

AWARENESS AND PRACTICE REGARDING MENSTRUAL HYGIENE AMONG ADOLESCENT GIRLS IN A COMMUNITY OF JANAKPURDHAM

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ABSTRACT

Introduction: Menstruation is a normal physiological process of females at their reproductive age. The poor knowledge and understanding of menstruation may lead to unsafe hygienic practice that intern increases the risk of reproductive tract infections, cervical cancer, poor academic performance and overall poor quality of life. The objective of the study was to assess awareness and practice of adolescent girls on menstrual hygiene in Janakpurdhham, Nepal. **Methods:** Descriptive study conducted among 80 adolescent girls in Pidari chowk-8, Janakpurdhham. Non-probability purposive sampling technique was used to select the respondents. Data was collected between 2020/10/04 to 2020/10/17 by face-to-face interview technique using self-developed structured interview questionnaire. Data was analyzed using PSPP. **Results:** Majority (80%) of the adolescent girls had adequate awareness whereas 20% of them had inadequate awareness regarding menstrual hygiene. However, only 1.3% adolescent girls had good practice and majority of adolescent girls (98.7%) had poor practice regarding menstrual hygiene. **Conclusion:** Study concluded that majority of adolescent girls had adequate awareness but poor practice for proper menstrual hygiene. There is need of adolescent girls to get adequate information about healthy menstrual practices. This demonstrates a need to design acceptable awareness creation and advocacy programs to improve safe menstrual hygienic practice of adolescent girls during menstruation.

KEYWORDS: Adolescent Girls, Awareness, Menstrual Hygiene, Practice.

INTRODUCTION

Menstruation is normal phenomenon during the reproductive age of females. The onset of menses takes place during adolescent period in which physiological and emotional changes take place. In this period females are preparing and adjusting themselves to manage their menstrual bleeding in safe and clean way.^[1]

Menstrual hygiene is defined as the principle of maintaining cleanliness of the body during menstrual flow.^[2] Menstrual hygiene management defines as 'Women and adolescent girls are using a clean menstrual management material to absorb or collect menstrual blood, that can be changed in privacy as often as necessary for the duration of a menstrual period, using soap and water for washing the body as required, and having access to safe and convenient facilities to dispose of used menstrual management materials. They understand the basic facts linked to the menstrual cycle and how to manage it with dignity and without

discomfort or fear'.^[3]

Yet millions of adolescent girls across the world are denied the right to manage their monthly menstrual cycle in a dignified, healthy way.^[4] At least 500 million women and girls globally lack adequate facilities for menstrual hygiene management.^[5]

Menstruating women and girls are often considered impure, unclean and unfit during this period. The situation is further worsened by the lack of washing and bathing facilities, materials and spaces that can help women and girls manage the menstrual discharge with dignity and safety. Due to the cultural and taboos surrounding menstruation, the issues of menstrual hygiene management have been ignored or misunderstood.^[6] People in developing countries like Ethiopia often perceive menstruation as a result of being cursed, a sign of diseases, punishment from God, a lifelong process. It can be a reason for school absenteeism, or drop-out, poor

academic performance, lower self-esteem and poor quality of life. Globally, approximately 130 million girls are out of school due to lack of awareness on sanitation, hygiene and menstrual health in which poor environments, lack of privacy and limited availability of water and sanitation facilities at school attribute frequent school absenteeism in adolescent girls.^[1,7]

Poor awareness on menstruation hygiene makes adolescent girls unable to manage menstrual periods efficiently and it cause them vulnerable to the risk of reproductive tract infections, urinary tract infections, cervical cancer, pelvic inflammatory diseases and in severe cases infertility may result. Adolescent girls perceive menstruation as something embarrassing that should be kept hidden. This can also increase the vulnerability of adolescent girls to have mental, emotional and physical problems.^[1] In Kenya, 65% of women use homemade hygiene products and 60% lack access to adequate sanitation facilities outside the home.^[8] According to study done in western Ethiopia on 2015 showed that good hygienic practices, such as use of sanitary pads and adequate washing of the genital areas, are essential during menstruation period. Women and girls of reproductive age need access to clean and soft absorbent sanitary products which in the long run protect their health from various infections and also from leakage, staining of clothes, smell and dropping of absorbent materials. Poor sanitary protection materials can result in blood-stained clothes causing stress and embarrassment to adolescent girls.^[9]

