



Knowledge and menstrual hygiene practices among adolescent girls in rural areas: A study of Nahri village of Sonipat district of Haryana

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Abstract

Menstrual hygiene and management are the issues that are not much discussed, taken care of and nevertheless have got little attention. Studies don't have much evidence about adolescent girls' menstrual practises and knowledge in rural Haryana. The purpose of this study is to analyse knowledge prior to menarche and the level of current hygiene practices among rural adolescent girls during menstruation. Researchers aimed to investigate the pattern of menstrual hygiene management practices and the determinants of the practice among adolescent girls. It was found by the researchers that mothers were the main source of knowledge regarding menarche for the adolescent girls and literacy level of mother's don't all together affect the type of absorbent material used by the girls. Almost half of the respondents used sanitary pads and resort to changing the practice of absorbent twice a day which shows their awareness about hygiene. Study further states that the age of adolescents affects the frequency of changing material and disposal methods of absorbents.

Keywords: Adolescents, menarche, hygiene

Introduction

Adolescence is a period marked by major physical, emotional, cognitive, and social changes, as well as the onset of menstruation in teenage girls on a monthly basis. Menstruation is derived from the Latin word "mensis" which means "month." Menstrual hygiene addresses women's unique health care demands and requirements during their menstrual cycle. Despite being an unavoidable natural event, most societies regard menstruation and menstrual blood as impure, preventing many adolescent girls from receiving proper education and information, forcing them to develop their own methods of dealing with the menstruation period based on existing traditional and cultural beliefs, level of knowledge about menstruation, and personal preferences which makes it a silent and invisible issue.

According to the definitions given by United Nations, adequate menstrual hygiene management consists of "women and adolescent girls using a clean menstrual management material to absorb or collect blood that can be changed in privacy as often as necessary for the duration of the menstruation period, using soap and water for washing the body as needed, and having access to facilities to dispose of used menstrual management material." It is believed that the majority of girls in our country lack menstrual awareness before reaching menarche and have misconceptions regarding the menstrual cycle. Although mothers and female relatives are the primary providers of information on menstruation, they can only convey so much information and frequently convey misconceptions that may influence adolescent girls' response to menstrual management. Menstrual hygiene management is low among adolescent females in countries such as India.

Poor menstruation management may raise the risk of reproductive tract infections (RTI), a major public health concern, as well as the risk of sexually transmitted disease and Human Papillomavirus (HPV) infection and adverse pregnancy outcomes. Menstruation among school-age girls

is a neglected issue on the implementation front despite the formal inclusion of a menstrual hygiene scheme under the reproductive and child health program by the governments. We don't have much evidence about practice and knowledge of adolescent girls about menstruation in rural areas. The goal of the study is to analyse the knowledge and practices followed by adolescent girls in rural Haryana so that educational programmes may be taken up and executed in the future by Government and Non Government organisations.

Review of Literature

Sharma Shantanu, Mehra Devika, Kohli Charu, Singh M. M. (May 2017) in their study entitled "Menstrual Hygiene Practices Among Adolescent Girls in A Resettlement Colony of Delhi: A Cross-Sectional Study" concluded that the menstrual hygiene practices were poor among girls they had to face restrictions and social taboos related to menstruation. Education to girls about the facts of menstruation, physiological implications, significance, and proper hygienic practices during menstruation is the need of the hour.

Basavaraju Vidya, Bukanakere Chetan Lakshmikantha *, Dsouza J. Madonna, Mallenahalli Ashok Kumar Shivakumar (October 2019) suggested on the findings of their study on "A Study of Menstrual Hygiene Among Rural Adolescent Schoolgirls in Rural Field Practice Area of a Medical College, Davangere- A Cross Sectional Study" that the girls should be educated about the significance of menstruation, use of proper sanitary pads or absorbents and its proper disposal.

Madhavi K. V. Phani, Paruvu Kranthi (January 2019) found in their study entitled "Menstrual Hygiene and Practices Among Adolescent Girls in Rural Visakhapatnam: A Cross-Sectional Study" awareness about menarche before its onset was still poor in rural areas. Lack of appropriate and sufficient information about menstrual hygiene can be attributed to cultural and religious beliefs and taboos.

