

attempted to measure the level of knowledge of the female adolescents on reproductive health at both urban and rural settings to explore the extent of their know-how on this sensitive issue. Finally, the study tried to examine the relationships between personal attributes (*e.g.* age, religion, year of schooling, residence) as well as socio-demographic and economic factors (such as parental education, income) with the magnitude of reproductive health knowledge of the female adolescents.

Materials and Methods

This study was carried out in two districts of south-western Bangladesh, Khulna and Bagerhat. The adolescents constitute 461 thousand and 293 thousand of the total population of Khulna and Bagerhat districts respectively and around 50 percent of them (48.1% and 48.9%, respectively) are female adolescents (Bangladesh Bureau of Statistics, 2015b, 2015c). From these two districts, *Boyra* from Khulna district as urban and *Palerbat* from Bagerhat district as rural area were selected purposively for its geographic accessibility as well as similar socio-cultural background, to understand the variations of female adolescents' knowledge regarding reproductive health with reference to the dynamics of urban and rural settings.

The participants of the study were selected under some specifications/characteristics: i) the participants must be 13 to 19 years old, ii) currently enrolled in schools/colleges/universities, iii) having at least one living sister and iv) living in the selected study areas of Khulna and Bagerhat districts for at least three consecutive years. Under the aforementioned criteria, considering 95% confidence level with 5% margin of error and 10% non-response, a total of 116 female adolescents, 58 girls from each of the preferred areas, were selected following proportionate random sampling method from an inventory list, consisting of 462 female adolescents, developed by the authors from a census.

A semi-structured interview schedule, in English, was prepared for data collection after reviewing previous studies of interest, *e.g.* Abajobir and Seme (2014), Seifu, Fantahun, and Worku (2006), Liu et al. (2011), Donaldson, Lindberg, Ellen, and Marcell (2013), Farid, Khan, Freeth, and Meads (2014). The interview schedule contained three modules; the first module focused on the socio-demographic conditions of the participants, the second module stressed on their economic status and the third module inspected their knowledge about reproductive health.

To develop an index of knowledge about reproductive health, the latter module contained 9 variables on reproductive health issues (Table 2), each with 3 questions and 5 possible responses, including '4' for 'Very Good', '3' for 'Good', '2' for 'Neither Good nor Bad', '1' for 'Bad' and '0' for 'Very Bad' knowledge. To construct the index, the scores of different questions were added up and divided into three equal intervals, *e.g.* 'High', 'Medium', and 'Low'. The negative responses were reverse scored, therefore, the highest score represented better knowledge about reproductive health. Observing all the scores, the sum of the total responses was finally used to construct the Knowledge about Reproductive Health Index¹ (KaRHI) to facilitate bivariate analyses.

¹ The Cronbach's α was calculated for knowledge about reproductive health index (SCI) to provide indications of the reliability and internal consistency of results ($\alpha = 0.665$). The highest achievable score is 1, thus, an alpha score of 0.7 is considered normal, and anything below 0.6 is regarded as non-usable (DeVellis, 2003).

Before conducting the field work, the interview schedule was pre-tested on 10 female adolescents to minimize inconsistencies and to maximize validity and reliability of the instrument. Following some necessary modifications in the study instrument, data were collected by a well-trained group of female undergraduate students, of Sociology Discipline who were familiar with the objectives of the study as well as the contents of the interview schedule, in a period of two months, June to July, of 2014. Each interview lasted for half an hour to complete in a face to face situation, initiated with rapport build up. Collected data were checked by the authors for any logical error or incompleteness, and edited manually before entering them into SPSS for data analysis. To measure the association between dependent (knowledge about reproductive health) and independent (age, religion, year of schooling, residence, parental and sibling characteristics) variables, Pearson's Chi-square (χ^2) was employed. Whenever the expected values in one or more cells were less than 5, the Fisher exact test was used, along with Pearson's Chi-square.

Ethical Consideration

The study was carried out with the permission of the authority of Sociology Discipline, Khulna University. The parents of the participants, especially, for those who were under 18 years of age, were informed and requested for permission. The participants, before responding to questions of the interviewers, were informed about the objectives as well as the authors of the study, and they were informed about what is required from them. The participants also had the right to refuse or discontinue participation at any time of the interview. In addition, the interviewers, considering the sensitivity of the issue, were selected among the female undergraduate students of Sociology Discipline who were trained to maintain privacy as well as confidentiality of the participants. With the verbal consent of the participants, the interviewers proceed the interviews, keeping the anonymity throughout the study.

