

Effect Of Health Education On Knowledge, Awareness & Practices Related To Menstruation Among Adolescent Girls In Rural India

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Abstract

Background: Adolescence is an important and sensitive phase of life. Due to restrictions and negative attitude of parents in discussing menstruation-related issues with girls has led to poor awareness regarding menstruation and menstrual hygiene among adolescent girls. The present study was proposed to be carried out to find out their knowledge about menstrual pattern and menstrual hygiene practice.

Material and Methods: The present study was school-based educational interventional study conducted at the Department of Obstetrics and Gynaecology in MIMER Medical College and Dr. BSTR Hospital in Talegaon (D), Pune. The study was conducted from March 2018 to May 2018. The study population was all adolescent school girls of age group 15-18 years and given consent were registered for inclusion in the study. Permission from the Ethical Committee was taken prior to commencement of the study and informed written consent was taken from the participants of the study. Pre designed, pre tested, semi structured questionnaire was used to collect the information from the study participants. Data was entered into a unified computer database and analysed. The statistical analysis was done using SPSS 24.0.

Results: Among the 100 study participants, nearly half (48%) were aged between 15–16 years, followed by 34% in the 16–17 age group. The majority experienced menarche between the ages of 12–14 years (58%). The majority of subjects were from lower Socioeconomic class (48%) Post-test results showed improvement in knowledge understanding topics like pad usage, hygiene practices (genital and hand washing), bathing during menstruation, and the role of nutrition and exercise. Awareness of common menstrual problems and puberty changes also increased significantly to 78% and 82%, respectively with statistically significance. ($P < 0.001$)

Conclusion: There was a significant improvement in the level of good and satisfactory knowledge and practice about menstruation following health education intervention.

keywords: Health Education, Menstruation, Adolescent girls

INTRODUCTION

Adolescence is an important and sensitive phase of life. According to the World Health Organisation, adolescence is defined as the period between 10 and 19 years.⁽¹⁾ Adolescent phase is characterized by accelerated physical growth, psychological, and behavioural changes in girls thus bringing transformation from childhood to adulthood. The onset of menstruation in the adolescent girls accompanies undue anxiety and tension due to lack of awareness regarding these changes.^(2,3)

Due to restrictions imposed during menstruation along with the negative attitude of parents in discussing menstruation-related issues with girls has led to poor awareness regarding menstruation and menstrual hygiene among adolescent girls. Studies have shown that less than half of adolescent girls were aware of menstruation before attaining menarche and had satisfactory menstrual hygiene practices.^(4,5)

Many studies have revealed that most of the adolescent girls had incomplete and inaccurate information about the menstrual physiology and hygiene. Menstrual disorders are found to be the commonest gynaecological problem in teenagers,⁽⁶⁾ affecting their future reproductive health if ignored. They are also at risk of many diseases due to poor sanitation, unclean water and lack of personal hygiene. Many may even drop schooling after primary education. It was therefore considered as relevant to investigate the menstruation related knowledge and practices among the school going adolescent girls.^(7,8)

The data about their level of knowledge and the practices which are followed by them with respect to menstruation are beneficial for planning a program for improving the awareness level with respect to their life processes and promoting their quality of life.

Hence, the present study was proposed to be carried out to find out their knowledge about menstrual pattern and menstrual hygiene practice with the help of health talk.

OBJECTIVE

- To assess knowledge, awareness & practices related to menstruation among adolescent girls in rural area.
- To find out impact of brief health education about menstruation among adolescent girls in rural area.

MATERIAL AND METHODS:

The present study was school-based educational interventional study conducted at the Department of Obstetrics and Gynecology in MIMER Medical College and Hospital in Talegaon (D), Pune. The study was conducted from March 2018 to May 2018. The study population was all adolescent school girls of age group 15-18 years and given consent were registered for inclusion in the study. A total of 100 adolescent school girls of age group 15-18 years were included in study by convenient sampling method. Permission from the Ethical Committee was taken prior to commencement of the study and informed written consent was taken from the participants of the study. Permission from the principals of the institutions was also taken. 100 girls were given the Pre designed, pre tested, semi structured questionnaire to collect the information from the study participants. After explaining the purpose of the study information regarding demographic profile, menstrual awareness, menstrual hygiene practices were obtained. Data was entered into a unified computer database and analysed. The statistical analysis was done using SPSS 24.0.

RESULTS**Table no 1: Demographic characteristics among study subjects: (n=100)**

Variables		Frequency	Percentage
Age group (years)	15-16	48	48.00
	16-17	34	34.00
	17-18	18	18.00
Age of menarche (years)	10-12	15	15.00
	12-14	58	58.00
	14-16	27	27.00
Religion	Hindu	74	74.00
	Muslim	18	18.00
	Other	08	08.00
Socioeconomic status (Modified B.G. Prasad Classification)	Upper	00	00.00
	Upper Middle	08	08.00
	Lower Middle	21	21.00
	Upper Lower	32	32.00
	Lower	48	48.00

The table no 1 showed, among the 100 study participants, nearly half (48%) were aged between 15-16 years, followed by 34% in the 16-17 age group. The majority experienced menarche between the ages of 12-14 years (58%). In terms of religious background, 74% identified as Hindu, 18% as Muslim, and 8% belonged to other religions. The majority of subjects were from lower Socioeconomic class (48%)