A growing evidence base from low- and middle-income countries shows that many girls are not able to manage their menses and associated hygiene with ease and dignity. These girls and women cannot practice good menstrual health and hygiene at home, at school, at work or in other public settings, due to a combination discriminatory social environments, inaccurate information, poor facilities, and limited choice of absorbent materials.^[3] National family health survey 2015-2016 estimates that of the 336 million menstruation women in India about 121 million (roughly 36 percent) women are using sanitary napkins, locally or commercially produced.^[10]

In Bangladesh, only six percent of schools provide education on Menstrual Health Management, resulting in low knowledge of menstruation. In addition, over one-third of girls surveyed in this country claim that menstrual issues adversely affect their school performance.^[5]

According to study done in Hyderabad India on 2019 March showed that the levels of knowledge regarding menstrual health is low among the adolescent girls.^[3]

Menstruation is clouded in social taboos and is never discussed in homes and hence the adolescent girls are ignorant about it.^[11]

The Nepal Demographic and Health Survey of 2011 revealed that of the top ten sexual and reproductive health issues of concern identified by teenage girls, seven were menstruation-related.^[12] Many women and adolescent girls face significant obstacles to healthy menstrual hygiene practice in Nepal. Less than half of adolescent girls have adequate knowledge about menstruation and only one in ten practice good menstrual hygiene.^[13] There is a strong traditional belief of staying in an unhygienic place (Chhaupadi) for several days, not allowing to see sun, not allowing to touch male members, books, restrictions of entering holy places and cultural taboos with foods, using unclean pads and improper disposal of used pads. Adolescent girls often lack knowledge regarding menstruation and good hygiene practices. Hence, are vulnerable to reproductive organs diseases. Better knowledge about menstrual hygiene reduced this risk.^[14]

METHOD AND MATERIAL

Research Design

A quantitative cross-sectional descriptive research design was used to assess awareness and practice regarding menstrual hygiene among adolescent girls in a community of Janakpurdham.

Place of Study

The study was conducted at Pidari chowk-8, Janakpurdham (Dhanusha). Janakpurdham is a sub-metropolitan city in Dhanusha district of Province No. 2 of Nepal. The city is located about 225 km south-east of Kathmandu. The total area covered by Janakpurdham is 100.20 km². Janakpurdham is currently the third largest city in the Terai and the seventh largest in Nepal.

Study Population

The population for this study was included all the adolescent girls' age between 13 to 19 years who were residing in Pidari chowk-8, Janakpurdham. The total population of adolescent in Pidari chowk-8, Janakpurdham were 3624. From that, the total adolescent girls were 1126.

Duration of Study

Total duration of study was 8 weeks.

Sampling Technique

Non-probability purposive sampling technique was used to select the sample. Non-probability sampling is a sampling technique in which the researcher selects samples based on the subjective judgment of the researcher rather than random selection. Purposive sampling, also known as judgmental, selective or subjective sampling, is a form of non-probability sampling in which researchers rely on their own judgment when choosing members of the population to participate in their study.

Sample Size

Sample size was 80 adolescent girls residing in Pidari

chowk who met the inclusion criteria.

Inclusion Criteria

Adolescent girls age between 13 to 19 years and who had started her menstruation period and were willing to participate in the study.

Data Collection Instrument

A self-developed structured interview questionnaire was developed on the basis of research objective, in depth literature review and consultation with the research guide. It was first prepared in English language and then translated into Nepali language. The questionnaire consisted of three parts:

Part I: This part included socio demographic information of adolescents which will consist of age, educational status, types of family, education of mother, family income, and age of menarche. It consisted of 6 questions.

Part II: This part included awareness related questions regarding menstrual hygiene. It consisted of 9 questions.

Part III: This part included practice related questions regarding menstrual hygiene. It consisted of 17 questions.

Scoring Criteria

The questionnaire contained 7 multiple response and 18 multiple choice questions. In multiple choice questions each correct response was given a score of 'one' and for wrong response score 'zero'. For multiple response questions, each item was given 'one' score mark.

The level of awareness and practice was categorized using the following scoring criteria.^[15]

For awareness

Score $\geq 60\%$ → Adequate awareness Score $< 60\%$ →

Inadequate awareness for practice

Score $\geq 60\%$ → Good practice Score $< 60\%$ → Poor practice

Validity of the Instrument

Face validity and Content validity of the instrument was done through literature review and consulting with

research advisor.

