### A descriptive study to assess the knowledge, attitude and practice on Menstruation and Menstrual Hygiene among adolescent school girls in selected rural of New Delhi

Mr. Anil Raj<sup>1</sup>, Mrs.V. Indumathy<sup>2</sup> and Nidhi, Shruti, Priya, Varija, Akansha, Firdos and Jaya pant<sup>3</sup>

- 1 Faculty, Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi
- 2 Faculty, Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi
- 3 Interns Batch 2018 to 2022

### **Abstract**

Menstruation and menstrual hygiene remain a taboo in many rural areas. Early adolescent girls often face challenges in rural areas. Hence, a study was conducted to assess the knowledge, attitude and practice on menstruation and menstrual hygiene among early adolescent girls in selected rural School of New Delhi. The objective of the study was 1.) To assess the level of knowledge, attitude, practice 2) To associate the selected demographic variables with knowledge, attitude and practice on menstruation and menstrual hygiene in selected rural School of New Delhi. Descriptive design was adopted and the study was conducted in selected rural School of New Delhi. 70 early adolescent girls who fulfilled the inclusion criteria were selected as sample for study. Structured questionnaire was used to assess the level of knowledge, Likert's scale was used to assess attitude and checklist to assess practice of menstruation and menstrual hygiene among early adolescent girls. Among the early adolescent girls of selected rural school 97.14% had good knowledge and 2.86% had poor knowledge. 92.86% and 7.14% had favorable and unfavorable attitude regarding menstruation and menstrual hygiene respectively. 92.86 % and 7.14 % of early adolescent girls expressed good and poor practice of menstruation and menstrual hygiene respectively. The analysis revealed statistically significant association of knowledge with demographic variables religion and education status of father at p< 0.05 level. There is statistically no significant association of attitude and practice with demographic variables.

### Introduction

The transition period between the childhood and adulthood is called adolescence which is marked with the growth and development of the child. According to World Health Organization (WHO), a person aged 11-14 year is considered as an early adolescent. During this period, physical, psychological, and biological development of the child occurs. It is recognized as a special period in a girl's life cycle which requires special attention. Menarche is an important biological milestone in a woman's life as it marks the onset of the reproductive phase of her life. The average age at menarche is mostly consistent across the populations, that is, between 12 and 13 years of age. Unfortunately, due to lack of knowledge on menstruation preparedness and management due to shyness and or embarrassment the situation becomes worse for girls. Menstruation is a natural process but it is still a taboo in Indian society as it is considered unclean and dirty. Girls have developed their own personal strategies to handle this period of time. Globally, these strategies vary greatly due to the personal preferences, availability of resources, economic status, cultural traditions and beliefs, education status, and knowledge about menstruation. Girls in rural area lacks adequate knowledge about menstruation and menstrual hygiene. Poor water, sanitation and hygiene facilities in schools. Inadequate puberty education and lack of hygienic items (absorbents) cause girls to experience menstruation as shameful and uncomfortable. Studies indicate girl's fear and humiliation from leaking of blood and body odor, lead menstruating girls to absent themselves from schools. (K.S. et. al. 2022). According to WHO, globally, some 2.3 billion people lack safely managed sanitation. Practices related to menstruation hygiene are of major concern as it has a health impact; if neglected, it leads to toxic shock syndrome, reproductive tract infections (RTI), and other vaginal diseases. Poor genital hygiene negatively affects adolescents' health. Most girls are unaware and unprepared for menarche as they are not informed or ill-informed about menstruation. The main objective of this review was to summarize the concern and possible methods of menstrual waste management in low-income countries. The review article was aimed at understanding the

menstrual practices, product design, demands, and disposal strategies. It includes both a summary of the existing menstrual hygiene needs and management and also an analysis of the current knowledge in the fields of public health, water and sanitation, and solid waste management. This study therefore hopes to determine the common knowledge, attitude and practice among adolescent girls in rural area. (BMJ 2016)

