



Comparative study on knowledge and practices regarding menstrual hygiene among adolescent girls studying in government and private schools of District Kathua J&K

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Type of Publication: Original Research Paper

Conflicts of Interest: Nil

ABSTRACT

Introduction: Young girls up to 20 years of age comprise a quarter of Indian female population. A vast majority of adolescent girls in India are affected by reproductive health issues and menstrual problems are one of them. These problems arise mostly due to false beliefs & poor awareness regarding menstrual cycle.

Aims and Objectives: To assess & compare the knowledge and practices regarding menstrual hygiene among government and private school's adolescent girls.

Methodology: A cross sectional study among 150 girls who had attained menarche (standard 8th – 10th) each from government and non-government (private) schools of Kathua district of Jammu & Kashmir was carried out by interviewing them with predesigned semi-structured questionnaire. Data was analyzed using MS Excel.

Results: A total of 150 girls each from the government and private schools were interviewed. Majority of the girls were in the age group 14-16 years. Most common source of information about menstruation in both government and private schools were their mothers followed by friends. 74% girls of private school were using sanitary pads, whereas such practice was found to be less among government school. About 39.3% of private school and 44.6 % of government school girls remained absent from the school during their menses.

Conclusion: The study shows the need of the adolescent girls to have accurate and adequate information about menstruation and its appropriate management as well as sanitation facilities and affordable absorbent napkins/pads for them particularly among adolescent girls attending government school.

Keywords: Menstrual hygiene, adolescent girls, government, private school

INTRODUCTION

Adolescence is characterized by physical, psychological, and social changes. WHO has defined adolescence as the age ranging from 10-19 years. Young girls up to 20 years of age comprise one quarter of India's female population.¹ Girls experience menstruation for the first time during adolescence. Puberty and especially the onset of menstruation is a natural aspect of a woman's life is a very critical point of a girls' transition into womanhood (McMahon et al., 2011).² Good hygienic

practices, such as use of sanitary pads and adequate washing of the genital areas, are essential during menstruation period.³ Reproductive tract infections and urinary tract infections are closely related to poor menstrual hygiene.⁴ The prevalence of reproductive tract infections are 3 times higher among girls who have poor menstrual hygiene.⁵ Therefore, hygiene related to practices during menstruation considered as important to decrease the risk of infection among female. Menstrual hygiene is

still a problem for adolescent girls especially in low and middle income countries particularly when attending school. Knowledge about menstruation among adolescent girls is poor in many regions. It is a common observation that girls are rarely informed about menstruation unless they experience it for the first time.⁶ Schools and education plays a key role in girls' menstrual hygiene practices. They have the opportunity to educate and train girls regarding the proper and safe hygiene practices.

Methodology

This school based cross sectional study was carried out in the urban field practice area of the Department of Community Medicine in Kathua district of J&K from November 2019 to February 2020 after seeking institutional ethical clearance. There are total of ----- schools in the urban area of Kathua. Out of the which, ? are government and ? are private schools. A total of 4 schools, 2 government and 2 private were selected by a draw of lot method. After selection of the schools, the respective principals were explained about the purpose and procedure of the study. If permission from selected school authority was not granted then it was replaced by the next school selected by the lottery method. A list of female students studying in 8th to 10th standards were obtained from each of the 4 selected school's administration. A total of 75 students were selected from each school by stratified random sampling to obtain a total sample size of 300. 25 students were selected from each standard in every school thus allowing equal participation of all age groups.

Inclusion criteria:

1. Female students of standard 8th to 10th
2. Students who had attained the menarche at the time of study

Exclusion criteria:

1. Students not willing to take part were excluded from the study.

A semi structured questionnaire was implemented to the students after obtaining an informed written consent. The questionnaire consisted of questions related to socio demographic characteristics, knowledge and practice regarding menstruation and menstrual hygiene. Questionnaire were distributed to

the children for self-administration and care was taken that no consultations were made with the fellow students with the help of school teachers.

