



EMPOWERING ADOLESCENT GIRLS: DETERMINANTS OF REPRODUCTIVE HEALTH KNOWLEDGE, ATTITUDE, AND PRACTICES

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ABSTRACT **Background:** Reproductive wellbeing plays a significant role in overall health, serving as an indicator of health status during the periods of adolescence and adulthood. Since today's adolescent female is tomorrow's young wife, then eventually the grandmother, it is imperative to give due consideration to the reproductive health-related demands and challenges confronted by adolescent girls. **Objective:** This study aims to identify the major determinants that influence the reproductive health knowledge, attitude, and practices of adolescent girls. **Methods:** Study design and Study area: Descriptive cross-sectional Study conducted at areas served by UHTC and RHTC of Department of Community Medicine, SRMS Institute of Medical Sciences 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 Subjects: Adolescent girls aged 10-19 years, attending 6th to 10th class in the selected government and private schools were included in the study. Sample size: 420. Sampling Technique: Simple random sampling without replacement. Statistical analysis: Mean and Standard deviation, Multiple regression analysis. **Results:** The findings indicate that factors such as urban residence, mother's education, and media access have a significant positive association with the knowledge score of adolescent girls ($\beta = 1.722, p < 0.001$; $\beta = 1.339, p < 0.001$; $\beta = 5.815, p < 0.001$). Girl's positive attitude towards reproductive health issues is significantly influenced by her mother's education level, socio-economic status, and media access ($\beta = 0.453, p < 0.001$; $\beta = 0.372, p < 0.001$; $\beta = 0.409, p < 0.001$). Adolescence Stages, area of residence, mother's education, and family size are significant predictors of practice scores related to menstrual hygiene ($\beta = 0.202, p < 0.05$; $\beta = 0.383, p < 0.05$; $\beta = 0.396, p < 0.05$; $\beta = 0.224, p < 0.001$). **Conclusion:** The study highlights the need for comprehensive and age-appropriate information on menstruation and sex education for adolescent girls. Negative attitudes towards menstruation should be addressed, and positive practices should be promoted. Additionally, sex education should be provided by female educators and integrated into school curriculums.

KEYWORDS :

INTRODUCTION

Adolescence is a crucial stage in a girl's life, marked by significant physical, emotional, and psychological changes. During this phase, adolescents develop their attitudes and beliefs, which can have a lasting impact on their health and well-being. Reproductive health is one such area that demands special attention during adolescence, as it affects the sexual and reproductive health of individuals throughout their lives. The age from 10 to 19 years is defined as the age of adolescence [1]. World Health Organization defines adolescence as the transition from the physical appearance of secondary sexual characters to sexual maturity and growth of adult brain and related processes [2]. In India, adolescents make up about 21.4% of the population and have the potential to bring about positive social and economic change. [3].

Puberty, which occurs between the ages of puberty and adulthood, is characterized by physical, biochemical, and psychosexual changes [2]. A problem that adolescents must overcome during puberty is physiological development, which has emotional, social, and behavioral elements. Hormonal, psychological, and cognitive changes take place concurrently and in interaction with one another at this time. The menarche is the most significant moment in a girl's life.

According to estimates, 300 million women and girls worldwide would menstruate in a given day [4]. Menstruation is a natural occurrence. The most significant physical change in girls during adolescence is the beginning of menstruation. The girl frequently has a lot of queries and worries about the menstrual period. Teenage ladies face a significant problem with menstrual hygiene since they lack experience [5]. During menstruation, many females experience a range of symptoms, including cramping in the abdomen, headaches, exhaustion, and acne.

Adolescent girls need to be taught about typical signs immediately. Around the time of adolescence, up to 23% of Indian schoolgirls stop attending, according to observations [4]. Many parents are unaware of the menstrual cycle and how to manage it, and this is made worse by a lack of reproductive education and communication. Studies show that there is a widespread lack of understanding and accuracy when it comes to the menstrual cycle.

Adolescent females receive inadequate education on menstrual hygiene practices due to religious traditions, prohibitions, and myths surrounding menstruation. Certain families adhere to specific rules and beliefs, such as using plants' leaves or broomsticks to ward off evil during a girl's period. [6].