# Need for the study

Despite being a phenomenon unique to girls, this has always been surrounded by secrecy and myths in many societies. Culturally in many parts of India, menstruation is still considered to be dirty and impure. Such taboos about menstruation present in many societies impact on girls' and women's emotional state, mentality and lifestyle and most importantly, health. Menstruation is the natural part of the reproductive cycle that the nature has planned for women. The onset of menstruation is one of the most important changes occurring among the girls during the adolescent years, in which blood from the uterus exits through the vagina. It is a natural process that first occurs in girls usually between the age of 11 and 14 years and is one of the indicators of the onset of puberty among them. Menstrual hygiene practices refers to maintaining specific hygiene and cleanliness during menstrual periods. Good hygiene practices such as the use of sanitary pad and adequate washing of the genital area are necessary during the menstrual period. Due to lack of knowledge and awareness about menstruation among the females in rural area many of them maintain poor hygiene conditions. Practicing poor hygiene condition like using old clothes, single pad during menstrual cycle can lead to various urinary tract infection. Menstrual hygiene depends upon the educational, socioeconomic, and cultural status of family. Girls should be educated about the facts of menstruation, physiological implications, significance of menstruation, and proper hygienic practices during menstruation. It is also

required to bring them out of traditional beliefs, taboos, misconceptions, and restrictions.

### Review of literature

Srishti Kukreja (2022) conducted a comparative study to evaluate menstrual hygiene among rural and urban adolescent girls -a mixed methodology study at jhalawar district of rajasthan. A mixed methodology study was conducted in one rural and one urban school in Jhalawar district of Rajasthan. Quantitative data were collected from the girls using semi-structured, self-responding questionnaire and qualitative data were collected by focused group discussion. Results: In the urban area, 100% girls use sanitary napkins as absorbent while in the rural areas 90.5% use sanitary napkins while rest use new/old cloth as absorbent. In rural area, 17.5% had knowledge about menstruation before menarche compared to 57.8% in urban areas. Almost all (98.9%) girls

V. U. Ajaegbu, M. Okwuikpo, et.al (2021) conducted a Study to assess the awareness of menstrual hygiene and factors affecting its practice among adolescent girls in two selected senior secondary schools in Ogun state, Nigeria. Method: The study utilized quantitative cross-sectional survey design. Purposive sampling technique was used in selecting 150 respondents for the study in the two selected senior secondary schools. Descriptive statistics, correlation and T-test fixed at 0.05 significance level was conducted to give statistical responses to the research hypotheses using SPSS version. Result: The result showed that adolescent girls in Babcock University High School (BUHS) and Remo High School (RHS) had advanced knowledge of menstrual hygiene and they had moderate practices of menstrual hygiene, but there were factors like religion and lack of conducive facilities affecting the effective practice among adolescent girls. Furthermore, respondents' knowledge on menstrual hygiene had no significant positive relationship with practices of menstrual hygiene among adolescent girls in private schools and those in public schools (r = .022, p > .01). There was no significant difference between adolescent girls in private and public schools on practice of menstrual hygiene. Conclusion: Adolescent girls in BUHS and RHS had advanced

knowledge of menstrual hygiene but moderate menstrual hygiene practices. This may be as a result of factors such as religion and lack of conducive facilities that hinder the effective practice among adolescent girls as identified in the study.

# Objectives of the study:

To assess the knowledge of early adolescent girls on menstruation and menstrual hygiene in selected school of rural area of New Delhi

To assess the attitude of early adolescent girls on menstrual hygiene in selected school of rural area of New Delhi

To assess the practice of early adolescent girls on menstruation and menstrual hygiene in selected school of rural area of New Delhi

To associate the selected demographic variables with knowledge, attitude and practice on menstruation and menstrual hygiene in selected school of rural area of New Delhi

### **METHODOLOGY**

The research approach chosen for the study was survey approach. It was designed to obtain information about the Knowledge, Attitude and Practice regarding Menstruation and menstrual hygiene within a population. The design chosen for this study was a descriptive research design, which helps to provide factual information about the existing phenomenon. The present selected study population comprises of adolescent girl aged between 11-14 years of rural school, New Delhi and studying in 6th,7th,8th and 9th standard of rural School, New Delhi. For obtaining the data from the subjects, a structured questionnaire was developed to assess the knowledge attitude and expressed practices regarding menstrual hygiene. Intense review of research and non-research literature was done for the purpose of developing appropriate tool for the study. Informal discussions were done and a structured questionnaire was developed.