Sheoran Poonam, Kaur Simarjeet, Lata Hem, Sarin Jyoti (April 2021) observed in their study on “A Descriptive Study of Menstrual Hygiene Practices Among Women at the Rural Area of Haryana” that there is a need of appropriate education regarding safe and hygienic practices also, to make appropriate choices to lead healthy reproductive life and lower risk of RTI's. Decentralized models for the production of low-cost sanitary napkins by community-based organizations/ self-help groups can be promoted to provide affordable, environment-friendly menstrual absorbents.

Garg Shallu, Bhardwaj Anu, Mittal Anshu, Bhonsla Suresh (March 2020) concluded in their study entitled “A Study of Menstrual Hygiene Management in Urban and Rural Adolescent Girls in Ambala (Haryana)” that awareness in urban adolescent girls was more in comparison to rural girls. The usage of sanitary pads was similar in both rural and urban areas. Menstrual hygiene was better in urban than rural areas.

Findings of a Dissertation (May 2020) submitted to The Tamilnadu Dr. M.G.R Medical University, Submitted by Registration Number: 201725401, Karpaga Vinayaga Institute of Medical Sciences and Research Centre, Madurantakam on “Menstrual Hygiene Practices among Adolescent Girls in Rural and Urban population of Field Practice Area of a Tertiary Care Teaching Hospital, Kancheepuram District, Tamilnadu” concluded that awareness about menstruation before menarche and the attitude towards physiological nature of menstruation and restrictions imposed was more favourable in rural than urban. Although restrictions were commonly practiced among girls in both areas, it was more in rural. Restrictions were more common among Hindus than girls belonging to other religion in both areas.

Objectives

Following are the objectives of the study:

1. To assess the knowledge of adolescent girls and their sources of information about menarche before its onset.
2. To ascertain the association of knowledge about menstruation and practices for menstruation hygiene with age of respondents and their mother's education.
3. To find out the prevailing practices for menstrual hygiene among adolescent girls.

Research Methodology

Sample size

Researcher has taken adolescent girls between the age of 12 to 17 years from Nahri village of district Sonapat (Haryana) for the study. Nahri village is located in Sonapat district in Haryana, India. According to Census 2011, it has a total population of 8,170 peoples, out of which male population is 4,439 while female population is 3,731. Literacy rate of Nahri village is 72.78% out of which 79.52% males and 64.75% females are literate. Sample size is 100 for the present study.

Data Collection Procedure

Quantitative data collected with a pretested self-administered questionnaire consisting of both opened-ended and closed questions on socio demographic characteristics of the respondents, menstrual hygiene management practices of adolescent girls. Necessary changes made to

improve the questionnaire after the review and the field test. The respondents informed of the purpose of the study to get correct information.

Statistical Techniques and Analysis

Descriptive Statistics like frequency and percentage have been used in the current study and the analyzed data were presented in the form of tables and diagrams. To evaluate whether there is a substantial discrepancy between expected frequencies and observed frequencies in the categories formed purposely by the researcher. The chi-square test is used to reach at the results.

Hypothesis: 1

- **H₀:** There is no significant difference between material used as Absorbent during menstruation with the mother's education of respondents.
- **H₁:** There is no significant difference between material used as Absorbent during menstruation with the mother's education of respondents.

Hypothesis: 2

- **H₀:** There is no significant difference between frequency of changing absorbent material during menstruation with the age of respondents.
- **H₂:** There is significant difference between frequency of changing absorbent material during menstruation with the age of respondents.

Hypothesis: 3

- **H₀:** There is no significant difference between the method of disposing absorbent material with the age of respondents.
- **H₃:** There is no significant difference between the method of disposing absorbent material with the age of respondents.

Significance of the Study for Society

The present study discussed the girls' awareness of menstruation. The sampled adolescent girls were asked a few questions to assess their knowledge of menarche, its hygiene, and management. A lack of knowledge, low understanding, and misinformation is hazardous to the health of adolescent girls today and in the future. There is still insufficient quantitative and qualitative data to address the difficulties of teenage menstrual hygiene management.

Table 1: Sociodemographic Profile of the Respondents

Variables		Frequency	%age
Age (in Years)	12-14	50	50
	15-17	50	50
Mother's literacy	Literate	82	82
	Illiterate	18	18

The age of respondents ranged from 12 to 17 years. 50% respondents between 12 to 14 years and 50% belong to 15-17 years of age.

In this study, 45% respondents having knowledge about menarche before its onset while 55% did not have any such knowledge. Further, it was observed that mothers (68%) were the main source of knowledge regarding menstruation followed by sisters/cousins (14%), teachers (12%), friends (3%), neighbour (1%) and other sources (2%).

