

ASSESS THE KNOWLEDGE REGARDING MENSTRUAL HYGIENE

Abstract

Menstruation is a natural and essential part of the female reproductive cycle, yet it is often surrounded by taboos and misconceptions. Many adolescent girls enter this phase of life without adequate knowledge and are unprepared to manage their menstrual hygiene effectively. The aim of the study was to assess the knowledge regarding menstruation among adolescent girls and to determine the association between their knowledge levels and selected demographic variables. A descriptive research design was adopted for the study. A total of 74 adolescent girls were selected from the Rajpura region of Punjab using a convenient sampling technique. A structured knowledge questionnaire was administered to collect data on menstrual hygiene knowledge. The responses were analyzed using descriptive statistics to determine frequency and percentage, and inferential statistics were used to assess associations between knowledge levels and demographic variables such as age, class, and parental Education. The results revealed that 28.4% of the adolescent girls had good knowledge, 66.2% had average knowledge, and 5.4% had poor knowledge regarding menstruation. The study concluded that majority of girls had average knowledge, a significant number still lacked essential understanding of menstrual hygiene, and this can be improved by providing good knowledge to adolescent girl in schools and through mass media.

Key words: -

Menstruation, Menstrual hygiene, Adolescent girls, Knowledge, Awareness, Health education.

Introduction: -

According to World Health Organization, adolescence is a transitional period between childhood and adulthood spanning the age group of 10-19 years. Young girls generally struggle to manage their menstruation effectively. Menarche is a critical and unique phase in a young women's lives requiring special care, attention and support. Adolescent girls often experience emotional

distress during menstruation including weakness, irritability, mood swings, stress, shame, guilt, fear and sadness.^[1]

Menstrual hygiene is a crucial factor that affects the well-being and empowerment of women. Inadequate attention to menstrual hygiene can affect both physical and mental health conditions. Therefore, it is essential to address this issue in the broader context of sexual and reproductive health initiatives. It has been estimated that approximately 1.8 billion girls experience menstruation each month worldwide.^[2]

Menstrual hygiene management is a critical public health issue and a fundamental right directly impacting the health, education and dignity of adolescent girls. In India despite national initiatives to promote menstrual hygiene, pervasive socio- cultural taboos, inadequate infrastructure and limited health education persist - particularly in rural and semi- urban areas. While urban centers benefit from targeted programs, adolescent girls in underserved community areas often lack access to evidence - based knowledge, hygienic products and self-sanitation facilities leading to increased risk of infection, school absenteeism and psychosocial distress.^[2]

Menstrual-related problems are under-reported among adolescent girls in India. Different types of menstrual abnormalities are found in different populations suggesting issues. Studies based on schoolgirls have at least one menstrual-related issue. In the age group of 10-19 years, poor menstrual hygiene and lack of self-care are critical drivers of morbidity and the problems. Some of the issues are urinary tract infections (UTI), rashes in vaginal areas, stomach/abdominal pain, absence from school, and pregnancy complications.^[3]

India is home to 243 million adolescent girls which account for a quarter of country's total population. India has over 355 million menstruating women and girls but millions of women across the country face uncomfortable and undignified experience with menstrual hygiene⁽³⁾

Need of Study

Menstrual hygiene management (MHM) remains a critical yet underprioritized public health challenge in India, with adolescent girls in Punjab facing unique socio-cultural and infrastructural barriers. Despite national schemes like *Rashtriya Kishor Swasthya Karyakram* (RKSK) and state-level efforts, empirical evidence reveals persistent gaps.^[4]

Only 54% of adolescent girls in Punjab use hygienic menstrual products (IIPS & ICF, 2021). The rest rely on cloth, ashes, or unsterilized materials, escalating risks of reproductive tract infections (RTIs), urinary tract infections (UTIs), and cervical cancer (UNICEF, 2023).^[5] While

urban Punjab reports moderate MHM awareness, rural communities—where 62% of Punjab’s population resides—lack access to functional toilets, disposal systems, and affordable sanitary products (Department of Health, Punjab, 2022).^[6]

Patil S.M, Wasnik V.R. and Wad gave H.V. (2020) conducted a systematic review and meta-analysis on adolescent girls (10-19 years) in India, published from 2000 to 2020 in which they found out that only 48% of girls had awareness about menstruation before their first period, 53% of adolescents girls used commercially available sanitary pads and 61% practiced adequate menstrual hygiene. This study concluded that menstrual hygiene management (MHM) remains a neglected public health care issue. There are widespread gaps in awareness, availability of hygienic products and infrastructure in rural areas. It was published in International Journal of community Medicine and Public Health (2020)^[7]

Material and Method:-

The present study adopted a quantitative research approach with a descriptive research design. The study was conducted in the selected area of Rajpura, District Patiala, Punjab. The target population consisted of adolescent girls, and the accessible population included adolescent girls aged 9–15 years. A convenient sampling technique was used to select the participants, with a total sample size of 74. For data collection, a tool was developed in two sections: Section I included socio-demographic variables, and Section II consisted of a self-structured knowledge questionnaire. Data were collected through the paper-pencil method after obtaining written consent from participants. The collected data were then subjected to descriptive and inferential statistical analysis for interpretation.