Menstrual hygiene practices need to change, as menstruation is still considered taboo in many cultures and societies. This causes girls to feel embarrassed and prevents them from seeking knowledge or managing their menstruation properly. It's important for women to take care of their diet, health, and hygiene during their menstrual cycle to avoid reproductive tract infections. Many young women are unaware of the physiological nature of menarche and its significance in the reproductive process. [5].

Teenage reproductive health issues pose a serious hazard to adolescent combat, and they are often brought on by a lack of information. In the new millennium, HIV/AIDS has become the one issue that poses the greatest threat to human rights, development, and public health. Adolescents are at risk of contracting STDs like HIV/AIDS due to unprotected sexual activity. Many teenagers engage in unsafe sexual practices without adequate care, which creates obstacles to making wise decisions [7].

Parents' avoidance of sensitive sexual topics leads teenagers to seek misinformation from peers and the media. Adolescent women are at a higher risk of contracting HIV during unprotected sex than men, with a risk that is two to four times higher [8].

The ability to make informed decisions is crucial in encouraging girls to embrace healthy family planning practices as they transition into womanhood [9]. Social expectations and gender roles can influence adolescents' desire to become pregnant, particularly for girls who may feel pressure to fulfill the societal role of wife and mother. Early marriage can exacerbate these pressures and lead to low contraceptive use, resulting in closely spaced pregnancies before the age of having the first child [10].

Boys are under pressure to engage in sexual activity while girls are

under pressure to refrain from it due to socially acceptable pre-marital sex double standards [11]. It was intended to study the knowledge, attitude, and practices of adolescent's girls regarding reproductive health in an ideal setting such as schools so that the adolescents girls could access accurate, reliable information about reproductive health issues. This was done in light of the various literatures suggesting that adolescents have limited knowledge about reproductive health issues as well as their reluctance to discuss it. Adolescent girls, in particular, face numerous challenges in accessing accurate information about reproductive health due to social, cultural, and religious barriers. This lack of knowledge can lead to adverse reproductive health outcomes, including unwanted pregnancies, unsafe abortions, and sexually transmitted infections. Thus, it is essential to identify the determinants that influence the knowledge, attitude, and practices of adolescent girls regarding reproductive health.

OBJECTIVES

To identify the major determinants that influences the reproductive health knowledge, attitude, and practices of adolescent girls.

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 Department of Community Medicine, SRMS Institute of Medical Sciences 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: Study population comprised of adolescent girls studying in the selected government and private schools in the urban and rural area.

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

Sample size estimation: The required sample size was calculated by using the following formula

$$n = \frac{Z_{1-\alpha}^2 p (1-p)}{e^2} \quad \text{where } Z_{1-\alpha} = 1.96 \text{ at } 5\% \text{ level of significance}$$

In a study by Dasgupta and Sarkar et al., the prevalence (p) of awareness regarding the onset of menstruation prior to menarche among school-going adolescent girls was found to be 67%. Based on this, a sample size of 210 was calculated with an allowable error (e) of 10%. An additional 10% of the sample size was considered for non-response rate, resulting in a rounded sample size of 210. The study surveyed 210 adolescent girls from schools in both rural and urban areas, with a total sample size of 420.

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

Data collection procedure: The study involved visiting schools and obtaining informed consent from adolescent girls before conducting face-to-face interviews. The interviews were conducted at a private location within the school premises and the girls were selected randomly from the roll number list of respective classes. If a girl was absent on the day of the interview, two additional attempts were made to contact her. Any girl who was absent on three consecutive visits was excluded from the study. After the interview, the girls were provided with health education and counseling to reinforce areas where their knowledge was lacking.

The Scoring System: The students' responses related to knowledge, attitude, and practice were scored and calculated using a five-point Likert scale ranging from strongly agree (score 5) to strongly disagree (score 1). A scoring for students' knowledge regarding reproductive health was given a score of 5 for complete correct answers, 3 for partially correct answers, and 1 for incorrect answers. A scoring was given to each question and a total knowledge score that ranges from 11 to 55 points was adopted. For the attitude section, a scoring for students' attitude toward reproductive health was given a score of 5 for strongly agree, 4 for agree, 3 for uncertain, 2 for disagree, and 1 for strongly disagree. For the practice section, a scoring for students'

practice was given a score of 5 for always, 4 for usually, 3 for sometimes, 2 for rarely, and 1 for never.

