

MENSTRUAL HYGIENIC PRACTICE AND ASSOCIATED FACTORS AMONG ADOLESCENT HIGH SCHOOL GIRLS

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(Received on Date: 28th December 2015

Date of Acceptance: 10th September 2016)

ABSTRACT

Many girls exhibit period pains and drop out of school. In Ethiopia, high (72%) prevalence of dysmenorrhea with absenteeism of 48% observed in schoolgirls due to pain. Besides personal hygiene and management of menstruation is another problem. To assess menstrual hygienic practice and associated factors among adolescent high school girls in Mekelle town, Tigray, Ethiopia. Institution based cross sectional study was conducted in secondary school in Mekelle. Using multi stage sampling method. Four hundred seventy seven students were participated in the study. A standardized, self-administered questionnaire was prepared in local language used for data collection. Informed consent was obtained from students before their agreement to participate in the study. Data was entered and analyzed using SPSS version 16.0 software. The age range of the participants was 10-19 years with mean age of 15.6 ±0.98. Majority, 403(87%) were experienced menarche at the mean age of 13.95 ±1year. Most of them 435 (94 %) had menstrual cycle with the interval between 21- 35 days and 28 (6%) had irregular cycle. Majority, 382 (82.5%) had information before menarche. Only 161(34.8%) were prepared well for menarche and most of the respondents, (74.3%) experienced menstrual problems. About 39.5% of the participants missed classes due to menstrual problems. Only 189(40.8%) of them used to change sanitary materials satisfactorily. Those who were b/n the age group of 10-12 when starting menarche had better menstrual hygienic practice as compared to those who were b/n 16-18 years, AOR 2.3(1.145-4.516).High rate of poor hygienic practice was identified in this study and absenteeism because of menstrual problems was the major challenge. Thus, it should be taken into account to solve menstrual problems that affect females in their education.

No: of Tables: 5

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INTRODUCTION

Hygiene related practices of women during menstruation are of considerable importance especially for young girls who do not have experience especially during the onset, at menarche. Good hygienic practices such as the use of sanitary pads and frequently change of menstrual soak ups are essential during menstruation [Jogdand k. Yerpude P; 2011]. Many studies have shown poor menstrual hygienic practice during adolescence. A study in tribal adolescent girls reported a large number (96.9%) of adolescents practiced very poor menstrual management (they used dirty cloth or an old used cloth was recycled for absorption of menstrual blood, improper washing of used cloth and improper disposal of used cloth) [Dhingra R, Kumar A, Kour M; 2009]. Only 29.5% practiced proper change of sanitary material during menstruation that is three times a day [Shanbhag D. et al; 2012]. Another study shown hygiene practices unsatisfactory because girls do not get adequate time and opportunity to clean and change timely at school [Report of Water Aid; 2009]. Another study shown 66.7% of the girls used unhygienic pads during menstruation [Dorle A, etal, 2010]. In Ethiopia, the level of personal hygiene and management of menstruation also showed unsatisfactory [Alexandra E. Fehr; 2010]. Adolescent girls in developing countries encountered many problems. Menstruation related problems like dysmenorrhea, Poor hygienic practice and poor information in how to deal with menstruation is common problem among

them. It is challenging for newly menstruating girls to managing menses successfully. Besides, very few adolescent girls aware regarding menstruation when they first experience it [Jogdand k. ,Yerpude P; 2011]. Changing sanitary material during menstruation and the level of personal hygiene is unsatisfactory [Alexandra E. Fehr' 2010]. Improper use of menstrual hygienic materials may associate with the risk of developing toxic shock syndrome (TSS), UTI and PID. Adolescent girls having a better knowledge regarding menstrual hygiene and safe menstrual practices are less vulnerable to reproductive tract infections and its consequences [Adhikari P. etal, 2009]. Thus there is need to emphasize on this topic related to female adolescent health care.

In proper hygienic practice, frequently change of menstrual soak ups is recommended at least 3 times per day or every 8 hours and under wears; and minimum twice a day washing, use of fresh cloth each day and disposal of used cloth. There is a risk of TSS by using super absorbency materials. It can be avoided by not using tampons, or by alternating between tampons and pads during the period or frequently changing menstrual soak ups. Around 100.0% of women use pads during period but only 29.3% changes their pad daily and piece of clothes used by 98.0% respondents [Adhikari P, etal, ; 2007]. Study regarding use of sanitary pads reported more than halve 64.3% adolescent girls' used sanitary pads [Adika, V.etal, 2011].

