Determinants of Attitude of School Going Adolescent Girls Towards Reproductive Health with their Treatment Seeking Behaviour

Priyanka Kumar¹, Richa Mishra², Ravi Kumar²

ABSTRACT

Introduction: Adolescence includes the age group between 10 to 19 years. World Health Organization has defined adolescence as the progression from the appearance of secondary sexual characters to sexual maturity and the development of adult mental processes. Puberty is the transitional period linking childhood to adulthood and involves physical, biological and psychosexual changes.

Objectives: To identify major determinants of the attitude of Adolescent school girls regarding reproductive health.

Material and Methods: Study design: Descriptive crosssectional study, Study Area: The present study was conducted at randomly selected government and private schools located in the areas served by UHTC and RHTC of the Department of Community Medicine, Shri Ram Murti Smarak Institute of Medical Sciences (SRMS IMS) at Bareilly, Uttar Pradesh. Study Period: The study was conducted over a period of one year, i.e., from 1st May 2014 to 30th April 2015. Study Population: The study population comprised adolescent girls studying in the selected government and private schools in the urban and rural areas. Study Subjects: Adolescent girls aged 10 to 19 years, attending 6th to 10th class in the selected government and private schools were included in the study. Sample size estimation: 420. Sampling Technique: Simple random sampling without replacement technique. Statistical tool: Logistics regression model.

Results: The findings imply that the daughter of a highly educated mother (β = 0.453, p < 0.001), high socioeconomic class (β = 0.372, p < 0.001), and having Media access (β = 0.409, p < 0.001) appeared as strong significant predictors of adolescent girls positive attitude towards reproductive health issues. Suggests that a daughter's positive attitude towards reproductive health issues is significantly influenced by her mother's education level, socioeconomic status, and media access (β = 0.453, p < 0.001; β = 0.372, p < 0.001; β = 0.409, p < 0.001).

Conclusion: Promoting health-seeking behavior and educating the people who play a role in being sources of information on

Submission: 02-02-2024; Acceptance: 03-03-2024; Published: 30-06-2024

¹Associate Professor, ²Statistician

Department of Community Medicine, Shri Ram Murti Smarak Institute of Medical Sciences, Bareilly, Uttar Pradesh, India.

Corresponding Author: Priyanka Kumar, Associate professor Department of Community Medicine, Shri Ram Murti Smarak Institute of Medical Sciences, Bareilly, Uttar Pradesh, India, e-mail: drpriyankadun@gmail.com

menstruation will help to improve menstrual hygiene among rural adolescent girls. Training programs for school teachers by health professionals involving parents in health education programs are some important steps that can be taken.

Keywords: Menstrual hygiene, Menstruation, Attitude, Adolescents, Reproductive women, Logistics regression.

How to cite this article: Kumar P, Mishra R, Kumar R. Determinants of Attitude of School Going Adolescent Girls Towards Reproductive Health with their Treatment Seeking Behaviour. SRMS J Med Sci. 2024;9(1):9-15.

Source of support: Nil
Conflict of interest: None

INTRODUCTION

Adolescence includes the age group between 10 to 19 years. World Health Organization has defined adolescence as the progression from the appearance of secondary sexual characters to sexual maturity and the development of adult mental processes. It is a period of rapid physical and biological changes that may lead to confusion, tension, frustration, and feelings of insecurity. About one-fifth (21.4% or 243 million) of India's population is constituted by adolescents who can transform the social and economic fortunes of the country. 2

Puberty is the transitional period linking childhood to adulthood and involves physical, biological, and psychosexual changes. During puberty, hormonal, psychological, and cognitive changes occur simultaneously and interactively, making physiological development a challenge adolescents have to face, with emotional, social, and behavioral dimensions. Menarche is the most important event in the life of an adolescent girl.