Statistical Analysis: The data underwent analysis with the aid of Microsoft Excel 2019 and R Studio. Categorical variables were analyzed using proportions and percentages, while continuous variables were summarized with mean and standard deviation (SD). Multiple regression analysis was performed after assessing the necessary assumptions to establish the cause-and-effect relationship between knowledge, attitude, practice scores, and their determinants concerning reproductive health. A significant P-value was considered when $P < 0.05$, and $P \leq 0.01$ was deemed highly significant.

RESULT

Table 1 shows the demographic descriptions of the female adolescent and their family characteristics. Mostly girls 214 (50.9%) were in mid adolescence (14-16 years) supervene by 155(36.9%) and 51(12.1%) who belonged to 10-13 years and 17-19 years respectively. A similar pattern was observed based on the area of residence.

Table 1: Socio-Demographic Profile of Adolescent Girls (n=420)

Variables	Particulars	Rural (n=210)	Urban (n=210)	Total (n=420)
		Frequency (%)	Frequency (%)	Frequency (%)
Age (in years)	10-13	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)
	Semi-professional	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 ^a	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)

^a According to Modified BG Prasad classification

Almost three-fourth of study participants 313(74.5%) belonged to nuclear family followed by 107(25.5%) joint families. The majority of the participant's father 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 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 father's occupation

was unskilled worker 114(54.3). House wise distribution of mother's occupation indicated majority rural mother 172 (81.9%) as housewives compared to 135 (64.3%) of 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%), 33.1% of girls correctly identified the source of menstrual bleeding.

The table 2 shows the results of a survey on various questions related to menstruation, with the mean and standard deviation reported for each question. Overall, the majority of respondents agree that menstruation is a natural phenomenon, not a curse, and that menstrual blood flows from the uterus. They also agree that good menstrual hygiene practices are important, and that menstruation typically lasts for 3-5 days. However, there is some variability in the responses, particularly on the questions related to the regularity of menstrual cycles, the effect of food habits on menstruation, and the best options for menstrual products.

Table 2: Knowledge Scores about Reproductive Health among Adolescent Girls

Question	Mean Score	Standard Deviation
Is menstruation a natural phenomenon?	4.8	0.4
Is it true that menstruation blood is impure?	2.1	0.9
Do you agree that menstruation is not a curse?	4.7	0.5
Do you think that regular menstruation is repeated after an interval of 20-30 days?	2.8	1.1
Is the normal age at menarche between 12-14 years?	4.2	0.8
Does menstrual blood flow from the uterus?	4.6	0.5
Do you believe that food habits do not affect the menstrual cycle?	2.2	1
Is it true that poor menstrual hygiene practices lead to infections?	4.9	0.3
Does menstruation typically last for 3-5 days?	4.7	0.5
Do you think that soap and water are important for keeping genitals clean during menstruation?	4.8	0.4
Are sanitary napkins the best option for use during menstruation?	4.2	0.9

*Note: mean score given is calculated from the total score of 5

Table 3 provides a snapshot of attitudes and beliefs about reproductive health among adolescent girls, highlighting some of the areas that require further education and information.

Table 3: 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 of 5

Table 4 provides mean scores and standard deviations for practices and behaviors related to reproductive health among adolescent girls. The results suggest that respondents generally practice good hygiene habits, such as disposing of used material in a dustbin, washing hands after changing pads, and cleaning genitalia after every toilet visit during menstruation. However, some respondents still believe in restrictions during menstruation and stopping physical activity during menstruation, indicating a need for further education and information on reproductive health.