The collected data was entered in Microsoft Excel, coding of the variables was done and thereby interpretation and analysis of the collected data was done by using appropriate statistical methods

Results

A total of 300 female students were included in the study, 150 each from government and private school. Majority of the participants (86.6%) were in the age group 14-16 years and belonged to Hindu families. Educational status of the mothers of the students studying in private school was better than government school where 19.3% of the mothers were graduated as compared to 4.6% in government school. 56.3% of the participant's father in government school were daily wager followed by some private job.(Table 1)

It was found that mother was the main source of information related to menstruation in both government (59.3%) and private (60.6%) school. Knowledge about the cause of menstruation was average in both government and private school. 90% of the private school girls considered sanitary pads as good absorbent as compared to 84.6% in the government school. (Table 2)

About three fourth of the participants (74%) from the private school use sanitary pads as compared to 56.6% in the government school. Correct practice of cleaning genitalia with soap and water particularly during menstruation was same in both government (94.6) and private(96.6) school. Regarding myths related to the menstruation and its practice such as certain restrictions, it was almost equally practiced irrespective of the type of school (Table 3)

Discussion

A total of 300 adolescent girls were interviewed, 150 each from government and private school by using semi structured questionnaire. It was found out that mother was the primary source of information about the menstruation in both the government and private school. These findings were found to be consistent with the study done by Damor and Kantharia, Jogdand and Yerpude in urban settings in Meeraj and Guntur where mother was found out to be the main

source of information regarding menstruation.^{7,8} Studies by Yasmin *et al* and Juyal *et al* reported

that friends and sisters were their first informant.^{9,10} The present study showed that the majority of the adolescent girls answered that the source of menstrual blood is urinary tract. Only

35.3% and 40.6% of the study population in government and private school respectively had a correct knowledge about source of menstrual blood which was uterus. Results of our study are consistent with that done by Sarkar *et al* where only 28.3% of the study population had a correct knowledge about source of menstrual blood which was uterus.¹¹ In our study, 76 % of the girls belonging to private school used sanitary napkins compared to 56.6 of the girls belonging to government school. 14.6% and 6.6% of the girls from government and private school respectively were using both sanitary napkins and cloth. Prashant R. Kokiwar, B. Ramesh, P. Sumalini Reddy *et al.* reported 90.8% and 98.9% use of sanitary napkins in government and private school respectively which was comparatively higher than that found in our study.¹² There was no significant difference between the girls of two schools relating to sanitary disposal method. Majority of the girls were aware about menstruation before its onset in our study and their main informant were their mothers and friends which were similar to the finding of the study by Jothy K *et al.*¹³ In our study, 44.6% and 39.3% of the adolescent girls of government and private school respectively were found to be absent from school during their menses. Most common reason given for being absent from school due to menstruation was fear of getting stain followed by pain. This trend was almost similar among both rural and urban adolescent girls. Abajobiri and Seme (in their study found that the most common reason given for being absent during menstruation was fear of leakage or staining followed by non availability of pad to manage period.¹⁴

Conclusion

Menstrual hygiene knowledge and practice among the study population was found to be average. Improving education level of the mothers can go a long way in improving menstrual hygiene practice as mothers were found to be the main informant about the menstruation. At the same time use and advantage of the sanitary napkins should be promoted among

the adolescent girls through various IEC activities at both the school and community level.

