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Menstrual Hygiene Practice among the Girls Residing in Under Privileged Area in Dhaka City

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ABSTRACT

The cross-sectional study was carried out to find theproportion of menstrual hygiene practice among the girls residing in a privileged area in Dhaka city with a sample size of 115. It is found from the study that age distribution was 15-19 years old. The study revealed that 27.0% did not go to school. Most of the respondents' mother (42.6%) had no formal education & nearly half of the respondents (44.3%) mothers were maidservant and more than half respondents (52.2%) father had primary education. The study presented that 40.9% of respondents' fathers were jobless & monthly family income was BDT 10000-15000. The highest number of the respondents (36.7%) menstruation started at the age of 11. The current study found that 59.1% of respondents' menstruation occurred in every cycle, and 40.9% of respondents' menstrual cycle was irregular. More than half, 67.8% of respondents, faced problems during menstruation. The present study found that 73.0% of the respondents knew about premenstrual syndrome. Out of them, 42.9% suffered from premenstrual syndrome regularly. The main source of menstrual bleeding is the ovary was mentioned by only 14.3%. Most (65.2%) of the respondents used homemade cloth, and 23.5% used sanitary napkins. A majority (80%) of the respondents (59.1%) washed their genitalia after using the toilet, and 40.9% of them did not wash & nearly (65.2%) took a bath regularly during menstruation, and (34.8%) of them did not do so.The present study was found a significant association between age & bathing patterns among the selected respondents. (p-value = 0.005).

Introduction

Adolescents are a large and growing segment of the world's population. More than half of the world's population is below 25, and one in every two young people in the world is adolescent. During adolescence, young people develop their adult identity, move toward physical and psychological maturity. Physiologically, the hypothalamus produces growth hormone and gonadotrophins, which initiates pubertal changes. Menstruation, the periodic vaginal bleeding that occurs with the uterine mucosa's shedding, is one of the signs of puberty and appears one or two years following the appearance of secondary sexual characteristics. Once established, every mature female menstruates on an average of 3-5 days each month until menopause. (Thakre, Thakre, Reddy, Rathi, Pathak, Ughade, 2011).

Menstrual hygiene deals with the special health care needs and requirements of women during monthly menstruation or menstrual cycle areas of special concern include the choice of the best "period protection" or feminine hygiene products; how often and when to change the feminine hygiene products; bathing care of the vulva and vagina as well as the supposed benefits of vaginal douching at the end of each menstrual period. Provisions for good menstrual hygiene include home-made remedies like pieces of cotton cloth which are either placed on a woman's undergarment or on a home-made belt that wraps around the waist. These cloths can be washed, dried, and used again.Available commercial products for women's hygiene during menstruation include pads, tampons, and cups.

Although adolescence is a healthy period of life, many adolescents are often less informed, less experienced, and less comfortable accessing reproductive health information and services than adults1. In many parts of developing countries, a culture of silence surrounds menstruation and related issues. (Singh, 2006)The menstrual cycle is a critical indicator of women's reproductive health and their endocrine function. The menstrual cycle's characteristic features vary across different age groups, between married and unmarried individuals, with residence, differential lifestyles, andother socio-economic groups. Some of these menstrual characteristics, such as irregularity in the menstrual cycle, premenstrual pain, and discomfort, pain, and discomfort at the time of menstrual discharge and a heavy menstrual discharge, may affect the general and reproductive health of a woman, and also her productivity, hamper her regular activities also. (Juyal, SD, Negi, 2012)



Hygienic practices related to menstruation, like prolonged use of these absorbents (either a piece of cloth or a commercial product) at a stretch, inappropriate laundering of the cloth absorbent, and improper perineum care, create an environment for harmful microorganisms that may affect the urinary tract and also infect the perineum, which in turn can affect the reproductive health of the woman. The urban poor and the rural people use a piece of old cloth as an absorbent at the time of menstrual discharge,and that the urban girls are more aware ofhygienic menstrual practices than the rural girls. (Omidvar, Begum, 2010)