Results

Socio-demographic and economic characteristics: Of the 116 female adolescents, the average age was about 16 years and 93.1 percent were Muslim girls (Table 1). Half of the adolescents lived in urban areas and other half resided in rural areas. Around 88 percent of the girls were unmarried with an average around 10 years of education. Among the girls, 54.3 percent had younger sister and they were living with their parents and younger siblings. Of the female siblings, 60.3 percent had secondary education.

In terms of parental education, 75.9 percent of the father and 57.8 percent of the mother of the female adolescents had higher secondary and tertiary education. Among the fathers, more than half (57.8%) were government employee, whereas among the mothers, almost 70 percent were housewives. Findings show that fathers, with an average monthly income of BDT 17,897, were the main-wage earners of the family, while the average monthly income of mother was only BDT 3,966.

Table 1: Socio-demographic and economic characteristics

Variables	N (%)	Statistics (Mean & Std. Deviation)
Age (in year)		
≤ 15	45 (38.8)	15.9 & 2.26
16 ≥	71 (61.2)	
Religious status		
Islam	108 (93.1)	-
<i>Sanatan</i>	8 (6.9)	
Residence		
Rural	58 (50)	-
Urban	58 (50)	
Education (in year)		
≤ 10	64 (55.2)	10.0 & 2.34
11 ≥	52 (44.8)	
Marital status		
Unmarried	102 (87.9)	-
Married	14 (12.1)	
Birth order		
Elder	63 (54.3)	-
Younger	53 (45.7)	
Living arrangement		
With family (including younger sister)	63 (54.3)	-
With family (including elder sister)	53 (45.7)	
Education of father (in year)		
≤ 10	28 (24.1)	13.7 & 3.67
11 ≥	88 (75.9)	
Education of mother (in year)		
≤ 10	49 (42.2)	11.4 & 4.13
11 ≥	67 (57.8)	
Education of sister (in year)		
≤ 10	70 (60.3)	9.4 & 3.51
11 ≥	46 (39.7)	
Occupation of father		
Government Service	67 (57.8)	-
Business/Farming	49 (42.2)	
Occupation of mother		
Housewife	79 (68.1)	-
Working Mother	37 (31.9)	
Monthly income of father (in BDT)		
≤ 15000	63 (54.3)	17,896.6 & 10,910.21
15001-30000	41 (35.3)	
30001 ≥	12 (10.4)	
Monthly income of mother (in BDT)		
No Income	79 (68.1)	3,965.5 & 6,527.44
1-10000	18 (15.5)	
10001 ≥	19 (16.4)	
Monthly household income (in BDT)		
≤ 20000	52 (44.8)	24,543.1 & 13,048.00
20001-40000	49 (42.3)	
40001 ≥	15 (12.9)	

Knowledge about reproductive health: Among the female adolescents, only 7.8 percent female adolescents responded that they were well-informed about menstrual cycle and managed their period properly, in hygienic manner (Table 2). About sex education, astoundingly around 80 percent had minimum knowledge about sex or relevant issues. However, the adolescents showed considerably better knowledge about healthcare (26.7%) as well as family planning (47.4%). It is also evident that the girls knew about the risks of unwanted pregnancy (40.5%) and were concerned about the safe motherhood and childcare (32.8%). In terms of reproductive health risks, the female adolescents showed remarkable knowledge (75%) about sexually transmitted diseases such as HIV/AIDS. On the contrary, girls showed insufficient knowledge about abortion (94%) and 56.9 percent of the girls were not sure about the role of men in terms of safe and secured reproductive health behavior. However, the index of knowledge about reproductive health of the female adolescents showed that a significant percent of the girls (37.1% and 55.3% respectively) had relatively better knowledge about their reproductive health issues.