A study in South Gondar, Ethiopia shown the level of personal hygiene and management of menstruation was unsatisfactory [Alexandra E. Fehr; 2010]. The study done in India reported on the frequency of changing sanitary material during menstruation that 39.8% twice a day, 29.5% three times a day and 21.7% once a day [Shanbhag D. et al; 2012].

The current study will help in designing and implementing unmet needs of adolescent girls through suitable school based health programs like need base health education by health professionals in the form of training or workshops. It will also help in raising related professional awareness; increasing motivation to help adolescents and use as an information for providing improved educational and caring programs for female adolescents. Beside to this the result of this study will be used as a base line data for other activities or researches.

METHOD AND MATERIALS

The study was undertaken among the adolescent school-going girls, in Mekelle Town, Tigray, Ethiopia from June - September 2013. School based cross-sectional study design was used. The study subjects were randomly selected adolescent school-going girls comprises grade 9th and 10th. Four hundred seventy seven samples were determined using single population proportion and correction formula. Data were collected using a structured questionnaire that was adopted and adapted from reviewing literatures of similar studies. It includes all questions related to hygiene related practices of schoolgirls during

menstruation. The questionnaire was translated into Tigrigna language. The questionnaire included sections on socio demographic information, menarche and menstrual pattern (regularity of cycle, cycle length and duration of flow), dysmenorrhea and other menstruation related problems, (impact of menstrual disorder on school attendance, the source of information about menarche and whether they required medical help (from a physician, or health personnel) for menstrual disorder and it had section on menstrual hygienic problems (kind of menstrual flow soak up materials they know, frequently of change of this materials and disposal method of used materials) were included. All data collectors were females who completed diploma in nursing and one day training given before data collection about the purpose of the study and how to collect data. Selection of participants done in collaboration with a female teacher from the schools and girls who had started menstruating discreetly identified. Data collection was during the class free period within school hours. Besides, male students were not in the class while females filling the questionnaires. Questionnaires were distributed and collected on the same day to ensure confidentiality and prevent information leakage. The selected adolescent girls filled up the questionnaire in their classrooms under the supervision of the data collectors. Written guideline was given to administrator of the questionnaire to assure that every respondent received the same directions and information. Anonymous of the participant was kept by

informing them not to write their name. Formal letter was obtained from Mekelle University Ethical Review Committee College of public health and Medical science and Tigray Health Bureau and communicated with respective hospitals. Then letter of permission was secured from administrative bodies of the area to communicate with relevant bodies at the hospital. All of the study participants were informed about the purpose of the survey, their right to participate or to terminate at any time if they want and respondents were ensured about the confidentiality of information obtained. Verbal consent was obtained for their participation. Pretest was also conducted in 10% of sample size. The data collection facilitators and supervisors were recruited and trained for two days on the objective of the study and about the questionnaire by the principal investigators. The PIs and recruited supervisors were responsible for supportive supervision on the spot and on reviewing all filled questionnaires on daily basis. The collected data were checked for its completeness every day, coded, entered into a computer, cleaned and analyzed using SPSS version 16.0. The data were summarized and descriptive statistics was computed for all variables according to type; frequency for continuous variables whereas categorical variables were assessed by computing frequencies. Cross tabulation was used to see the frequency and percentage of socio-demographic characteristics with assess attitude of health providers towards safe abortion. The

mean scores were calculated for each respondent and the respondents as a group for each assess attitude of health providers towards safe abortion. Each variable was entered into logistic regression model as the independent variable with assess attitude of health providers towards safe abortion (i.e. Crude odds and adjusted odds ratio with 95% CI was used to calculate for each exposure variables). Finally, variables that are found statistically significant under bivariate analysis were entered into multiple logistic regression models in order to identify independent predictors of assess attitude of health providers towards safe abortion. Result was summarized using tables and figures.

RESULTS

Four hundred sixty three students provide valuable information and which makes the response rate of 97%. The age range of the participants was 10-19 years, 441 (95.2%) were in between 14-17 years of age and a mean age of 15.6 years with SD of ± 0.98 year. From the total respondents, 239 (51.6%) participants were from 9th grade and 224 (48.4%) from 10th grade. Regarding educational level of their parents, 175 (37.8%) of the mothers of the participants were able to read and write and nearly half of 230 (49.7%) the fathers of the participants were also able to read and write. Most participant 338 (73%) live in houses that have TV (Table 1).