Shared knowledge on menstruation increases the risk of contracting reproductive tract infections and pelvic inflammatory diseases, and urinary tract diseases among millions of women worldwide because they are unable to manage their menstrual periods well enough. Good menstrual hygiene management involves women or adolescent females using clean blood-absorbing materials that can be changed often in a secure place in privacy, after which soap and water are available to wash hand and body and access to secured used sanitary material disposal facility. (Adhikar, Kadel, Dhungel, Mandal, 2007)

The menstrual cycle is the monthly series of changes a woman's body goes through inpreparation for the possibility of pregnancy. When periods (menstruations) come regularly, this is called the regular menstrual cycle. Having regular menstrual cycles is a sign that significant parts of one's body are working normally. The menstrual cycle provides important body chemicals, called hormones, to keep anyone healthy. It alsoprepares one's body for pregnancy each month. A cycle is counted from the first day of 1period to the next period. The average menstrual cycle is 28 days long.Cycles can range from 21 to 35 days in adults and 21 to 45 days in youngteens. The rise and fall of levels of hormones during the month control the menstrualcycle. (Um, Yusuf, Musa, 2010)

Literature Review

A cross-sectional study on adolescent girls carried at Municipal Corporation School, Ahmednagar. A pretested, semi-structured questionnaire was used for data collection. From investigation, it was evident that girls' mean age was 13 years and the range was between 11 to 16 years. It was apparent that only62.14% of girls were aware of menstruation before menarche, and a majority of girls, 71%, were not aware of the sourceof the menstrual bleeding. The study showed that among all respondents, almost 31.42% of girls used sanitary pads during menstruation, 64.28% of girls used cloth pieces, and 4.28% of girls used both sanitary pads and cloth.

The cleaning of external genitalia was satisfactory in 97 % of girls, and only 3% of girls showed the unsatisfactory result. After studying the analysis, it can be said that among adolescent school girls, the knowledge of menstruation is poor, and the practices are often not optimal for proper hygiene. (El-Gilany, Badawi, 2005)

Another cross-sectional study was conducted from November 2012 to June 2013 to assess the age of menarche and knowledge of adolescents about menstrual hygiene management in Amhara province. In this study, 492 students were included, making a response rate of 100%; among them mean age at menarche was 13-14.5 years. The primary sources of information about menstrual hygiene management were teachers for 43.1%. Four hundred forty-six 90.7% respondents had high-level knowledge about menstrual hygiene management. Most of the respondents, 92.9% and 96.5%, had access to water and toilet facilities. School teachers were the primary source of information. Place of residence and their mother's educational status were independent predictors of menstrual hygiene management. From the study, we can conclude that respondents' knowledge about menstrual hygiene management was very high. Thus, in collaboration with its stalk holders, Ethiopia's government should develop and disseminate reproductive health programs on menstrual hygiene management targeting both parents and their adolescents. (Bangladesh National Hygiene Baseline Survey, 2014)

A descriptive, cross-sectional study was conducted among 190 adolescent girls of a rural area, Mansoura, Egypt, by El-Gilanyet al. 2005; among all teenage girls who participate in the study majority were in the age group of 15-19 yrs (57%). Most of them lived in Mixed houses(59.5%) and did not have the sanitary latrine in their place (71.6%). Only 10.5% of the study population had a toilet facility inside their house. About 80% of the study population had per capita income between Rs 600-Rs 1000, and more than half (60%) of thepopulation was never exposed toadvertisements in mass media regarding sanitary napkins. Only 42% of the girls knew about menstruation before their onset of menarche, the primary source of knowledge being mother and sister (45%). About one-third of the population did not know the actual cause of menstruation, and only 17.9% of the adolescent girls knew that uterus was the source of blood in menstruation. A majority (62.6%) of the girls used only cloth as their menstrual absorbent. (Sommer, Sahin, 2013)

A cross-sectional survey assesses the effects of premenstrual symptoms on quality of life as measured by the impact symptoms have on women's daily life activities (A.D.L.).