Menstruation is a natural phenomenon, said that in a day, 300 million women and girls worldwide would be menstruating.³ The onset of menstruation is the most important physical change that occurs among girls during adolescence. It is not uncommon for the girl to have many questions and concerns related to the menstrual cycle. Menstrual hygiene is an important issue for adolescent girls as they do not have experience.⁴ Many girls experience a variety of symptoms during menstruation, such as abdominal cramps, headache, fatigue, and pimples. It is imperative that adolescent

girls be taught about commonly occurring symptoms. It was observed that up to 23% of school-going girls in India leave schooling around the time of puberty.³ Even most of the parents lack the required information about the menstrual cycle and issues related to its management. Lack of education and communications regarding the reproductive system further adds to the problem. Numerous studies have demonstrated that our understanding of the menstrual cycle is incomplete and inaccurate. The religious practices, restrictions, and myths related to the menstrual cycle create more confusion about the correct practice and very little information is given to adolescent girls in such culture. Apart from restrictions, various families follow there are certain beliefs, one example of which is that by placing sticks from a broom or leaves of particular plants around the girl during her menstruation, evil would be prevented from entering her body.5

Requirements for improvement were also highlighted by studies evaluating menstrual hygiene practices. Menstruation and menstrual hygiene are still shadowed by taboos, cultural and social restrictions, myths, and misconceptions and, resulting in the embarrassment of girls and preventing them from seeking information and even for hiding their menstruation.

It is important that a woman take adequate care of her diet, health and hygiene during her menses. It is needed to inculcate a habit of following strict hygiene practices during menstruation to prevent reproductive tract infections. Insufficient management of menstrual hygiene may result in symptoms involving genital and urinary tract infections. Many girls who attain menarche are totally unaware of its physiological nature, as a menarche change and its role in reproduction. 4 Teenager's ability to fight is greatly threatened by issues with their reproductive health, which are linked to a lack of understanding. HIV/AIDS has emerged as the single most formidable challenge to public health, human rights and development in the new millennium. School children of today are exposed to the risk of being victims of HIV/ AIDS. Many adolescents around the world are sexually active and because many sexual contacts among them are unprotected, they are at risk of contracting sexually transmitted diseases (STDs), including HIV/AIDS. In making informed life choices, they begin to encounter tremendous challenges. For example, a substantial number of adolescents experience risky or unwanted sexual behaviors and do not get prompt or proper care ⁶. Most parents do not discuss topics related to sexual issues and hence, many teens turn to peers and to the media and get inaccurate information. The risk of becoming infected with human immunodeficiency virus (HIV)

during unprotected sex is two to four times greater for a woman (even higher in adolescent women) than for a man.⁷

Awareness plays a pivotal role in motivating girls to have a favorable attitude towards family planning and to adopt healthy family planning behavior in their womanhood.8 Social norms and expectations of gender roles strongly influence adolescent's reproductive desires. The belief that a girl's primary value and role in society is that of a wife and/or mother can greatly impact her family planning desires and decisions. Early marriage often exacerbates these pressures. While early marriage can provide social recognition and approval for sexual relations, it also places pressure on girls to prove fertility and bear children. Child marriage is associated with low use of contraception prior to the first child, followed by multiple, shortly spaced pregnancies 9. Keeping in mind the various kinds of literature suggesting that adolescents have limited awareness about reproductive health issues as well as their reluctance towards discussing it and urban-rural discrepancy observed among adolescent girls regarding reproductive health, it was planned to study the attitude of adolescent girls regarding reproductive health in an ideal setting such as schools so to enable the adolescent's girls to access accurate, relevant and important information concerning reproductive health. Thus, the aim of this study was to identify major determinants of the attitude of adolescent school girls regarding reproductive health. The aim of the present study is to identify major determinants of the attitude of Adolescent school girls regarding reproductive health.

MATERIAL AND METHODS

Study Design

Descriptive cross-sectional study.

Study Area

The present study was conducted at randomly selected government and private schools located in the areas served by UHTC and RHTC of the Department of Community Medicine, Shri Ram Murti Smarak Institute of Medical Sciences (SRMS IMS) at Bareilly, Uttar Pradesh.

Study Period

The study was conducted over a period of one year, i.e., from 1st May 2014 to 30th April 2015.

Study Population

The study population comprised adolescent girls studying in the selected government and private schools in the urban and rural areas.

Study Subjects

Adolescent girls aged 10 to 19 years, attending 6th to 10th class in the selected government and private schools were included in the study.

Sample Size Estimation

Considering 67% prevalence of awareness regarding the onset of menstruation prior to attainment of menarche among school-going adolescent girls Dasgupta and allowable error as d=10% with 10% non-response rate, the sample size came out as 209, which were rounded off to 210. Since 210 adolescent girls each were surveyed from schools in both rural as well as urban areas, making a total sample size of 420.

