

Menstruation and Menstrual Hygiene – Descriptive Cross-sectional Study among Adolescent Girls of a Selected School of District, Punjab

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ABSTRACT

Inadequate self-care and poor menstrual hygiene are major determinants of morbidity and other issues in adolescent age groups. Urinary tract infections, scabies in the vaginal area, irregular abdomen pain, and absence from school are just a few of the issues. Many young girls lack proper information on menstrual hygiene as a result of the silence all around the topic of menstruation and related difficulties in developing countries. Learning about menstrual hygiene is an important aspect of adolescent girls' health education so they can continue working and maintaining hygienic habits as adults.

A descriptive cross-sectional study with a non-experimental research approach was undertaken in selected schools in Punjab. Ethical approval was granted to conduct research was obtained from the Institute Ethics Committee and the school principal. Parents' written informed permission was obtained after a full parent information sheet was provided to them. The information was gathered utilizing a self-structured questionnaire that nine experts in the same field validated.

The majority of the students' mean knowledge (31.61) and SD (2.586) indicated that knowledge levels were dispersed more or less evenly.

The present study aimed to assess the knowledge regarding menstruation and menstrual hygiene among the school adolescents at selected Girls Senior Secondary School Cheema Sahib in Punjab. The basis of the total mean score of the finding revealed the mean knowledge (31.61) and SD (2.586) indicated that knowledge levels were dispersed more or less evenly.

Keywords: Cross-sectional study, Menstruation, Menstrual Hygiene, Urinary tract infections

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INTRODUCTION

The word “adolescent” comes from the Latin word “adolescence,” which means “mature growth.” Adolescence is a transitional period between childhood and adulthood. These are the years of formative growth when the most physical and psychological changes occur. When the hypothalamus releases a hormone called gonadotropin-releasing hormone, puberty begins. The pituitary gland is urged to release two hormones by the gonadotropin-releasing hormone, i.e., follicle-stimulating hormone and luteinizing hormone. In both males and girls, these hormones indicate the onset of sexual development. Hormones affect the ovaries in females. The ovaries are two tiny glands in the pelvis that have two main functions: producing specific hormones like estrogen and progesterone and releasing eggs essential for fertilization. For reproduction. Ovulation is controlled by many hormones¹

For females, the menstrual cycle is a one-of-a-kind natural event. It occurs every month in a consistent rhythm. It begins throughout puberty and lasts till menopause. The menstrual cycle is caused by the rise and fall of certain bodily hormones throughout the month. 98% of females have menarche by the age of 15 years. Menstrual hygiene has long been a source of worry, particularly in developing countries. Adjustment

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to menstrual hygiene is influenced by social, cultural, and religious variables. Menstrual blood and cleanliness are the subjects of many myths, misconceptions, superstitions, and cultural and/or religious taboos. For example, menstruating women and everything they touch are considered impure in Jewish culture. Menstruation is regarded as filthy by Hindus, and menstrual restrictions are associated with it to auspiciousness and positivity.^{2,3}

Menstruating women in some Nigerian tribes are required to segregate themselves in menstruation huts because they believe menstrual blood pollutes the home.⁴ Women's thinking,

Table 1: Findings related to the association between the knowledge regarding menstruation and the menstrual cycle among the adolescent at Girls Senior Secondary School in Punjab, with their selected demographic variables

	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>F</i>	<i>DF</i>	
					<i>Between Groups</i>	<i>Within Groups</i>
Age						
10–13 yrs	175	31.38	2.53	6.148	1	224
14–16 yrs	51	32.36	2.66			
Socioeconomic status						
Middle class	138	31.33	2.70	2.039	df1	df2
Upper middle class	82	32.02	2.37		3	222
Upper class	4	31.5	1.29			
Lower class	2	34.5	2.13			
Education of the mother						
Higher secondary	57	31.68	1.74	3.922	df	
Lltrate	20	31.65	2.61		5	220
Middle class	61		3.01			
Secondary	37	32.48	2.45			
Primary	42	30.26	2.77			
Graduate and above	9	33	1.42			
Type of family						
Joint	145	31.71	2.62	0.623	df	
Nuclear	80	31.42	2.55		1	223
Total	225		2.59			
Age of menarche						
10–13 Years	180	31.49	2.62	1.789	df1	df2
14–16 Years	46	32.06	2.40		1	224
Duration of blood flow						
2 Days	175	31.66	2.53	0.167	df1	df2
3-4 Days	50	31.5	2.71		1	223
Menstrual cycle pattern						
Regular	201	31.66	2.62	1.283	df1	df2
Irregular	24	31.04	2.13		1	223
Length of cycle						
					df1	df2
Less than 28 days	187	31.50	2.56	1.047	2	223
28-32 Days	8	32.5	2.77			
More than 32 days	31	32.03	2.65			
Pain during menstruation						
1	77	31.33	2.58		df1	df2
2	149	31.75	2.58	1.302	1	224