It was a face-to-face interview with 1202 women aged 15-49 years recruited by random sampling in Hong Kong, Pakistan, and Thailand. From the study, it is fjord down that 23 premenstrual symptoms have A.D.L. Premenstrual physical and mental symptom domains had similar adverse effects on ADL.74% of women were not affected or minimally affected in A.D.L., 17% had a clinically significant impact on A.D.L., and 9% were severely affected in A.D.L. A.D.L. were predominantly affected by premenstrual symptom severity. Oral contraceptive pill users and women living in Pakistan reported less impact on A.D.L... In comparison, married women report more impact of symptoms on A.D.L. So it can be concluded the severity of premenstrual symptoms was found to have a significant effect in A.D.L.s with the type of activity affected, reflecting how women predominantly spend their time in the studies of the different cultures. (Johnson and Adolesc, 1988)

A study was conducted in 2013 among 50 young & 50 middle-aged women of S.B.K.S Medical Institute and Research Centre can find the prevalence of premenstrual syndrome with an emphasis on its management. Responses to a feedback questionnaire covering various aspects related to P.M.S. were obtained from 50 participants belonging to each group. The participants belonged to different range of literacy. It was found that 42% faced P.M.S. regularly, while 58% occasionally. Almost 68% suffered from backache, 64% leg cramps, 62% fatigue, breast tenderness, and anger, whereas 58% suffered from anxiety and generalized body ache. Of all the sufferers, only 34% had received the treatment for P.M.S. Irrespective of age, P.M.S. is a common problem faced by women. With their study, they observed that literacy has not mattered in the management of this health problem. Since reports are stating that the severity of P.M.S. can hamper the daily routine and even lead to suicidal tendencies, it is essential that awareness programs need to be conducted to address the importance of managing the issue by pharmacological and non-pharmacological methods. (Narayan, Srinivasa, and Veeramal, 2001)

By the study of Johnson and Adolesc (1989), a multiple-choice questionnaire was administered to 182 adolescent women, ages 14-18 years, to assess the different problems & prevalence of dysmenorrhea, the morbidity associated with dysmenorrhea, and the level of knowledge regarding available treatment. Of the study group, around 79.3% reported that they faced problems in this period, 39.7% reported "lower abdominal pain or discomfort," 21.9 reported malaise with fever during their period, 58.9% reported decreased activity, 45.6% reported school or work absenteeism. Of the dysmenorrheic sample, only 15.5% had used prescription medication, and only 14.7% could name any nonsteroidal anti-inflammatory agent, except aspirin, as potentially effective in relieving dysmenorrhea.

The data from Johnson and Adolesc (1989) suggested substantial ignorance or misinformation among adolescent females regarding effective treatment for dysmenorrhea. (Dhingra and Kumar, 2009)

A study was conducted to evaluate factors affecting the prevalence of dysmenorrhea in a group of Mexican students. A questionnaire was administered to 1152 high school students, and the obtained data about severity, symptoms, and medications used were analyzed. The result showed that dysmenorrhea had a prevalence of 48.4% and was the cause of school absences for 24% of the affected students. It was mild in 32.9%, moderate in 49.7%, and severe in 17.4% of these students, of whom 28% consulted a physician and 60.9% self-medicated. The most common over-the-counter drugs used were a combination of paracetamol and pyrilamine maleate, metamizole (a nonsteroidal anti-inflammatory drug), and naproxen. We found a significant correlation between the presence of dysmenorrhea and smoking, cycle pattern, cycle duration, flow duration, and amount of flow. So from this study, it can be demonstrated that the prevalence of dysmenorrhea was high in our sample. The condition caused short-term school absences, and the students commonly addressed it by self-medicating. (Chaudhari, 1998)

Methodology Conceptual framework: Independents variables- Vs Dependents variables



Study and Sample population: The study population was all the adolescent girl's age group accordingly 10-25 years old of a selected slum area in Dhaka city. The sample population was all that teenage girls of that selected slum area at the time of data collection.