Ethical Consideration

The study was conducted after obtaining approval from Research Committee of Patan Academy of Health Sciences (PAHS), School of Nursing and Midwifery (Lalitpur Nursing Campus). Then written permission was taken from pidari chowk-8, Janakpurdam. Self-structured tool validated from expert was used for data collection. Informed verbal consent was taken from each participant after explaining purpose of the study. None of participant was forced to participate in the study. Participant were free to answer and had full authority for exclusion during any period of data collection. Confidentiality was maintained by using findings only for study purpose. There was not mention names on the interview sheet, instead a code number was written.

Data Collection Procedure

Data collection was started after approval of the proposal and finalization of instrument. Formal permission was taken from ward chairperson of Pidari chowk-8, Janakpurdam. Respondents was selected on the basis of inclusion criteria. Verbal consent was taken from each respondent by explaining the objective and purpose of study. One participant was selected from each family who was willing to participate. Data was collected by face to face interview technique by using self-developed structured interview questionnaires. Privacy was maintained by not recording the name of respondent and by interviewing separately. Data was collected by researcher herself from 2020/10/04 to 2020/10/17. Each respondent were interviewed for 15-20 minutes.

Data Analysis

After completion of the data collection, data was rechecked, reviewed, edited and organized for its accuracy and completeness. Data was edited, coded and classified manually and data was entered and analyzed by using PSPP. Descriptive statistical methods such as frequency, mean, standard deviations, range was used for the interpretation of data. Results were represented by using table and figures.

RESULT

Table 1: Socio Demographic Characteristics of Respondents N=80.

Characteristics	Frequency(n)	Percentage (%)
Age in completed years		
Early adolescence(11-14 years)	20	25.0
Middle adolescence(15-17 years)	40	50.0
Late adolescence(18-20 years)	20	25.0
Mean age \pm S.D= 15.80 \pm 1.67		
Education		
Illiterate	-	-
Can read and write only	-	-
Primary level completed	45	56.3
Secondary level completed	33	41.3
Higher secondary level completed	2	2.5

Bachelor and above	-	-
Education of mother		
Illiterate	2	2.5
Can read and write only	12	15.0
Primary level completed	20	25.0
Secondary level completed	27	33.8
Higher secondary level completed	11	13.8
Bachelor and above	8	10.0
Family income per month		
5000	1	1.3
10000	12	15.0
20000	40	50.0
30000	17	21.3
50000	10	12.5

Table 1 shows that 50% respondents were middle adolescence (15-17 years) with mean age and standard deviation of respondents were 15.80 ± 1.67 . The majority of respondents, 45(56.3%) were primary level

completed. Likewise, majority of respondent's mother education, 27(33.8%) were secondary level completed. Out of 80 respondents, half of family income were 20,000.

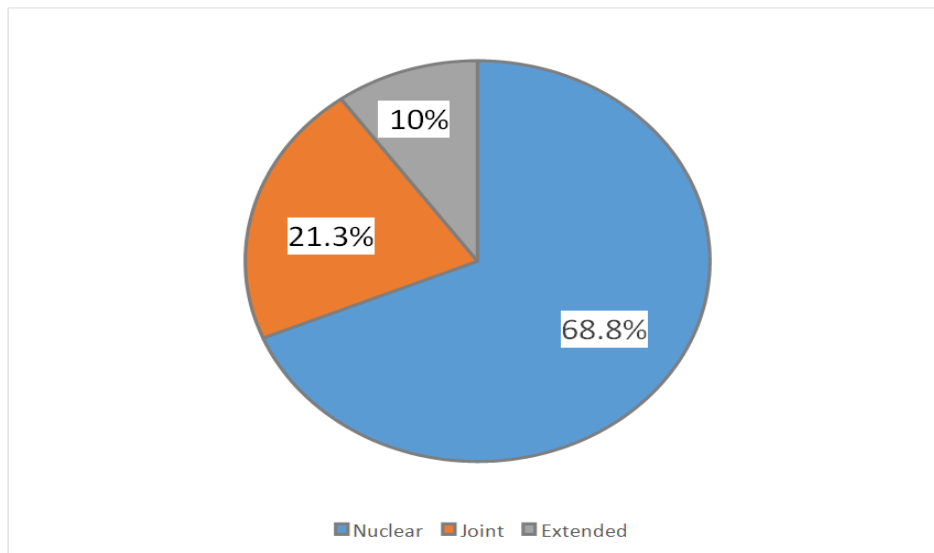


Figure 1: Types of Family.