Table 1: Socio-demographic characteristics of adolescent schoolgirls in Mekelle Town, Tigray, Ethiopia 2013.

Variable (n=463)	Frequency	Percentage
Age of respondents		
10-13 years	3	0.6
14-17 years	441	95.2
18-21 years	19	4.1
Religion (n=463)		
Orthodox	417	90.1
Muslim	36	7.8
Protestant	4	0.9
Catholic	2	0.4
Others	4	0.9
Fathers' educational level(n=463)		
Cannot Read and Write	62	13.4
Can Read and Write	230	49.7
Primary education	17	3.7
Secondary education	36	7.8
Diploma	45	9.7
Degree	63	13.6
Others(above degree)	10	2.2
Mothers' educational level(n=463)		
Cannot Read and Write	147	31.7
Can Read and Write	175	37.8
Primary education	15	3.2
Secondary education	38	8.2
Diploma	41	8.9
Degree	35	7.6
Parents job status(n=463)		
Both do not work	43	9.3
Only father works	198	42.8
Only mother works	43	9.3
Both Parents Work	178	38.4
Others(pension)	1	0.2
Parents total monthly income(n=463)		
below 500 Birr	62	13.4
500-1000Birr	37	8.0
1001-2000 Birr	48	10.4

2001-3000 Birr	25	5.4
Above 3000 Birr	54	11.7
No known income	237	51.2

Majority of the respondents 403(87%) were experienced menarche at the age of 13-15 year. Dysmenorrhea in 271(58.5%) respondents was the most dominant symptom that they had at menarche. Different places were reported where they experienced their first menstruation; of the total respondents, about 344(74.3%) at home, 81(17.5%) at school and 38(8.2%) at different places outside of their homes and school.

Regarding menstrual pattern, the majority of girls 435 (94 %) had menstrual cycle with the interval between 21- 35 days and the rest 28 (6%) had irregular menstrual pattern. Majority of participants 381 (82.3%) had the average duration of menstrual flow for 3-5 days. From the participants 382 (82.5%) reported that they had information before attending menarche. A number of sources mentioned for this information; and 161 (34.8%) respondents got information from more than one source. For the others,

teachers 84(18.1%), friends 64(13.8%), mothers 61(13.2%), sisters 59(12.7%), brothers 4(0.9%), fathers 3(0.6%) and reading 27(5.8%) were the sources. More than half participants 279 (60.3%) reported that they had used modes/ tampon during menarche.

Regarding the preparation of sanitary materials used in menarche; 183(39.5%) participants were prepared by themselves and for 109(23.5%) of respondents, their mothers prepared for them. Respondents were asked for general preparation for menarche; only 161(34.8%) were prepared well but most girls were unprepared. Majority of respondents 432(93.3%) learned lesson on menses in one of their educational subjects like biology and physical education at school. Regarding discussion on menses, only 54(11.7%) of respondents founded very easy to discuss with their fathers on this issue (Table 2).

Table- 2. Menarche and menstrual pattern among adolescent schoolgirls in Mekelle Town, Tigray, Ethiopia September 2013.

Variable (n= 463)	Frequency	Percentage
Age at Menarche	Yes	No
10-12 years	37	8.0
13-15 years	403	87.0
16-18 years	23	5.0
Symptoms girls had during Menarche(n= 463)		
Abdominal and back pain	271	58.5
Sleeplessness	17	3.7

Weaknesses	59	12.7
Heavy bleeding	56	12.1
Others(No symptoms)	36	7.8
Two or more of the above symptoms	24	5.2
Average duration of menstrual flow (n= 463)		
< 2 days	27	5.8
3-5Days	381	82.3
> 6 days	55	11.9
Preparedness during menarche(n= 463)		
Not at all	122	26.3
Not well prepared	96	20.7
Prepared well	161	34.8
I don't remember	84	18.1
Discussing with mother on menses(n= 463)		
Very easy	185	40.0
Easy	109	23.5
Average	83	17.9
Difficult	40	8.6
Very difficult	46	9.9
Discussing with father on menses(n= 463)		
Very easy	54	11.7
Easy	47	10.2
Average	103	22.2
Difficult	110	23.8
Very difficult	147	31.7
Not living with father	2	0.4