Study area: Rayer bazaar is a well-known thoroughfare in Dhaka, the capital city of Bangladesh. It is generally regarded as one of the historical areas of the city. Rayer bazaar was founded during the colonial period, most probably in the 19th century. It was the potters who first started to live here beside the Turag River.

Sample size: The following formula determined the sampling size.

$$n = \frac{z^2 p q}{d^2}$$

Where-

n = required sample size

z = standard normal distributaries with 95% confidential level 1.96

p = as it is practice level researcher took it as 90%.48

p = 0.9 (90%)

q = 1-p = 1-0.9=0.1 (Proportion in the target population not having the desired characteristics)

d =acceptable Error level 5%=0.05

So, the sample size,

$$n = \frac{1.96^{-2} \times 0.9 \times 0.1}{0.05^{-2}}$$

=138

So, the total sample size is n = 138

Due to the unavailability of samples, the researcher took 115 samples after taking permission from the guide.

Data processing and analysis

The data was collected through interviews. The master tabulation sheet was then prepared after proper checking, verifying, and editing as per the specific objectives and critical variables. Analysis of the data was finally done with the Statistical package for social science (S.P.S.S.) version 20.0; a computer programmed was used to analyze the collected data. The proportion was present by frequency and cross-tabulation analysis. The association will find out by using Pearson's chi-square test.

Results

The cross-sectional study was carried out to determine the proportion of menstrual hygiene practice among the girls residing in the privileged area in Dhakacity. The data were collected by face-to-face interview. Data were analyzed by statistical package for social science (S.P.S.S.) software version 20.0.

Age in years	Frequency	Percentage
10 <mark>-14</mark>	19	16.5
15-19	66	57.4
20-25	30	26.1
Total	115	100.0
Mean±SD	17.10 ± 2.956	

Table No 1: Distribution of the respondents by age (n= 115)

Table no. 1 shows that among 115 adolescent girls, the age distribution was 57.4% was 15-19 years, 26.1% was 20-25 years, 16.5% was 10-14 years old, respectively.



Figure No 1: Distribution of the respondents by Religion (n= 115) Figure no.1 indicates that majority(83%) of the respondents was Muslim, 14.8% of them was Hindu, 1.7% was Buddha.



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Respondents Education	Frequency	Percentage
Class VI-VIII	26	22.6
IX-S.S.C	40	34.8
1st year (H.S.C)	7	6.1
2 nd year (H.S.C)	11	9.6
Do not go to school	31	27.0
Total	115	100.0

 Table No 2: Distribution of the respondents by their education level (n= 115)

 Table no.2 presents that 34.8% of respondents were in class IX-S.S.C, 27.0% did not go to school, 22.6% were in class VI-VIII, 9.6% were in the 2nd year of H.S.C, and 6.1% were in 1st year of H.S.C level of education.

Mothers education	Frequency	Percentage
No Formal Education	49	42.6
Primary	48	41.7
Secondary	18	15.7
Total	115	100.0

Table No 3: Distribution of the respondents by Mothers education (n= 115)

Table no.3 reveals that 42.6% of the respondents had no formal education, followed by 41.7% had primary education, 15.7%% had secondary education.

Mothers Occupation	Frequency	Percentage
H/W	25	21.7
Service Holder	11	9.6
Day Labor	28	24.3
Maid Servant	51	44.3
Total	115	100.0

Table No 4: Distribution of the respondents by Mothers Occupation(n= 115)

Table no.4 finds that nearly half of the respondents (44.3%) mothers were maidservants, followed by 24.3%, 21.7%, and 9.6% was day labor, housewife, and service holder.