Sampling Technique

Simple random sampling without replacement technique was used for the selection of the respondent.

Data Collection Procedure

Visits were made to the schools, information about the purpose of the study was given to all study subjects, rapport was developed, and voluntary informed consent was taken before filling the pre-designed, pre-tested semi-structured questionnaire. The methodology comprised face-to-face interviews with school-going adolescent girls on the school premises at a private place provided by the school management. The girls were picked randomly, one at a time, from the roll number list of respective classes using a random number table. If any girl was found absent on the day of the interview, a maximum of two more attempts were made to contact the girl and interview her in subsequent visits, and even if found absent on two consecutive visits, then that girl was excluded from the study.

RESULTS

The results of this study are presented in less than five headings: demographic descriptions of the female adolescent, attitude toward reproductive health, health practices, of the relationship between adolescent attitude and their family characteristics.

Table 1 shows that mostly girls, 214 (50.9%) were in mid-adolescence (14–16 years) supervene by 155 (36.9%) and 51 (12.1%) who belonged to 10 to 13 years and 17 to 19 years respectively. The mean age of study subjects was 14.3 ± 1.3 years, and the mean age at menarche were 12.7 ± 0.3 years in rural areas and 12.1 ± 0.2 years in urban areas. Almost three-fourths of study participants, 313 (74.5%), belonged to the nuclear family, followed by 107 (25.5%) joint families. The majority of the participant's fathers, 168 (40.0%), had completed high school, while 71 (16.9%) were

illiterate. Only 29 (6.9%) had education of Intermediate and above. Fathers' education appears to be better in urban areas than rural, with 19% illiterate in urban areas compared to 52.7% in rural areas. Around 149 (35.5%) of the sample's mothers had completed primary school, whereas 100 (23.8%) were illiterate. The participant's father's main occupation was skilled worker 201 (47.8%), followed by Clerical/Shop owner 121 (28.8%). This drift was also seen among the rural subjects, where more than half of the father's occupation was unskilled workers 114 (54.3). House-wise distribution of mother's occupations indicated a majority of rural mothers, 172 (81.9%) as housewives compared to 135 (64.3%) urban mothers. In accordance with the modified BG Prasad classification, more than half of rural subjects (62.8%) belonged to the middle and upper lower socioeconomic category, whereas the majority of urban respondents (68.5%) belonged to the upper middle and middle class. Table 3 highlights the gaps in knowledge among adolescent girls regarding reproductive health and sex education. The adolescent girls have a good understanding of menstruation 70.2 and 33.1% of girls correctly identified the source of menstrual bleeding.

Table 2 provides a snapshot of attitudes and beliefs about reproductive health among adolescent girls, highlighting some of the areas that require further education and information.

Identifying factors that affect the attitude related to menstrual hygiene is crucial to promoting the physical and emotional well-being of adolescent girls. To this end, we utilized multiple linear regression models to examine the predictors that influence these factors. Our study included variables such as adolescence stage, area of residence, parents' education, family size, socioeconomic class, and media access. By analyzing these predictors, we aimed to gain a better understanding of the specific needs of adolescent girls and develop targeted interventions to improve their reproductive health outcomes (Table 3).

Table 4 depicts that being a daughter of a highly educated mother (β = 0.453, p < 0.001), having high socioeconomic class (β = 0.372, p < 0.001) and having Media access (β = 0.409, p < 0.001) appeared as strong significant predictors of adolescent girls positive attitude towards reproductive health issues.

DISCUSSION

Reproductive health (RH) is a crucial aspect and a reflection of general health during adolescence age. Adolescence, as a transition phase, is a period where such transition tends to be a more rapid event marked by the beginning of reproductive maturity. More than five percent of adolescent people are affected by reproductive

Table 1: Socio-demographic profile of adolescent girls (n = 420) **Source:** Author's Calculation.