The structured questionnaire consisted of four sections:

#### SECTION -1

Structured questionnaire on demographic data of early adolescent girls regarding menstruation and menstrual hygiene in selected school of rural area. This section includes 9 question for obtaining information regarding demographic characteristics that is age, religion, dietary pattern, source of information, education status of mother, education status of father, income per month, number of siblings.

#### SECTION -2

Structure knowledge questionnaire to assess the knowledge of early adolescent girls regarding menstruation and menstrual hygiene in selected school of rural area. It consists of questionnaire for knowledge assessment it includes 20 questions (MCQ) each carry one mark. Maximum score was 20 and minimum score was 1.

#### SECTION -3

Likert scale to assess the attitude of early adolescent girls regarding menstruation and menstrual hygiene in selected school of rural area. It consists of statements for the attitude assessment. It includes 5 positive statements and 5 negative statements (agree/ disagree/neutral) each carry 3 marks. Maximum score was 30 & minimum was 10.

#### **SECTION -4**

Checklist to assess the practice of early adolescent girls regarding menstruation and menstrual hygiene in selected school of rural area. It consists of questionnaire for the practice assessment it includes 10 questions yes or no each carry one mark maximum score was 10 and minimum score was 1.

#### **RESULT**

### Section 1 : Analysis of demographic characteristics

Table 1: Frequency and percentage distribution of demographic data(n=70)

S.NO.	SAMPLE CHARACTERISTICS	FREQUENCY(NO.)	PERCENTAGE(%)
1	Age Group		
	11 – 12	11	15.71
	12 – 13	25	35.71
	13 – 14	34	48.58
2	Religion		
	Hindu	65	92.86
	Muslim	05	7.14
	Christian	00	00
	Others	00	00
3	Dietary Pattern		
	Vegetarian	20	28.58
	Non Vegetarian	00	00
	Mixed	50	71.42
4	Source of information		
	Family and relatives	44	62.86
	Friends	8	11.43
	Mass media	1	1.43
	Health Care Workers	17	24.28
5	Education status of mother		
	Illiterate	17	24.28
	Primary school	21	30
	Senior secondary school	25	35.72
	Graduate and above	07	10
6	Education status of father		
	Illiterate	5	7.15
	Primary school	22	31.42
	Senior secondary school	33	47.15

	Graduate and above	10	14.28
7	Income per month		
	10,000 – 20,000	44	62.86
	20,001 – 30,000	17	24.28
	30,001 – 40,000	05	7.14
	More than 40,000	04	5.75
8	Family size		
	1 – 3 members	06	8.57
	4 – 6 members	34	48.57
	7 – 9 members	19	27.14
	More than 9	11	15.71
9	No. of female siblings		
	No female siblings	17	24.28
	1	24	34.28
	2	10	14.28
	More than 2	19	27.16

Majority of sample subjects 34(48.58%) are of age group 13-14years. Majority of sample subjects 65(92.85%) are Hindus, 7.14% are Muslim .Dietary wise distribution reveals that 71.42 % are mixed ( veg + non veg) and 28.5% are vegetarian.62.85% of sample got information from family and relatives.25.28% from health care workers. 11.42 % from friends and 1.42% from mass media. Mothers of 35.71% of sample are educated upto senior secondary school, 30% upto primary school, 24.28% are illiterate. Fathers of 47.14% of sample are educated upto senior secondary school, 31.42% upto primary school,14.28% upto graduate and above and 7.14% are Illiterate. Income per month of 62.85% of sample is Rs. 10,000-20,000. 24.28% has income Rs 20,001 to 30,000. 48.57% of sample has 4-6 members in their family,27.14% has 7-9 members,15.71% has more than 9 members and 8.57% has 1-3 members in their family.34.28% of sample has 1 female siblings,27.14% of sample has more than 2 female siblings, 24.28% of sample has no female siblings and 14.28% has 2 female siblings.