Table 2 continued

Variables (n= 463)	Frequency	Percentage
Information preference on menses(n= 463)		
School teachers	112	24.2
Mother	82	17.7
Father	1	0.2
Friends	52	11.2
Sister	43	9.3
Doctors/ Medical personnel	84	18.1
Books and Magazine	17	3.7
Films and video	3	0.6
Two or more of the above	69	14.9

Protective materials used during menses(n= 463)		
Napkin/soft paper	9	1.9
Rag made pad	23	5.0
Modes/ tampon	279	60.3
Homemade close	147	31.7
Others(gauze)	5	1.1
Who prepared the protective material during menarche		
Mother made it for me	109	23.5
My older sister	90	19.4
My dad	11	2.4
I made it my self	183	39.5
I bought myself	62	13.4
Others(other relatives)	8	1.7

Menstrual Health problems

Students were asked for menstruation related health problems they had experienced and its effect on their school. From total participants, 344(74.3%) reported that they experienced such problems for one or more occasions. Of those who reported that they experienced menstrual health problems, 169(36.5%) dysmenorrhea (back pain /abdominal pain) was the most frequently encountered problem among the participants. From the participants with

menstrual problems, only 119(25.7%) were seeking medical help (go to doctors/health personnel).

Regarding its effect on their school, 183(39.5%) respondents were reported that menstrual problems had interfered with their class attendance for 1-5 days per cycle. Generally more than half 236(51%) participants were reported that they faced difficulty of attending class sessions attentively during menstruation (Table 3).

Table- 3. Health problems related to Menstruation among adolescent schoolgirls in Mekelle Town, Tigray Ethiopia September 2013.

Variables	Frequency	Percentage
Health problem faced during menses (n= 463)		
Yes	344	74.3
No	119	25.7
Health problems related to menses(n=344)		
Irregular bleeding	21	4.5

Excess flow	13	2.8
Pain(back pain or abdominal pain)	169	36.5
Head ache	9	1.9
Mood change –irritability-depression	23	5.0
Sleeplessness	9	1.9
Two or more of the above	100	21.6
Severity of menstrual problems(n=344)		
No effect on class	114	24.6
Vomiting and diarrhea	30	6.5
Absent from class	142	30.7
Use drug	47	10.2
Two or more of the above symptoms	11	2.4

Table 3. Continued

Visited where for help(n=344)	Frequency	Percentage
Go to family members		
Go to doctors, health personnel	119	25.7
Buy medication without professionals order	34	7.3
Use traditional medication	21	4.5
Two or more of the above	23	5.0
Other(go nowhere for help)	24	5.2
Family Hx of menstrual problems (n= 463)		
Yes	266	57.5
No	197	42.5
Types of menstrual problems their family faced (n=266)		
Irregular bleeding	17	3.7
Excess flow	17	3.7
Pain(back pain or abdominal pain)	108	23.3
Head ache	15	3.2
Mood change –irritability-depression	18	3.9
Sleeplessness	8	1.7
Two or more of the above	81	17.5
Others	2	0.4
Interference with class attendance/ Absenteeism(n= 463)		
Yes	183	39.5
No	280	60.5

How often class missed(n=183)		
One day every cycle	122	26.3
Two day every cycle	47	10.2
Three day every cycle	12	2.6
Four day every cycle	1	0.2
Difficulty of pursuing Class during menses(n= 463)		
Yes	236	51.0
No	227	49.0

Menstrual hygienic practice

The participants knew different types of menstrual hygienic materials and most of them 342 (73.9%) reported that they knew modes/ tampons. Regarding the frequency of changing the menstrual protective materials, only 189(40.8%) of participants used to change sanitary materials properly (three or more times a day).The rest of participants

274(59.2%) practiced menstrual hygiene unsatisfactorily (change sanitary materials less than required). More than half 286(61.1%) participants disposed their used sanitary materials into latrines, 22(4.8%) in to an open field, 111 (24%) dispose into the waste bins, others 44(9.5%) wash and reuse or flush/hide/burn and 3(0.6%)used more than one disposal technique(Table 4).

Table- 4. Menstrual hygienic practice among adolescent schoolgirls in Mekelle Town, Tigray Ethiopia September 2013.