Fathers Education	frequency	Percentage
No Formal Education	17	14.8
Primary	60	52.2
Secondary	26	22.6
Higher Secondary	12	10.4
Total	115	100.0

Table No 5. Distribution of the respondents by Fathers Education(n= 115)

 Table no.5 reveals that more than half of the respondents (52.2%) had primary education, 22.6% had secondary education, 14.8% had no formal education, and 10.4% had secondary education.



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Fathers Occupation	frequency	Percentage
Farmer	16	13.9
Service Holder	23	20.0
Business	3	2.6
Day Labor	26	22.6
Jobless	47	40.9
Total	115	100.0

Table No 6: Distribution of the respondents by Fathers Occupation (n=115) It is found from table no. 6 that consecutively 40.9%, 22.6%, 20.0%, and 13.9%, 2.6% of the respondents' fathers was jobless, day labor, service holder, farmer, and businessman.

Monthly family income	Frequency	Percentage
10000-150000	73	63.5
15001-20000	42	36.5
Total	115	100.0

Table No 7: Distribution of respondents Monthly family income(n=115) Table no.7 reveals that the majority (63.5%) of the respondents' monthly family income was BDT 10000-15000 while 36.5% had it as BDT 15001-20000.



Figure No 2: Distribution of the respondents by marital status (n= 115). It is seen from figure no .2 that among 115 respondents, 79.1% was unmarried, 17.4% was married, and 3.5% was divorced/separated.

Latrine in House	Frequency	Percentage
Yes	85	73.9
No	30	26.1
Total	115	100.0

 Table No 8: Distribution of the respondents by the latrine use in their house (n= 115)

 Table no 8. Presents that 73.9% of the respondents had latrine in their house, and 26.1% had no latrine.



Figure No 3: Distribution of the respondents by location of the toilet in their house (n=85) Figure no. 3 indicates that 84.7% had a toilet inside their house, and 15.3% had a bathroom outside their house among 85 respondents.

First Menstrual Age (in years)	Frequency	Percentage
10	13	11.9
11	40	36.7
12	27	24.8
13	29	26.6
Do not know	6	5.2%
Total	115	100.0

Table No 9: Distribution of respondents byfirst menstrual age (n=115)
 Image: Comparison of the second s

Table no. 9 shows that the highest number of the respondents (36.7%)menstruation started at the age of 11, 26.6% start at 13, 24.8% startat 12, 11.9% at ten years old, and among them, 5.2% did not give any answer.





Figure No 4: Distribution of the respondents by type of latrine (n=85) Figure no. 4 shows that more than half (58.8%) of the respondents had a sanitary toilet in their house,but 41.2% did not.

Figure No 5: Distribution of respondents by their usual cycle of menstruation (n=115) It is found from figure no. 5 that 59.1% of respondents' menstruation occurred in every cycle withthe same interval, and 40.9% of respondents' menstrual cycle was irregular.

Medicine use in menstruation	Frequency	Percentage
Naprosyn	12	17.6
Visaralgin	5	7,4
Tranexamic Acid	4	5.9
Paracetamol	<mark>69</mark>	76.7
Do not take medicine	25	21.7
Total	115	100.0

Table no. 10: Distribution of the respondents by medicine they use during menstruation (n=115)

Table no. 10 shows that the majority 69.1% of the respondents took Paracetamol as a pain killer during menstruation, 17.6% took Naprosyn, 7.4% tookVisaralgin, 5.9% take Tranexamic Acid, and approximately 21.7% of the respondents did not take any medicine during menstruation.





Figure no. 6: Distribution of respondents by the problems faced during menstruation (n=115) Figure no six was found that 67.8% of respondents faced problems during menstruation, and 32.2% did not meet the problem.