Table 2: Knowledge about reproductive health

Variables	N (%)			Cronbach's α
	Low	Medium	High	
Knowledge of menstrual cycle/management	45 (38.8)	62 (53.4)	9 (7.8)	0.665
Knowledge about sex education	92 (79.3)	24 (20.7)	0 (0.0)	
Knowledge about primary healthcare	22 (19.0)	63 (54.3)	31 (26.7)	
Knowledge about family planning	7 (6.0)	54 (46.6)	55 (47.4)	
Knowledge of unwanted pregnancy	33 (28.4)	36 (31.0)	47 (40.5)	
Knowledge about safe motherhood and childcare	12 (10.3)	66 (56.9)	38 (32.8)	
Knowledge about safe abortion	109 (94.0)	7 (6.0)	0 (0.0)	
Knowledge about STDs/HIV/AIDS	1 (0.9)	28 (24.1)	87 (75.0)	
Knowledge about men's involvement	66 (56.9)	36 (31.0)	14 (12.1)	
Knowledge about reproductive health index (KaRHI)	9 (7.8)	64 (55.2)	43 (37.1)	

Socio-demographic and economic characteristics and knowledge about reproductive health: To understand the socio-demographic and economic factors related to adolescents' reproductive health knowledge, Pearson's Chi-square test was done, along with Fisher's exact test when appropriate. Among the socio-demographic characteristics, female adolescents' age was found significantly associated with their level of knowledge about reproductive health (Table 3). In fact, late adolescence (16-19) was positively connected to greater level of knowledge about reproductive health ($p < 0.05$). The influence of religion and marital status on adolescents' reproductive health knowledge was statistically insignificant, whereas some studies found significant relation between religion and marital status with individual's reproductive health knowledge as well as behavior (Andersen et al., 2015; Farahani, Cleland, & Mehryar, 2012; McCree, Wingood, DiClemente, Davies, & Harrington, 2003). In this study, perhaps the female adolescents were not picked equally considering

their religion and marital status, hence, these two factors were found to have insignificant relation with adolescents' reproductive health knowledge.

Table 3: Socio-demographic and economic characteristics and knowledge about reproductive health

Independent variables	Dependent variable (KaRHI)			$\chi^2_{(df)}$	Fisher's Exact	p-value
	Low	Medium	High			
Age						
≤ 15	5 (55.6)	28 (43.8)	12 (27.9)	7.22 ₍₂₎	7.01	0.05*
16 ≥	4 (44.4)	36 (56.2)	31 (72.1)			
Religious Status						
Islam	9 (100.0)	60 (93.8)	39 (90.7)	1.09 ₍₂₎	0.63	0.05
Sanatan	0 (0.0)	4 (6.2)	4 (9.3)			
Residence						
Rural	8 (88.9)	27 (42.2)	23 (53.5)	7.21 ₍₂₎	7.19	0.05*
Urban	1 (11.1)	37 (57.8)	20 (46.5)			
Education (in Year)						
≤ 10	5 (55.6)	42 (65.6)	17 (39.5)	7.07 ₍₂₎	7.06	0.05*
11 ≥	4 (44.4)	22 (34.4)	26 (60.5)			
Marital Status						
Unmarried	7 (77.8)	54 (84.4)	41 (95.3)	3.85 ₍₂₎	4.25	0.05
Married	2 (22.2)	10 (15.6)	2 (12.1)			
Birth Order						
Elder	4 (44.4)	44 (68.8)	15 (34.9)	12.27 ₍₂₎	13.30	0.05*
Younger	5 (55.6)	20 (31.3)	28 (65.1)			
Living arrangement						
With family (with younger sister)	4 (44.4)	44 (68.8)	15 (34.9)	12.27 ₍₂₎	13.30	0.05*
With family (with elder sister)	5 (55.6)	20 (31.3)	28 (65.1)			
Education of Father						
≤ 10	1 (11.1)	23 (35.9)	4 (9.3)	10.86 ₍₂₎	10.77	0.05*
11 ≥	8 (88.9)	41 (64.1)	39 (90.7)			
Education of Mother						
≤ 10	6 (66.7)	29 (45.3)	14 (32.6)	9.51 ₍₂₎	9.12	0.05*
11 ≥	3 (33.3)	35 (54.7)	29 (67.4)			
Education of Sister						
≤ 10	6 (66.7)	35 (54.7)	29 (67.4)	6.37 ₍₂₎	6.02	0.05*
11 ≥	3 (33.3)	29 (45.3)	14 (32.4)			
Occupation of Father						
Government Service	8 (88.9)	31 (48.4)	28 (65.1)	6.80 ₍₂₎	6.67	0.05*
Business/Farming	1 (11.1)	33 (51.6)	15 (34.9)			
Occupation of Mother						
Housewife	8 (88.9)	41 (64.1)	30 (69.8)	6.11 ₍₂₎	5.94	0.05*
Working Mother	1 (11.1)	23 (35.9)	13 (30.2)			
Monthly Income of Father						
≤ 15000	7 (77.8)	31 (48.4)	25 (58.1)	9.89 ₍₄₎	10.75	0.05*
15001-30000	0 (0.0)	29 (45.3)	12 (27.9)			
30001 ≥	2 (22.2)	4 (6.3)	6 (6.0)			