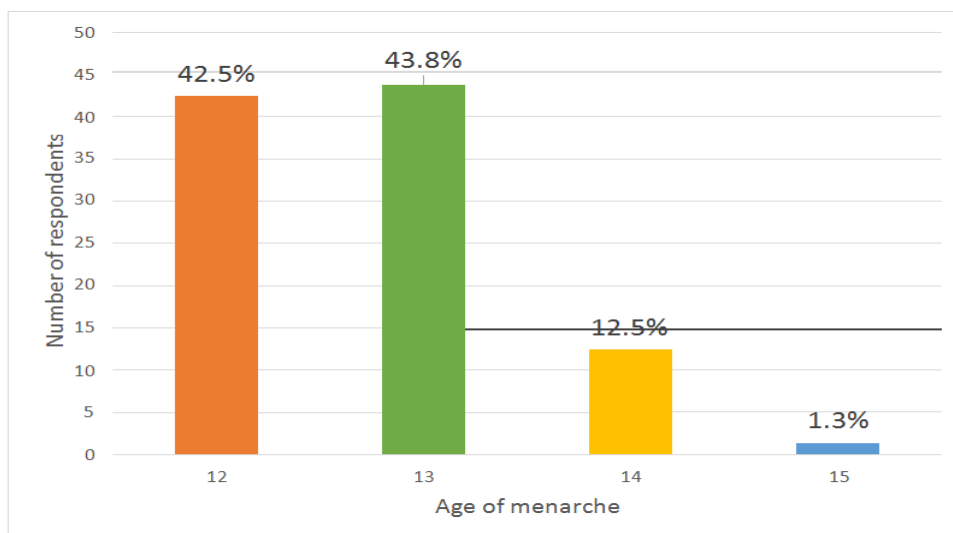


Figure 2: Age of Menarche.

Table 2: Respondents' Awareness regarding Menstruation N=80.

Statement	Frequency (n)	Percentage (%)
Meaning of menstruation		
Natural shedding of blood on monthly basis	72	90.0
Lifelong process	8	10.0
Curse	-	-
Disease	-	-
Menstruation takes place in		
Uterus	45	56.3
Bladder	21	26.3
Birth canal	12	15.0
Abdomen	2	2.5

Note: Bold: Correct answer

Table 2 shows that 90% respondents described menstruation as natural shedding of blood on monthly basis. 56.3% respondents said that menstruation take place in uterus.

Table 3: Respondents' Awareness regarding Menstrual Hygiene N=80.

Statement	Frequency (n)	Percentage (%)
Meaning of menstrual hygiene		
Maintaining cleanliness of the body during menstrual flow	59	73.8
Maintaining cleanliness of the body before menstrual flow	8	10.0
Maintaining cleanliness of room during menstrual flow	7	8.8
Maintaining cleanliness of the body after menstrual flow	6	7.5
Purpose of menstrual hygiene*		
Prevent the spread of infection and illness	46	57.5
Minimize risk of cervical cancer	44	55.0
Prevent the bad odors during menstruation	35	43.8
Prevent the reproductive tract infection	21	26.3
Menstrual blood is unhygienic		
Yes	43	53.8
No	37	46.3
Menstrual hygiene is important		
Yes	80	100.0
No	-	-
Maintenance of menstrual hygiene*		
Changing the pads regularly on time	66	82.5
Safely dispose of used absorbent material	49	61.3
Bathing regularly	42	52.5
Maintain personal hygiene	40	50
Complication occurs due to poor menstrual hygiene*		
Reproductive tract infection	66	82.5
Susceptible to infertility	52	65.0
Urinary tract infection	19	23.8
Prevention of reproductive tract infection*		
Menstrual hygiene	64	80.0
Personal hygiene	58	72.5
Perineal hygiene	48	60.0
Hand hygiene	10	12.5

Note: Bold: Correct answer, multiple response question*

Table 3 shows that 73.8% respondents described menstrual hygiene as maintaining cleanliness of the body during menstrual flow. More than half of the respondents

(57.5%) stated that prevent the spread of infection & illness and 26.3% of the respondents stated that prevent the reproductive tract infection as purpose of menstrual

hygiene. 53.8% respondents stated that menstrual blood is unhygienic whereas 46.3% respondents stated that menstrual blood is hygienic. 100% respondents said that menstrual hygiene is important in which 82.5% respondents stated changing the pads regularly on time

as maintenance of menstrual hygiene. 82.5% respondents stated reproductive tract infection as complication occurs due to poor menstrual hygiene. 80% respondents stated menstrual hygiene and 12.5% respondents stated hand hygiene as prevention of reproductive tract infection.