Figure no. 7: Distribution of the respondents by the different type of problems they face during menstruation (n= 78) Figure no. 7 presents that 43.6% of the respondents had lower abdominal pain with profuse bleeding, 35.9% had





Discussion

The cross-sectional study was carried out to find theproportion of menstrual hygiene practice among the girls residing in a privileged area in Dhaka city. The data were collected by face-to-face interview. Data were analyzed by statistical package for social science (S.P.S.S.) software version 20.0. It is found from the study that among 115 adolescent girls,the age distribution was 15-19 years old, 20-25 &10-14 years by 57.4%, 26.1% & 16.5%, respectively. It also indicated that the majority (83%) of the respondents were Muslim, 14.8% were Hindu, 1.7% were Buddha. The study revealed that 34.8% of respondents were in class IX-S.S.C, 27.0% did not go to school, 22.6% were in class VI-VIII, 9.6% were in 2nd year of H.S.C, and 6.1% were in 1st year of H.S.C level of education, 42.6% of the respondents had no formal education followed by 41.7% had primary education, 15.7%% had secondary education, nearly half of the

respondents (44.3%) mothers was maidservant followed by 24.3%, 21.7%, and 9.6% was day labor, housewife, service holder respectively and more than half respondents (52.2%) father had primary education, 22.6% had secondary education, 14.8% had no formal education, 10.4% had secondary education. The study presented that consecutively 40.9%, 22.6%, 20.0%, and 13.9%, 2.6% of the respondents' fathers was jobless, day labor, service holder, farmer and businessman, the majority (63.5%) of the respondents' monthly family income was BDT 10000-15000 while 36.5% had it as BDT 15001-20000. In this study, among 115 respondents, 73.9% had latrine in their house, and 26.1% had no outhouse in their house, 84.7% had a toilet inside their house, and 15.3% had toilet outside their house among 85 respondents, more than half (58.8%) of the respondents had sanitary latrine in their house, but 41.2% did not have so. Quite similar results were also seen in a study done in a rural area in Mansoura, Egypt, in 2005.

Figure no. 8: Distribution of the respondents by their knowledge about Menarche (n=115) Figure no. 8 presents that 55.7% heard about menarche among

all respondents, and 44.3% did not hear about menarche.



More than half, 67.8% of respondents faced menstruation problems, and 32.2% did not face a problem. Among 78 respondents, 43.6% had lower abdominal pain with profuse bleeding, 35.9% had lower abdominal pain with discomfort, 20.6% had lower abdominal pain with scanty bleeding during menstruation. A majority, 69.1% of the respondents, took Paracetamol as a pain killer during menstruation, 17.6% took Naprosyn, 7.4% took Visaralgin, 5.9% take Tranexamic Acid, and approximately 21.7% of the respondents did not take any medicine during menstruation. In another study by Johnson and Adolesc (1989) finding that around 79.3% reported that they faced problems in this period, 39.7% said "lower abdominal pain or discomfort," 21.9 reported malaise with fever during their period, 58.9% reported decreased activity, and 45.6% reported school or work absenteeism. Of the dysmenorrheic sample, only 15.5% had used prescription medication. Only 14.7% could name any nonsteroidal anti-inflammatory agent, except aspirin, as potentially effective in relieving dysmenorrhea which is quite similar to the study.

Conclusion

Menstruation is a normal physiological phenomenon for females; still, it is associated with somedegree of suffering & embarrassment. Menstruation, or period, is normal woman's vaginal bleeding that occurs as part of a woman's monthly cycle. This study's main objective was to find theproportion of menstrual hygiene practice among the girls residing in an underprivileged area in Dhaka city. This study highlighted the knowledge and practice level of the adolescent girl was not good. They have a lack of interest to know about it. A high level of hesitation keeps them away from openly discussing it and social culture is the main obstacle behind this. Conducting this survey, we found that still there is a necessity for improvement in their knowledge, attitude, and regular practice. Educational television programs, trained school nurses/health personnel, motivated school teachers, and knowledgeable parents can play a critical role in transmitting the vital message of correct menstrual hygiene to females.Awareness regarding the need for information about healthy menstrual practices is essential. Low socio-economic condition, lack of sanitary latrine, absorbent materials, lack of knowledge about sterile napkin use, regular bathing habits, washing genitalia with antiseptic solutions, lack of mothers education and teachers support, etc. were the major reasons.