Variables(n= 463)	Frequency	Percentage
Catch up materials they know(n= 463)		
Pads	3	0.6
Modes/tampon	342	73.9
Made of cotton	27	5.8
Gauze	9	1.9
Clean close	77	16.6
Two or more of the above	5	1.1
Information on how to use protective materials(n= 463)		
Parents/ Mom or dad	120	25.9
Friends	100	21.6
Mass media (TV, Radio, Newspaper)	69	14.9
Teachers	79	17.1
From No one	35	7.6
Two or more of the above	54	11.7

Others(No information from any source)	6	1.3
Frequency of change of menstrual protective materials(n= 463)		
Once a day	59	12.7
Twice a day	199	43.0
Three times a day	156	33.7
Four times a day	33	7.1
Others(Sometimes: once, twice or more times)	16	3.5
Difficulty of pursuing class session(n= 463)		
Yes	236	51.0
No	227	49.0

Those who were b/n the age group of 10-12 when starting menarche had better menstrual hygienic practice as compared to those who were 16-18 years, 2.3(1.145-4.516)(Table-5)

Table-5. Factors associated with menstrual hygienic practice among adolescent schoolgirls in Mekelle Town, Tigray Ethiopia September 2013.

Variables (n= 463)	Hygienic practice		COR	95% CI	AOR	95% CI
	Satisfactory	Unsatisfactory				
Age of respondents						
10-13 years	2(66.7%)	1(33.3%)	2.955	(0.266 - 32.835)	-	
14-17 years	178 (40.4%)	263 (59.6%)	2.222	(0.171 - 28.856)	-	
18-21 years	9 (47.4%)	10 (52.6%)	1.00			
Parents job status						
Both do not work	20 (46.5%)	23 (53.5%)	1.426	(0.734 - 2.772)	-	
Only father works	75 (37.9%)	123 (62.1%)	1.098	(0.470 - 2.568)	-	
Only mother works	19 (44.2%)	24 (55.8%)	1.222	(0.626 - 2.387)	-	
Both Parents Work	74 (41.6%)	104 (58.4%)	0.000	0.000		
Others	1(100.0%)	0(0.0%)	1.00			
Age at Menarche						

10-12 years	22 (59.5%)	15 (40.5%)	2.274	(1.145 - 4.516)*	-
13-15 years	158 (39.2%)	245 (60.8%)	2.281	(0.787- 6.611)	-
16-18 years	9(39.1%)	14 (60.9%)	1.00		
Family Hx of Menstrual problems					
Yes	109 (41.0%)	157 (59.0%)	1.015	(0.698 - 1.477)	-
No	80 (40.6%)	117 (59.4%)	1.00		
Average duration of Menstrual flow					
< 2 days	10 (37.0%)	17 (63.0%)	0.926	(0.413 - 2.077)	-
3-6days	148 (38.8%)	233 (61.2%)	0.455	(0.177 - 1.172)	-
> 6 days	31 (56.4%)	24 (43.6%)	1.00		
Information before Menarche					
Yes	163 (42.7%)	219 (57.3%)	1.574	(0.947 - 2.618)	-
No	26 (32.1%)	55 (67.9%)	1.00		
Interference with class /Absenteeism					
Yes	76(41.5%)	107 (58.5%)	1.050	(0.719 - 1.533)	-
No	113(40.4%)	167 (59.6%)	1.00		

DISCUSSION

In the present study, The mean age of menarche was reported 15.6 years with SD of ± 0.98 year and similar study in Gondar, Ethiopia reported the same mean age at menarche which was 15 SD ± 1.73 (Alexandra, 2010). Other finding in Nepal

shown the mean age at menarche was 12.7 SD ± 1.3 years that is lower than present study (report water aid, 2009). Majority 95.2% were in the age group of 14-17 years of age. Similar study shown that the majority (54.45%) of participants were in the age group of 13-14 years (Katiga, 2011). This can be due to socio-economic

factors that can alter their physiological growth.

Current finding shows, majority (94 %) of respondents had regular menstrual cycle that was in the interval between 21- 35

days and the rest, 6% had irregular menstrual cycle. 82.3% participants had an average menstrual flow for 3-5 days duration. Similar study conducted in Ethiopia indicated 70.3% of the girls with a cycle length between 21 and 35 days and 42.8% of the subjects with irregular menstrual cycles (Zegeye, 2009).

This study also shows that menstrual problems affected school attendance in female adolescent. 39.5% students missed class for 1-5 days per cycle due to menstrual problems. More than half (51%) participants were reported difficulty of attending class sessions attentively. These shows missing 10-50 school days in a year and obviously interrupt and affect learning process. Similar study In rural Nepal showed higher prevalence of (70.7%) absenteeism during MP (Adhikari P, 2007) while other studies reported lower or nearly the same findings, that are 26.9%;16.18%;12.67%; 43%, 48% of absenteeism with current findings (Hameed N,2011, Zegeye,2009, Alexandra,2010, Dasgupa A, 2008, Muday A,2010,Aniebue, 2009).