Table 4: Practices and Behaviors about Reproductive Health among Adolescent Girls

Question	Mean	Standard
Is a sanitary napkin used as the preferred material during menstruation?	4.6	0.7
Do you believe that pads should be changed more than three times daily?	4.2	0.9
Do you dispose of used material in a dustbin?	4.8	0.4
Do you wash your hands after changing pads?	4.7	0.5
Do you clean your genitalia after every toilet visit during menstruation?	4.9	0.3
Do you believe that restrictions are necessary during menstruation?	2.6	1.2
Do you believe that washed reusable materials should dry in sunlight?	4.1	1
Do you think that washing hands before changing pads decreases chances of infection?	4.8	0.4
Do you believe that physical activity should be stopped during menstruation?	2.5	1.3
Do you take a bath during menstruation?	4.8	0.5
Do you experience premenstrual symptoms?	2.9	1.1

*Note: mean score given is calculated from the total score of 5

Identifying factors that affect the knowledge, attitudes, and practices 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, socio-economic 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 5)

Table 5: Description of Determinants responsible for knowledge, attitude and practices scores

Variable	Categories
Knowledge score (Model 1) Attitude score (Model 2) Practices score (Model 3)	Dependent variable (Continuous)
Predictors	
Adolescence stages	Early adolescence-1, Middle adolescence-2, Late adolescence-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
Socio-economic class	Low /lower middle-1, Middle/upper middle-2, High class-3
Media access	Have you ever read or watched media content?No-1, Yes-2

The findings of the multiple linear regression analysis are shown in Table 6. The adjusted R² of the multiple linear regression models is 0.283, 0.147 and 0.300 means Model 1 explains 28.3 %, Model 2 explains 14.7 % and Model 3 explains 30 % of the total variation in the data respectively, which is quite impressive in case of primary data. The Durbin-Watson (D-W) statistics is lying between the two critical values of 1.5 and 2.5; therefore, it can be assumed that there is no linear auto-correlation in our data. The model is fit (F-statistics, $p < 0.01$) to our data and explains a significant amount of variance in knowledge, attitude and practices scores regarding reproductive health.

Table 6: Regression Analysis Output Reporting Factors Associated With Knowledge, Attitude and Practices Regarding Reproductive Health of Adolescents Girls (N=420)

Variable	Model-1			Model-2			Model-3		
	Knowle score dge			Attitude score			Practice score		
		t	p value	β (Std. Error)	t	p value	β (Std. Error)	t	
(Constant)	13.119***	7.078	0.000	7.066**	13.589	0.000	5.810**	10.648	0.000
	(1.854)			(0.520)			(0.546)		
Adolescence Stages	0.260	0.747	0.455	0.034	0.352	0.725	0.202*	1.98	0.048
	(0.348)			(0.098)			(0.102)		
Area	1.722***	3.507	0.004	0.286	2.072	0.035	0.383*	0.383	0.008
	(0.491)			(0.138)			(0.144)		
Mother education	1.339***	2.801	0.000	0.453**	3.380	0.001	0.396*	2.818	0.005
	(0.478)			(0.134)			(0.141)		
Father education	0.135	0.277	0.781	0.042	0.309	0.757	0.279*	1.951	0.052
	(0.486)			(0.136)			(0.143)		
Family size	0.661	1.367	0.172	0.619	4.556	0.000	0.224**	1.58	0.000
	(0.484)			(0.136)			(0.142)		
Socio-economic class	0.200	0.543	0.587	0.372**	3.604	0.000	0.074	0.679	0.498
	(0.368)			(0.103)			(0.108)		
Media Access	5.815***	12.246	0.000	0.409**	3.073	0.002	0.675	4.820	0.850
	(0.475)			(0.133)			(0.140)		
Adjusted R square (F test Statistic)	0.283 (24.589***)	0.147 (11.284***)	0.300 (3.681***)						
Durbin Watson Test	1.839	2.001	1.742						

*** "p value < 0.001, **p value< 0.05, *p value< 0.10", k = 7 predictors and degree of freedom = n-k-1=412

It is clear from Model 1, that being a student of the urban area ($\beta = 1.722$, $p < 0.001$), high level of mother's education ($\beta = 1.339$, $p < 0.001$) and reading about or watching reproductive health related issues on media ($\beta = 5.815$, $p < 0.001$) are significantly associated with

high level of knowledge in adolescent girls. Media access has the highest impact on knowledge score of adolescences girls followed by urban residence and mother's education. Furthermore, Model 2 depicts that being a daughter of highly educated mother ($\beta = 0.453$, $p < 0.001$), High socio-economic class ($\beta = 0.372$, $p < 0.001$) and having Media access ($\beta = 0.409$, $p < 0.001$) appeared as strong significant predictors of adolescent girls positive attitude towards reproductive health issues. The third model (Model-3) showed that Adolescence Stages ($\beta = 0.202$, $p < 0.05$), area of residence ($\beta = 0.383$, $p < 0.05$), mother education ($\beta = 0.396$, $p < 0.05$), and family size ($\beta = 0.224$, $p < 0.001$) were significant predictors of practice scores.