#### Section 2: Analysis of knowledge

Knowledge wise distribution of early adolescent girls indicates maximum 97.14% sample had good knowledge and 2.86% had poor knowledge. Attitude wise

distribution of early adolescent girls indicates maximum 92.86% sample had favorable attitude and 7.14% had unfavorable attitude. Practice wise distribution of early adolescent girls indicates maximum 92.86% sample followed good practice and 7.14% sample followed poor practice.

SECTION - 3: There is statistically significant association of knowledge with religion, and education status of father

SECTION – 4: There is statistically no significant association of attitude with any demographic variable.

SECTION – 5: There is statistically no significant association of practice with any demographic variable.

### Discussion

The result of the study is similar to the V. U. Ajaegbu, M. Okwuikpo, et.al (2021) conducted a Study to assess the awareness of menstrual hygiene and factors affecting its practice among adolescent girls in two selected senior secondary schools in Ogun state, Nigeria. The result showed that adolescent girls in Babcock University High School (BUHS) and Remo High School (RHS) had advanced knowledge of menstrual hygiene and they had moderate practices of menstrual hygiene, but there were factors like religion and lack of conducive facilities affecting the effective practice among adolescent girls. and the result of present study has shown the impact of religion and education status of father

### RECOMMENDATION

Based on findings the following recommendations are offered for future research that a similar study on a large sample in different school can be replicated for broad generalization.

## **IMPLICATIONS**

The findings of the study have several implications for nursing education, nursing practice, nursing administration and nursing research.

#### 1. NURSING PRACTICE

the role of school health nurse to conduct educational programmes related to menstrual hygiene and sex education.

#### 2. NURSING ADMINISTRATION:

Nursing administrator should take initiative in organizing in services education programmes for nurses and motivates nurses to participate in such type of activity and adequate support should be given with men, money & material.

#### 3. NURSING EDUCATION

During basic nursing education courses students may be given clinical assignments regarding the activities procedures to find out the special needs of adolescents regarding menstruation, plan and implement various health education programmes.

#### 4. NURSING RESEARCH:

Study has a great implication on the need of nursing research in the era client education, to discover the appropriate method, media and audio visual aids for teaching regarding menstrual hygiene.

## Conclusion

Majority of girls have good knowledge, favorable attitude and good practice and there is also an association of knowledge with the education status of father and religion. This result will help the girls to maintain good menstrual hygiene

## Reference

- 1. Basavaraju, V., Bukanakere, C. L., Dsouza, M. J., & Mallenahalli, A. K. S. (2019). A study of menstrual hygiene among rural adolescent school girls in rural field practice area of a medical college, Davangere- a cross sectional study. International Journal of Community Medicine And Public Health, 6(10), 4538-4544. https://doi.org/10.18203/2394-6040.ijcmph20194526
- 2. Srishti Kukreja, Mitra A, Mahajan RG, Rangoonwala M, Kadri AM, Amin C, Gajera K. Comparative study to evaluate Menstrual hygiene among rural and urban adolescent girls in Jahalawar District of Rajasthan Helathline J. 2022;7(10):61-7.
- 3. Journal of family medicine and primary care 2015, April- June. 184-186 doi: 10.4103/2249-4863.154627
- 4. Ishita sarkar, YasminManna N, Mallik S. Menstrual hygiene among adolescent school students: An in- depth cross-sectional study in an urban community of West Bengal, India. IOSR J Dental and Medical Sciences. 2013;5:22–6.
- 5. Jain K, Garg SK, Singh JV, Bhatnagar M, Chopra H, Bajpai SK. Reproductive health of adolescent girls in an urban population of Meerut, Uttar Pradesh. Health Popul Perspect Issues 2009;32:204-9.15.
- 6. Jossy John, Sudeshna R, Aparajita D. Study on knowledge and practice regarding menstrual hygiene among adolescent girls: A multivariate analysis in Kanyakumari district of Tamilnadu. Natl J Obstetrics Med 2019;3:294-301.20. Journal volume & issue

7. K., S. K. M., S., M., N., H., & Kolli, B. (2022). Knowledge and practice of menstrual hygiene among tribal adolescent girls in Visakhapatnam district, Andhra Pradesh. International Journal Of Community Medicine And Public Health, 9(8), 3269-3273. https://doi.org/10.18203/2394-