lifestyle, emotional condition, and, most importantly, health is all affected by such taboos.⁵ Socioeconomic position, environmental limits, shame and stress, lack of information, lack of amenities such as water, menstruation stigma, gender norms, restroom and privacy are all factors that influence

menstrual hygiene.^{6,7} According to one Saudi study, girls receive minimal education from their mothers, sisters, and religious books. According to a survey, 71% of Indian females have never heard of menstruation before their first period.⁸ In 2015-16 National Family Health Survey estimates Only 36%



Table 2: Descriptive statistics of the knowledge regarding menstruation and menstrual hygiene among the adolescents at Girls Senior Secondary School Cheema sahib at Punjab. N=226

<i>Knowledge frequency</i>	<i>Mean</i>	<i>Sd</i>
What is menstruation	1.03	0.20
Are monthly menses shameful according to you	1.03	0.19
Do you follow seclusion during menses	1.05	0.22
Do you cook food during menses	1.96	0.37
When should a girl learn about menses	1.23	0.19
can a girl come to school during menses	1.98	0.13
if the cloth is reused when do you dry the washed clothes	1.07	0.16
where do you dry the washed clothes	1.59	0.53
during menses, do you hide your clothes so that your father and brother never get a chance to see them	1.92	0.48
how many times do you change the pad or cloth in a 1	1.63	0.70
do you carry pads or cloth to school	1.88	0.13
what do you do with used napkins	1.14	0.36
do the following persons know menses	1.64	0.49
from what sources or whom did you find out about menses	1.59	1.07
do you talk to someone without hesitation regarding menses and related issues	1.67	0.23
if 2, with whom are you comfortable talking about menses and related issues	1.41	1.08
do you have many medical complaints during menses	1.92	0.35
do you or your family give special attention to your diet during menses	1.57	0.32
should schoolboys be given information related to menses	1.07	0.47
would you ask your brother to buy sanitary napkins from the store	1.75	0.49
would you request your father to buy sanitary napkins from the store	1.78	0.46
Total	38	31.610619

of women use sanitary napkins, according to the study. Many girls wear unclean, unwashed rags and garments.

Infections of the reproductive and urinary tract are caused by poor menstrual hygiene.⁹⁻¹¹ Despite efforts by WHO, UNICEF, and national governments such as the Kishori Shakti Yojana (KSY) to address menstruation and menstrual hygiene issues, it continues to be a factor that negatively impacts the health of adolescent girls. Poor menstrual hygiene has been one of the under-recognized issues in Haryana, India. Because there was no information available on these topics, the current study was undertaken to analyse adolescent girls' knowledge and habits about menstruation and menstrual hygiene.¹²

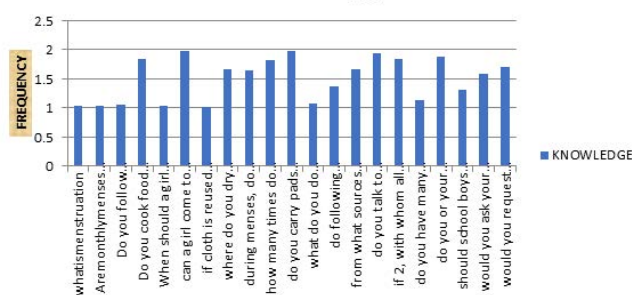
Aims

To assess the knowledge related to menstruation and menstrual hygiene among adolescent girls of selected schools of district Punjab. The objectives of this study were (1) to assess the knowledge of students about menstruation and menstrual hygiene among adolescent girls and (2) to associate the knowledge score with selected demographic variables

MATERIALS AND METHODS

To assess the knowledge related to menstruation and menstrual hygiene among adolescent girls, a descriptive cross-sectional

study with a non-experimental research approach was undertaken in selected schools in Punjab. Ethical approval was granted to conduct research was obtained from the Institute Ethics Committee and the school principal. Parents' written informed permission was obtained after a full parent information sheet was provided to them. The information was gathered utilizing a self-structured questionnaire that nine experts in the same field validated. For validation, the tool was presented to nine professionals in the field of nursing. The CVI (Content Validity Index) was calculated to be 0.87. The questionnaire included a socio-demographic profile, adolescent girls' awareness of menstrual hygiene, and menstrual hygiene habits. 224 adolescent girls from selected schools' classes 9th to 12th were enrolled using the total enumeration sampling technique (Table 1). Girls who were willing to participate and might communicate in Hindi, English, or Punjabi were selected. Girls who had not reached menarche or had been experiencing amenorrhoea for more than three months were excluded from the study. Participants were seated in a separate area to ensure they were comfortable and their privacy was protected. The questionnaires were issued, and participants had 45 minutes to complete them. After all of the participants' questions were answered, the data gathering was completed. The data were coded and analyzed using descriptive and inferential statistics in SPSS-16