Variables	Particulars	Rural (n = 210)	Urban (n = 210)	Total (n = 420)
		Frequency (%)	Frequency (%)	Frequency (%)
Age (in years)	44847	74 (35.2)	81 (38.6)	155 (36.9)
	14–16	101 (48.1)	113 (53.8)	214 (50.9)
	17–19	35 (16.7)	16 (7.6)	51 (12.1)
Type of family	Nuclear	141 (67.1)	172 (81.9)	313 (74.5)
	Joint	69 (32.8)	38 (18.1)	107 (25.5)
Father's education	Illiterate	52 (24.7)	19 (9.0)	71 (16.9)
	Primary	73 (34.7)	79 (37.6)	152 (36.2)
	High	77 (36.7)	91 (43.4)	168 (40.0)
	Intermediate & above	8 (3.8)	21 (5.0)	29 (6.9)
Mother's education	Illiterate	74 (32.4)	26 (12.4)	100 (23.8)
	Primary	68 (32.4)	81 (38.6)	149 (35.5)
	High	55 (26.2)	83 (39.5)	138 (32.8)
	Intermediate & above	13 (6.2)	20 (9.5)	33 (7.8)
Father's occupation	Unskilled worker	9 (4.3)	3 (1.4)	12 (2.8)
	Skilled worker	114 (54.3)	87 (41.4)	201 (47.8)
	Clerical/ Shop owner	73 (34.7)	48 (22.8)	121 (28.8)
	Semiprofessional	11 (5.2)	37 (17.6)	48 (11.4)
	Professional	3 (1.4)	35 (16.7)	38 (9.0)
Mother's occupation	Housewife	172 (81.9)	135 (64.3)	307 (73.1)
	Working	38 (18.1)	75 (35.7)	113 (26.9)
Socio-economic status	Upper	7 (3.4)	28 (13.3)	35 (8.3)
	Upper middle	23 (10.9)	58 (27.6)	81 (19.3)
	Middle	71 (33.8)	86 (40.9)	157 (37.4)
	Upper lower	61 (29.0)	26 (12.4)	87 (20.7)
	Lower	48 (22.8)	12 (5.7)	60 (14.3)

Table 2: Attitudes scores about reproductive health among adolescent girls

Question	Mean	Standard Deviation
Do you find menstruation to be a bothersome event?	2.9	1.2
Do you feel that you should get more information about menstruation?	4.7	0.5
Does menstruation disturb everyday life activities?	2.6	1.1
Do you believe that bathing is safe during menstruation?	4.8	0.4
Is menstruation a bothersome event?	2.9	1.2
Do you think it is important to maintain cleanliness during menstruation?	4.9	0.3
Is cotton underwear the best option during menstruation?	4	0.9
Do you think using cloth is equally effective as using sanitary napkins?	2.5	1.2
Does menstruation interfere with sports and social activities?	2.2	1
Do women feel more tired than usual when they are menstruating?	3.8	0.9
Do you believe that menstrual blood is not unholy?	4.6	0.6

^{*}Note: mean score given is calculated from the total score

Table 3: Description of determinants responsible for attitude scores				
Variable	Categories			
Attitude score	Dependent variable (Continuous)			
Predictors				
Adolescence stages	Earlyadolecense-1, Middle adolescence-2, Late adolecense-3			
Area	Rural -1 , Urban - 2			
Mother's education	Low education (Illiterate/ Read/write)-1, Medium education(Elementary/ Intermediate/ Secondary)-2, High education(University/ Postgraduate)-3			
Father's education	Low education (Illiterate/ Read/write)-1, Medium education(Elementary/ Intermediate/ Secondary)-2, High education(University/ Postgraduate)-3			
Family size	Small family (<4)-1, Medium family (5-10)-2, Large family (>10)-3			
Socioeconomic class	Low /lower middle-1, Middle/upper middle-2, High class-3			

Have you ever read or watched media content?No-1, Yes-2

health problems worldwide.¹² Our study demonstrates that the majority of girls were in mid-adolescence. The present study shows that most of the older adolescent girls considered their mothers to be their key informants of SRH issues. Mothers also appeared as the primary source of SRH information. This is because daughters have a trustworthy relationship with their mothers due to gender homogeneity.¹³ Furthermore, Table 4 suggests that a daughter's positive attitude towards reproductive health issues is significantly influenced by her mother's education level, socioeconomic status, and media access

Media access

Table 4: Factors associated with attitude regarding reproductive health of adolescence girls (n = 420)