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Tables

Table 1: Socio demographic characteristics of the participants

Characteristic	Number (% age)	
	Government School	Private school
Age		
< 16 years	127(84.6)	133(88.6)
>16 years	23(15.3)	17(11.3)
Religion		
Hindu	109(72.6)	114(76)
Muslims	19(12.6)	17(11.3)
Sikhs	22(14.6)	19(12.6)
Educational status of father		
No formal education	51(34)	19(12.6)
Primary school	39(26)	23(15.3)
Middle school	42(28)	30(20)
High school	11(7.3)	49(32.6)
Graduate and above	7	29(19.3)
Educational status oh mother		
No formal education	69(46)	13(8.6)
Primary school	29(19.3)	21(14)
Middle school	24(16)	33(22)
High school	19(12.6)	63(42)
Graduate and above	9(6)	20(13.3)
Occupation of father		
Daily wager	83(56.3)	19(12.6)
Private job	37(24.6)	53(35.3)
Government job	16(10.6)	42(28)
Businessman	14(9.3)	36(24)
Occupation of mother		
Home maker	97(64.6)	89(59.3)
Working	53(35.3)	61(40.6)

Table 2: Respondents knowledge about menstruation and menstrual hygiene

Variable	Number (% age)	
	Government School	Private school
Source of information about menstruation? <ul style="list-style-type: none"> • Mother • Sister • Friend • Teacher • Television / Radio 	89(59.3) 19(12.6) 23(15.3) 14(9.3) 5(3.3)	91(60.6) 22(14.6) 17(11.3) 17(11.3) 3(2)
Age of menarche (when did your period start) <ul style="list-style-type: none"> • 12-15 years • >15 years 	89(59.3) 61(40.6)	76(50.6) 74(49.3)
Heard about menstruation before menarche? <ul style="list-style-type: none"> • Yes • No 	69(46) 81(54)	72(48) 78(52)
Is Menstruation a normal process? <ul style="list-style-type: none"> • Yes • No • Do not know 	89(59.3) 43(28.6) 18(12)	95(63.3) 47(31.3) 8(5.3)
Cause of menstruation? <ul style="list-style-type: none"> • Disease • Hormones • Past sins • Curse • Do not know 	21(14) 47(31.3) 7(4.6) 5(3.3) 70(46.6)	19(12.6) 51(34) 5(3.3) 6(4) 69(46)
Organ from which menstrual blood comes? <ul style="list-style-type: none"> • Stomach • Uterus • Urinary tract • Ovary • Don't know 	2(1.3) 53(35.3) 57(38) 9(6) 29(19.3)	1(0.6) 61(40.6) 49(32.6) 19(12.6) 20(13.3)
Good absorbent during menstruation? <ul style="list-style-type: none"> • Sanitary Pad • Old cloths/towels • Do not know 	127(84.6) 9(6) 14(9.3)	135(90) 4(2.6) 11(7.33)

Table 3: Respondents menstrual hygiene practice during menstruation

Variable	Number (% age)	
	Government School	Private school
Type of absorbent used during menstruation? <ul style="list-style-type: none"> Sanitary Pad Cloth Both sanitary pad and cloth 	85(56.6) 43(28.6) 22(14.6)	111(74) 29(19.3) 10(6.6)
Absorbent change time? <ul style="list-style-type: none"> Less than 2 times 2 to 4 times More than 5 times 	81(54) 49(32.6) 20(13.3)	89(59.3) 51(34) 10(6.6)
Where do you dispose of the sanitary pad? <ul style="list-style-type: none"> Dustbin In some open space Flush it 	99(66) 49(32.6) 2(1.33)	112(74.6) 32(21.3) 6(4)
Material used for genitalia cleaning? <ul style="list-style-type: none"> Soap and water Only water 	142(94.6) 8(5.)	145(96.6) 5(3.3)
Restrictions practiced during menstruation? <ul style="list-style-type: none"> Restrict sour foods Restrict religious activities Avoid sports activity Restrict wearing washed clean clothes No restrictions 	64(42.6) 32(21.3) 31(20.6) 3(2) 20(13.3)	59(39.3) 33(22) 29(19.3) 1(0.66) 28(18.6)
Do you take bath regularly during menses? <ul style="list-style-type: none"> Yes No 	146(97.3) 4(4)	145(96.6) 5(5)
Do you remain absent from school during menstruation? <ul style="list-style-type: none"> Yes No 	67(44.6) 83(55.3)	59(39.3) 91(60.6)