Independent variables	Dependent variable (KaRHI)			$\chi^2_{(df)}$	Fisher's Exact	p-value
	Low	Medium	High			
Monthly Income of Mother						
No income	8 (88.9)	41 (64.1)	30 (69.8)	7.53 ₍₄₎	7.37	0.05
1-10000	1 (11.1)	10 (15.6)	7 (16.3)			
10001 ≥	0 (0.0)	13 (20.3)	6 (14.0)			
Monthly Household Income						
≤ 20000	4 (44.4)	26 (40.6)	22 (51.2)	9.64	9.21	0.05*
20001-40000	5 (55.6)	31 (48.4)	13 (30.2)			
40001 ≥	0 (0.0)	7 (10.9)	8 (18.6)			

* 5% level of significance

The residence of the female adolescents was significantly associated with their knowledge about reproductive health ($p < 0.05$) as the urbanites showed relatively better knowledge about reproductive health issues than their rural counterparts. Similarly, adolescents having higher secondary or tertiary education displayed higher knowledge about reproductive health than the junior secondary school adolescents ($p < 0.05$). In addition, adolescents having an elder sisters and living with them, along with parents, were comparatively more acquainted with reproductive health compared to the adolescents with younger sisters ($p < 0.05$).

Parental education also has positive relation with their offspring's knowledge about reproductive health. Female adolescents with both parents having higher secondary or tertiary education were more likely to have better knowledge about reproductive health issues ($p < 0.05$). The education of sister, however, showed an inverse relation, *i.e.* sisters with secondary education were more influential on their siblings' knowledge about reproductive health than sisters with higher secondary and tertiary education ($p < 0.05$).

Among the economic characteristics, parental occupation was also positively associated with adolescents' knowledge about reproductive health. Fathers' occupation, particularly government service, was significantly influencing their female children's knowledge about reproductive health ($p < 0.05$). Similarly, working mothers were more influential over housewife mothers to improve their children's reproductive health knowledge ($p < 0.05$). In case of parental income, fathers' monthly income was positively associated with their children's knowledge about reproductive health ($p < 0.05$), whereas mothers' income was not associated significantly with adolescents' reproductive health knowledge. However, monthly household income found to be an important determinant of adolescent members' knowledge about reproductive health ($p < 0.05$).

Discussion

Adolescents' knowledge about reproductive health has crucial impact on their access to and use of reproductive health services (Abajobir & Seme, 2014; Khalaf et al., 2010). In Bangladesh, adolescents' use of and access to reproductive health services are relatively low, because the young people are not aware of their reproductive health issues and rights (Kabir et al., 2014). Henceforth, this study attempted to assess the level of adolescents' knowledge about reproductive health and to find out the socio-demographic and economic attributes that influence their knowledge.

Among the female adolescents, a significant proportion have shown minimum knowledge about menstruation cycle and management (38.8%), sex education (79.3%), safe abortion (94%) and men's involvement and role in safe reproductive activities (56.9%). The high negative knowledge might be due to the delicate nature of the issues related to sexuality and reproductive health. In Muslim countries, these issues could not be disclosed under any circumstances and no one shares or dares to talk about these due to socio-cultural taboo (Abajobir & Seme, 2014; Adinew et al., 2013; Yazıcı et al., 2011). On the contrary, adolescents showed relatively better knowledge about primary healthcare (26.7%), family planning (47.4%), unwanted pregnancy (32.8%), safe motherhood and childcare (32.8%) as well as sexually transmitted diseases including HIV/AIDS (75%). The heightened knowledge about the latter issues indicate that the participants' exposure to outside world, especially, interaction with peers or watching television and movies, might have a strong influence on their understanding (Zhang, Li, & Shah, 2007) since these issues are more open. However, the influence of peers and mass media were not explored in this study. This study, therefore, suggests more investigation in this regard.