Results:-

Section 1- Frequency and percentage distribution of socio-demographic variable of adolescent girls.

Section 2- Finding related to knowledge score among adolescent girls.

Section 3- Findings related to the association between knowledge regarding menstrual hygiene with selected sociodemographic variables of Adolescent girls.

Section 1 - Frequency and percentage distribution of socio-demographic variable of adolescent girls.

100 Table 1 - Frequency and percentage distribution of socio-demographic variable of adolescent
 101 girls.

(N=74)

S. No.	Characteristic	Frequency(F)	Percentage (%)
1.	Age(years)		
	9 - 10	5	6.8
	11 - 12	11	14.9
	13 - 14	43	58.1
	15	15	20.3
2.	Class		
	6th class	5	6.8
	7th class	9	12.2
	8th class	19	25.7
	9th class	41	55.4
3.	Age at Menarche		
	9 - 10	29	39.2
	11 - 12	40	54.1
	13 - 14	5	6.8
4.	Religion		
	Hindu	36	48.6
	Muslim	3	4.1
	Sikh	35	47.3
5.	Education level of mother		
	Primary	40	54.1
	Matric	20	27.0
	Higher secondary	4	5.4
	Graduation	10	13.5

6. Education level of father

Primary	26	35.1
Matric	25	33.8
Higher secondary	12	16.2
Graduation	11	14.9

7. Type of family

Nuclear	21	28.4
Joint	41	55.4
Extended	11	14.9
Others	1	1.4

8. Income

5,000 – 10,000	6	8.1
10,000 – 20,000	43	58.1
20,000 – 30,000	22	29.7
>30,000	3	4.1

9. Source of Information

Mother	14	18.9
Friends	41	55.4
Teacher	12	16.2
Mass Media	7	9.5

Table-1 This table reveals the details about 74 Adolescent girls in this study. Majority (55.4%) of Adolescent girls were between 13-14 years, and most participants were from 9th class (55.4%). more than half Adolescent girls (54.1) attained Menarche b/w 11-12 years (48.6%) Adolescent girls belong from Hindu Religion and (47.3%) belong from Sikh Religion. Most of their mother had educated up to primary levels (55.1%). while (33.1%) of father had primary

education. Most of the girls belong to joint family (55.4%) and majority (55.9%) had a monthly income between 10,000,20,000 and friends were the main source of (55.1%).

Section 2- Finding related to knowledge score among adolescent girls.

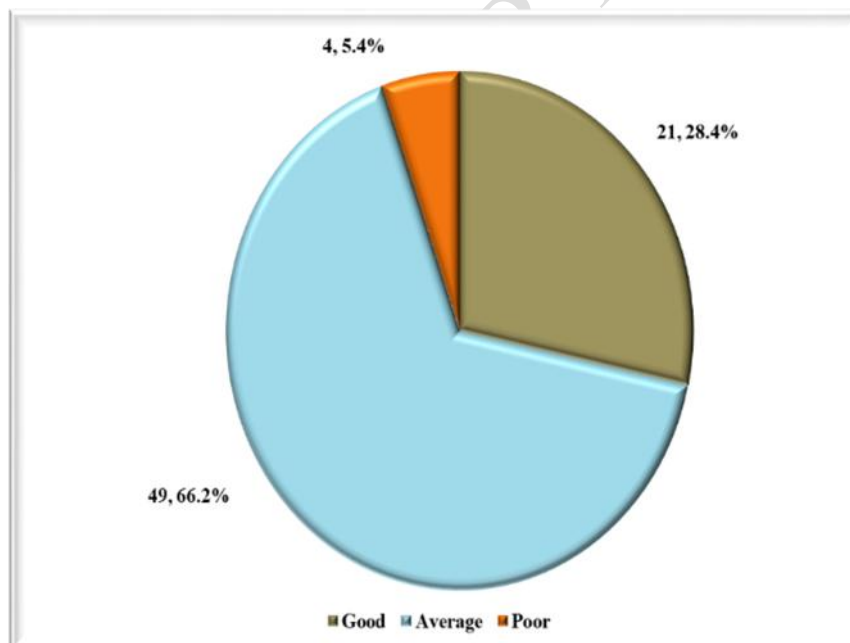


Fig –1 Shows that the distribution of knowledge scores among participants regarding menstrual hygiene. Out of 74 participants, 28.4% (21 individuals) achieved a "Good" level of knowledge

with scores between 14-20, reflecting a strong grasp of the subject matter. 66.2% (49 individuals) scored in the "Average" range (7-13), indicating moderate understanding. Meanwhile, 5.4% (4 individuals) fell into the "Poor" category with scores between 0-6, suggesting limited comprehension