Regarding the information before menarche, present study shows that 82.5% participants were informed before menarche from different sources; for 34.8%

of adolescent girls got information from more than one source, 18.1% teachers, 13.8% friends, 13.2% mothers, and 12.7% sisters. Besides 93.3% learned lesson on menses with their education. A previous local study in Ethiopia has shown 73.54% adolescents got information with their education on menses and 39.68% from their mothers (Bayray A, 2012). Other study reported mothers as a first source of information (Jogdand K, 2011, Aniebue, 2009).

Most participants in current study shows that they were not prepared for menarche and only 34.8% reported prepared well. Study in Nigeria reported 44.8% of the respondents had no form of preparation for menarche (Aniebue, 2009). This indicates that, though there is information source with educational subjects or from different source; it can't enable them ready for menarche or manage menses properly.

Regarding use of menstrual protective materials, most respondents 60.3% reported that they used modes/ tampon during menarche. Study in Nigeria reported nearly the same 64.3% finding (Adika, 2011).

Present study shown that most 24.2% respondents prefer to have more information from schoolteachers, 18.1% medical personnel and 17.7% from mothers. Study done in Hong Kong Chinese girls reported majority 70.0% of participants preferred to seek advice from their family members and 40.7% from friends while only 12.7% from doctors, 6.5% from teachers and 24.3% from newspapers or books 12.3% from the internet, 11.9% from television or radio programmes and 8.5% health

talks(Chan S, 2009). In both finding, the advice seeking preference from medical professionals is nearly the same and it is low. This could be because of less accessibility to health counseling service.

In present study, the majority 73.9% of participants knew Modes / tampons. Parents 25.9% were the main sources of information on how to use protective materials then friends 21.6%, teachers 17.1%, and mass media 14.9% while 7.6% had no information from any source. Similarly, study done in Nigeria revealed that mothers as the primary source of information 39.3% on use of sanitary pads (Adika, 2011). From all sources, it is very low and mass media has to be promoted in advertizing sanitary materials.

Regarding the frequency of changing of the menstrual protective materials, only 40.8% of participants practiced menstrual hygiene satisfactorily. The rest of them practiced poorly or changing sanitary materials inadequately, which is less than required (three times a day). In India, a previous finding in the frequency of changing sanitary materials shown 39.8% changed sanitary pad or cloth twice a day, 29.5% three times a day and 21.7% once a day (Alexandra, 2010) which similarly shown very poor practice with current study. There is a risk of TSS and infection by using super absorbency materials and if changed infrequently. We can minimize or avoid the risk by not using tampons, or by alternating between tampons and pads during the period (Adhikari P, 2007).

This study on disposal technique shown that, 4.8% participants reported disposing their used sanitary materials into an open field, 61.1% dispose it into latrines and 24% dispose into the waste bins, others 9.5% do not dispose or they recycled them by washing/ flush/hide/burn. Study on Nigerian school girls shown the various methods that students used for disposing of used menstrual absorbents include disposal with domestic wastes 71.2%; burning 24.3%; burial 4.3% and flushing in toilet 0.3%(Lawan U, 2010). In Saoner, Nagpur reported majority of the girls 52.2% burned it, 39.79% threw it with the routine waste and 6.72% used other methods of disposal(Subhash B, 2011) Study done in adolescent schoolgirls in Navi-Mumbai also reported 96.38% girls disposed off the sanitary pads in the householdbin while 3.01% and 0.61% girls disposed it off by the roadside and latrine respectively (Nemade D, 2009). From this, it can be said there is improper disposal technique.

Family history of menstrual problems and dysmenorrheal were the associated factors for menstrual hygienic practice. No comparative finding was founded for this result.

CONCLUSIONS

The current study showed that majority of adolescent girls experienced their first menstruation while they are not ready for it/ before they get sufficient information. Participants who practiced menstrual hygiene satisfactorily are few. Most of them practiced poorly or changing sanitary materials inadequately, there is a risk of

TSS, and UTI. The disposal technique for used sanitary materials was practiced improperly like using open field for disposal. First menarche during early age (10-12 years) was associated with menstrual hygienic practice.

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