Table 2: Knowledge of Respondents about menstruation

Variables		Frequency	%age
Knowledge about menarche	Yes	45	45
	No	55	55
Source of knowledge regarding menstruation	Mother	68	68
	Sister/Cousin	14	14
	Neighbour	01	01
	Teachers	12	12
	Friend	03	03
	Others	02	02

Table 3: Variables

Variables		Frequency	%age
Material used as Absorbent	Cloth	28	28
	Cotton	06	06
	Sanitary Pads/Tampons	56	56
	Cloth & Sanitary Pads both	10	10
Frequency of changing absorbent material during menstruation	Once in a Day	32	32
	Twice in a Day	46	46
	Thrice in a Day	18	18
	More than 3 Times	04	04
Absorbent Disposal Methods	Dustbin	66	66
	Burning	04	04
	Reuse after Washing	30	30

The government of India started a scheme of making available subsidized sanitary napkins to adolescent girls in rural part of India since August 2011. Table no. 3 shows during menstruation, majority 56% respondents used sanitary pads/tampons while cloth was used by 28% which is half of sanitary pads response. Cloth and sanitary pads both were used by 10% respondents. The practice of using sanitary pads/ tampons is more than other materials as reported from the study. Use of Cotton practised by only 6% respondents.

Further, it is observed that 32% of the respondents changed the absorbent material once a day. 46% respondents twice, 18% thrice and only 4% more than 3 times changed the absorbent material in a day. About the method of disposal of used absorbent, 66% of the respondents threw the absorbent along with routine waste in dustbin. 30% reuse it after wash and 4% burnt the used material.

Table 4: Mother' Literacy and Material used as Absorbent during Menstruation by Adolescent Girls of Rural Area

Mother's Literacy	Cloth	Cotton	Sanitary Pads/Tampons	Cloth & Sanitary Pads both	Total
Literate	26	04	42	08	82
Illiterate	02	02	12	02	18
Total	28	06	56	10	100

To judge the difference between materials used as Absorbent during menstruation with the mother's education of respondents χ^2 test was applied.

Calculated Value of χ^2	Table Value	Degree of Freedom	Level of Significance
3.9183	7.1473	3	5%

Table value of χ^2 is more than the calculated value so, null hypothesis is accepted. We can conclude that there is no significant difference between material used as Absorbent during menstruation with the mother's education of

respondents. It shows that literacy of mother's of adolescent girls does not affect the type of material used by them.

Table 5: Age of Respondents and frequency of changing absorbent material during Menstruation by Adolescent Girls of Rural Area

Age (in Years)	Once	Twice	Thrice	More than 3 times	Total
12-14	25	21	04	-	50
15-17	07	25	14	04	50
Total	32	46	18	04	100

To judge difference between frequency of changing absorbent material during menstruation with the age of respondents χ^2 test was applied.

Calculated Value of χ^2	Table Value	Degree of Freedom	Level of Significance
20.0282	7.81	3	5%

Table value of χ^2 is less than the calculated value so, alternate hypothesis is accepted which shows that age of adolescent girls affects their frequency absorbent material during menstruation. It means by growing with the age they tend to move towards adopting hygienic habits.

Table 6: Age of Respondents and Absorbent Disposal Methods Adolescent Girls of Rural Area

Age (in Years)	Dustbin	Burning	Reuse	Total
12-14	22	03	25	50
15-17	44	01	05	50
Total	66	04	30	100

To judge difference between the method of disposing absorbent material with the age of respondents χ^2 test was applied.

Calculated Value of χ^2	Table Value	Degree of Freedom	Level of Significance
21.028	5.991	2	5%

Table value of χ^2 is less than the calculated value so, null hypothesis is rejected, we can conclude that method of disposing of absorbent material used by adolescent girls is affected by their age. As they gain maturity they become more aware and majority of girls use dustbin for throwing away the used material.

Conclusion

The primary objective of the study was to assess the knowledge & menstrual hygiene management practices of adolescent girls, and the determinants of such practices. Although the research findings show that a good number of adolescent girls have information before reaching menarche about menstrual hygiene management. As mother and sister/cousins are the two significant sources of menstrual information. There for steps should be taken by government and non-government organisation to enhance the awareness level of adolescent girls as well as their mothers so that the girls are aware before they reach the menarche age and adopt the healthier practices during menstruation. There is a need to increase adult expending on sanitary pads so as to make pads available to all at an affordable cost.

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