Among the socio-demographic factors influencing adolescents' knowledge about reproductive health, participants' age has significant influence on their level of knowledge, especially, the late adolescents ($16 \geq$ years of age) have comparatively greater knowledge than their young counterparts. Likewise, adolescents with higher secondary or tertiary education were more knowledgeable about reproductive health, since they were more acquainted with biological issues erudite from magazines, books or mass media (Zhang et al., 2007). Adolescents from urban areas showed pragmatic knowledge about reproductive health issues than their rural counterparts. This disparity could be attributed to cultural differences, including norms and practices, between rural and urban areas in which they are nurtured. In addition, the urbanites enjoy relatively more access to information and services offered by government and non-government organizations, concentrated largely in urban areas, henceforth, harnessed more knowledge about reproductive issues (Mohammad Reza et al., 2006; Ogunlayi, 2005).

Adolescents' religious status has no effect on their level of knowledge regarding reproductive health. In fact, religious values and practices evidently discourage people to share or talk about sexual and reproductive health issues (Ajuwon et al., 2006; Yazıcı et al., 2011). Mohammad Reza et al. (2006) found an inverse relation between religion and reproductive health knowledge. They observed that adolescents who were not devoted to strict religious norms and values showed better knowledge about reproductive health issues than those who were devout. Adolescents' marital status also showed negative relation with their knowledge about reproductive health. Studies suggest that the cultural settings, the patriarchal societies in particular where women, confined within stereotypic household responsibilities, have to rely on men's decision in all aspects of social life, discouraged the adolescents whether married or unmarried to know about reproductive health issues (Adinew et al., 2013; Khan & Ara, 2006).

Adolescents having elder sisters showed more knowledge about reproductive health issues than those who had younger sisters. Moreover, sisters' education and living arrangement, *e.g.* residing in parents' house with the participants, also have positive influence on the knowledge of female adolescents. The possible explanation for this scenario can be

that the elder sisters helped their young siblings to understand and prepare for the inevitable bio-psychological changes and informed them to adjust and manage such shifts more eloquently (Mohammad Reza et al., 2006).

Parental education showed affirmative relation with their offspring's knowledge about reproductive health. These findings complement the previous studies that female adolescents' knowledge was positively associated with parental education, especially, mother's education (Adinew et al., 2013; Shiferaw et al., 2014). Because, mothers are more concerned about their daughters' safety, therefore, they are more receptive than the fathers (Senanayake & Ladjali, 1994). Similarly, parental working status also influences the female adolescents' knowledge, especially, fathers working as government officers and mother involved in jobs are the determinants of their children's greater familiarity with reproductive health. Moreover, parental income, more specifically, father's as well as household's total monthly income, has positive impact on adolescents' knowledge. Studies suggest that young people from relatively better family background, including good parental education and economic condition, has better chance of being familiar with reproductive health issues (Adinew et al., 2013; Karofsky, Zeng, & Kosorok, 2013). Because, parents in well-off families are more liberal to communicate about reproductive health issues than the parents from relatively poorer families with conservative views (Karofsky et al., 2013; Wamoyi et al., 2010). In this study, the communication between parents and children was not explored. This study, therefore, suggests further investigation in this regard.

Conclusion

Adolescents' knowledge about reproductive health is found to be adequate. However, their magnitude of knowledge depends largely on better level of education, living in urban areas and belonging to a well-off family where parents and siblings are well-educated. However, a holistic approach, encompassing all sects of people irrespective of class and locality, is required to be incorporated by the government as well as its development partners in the national health and population policies prioritizing adolescents' health needs and demands. In addition, the policy makers must integrate sex and health education in schools and college curricula as well as in social and religious institutions to facilitate interpersonal communication between parents and children, to increase awareness about adolescents' rights regarding reproductive health, to prevent socio-cultural taboos and to avoid future health risks and complexities.

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