Table 4: Practice regarding Common Absorbent Material, Duration, Dispose, Storage of Pad during Menstruation N=80.

Statement	Frequency (n)	Percent (%)
Commonly used absorbent material during menstruation		
Sanitary pad	77	96.3
Old cloth	3	3.8
Cotton	-	-
New cloth	-	-
Duration of cloth or pad change per day		
4 to 6 hourly	73	91.3
12 hourly	5	6.3
24 hourly	-	-
When fully soaked	2	2.5
Disposal of used pad		
Dustbin	40	50.0
Open field	17	21.3
Drain	15	18.8
Toilet	8	10.0
Storage of unused absorbent		
Store with routine cloth	49	61.3
Don't store	27	33.8
Hide under mattress	4	5.0
Bathroom	-	-

Note: Bold: Correct answer

Table 4 shows that 96.3% respondents were commonly used sanitary pad and 3 (3.8%) respondents used old cloth as absorbent material during menstruation. 91.3% respondent changed pad 4 to 6 hourly per day. Half of the

respondents (50%) disposed used pad in dustbin and 61.3% respondents said that they store unused absorbent with routine cloth.

Table 5: Practice regarding Management of Cleanliness during Menstruation N=80.

Statement	Frequency(n)	Percent (%)
Bathing is good during menstruation		
Yes	80	100.0
No	-	-
Frequency of bath		
Daily	80	100.0
Only on first day	-	-
Only on third day	-	-
Fourth day	-	-
Do not bath any time	-	-
Cleaning of external genitalia during menstruation		
Yes	80	100.0
No	-	-
Material used for cleaning of external genitalia		
Soap and water	25	31.3
Water with antiseptic solution	24	30.0
Only water	20	25
Warm water	11	13.8
Number of pads used per day		
1 to 3	52	65.0

4 to 6	17	21.3
More than 6	11	13.8
Using cloth	-	
Type of sanitary facilities present in the home*		
Toilet facilities	74	92.5
Water facilities	68	85.0
Drying facilities	59	73.8
Waste management	49	61.3
Reason behind not buying absorbent material from the shop*		
Too embarrassed to buy it from the shop	80	100.0
To expensive	8	10.0
Not allowed to buy	-	-
Not available for purchase	-	--

Note: Bold: Correct answer, multiple response*

Table 5 shows that all of the respondents 80 (100%) said that during menstruation bathing is a good health practice and 80 (100%) respondents bath daily during menstruation. 80(100%) respondents said that they clean external genitalia during menstruation whereas 25(31.3%) respondents clean with soap & water and 24(30%) respondents clean with water and antiseptic

solution. Only 17(21.3%) correctly stated that they used 4 to 6 pads per day. 74 (92.5%) respondents stated that toilet facilities present as type of sanitary facilities in the home. 80(100%) respondents answered that too embarrassed to buy it from the shop were reason behind not buying absorbent material from the shop.

Table 6: Practice regarding Different Problems Faced during Menstruation and Forbidden Activities during Menstruation N=80.

Statement	Frequency (n)	Percentage (%)
Missed school due to menstrual cycle		
Yes	28	35.0
No	52	65.0
If yes, number of days (N=28)		
1	17	18.8
2	11	12.5
3	-	
5	-	
Type of problem faced during menstruation*		
Religious limitation	75	93.8
Problem related to dietary restriction, personal hygiene like hair wash	6	7.5
Problem related to availability of sanitary pad	-	-
Problem related to disposal	-	-
Forbidden activities during menstruation *		
Religious activities	75	93.8
Going to certain place	12	15.0
Eat certain foods	5	6.3
Cook	-	-
Go out	-	-
Touch certain things (i.e. bed)	-	-

Note: Multiple response*

Table 6 shows that 74(92.5%) stated out of 80 respondents, 28 (35%) missed their school and 52 (65%) they didn't missed their school whereas 17 (18.8%) respondents missed 1 day and 11 (12.5%) missed 2 days. 75 (93.8%) respondents stated religious limitation as type of problem faced during menstruation. 75 (93.8%) answered that not allowed to religious activities and

12(15%) answered that not go to certain place as forbidden activities during menstruation.

Table 7: Respondents' Level of Awareness regarding Menstrual Hygiene N=80.