Variable	Attitude score					
variable	β (Std. Error)	t	p-value			
(Constant)	7.066***	13.589	0.000			
	(0.520)					
Adolescence Stages	0.034	0.352	0.725			
	(0.098)					
Area	0.286	2.072	0.305			
	(0.138)					
Mother education	0.453***	3.380	0.001			
	(0.134)					
Father education	0.042	0.309	0.757			
	(0.136)					
Family size	0.619	4.55	0.536			
	(0.136)					
Socio-economic class	0.372***	3.604	0.000			
	(0.103)					
Media Access	0.409***	3.073	0.002			
	(0.133)					
Adjusted R square	0.147					
(F test Statistic)	(11.284***)					
Durbin Watson test	2.001					
Note: standard array (C.E.) in parenthasis						

Note: standard error (S.E.) in parenthesis.

(β = 0.453, p < 0.001; β = 0.372, p < 0.001; β = 0.409, p < 0.001). These results support previous research that a high socioeconomic class is a significant predictor is consistent with previous research that suggests that higher economic status is associated with better reproductive health outcomes. ¹⁴ Moreover, the positive impact of media access on attitude scores suggests that exposure to reproductive health-related messages in the media can shape adolescents' attitudes toward reproductive health.

Similarly, Gaferi et al. 15 also explained the result of good communication between mothers and daughters by the fact that many mothers are being educated nowadays. Furthermore, Kumar and Srivastava¹⁶ claimed that educated Indian mothers are not hesitant to talk about SRH issues, including menstruation, with their daughters. Inadequate health care services across the country and the tendency to conceal SRH-related problems because of the perception of them being taboo may contribute to this low percentage of access to health care. The absence of open and frequent discussions on this important topic within the family, classroom, and social network, a lack of SRH health campaigns, and inadequate SRH-related content on mass media due to the perceived taboo of the issues have led to the restriction of a steady flow of SRH information and ignorance about adolescence health among the school-going girls ¹⁷. Adolescents who are pressured by their peers and by traditional societal values and beliefs get unreliable information about sexuality. Thus, they are compounded by risk-taking behaviors. Therefore, adolescence is a period that needs or requires a close and open family relationship conducive to school, work, and neighborhood environments to help them make good choices, shape their sexual behavior and career development and finally fulfill their goal ¹⁸.

The finding of the study indicated that there is a positive correlation between the attitude towards reproductive health and different variables like age, education of mother, occupation of father, number of siblings, and age of attaining menarche. In contrast, it negative association was found between the attitude and different factors like religion, education of the father, occupation of the mother, type of family, and source of information on reproductive health. Different myths are common in rural areas with regard to menstruation, creating religious dogmas and cultural orthodoxy that impose restrictions on adolescent girls and adult women. These restrictions prohibit adolescents from going outside, even to school, entering the kitchen, touching any male, brushing their hair, and seeing themselves in the mirror. Some respondents, most of them from rural areas, believed that they should follow these restrictions. Various types of restrictions related to menstruation also exist in other countries, such as India, Nepal, and Saudi Arabia. 16 Parents with more children did not have higher scores in terms of attitude than those with fewer children, i.e., the experience of having children does not help to increase attitude. It is, however, obvious because parents were not trained when they had their older children.¹⁹ In the study by Kurtuncu *et al.*, the attitude of the participants increased with their education.²⁰ Having conversations about sexual matters with their kids at a young age and creating a conversational environment will greatly improve parent-child communication and support kids in having healthy sexual relationships.

CONCLUSION

The study highlights that there are many aspects regarding the attitude of menstruation that need to be addressed. Promoting health-seeking behavior and educating the people who play a role in being sources of information on menstruation will help to improve menstrual hygiene among rural adolescent girls.

Training programs for school teachers by health professionals and involving parents in health education programs are some important steps that can be taken. The study also revealed that a majority of the girls received their understanding of menses prior to menarche from their mother, stressing the fact that mothers play an important role in building the foundation of the menstrual health of the future generation, and hence, counseling programs for parents are equally important. In our societies, parents hesitate to discuss reproductive health issues with their children, and are considered a taboo. Safe reproductive health can be achieved by incorporating family education, which focuses on learning about living, family and social relationships & personal development in the school curriculum. Overall, this study underscores the need for targeted interventions that address specific factors influencing the attitudes related to menstrual hygiene in adolescent girls.

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