Table 2 Knowledge among adolescent girls regarding Menstrual Hygiene

(N=74)

Knowledge	Score	Frequency(F)	Percentage (%)
Good	14 - 20	21	28.4
Average	7 - 13	49	66.2
Poor	0 - 6	4	5.4
Range		4 -17	
Mean \pm SD		11.30 \pm 2.99	

Table-2 Shows the distribution of knowledge scores among participants regarding menstrual hygiene. Out of 74 participants, 28.4% (21 individuals) achieved a "Good" level of knowledge with scores between 14-20, reflecting a strong grasp of the subject matter. 66.2% (49 individuals) scored in the "Average" range (7-13), indicating moderate understanding. Meanwhile, 5.4% (4 individuals) fell into the "Poor" category with scores between 0-6, suggesting limited comprehension.

Table3:- Parameter wise analysis related to knowledge among adolescent girls.

S. No.	Parameter	Correct		Incorrect	
		F	%	F	%
1.	What is Menstruation?	61	82.4	13	17.6
2.	What is the average length of menstrual cycle?	47	63.5	27	36.5
3.	What is the Normal duration of Menstruation?	50	67.6	24	32.4
4.	How often should sanitary pad be changed?	33	44.6	41	55.4

5.	When most girls start having menstrual cycles?	48	64.9	26	35.1
6.	Which of the following is not a menstrual product?	35	47.3	39	52.7
7.	What is the primary purpose of using sanitary products during menstruation?	12	16.2	62	83.8
8.	Which of the following is a common risk associated with poor menstrual hygiene?	41	55.4	33	44.6
9.	What is a safe and hygienic way to dispose of sanitary products?	43	58.1	31	41.9
10.	Which of these hygiene practices is recommended during menstruation?	42	56.8	32	43.2
11.	What is the key factor in preventing infections during menstruation?	33	44.6	41	55.4
12.	Which of the following material is suitable for underwear during menstruation?	40	54.1	34	45.9
13.	Why is it essential to wash hands after changing sanitary products?	53	71.6	21	28.4
14.	What is a common challenge faced by girls and women in managing their menstruation?	47	63.5	27	36.5
15.	What challenges are associated with poor menstrual hygiene practices?	44	59.5	30	40.5
16.	In which age menstruation usually stop?	43	58.1	31	41.9

17.	How often should one take a bath or shower during menstruation?	43	58.1	31	41.9
18.	How frequently should you change your undergarments during menstruation?	50	67.6	24	32.4
19.	What should be avoided during menstruation?	35	47.3	39	52.7
20.	Which of the following is a reusable menstrual hygiene product?	26	35.1	48	64.9

Table – 3 Shows that 61 (82.4%) adolescent girls had knowledge regarding the meaning of menstruation, 47 (63.5%) knew the average length of the menstrual cycle, and 50 (67.6%) knew the normal duration of menstruation. Knowledge regarding how often sanitary pads should be changed was found in 33 (44.6%) girls. 48 (64.9%) had awareness about the age of onset of menstruation. Regarding identification of non-menstrual products, 35 (47.3%) responded correctly. Only 12 (16.2%) girls knew the primary purpose of using sanitary products during menstruation, while 41 (55.4%) knew the risks associated with poor menstrual hygiene. 43 (58.1%) girls had knowledge about safe disposal of sanitary products, and 42 (56.8%) knew the recommended hygiene practices during menstruation. Knowledge regarding the key factor in preventing infections was observed in 33 (44.6%) girls, and 40 (54.1%) knew the suitable material for underwear during menstruation. 53 (71.6%) girls knew the importance of washing hands after changing sanitary products. Regarding challenges faced by women in managing menstruation, 47 (63.5%) girls responded correctly. 44 (59.5%) had knowledge of challenges associated with menstrual hygiene practices. Awareness about the age of cessation of menstruation was observed in 30 (40.5%) girls, and 43 (58.1%) knew how often to bathe or shower during menstruation. Only 24 (32.4%) knew what should be avoided during menstruation, and 26 (35.1%) correctly identified reusable menstrual hygiene products.

Discussion:-

Adolescent girls are a vulnerable group in India, where menstruation is often surrounded by stigma and misconceptions. Awareness and knowledge about menstrual hygiene play a vital role in ensuring girls' health, dignity, and empowerment. The present study assessed knowledge regarding menstrual hygiene among adolescent girls in Rajpura, Punjab. Findings showed that 28.4% had good knowledge, 66.2% average knowledge, and 5.4% poor knowledge. This indicates that while most girls have moderate awareness, gaps remain that could affect their practices. Similar findings were reported by Kavitha M. and Subhashini D. (2018) in Tamil Nadu, where 28% had good knowledge, 52% average, and 20% poor knowledge

Conclusion:-

In conclusion, our findings align with previous studies that shows majority of girls had average knowledge, a significant number still lacked essential understanding of menstrual hygiene. This gap highlights the importance of structured education programs targeting adolescent girls at an early age.

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