DISCUSSION:

Adolescence is a critical period, marked by numerous physical, psychological, and social changes. Reproductive health is a crucial aspect of adolescent health, and knowledge about it is essential for a healthy and fulfilling life. However, despite efforts to provide sex education, there are still gaps in knowledge among adolescent girls regarding reproductive health.

Adolescence is a critical period, marked by numerous physical, psychological, and social changes. Reproductive health is a crucial aspect of adolescent health, and knowledge about it is essential for a healthy and fulfilling life. However, despite efforts to provide sex education, there are still gaps in knowledge among adolescent girls regarding reproductive health.

According to Thakre SB et al., were unaware of the origin of the bleeding; 18.4% of the female individuals thought it was a physiological process, while 1% thought it was a curse from God. [13] According to Savanthe et al., 86% of students believe that menstruation is a normal phenomenon. [14] In our study participants also agreed with score 4.7 ± 0.5 that menstruation is not a curse and with strongly agreed with score 4.8 ± 0.4 that it is a natural process. A similar conclusion has been made Das et al. [15]

The results of this study highlight the significant impact of various factors on the knowledge, attitudes, and practices related to menstrual hygiene in adolescent girls. The findings of Model 1 indicate that factors such as urban residence, mother's education, and media access have a significant positive association with the knowledge score of adolescent girls ($\beta = 1.722$, $p < 0.001$; $\beta = 1.339$, $p < 0.001$; $\beta = 5.815$, $p < 0.001$) (Table). Media platforms such as television, radio, and the internet can provide adolescents with information about reproductive health, especially in areas where access to sexual and reproductive health services is limited. Furthermore, the association between mother's education and adolescent reproductive health knowledge is also supported by previous studies [16, 17].

Furthermore, Model 2 suggests that a daughter's positive attitude towards reproductive health issues is significantly influenced by her mother's education level, socio-economic status, and media access ($\beta = 0.453$, $p < 0.001$; $\beta = 0.372$, $p < 0.001$; $\beta = 0.409$, $p < 0.001$). These results support previous research that a high socio-economic class is a significant predictor is consistent with previous research that suggests that higher economic status is associated with better reproductive health outcomes [18]. 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 towards reproductive health.

Finally, Model 3 highlights that Adolescence Stages, area of residence, mother's education, and family size are significant predictors of practice scores related to menstrual hygiene ($\beta = 0.202$, $p < 0.05$; $\beta = 0.383$, $p < 0.05$; $\beta = 0.396$, $p < 0.05$; $\beta = 0.224$, $p < 0.001$). Furthermore, the significant association between family size and menstrual hygiene practices in the present study is consistent with previous research that has highlighted the impact of household size on menstrual hygiene practices among adolescent girls [19]. Additionally, previous studies have also indicated that the level of maternal education plays a crucial role in promoting good menstrual hygiene practices among adolescent girls [20].

Overall, this study underscores the need for targeted interventions that address specific factors influencing the knowledge, attitudes, and practices related to menstrual hygiene in adolescent girls. Improving access to education and media, increasing parental education and socio-economic status, and addressing the specific needs of girls in

different stages of adolescence and living in different areas could help to improve menstrual hygiene practices and promote the overall health and well-being of adolescent girls.

CONCLUSION:

These findings highlight the need for interventions that target the gaps in knowledge, attitudes, and practices of adolescent girls, particularly those from rural and underprivileged areas. Improving access to accurate and comprehensive information on reproductive health, as well as promoting positive practices and addressing negative attitudes towards menstruation, are important steps in improving the overall health and well-being of adolescent girls. Educating girls and their families before they reach menarche is also crucial for establishing good habits and practices that will benefit them in the long term.

CONFLICT OF INTEREST: There is no conflict of interest.

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