Statement	Frequency (n)	Percentage (%)
Awareness Level		
Inadequate awareness (<60%)	16	20.0
Adequate awareness (≥60%)	64	80.0

Table 7 shows that out of 80 respondents, 64(80%) had adequate level of awareness and 16(20%) had inadequate level of awareness regarding menstrual hygiene.

Table 8: Respondents' Level of Practice regarding Menstrual Hygiene N=80.

Statement	Frequency (n)	Percentage (%)
Practice Level		
Poor practice (<60%)	79	98.7
Good practice (≥60%)	1	1.3

Table 8 shows that 79 (98.7%) had poor practice and only 1 (1.3%) had good practice regarding menstrual hygiene.

DISCUSSION

Discussion regarding socio demographic variables

The present study showed that the age distribution of the respondents ranged from 13 – 19 years with mean age 15.80 years. This finding is supported by the study done in Lebanon where respondents ranged age from 13 to 19 years, with a mean of 15.1 years.^[16] similarly age of menarche ranged from 12 to 15 years which was similar to the study conducted in Biratnagar, Nepal that the age of menarche in their study ranged from 12 to 15 years.^[17] The study result showed that 56.3% respondents were primary level completed which was inconsistent from the study done in Andhra Pradesh, India where only 23.8% respondents were primary level completed.^[11]

The current study showed that 68.8% respondents belongs from nuclear family and 21.3% respondents belongs from joint family which was supported with the study done in Puducherry, India where 74.9% belongs from nuclear family and 25.1% belongs from joint family.^[18]

Discussion on awareness regarding menstrual hygiene

The current study revealed that majority of respondents (90%) answered natural shedding of blood on monthly basis as meaning of menstruation. This finding is supported with the study conducted in Bhaktapur, Nepal where majority of respondents (96.4%) answered that menstruation is a natural shedding of blood on monthly basis.^[19] And more than half (56.3 %) respondents answered that menstruation takes place in uterus. This finding is supported by the research done in Central, India which showed 60% girls had the correct idea that the source of blood during menstruation was uterus.^[20]

The present study showed that 73.8% of the respondents knew that menstrual hygiene is maintaining cleanliness of the body during menstrual flow which is supported with the study which showed that 84.8% respondents knew about correct meaning of menstrual hygiene.^[21]

The present study showed that 53.8% of the respondents answered yes as menstrual blood is unhygiene and 46.3% answered no as menstrual blood in unhygienic which is

contrast from the study done in Pakistan where 80.2% of the respondents said yes and 19.8% said no regarding menstrual blood is unhygienic.^[20]

The current study showed that 80% of the respondents had adequate level of awareness which is supported with the study conducted in Chitwan, Nepal where 84.8% had adequate level of awareness.^[21] and contrast to the study done in Kathmandu, Nepal where less than half (42.9%) had adequate level of awareness regarding menstrual hygiene.^[21]

Discussion on practice regarding menstrual hygiene

The current study revealed majority of respondents (96.3%) answered sanitary pad as commonly used absorbent material during menstruation. This finding is supported with the study conducted in Central India where majority of respondents (98%) used sanitary pads during menstruation. Regarding duration of cloth or pad change per day, majority of respondents (91.3%) stated 4 to 6 hourly which is contrast from the study done in Central, India where only 25% girls changed absorbent material 4 to 6 hourly.^[20]

The current study showed that 100% respondents answered bathing is good during menstruation. This finding is supported with the study done in Visakhapatnam, India where 78.80% answered same as current study.^[22]

The current study showed that 100% respondent's clean external genitalia and 31.3% used soap and water & 25% used only water to clean external genitalia during menstruation. This finding is supported with the study done in Pakistan where 80.5 % respondents clean external genitalia and 25.4% used soap and water & 57.6% used only water to clean external genitalia.^[20] The current study showed that 93.8% respondents were not allowed to religious activities during menstruation which is supported by the study done in Nagunoor, Karimngar where 75% girls were not allowed to religious activities.^[23]

This study revealed that only 1.3 % respondents had adequate practice which is contrast from the study done in Doti District, Nepal where 40% respondents had adequate practice of menstrual hygiene.^[24]

CONCLUSION

The study in general concluded that majority of adolescent girls had adequate awareness but inadequate practice for proper menstrual hygiene. There is a need of adolescent girls to get adequate information about healthy menstrual hygiene practices. This demonstrates a need to design acceptable awareness creation and advocacy programs to improve safe menstrual hygienic practice of adolescent girls during menstruation.

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