Table no 2: Knowledge & awareness regarding menstruation and menstrual hygiene among study subjects: (n=100)

Facts	Pre-test (%)	Post-test (%)	P value
Cause of menstruation	46	98	<0.0001
Proper use of pads & disposal	65	100	<0.0001
Bath during menses	72	100	<0.0001
Genital wash & hand wash	75	100	<0.0001
Common Menstrual problems	38	78	<0.0001
Common puberty changes	35	82	<0.0001

Nutrition & exercise	54	100	<0.0001
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(*P value <0.05 statistically significant by chi-square test)

Table 2 presents a compelling shift in knowledge and awareness regarding menstruation and hygiene among the study subjects following an educational intervention. Pre-test scores indicated varying levels of understanding, with only 46% aware of the cause of menstruation and 35–54% knowledgeable on puberty changes, nutrition, and exercise. However, post-test results demonstrated a near-universal improvement across all areas—with 100% of participants correctly understanding topics like pad usage, hygiene practices (genital and hand washing), bathing during menstruation, and the role of nutrition and exercise. Awareness of common menstrual problems and puberty changes also increased significantly to 78% and 82%, respectively. All improvements were statistically significant ($p < 0.0001$), highlighting the effectiveness of the educational session.

Table no 3: Practices regarding menstrual hygiene among study subjects: (n=100)

Practices		Pre-test (%)	Post-test (%)	P value
Proper use of pads & disposal	Yes	52	89	<0.0001
	No	48	11	
Bath during menses	Yes	72	100	<0.0001
	No	28	00	
Restriction followed during menstruation	Yes	68	29	<0.0001
	No	32	71	

(*P value <0.05 statistically significant by chi-square test)

Table 3 illustrates significant improvements in menstrual hygiene practices among the study participants following the intervention. Prior to the educational session, 52% reported proper use and disposal of sanitary pads, which rose markedly to 89% post-intervention. The practice of bathing during menstruation increased from 72% to a full 100%. Notably, adherence to social or cultural restrictions during menstruation declined from 68% to 29%, indicating increased awareness and behavioural change. All changes were statistically significant ($p < 0.0001$), underscoring the intervention's effectiveness in promoting healthier menstrual hygiene behaviours.

DISCUSSION

The present school-based educational interventional study carried out to find out their knowledge about menstrual pattern and menstrual hygiene practice. All adolescent school girls of age group 15-18 years were enrolled in the study.

In present study, among the 100 study participants, 48% were aged between 15–16 years. The majority experienced menarche between the ages of 12–14 years (58%). The most of subjects were from lower Socioeconomic class (48%)

Ashok S. Dorle et al ⁽⁹⁾ in a study found out of 110 participants majority of the participants 43.68% were of 19 years and majority of them (42.7%) belonged to middle class family. Arora A et al ⁽¹⁰⁾ in a study observed maximum no. of girls 122 (61%) girls had attained menarche from 13-14 years of age. Dipali et al ⁽¹¹⁾ in their study conducted among school going girls in Navi Mumbai have reported similar findings who stated that the mean age of menarche of the respondents was 13.32 years.

In the present study, post-test results showed improvement in knowledge understanding topics like pad usage, hygiene practices (genital and hand washing), bathing during menstruation, and the role of nutrition and exercise. Awareness of common menstrual problems and puberty changes also increased significantly to 78% and 82%, respectively with statistically significance. ($P < 0.001$)

Ashok S. Dorle et al ⁽⁹⁾ in a study observed pre-test only 63.7% were aware as menstruation as normal phenomenon, this response increased to 98.2 following post-test. Similar finding are also seen in the study conducted by Nemade D et al ⁽¹¹⁾ where 72.3% of girls felt menstrual blood is impure in the pretest which reduced to 100% after giving health education.

In the present study, menstrual hygiene practices among the study participants following the intervention showed, 52% reported proper use and disposal of sanitary pads, which rose markedly to 89% post-intervention. The practice of bathing during menstruation increased from 72% to a full 100%. All changes were statistically

significant ($p < 0.0001$), underscoring the intervention's effectiveness in promoting healthier menstrual hygiene behaviours.

In the study conducted by Arora A⁽¹⁰⁾ the pretest sanitary pad users were 35% which improved to 55% in the post test.

Similar results were also observed by Echendu Dolly Adinma et al⁽¹²⁾, Dipali Nemade et al⁽¹¹⁾ and Juyal R et al⁽¹³⁾ on practices of menstrual hygiene among adolescent girls and there was significant improvement in their practices during post-test.

Menstrual Hygiene matters discussed through Health education is an essential resource for improving menstrual hygiene in girls and women especially in lower- and middle-income countries. Poor menstrual hygiene is closely related with reproductive tract infections.

Young girls grow up with limited knowledge of menstruation because their mothers do not discuss these issues openly with them. The current study highlighted that there are many unhealthy menstrual practices and taboos among adolescent girls and their mothers which can be improved through health education.

CONCLUSION

There was a significant improvement in the level of good and satisfactory knowledge and practice about menstruation following health education intervention which shows that there is a definitive role of health education intervention in improving the knowledge and practice of adolescent girls regarding menstruation.

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