Recommendation

The following recommendations are given after analyzing the findings of the study

-Conducting this survey, we found that still there is a necessity for improvement in their knowledge, attitude, and regular practice.

-Educational television programs, trained school nurses/health personnel, school teachers can play a significant role in good menstrual hygiene practice among adolescent girls.

-Mother is the first teacher and source of information; hence emphasis should also be given on educating women to guide their daughters.

-Maximize opportunities of integrating menstrual hygiene practice campaigns. These should be done by all the Ministry of Health, N.G.O.s, and others.

-There should be a need for public awareness of menstrual hygiene through television, radio, newspapers, and other media.

References

1. Adhikar P, Kadel B, Dhungel S, Mandal A. (2007). Knowledge and practice regarding Menstrual Hygiene in rural Adolescent Girls of Nepal. Kathmandu University Med J, 5(3):382-6.

2. Bangladesh National Hygiene Baseline Survey. (2014). Preliminary Report. MOLGRD, ICDDRB, Water Aid Bangladesh.

3.Chaudhari R H. (1998). Socio-economic demographic and reproductive health profile of adolescents in the S.A.A.R.C. countries. Paper presented in south Asia Conference on Adolescents; 21-23, New Delhi, India.

4. Chaudhari R H. (1998). Socio-economic demographic and reproductive health profile of adolescents in the S.A.A.R.C. countries. Paper presented in south Asia Conference on Adolescents; 21-23, New Delhi, India.

5. Dhingra R, Kumar A. (2009). Knowledge and practices related to menstruation among tribal (Gujjar) adolescent girls. Etho-Med, 3(1):43-48.

6. El-Gilany AH, Badawi K. (2005). Menstrual hygiene among adolescent schoolgirls in Mansoura, Egypt. Reprod Health Matters,13:147-52.

7. Johnson, J. and Adolesc, J. (1988). Level of knowledge among adolescent girls regarding effective treatment for dysmenorrhea.

8. Juyal R, SD K, J S, Negi K. (2012). Practices of Menstrual Hygiene among Adolescent Girls in a District of Uttarakhand. Ind J Comm Health, 24(2):124–8.

9. Narayan K A, Srinivasa D K Pelto, P J and Veeramal S. (2001). Puberty rituals, reproductive knowledge and health of adolescent schoolgirls in South, Asia Pacific Population Journal, Vol 16(2), 225–238.



10. Omidvar S, Begum K. (2010). Factors influencing hygienic practices during menses among girls from south India- A cross sectional study Factors influencing hygienic practices during menses among girls from south India- A cross sectional study. Int J Collaborative Res Intern Med Pub Health, 2(12):411–23.

11.Singh A. (2006). Place of menstruation in the reproductive lives of women of rural North India. Ind J Comm Med, 31(1):10–4.

12. Sommer M, Sahin M. (2013). Overcoming the taboo: advancing the global agenda for menstrual hygiene management for schoolgirls. Am J Public Health, 103:1556-9.

13. Thakre, SB, Thakre SS, Reddy M, Rathi N, Pathak K, Ughade S. (2011). Menstrual Hygiene: Knowledge and Practice among Adolescent School Girls of Saoner, Nagpur District. J Clin Diag Res, 5(5):1027–33.

14. Um L, Yusuf NW, Musa AB. (2010). Menstruation and Menstrual Hygiene amongst Adolescent School Girls in Kano, Northwestern Nigeria. Afr J Reprod Health, 4(3):201–8.

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