The knowledge regarding menstruation and menstrual hygiene**Figure 1:** The knowledge regarding menstruation and menstrual hygiene

RESULTS

Table 1 shows that the majority of the adolescents (175) were between the ages of 10 and 13, followed by 51 between the ages of 14 and 16 and all of the adolescents were females (100%). The majority of adolescent mothers had a middle-class education and 57 had a higher secondary education, with 20 being illiterate, 42 having a secondary education, and 9 having a graduate education. The majority of the adolescents had a socioeconomic status of the middle class, with 138 belonging to the middle class and 82 to the upper middle class, respectively, followed by 4 and 2 belonging to the upper and lower classes, respectively, with 145 belonging to a joint family and 80 belonging to a nuclear family. 180 of the menarche-age adolescents were between the ages of 10 and 13. Then there were 46 people in the 14–16-year-old age range, and then there was the duration of blood flow. 175 adolescents had blood flow and menstrual cycle patterns that were regular in 201 adolescents and erratic in 24 adolescents, followed by a cycle duration of fewer than 28 days in 50 adolescents. There were 187 adolescents with 28–32 days and 8 with more than 32 days. Thirty-one adolescents said they had pain during menstruation, 77 and the remaining 149 did not.

Table 1 demonstrates a strong relationship between adolescent age, socioeconomic status, mother's education, age of menarche, menstrual cycle pattern, and knowledge of menstruation and menstrual hygiene among adolescents at a Punjab Girls Senior Secondary School. At 0.05% level of significance, the estimated value of Anova is (6.148, 2.039, 3.922, 1.789, 1.283, 1.047), which is higher than the tabulated value within the groups (224df) and between the groups. (1 df) As a result, we may assume that the age of teenagers and their understanding of menstruation and the menstrual cycle among adolescents at a selected Girl's Senior Secondary School in Cheema, Punjab, are similar.

However, among the adolescents at a selected Girls Senior Secondary School Cheema sahib in Punjab, there is no significant relationship between kind of family, duration of blood flow, and knowledge of menstruation and menstrual cycle (Figure 1). At 0.05% level of significance, the estimated value of ANOVA value is (0.167 and 0.623), which is smaller

Table 3: Descriptive statistics of the knowledge regarding menstruation and menstrual hygiene among the adolescents at Girls Senior Secondary School Cheema sahib at Punjab. N=226

Knowledge score	N	Mean	SD
	226	31.6106195	2.586
Maximum score: 44			
Minimum score =22			

than the tabulated value within the groups (223 df) and between the groups (223 df) (1df). As a result, we can conclude that the kind of family and duration of blood flow of adolescents, as well as knowledge of menstruation and the menstrual cycle among adolescents at a Cheema Sahib, Punjab Girls Senior Secondary School, are not significantly related. other (Table 2).

DISCUSSION

The goal of this study was to determine how well people understood menstruation and menstrual hygiene. The majority of the students' mean knowledge (31.61) and SD (2.586) indicated that knowledge levels were dispersed more or less evenly (Table 3).

Using a multistage random sample technique, a similar study was carried out in Puducherry with 242 teenage schoolgirls between the ages of 12 and 18 years. The average age at menarche was 12.99 ± 0.9 years; 51.7% of respondents were unaware of menstruation before reaching menarche; 71.5 and 61.2% of participants did not know the cause or source of menstrual bleeding; approximately 88.4% of participants reported having any reproductive morbidity; only 37.4% sought medical attention from a facility. Highlighted how important it is for adolescent females to have complete and accurate information about menstruation before menarche. Girls and women can avoid these problems if they are taught proper menstrual hygiene practices through timely interventions in early life.¹³

CONCLUSION

The present study aimed to assess the knowledge regarding menstruation and menstrual hygiene among the school adolescents at selected Girls Senior Secondary School Cheema Sahib in Punjab. The basis of the total mean score of the finding revealed the mean knowledge (31.61) and SD (2.586) indicated that knowledge levels were dispersed more or less evenly.

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