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ORIGINAL RESEARCH

Knowledge, Beliefs, and Practices Related to Menstruation Among Female Students in Afghanistan

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Background: Menstruation is a universal, natural, unique, and physiological phenomenon. Despite the fact that menstruation is a natural fact of life, it is still considered taboo in Afghanistan and other developing countries.

Objective: To assess knowledge, beliefs, and practices related to menstruation among female students of Kabul University of Medical Sciences (KUMS).

Methods: A cross-sectional descriptive study design was conducted at KUMS in 2022, and a quota sampling technique was used.

Results: In this study, 339 students participated out of the 346-sample size. The majority of participants (70.02%), were over 20 years of age. About (59.60%) of participants were aware of menstruation before menarche. The main source of their information was their mothers (37.50%). The average age of menarche was 13.5 years old. Above 70% of respondents had normal patterns of menstruation. More than half of them (51.90%) had dysmenorrhea. Frequent menstrual disorders were abdominal pain (58.1%), and backache (56.1%). The majority of respondents had good and acceptable knowledge of menstruation (33.6%), and (63.1%) respectively. A statistically significant relationship between knowledge and academic year was observed (P value = 0.005). The majority of respondents (92.6%) had poor menstrual beliefs. A statistically significant relationship between respondents' age and beliefs was observed (P value = 0.004). Mother education did not affect respondents' level of beliefs (P value = 0.4). In addition, respondents had good practice of menstruation (75%).

Conclusion: In general participants had a good and acceptable level of knowledge with good practice related to menstruation. Despite the good knowledge and practice, the respondents' beliefs related to menstruation were poorer than what was expected from medical disciplines students. Their frequent source of information was their mothers, which highlights the provision of information and education for mothers and all females.

Keywords: menstruation, knowledge, beliefs, practice, female students, Kabul University of Medical Sciences

Introduction

Puberty is a stage of growth and development in which significant cognitive, psychological, and physical changes occur.[1] One of the signs of puberty in women is menstruation.[2] Menstruation is a natural part of the reproductive cycle of women, in which periodic secretions of blood leave the uterus through the vagina.[3] Almost half of the female population, about 26% of the world's population, are of reproductive age.[4] Girls in many low- and middle-income countries enter puberty with knowledge gaps and misconceptions about menstruation, unprepared to cope, and unsure when and where to seek help. Because the adults around them, including parents and teachers, are themselves ignorant and refuse to discuss issues of sex, reproduction, and menstruation (which are often thought to be full of dirty, polluted, and shameful concepts).[4]

Various research in different regions of India, Pakistan, Iran, Turkey, Bangladesh, China, Ethiopia, Nepal, Saudi Arabia, Lebanon, Jordan, Nigeria, Uganda, Egypt, Malaysia, and SriLanka have shown that many teenage girls start their

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period uninformed and unprepared. Mothers are the main source of information, but they inform girls too little and too late and often express their misconceptions.[4]

Studies conducted in India,[5] Iran,[6] Pakistan,[7] Saudi Arabia,[8,9] Turkey,[10] and Nigeria[11] showed a poor level of knowledge about menstruation. Although the study conducted in Bangladesh (75%) showed good knowledge of menstruation.[12] And in Saudi Arabia, the acceptable knowledge of menstruation was 45.1%.[9] A study in Herat, Afghanistan showed that the knowledge was less than in other countries (53.3%).[13]

Lack of awareness and knowledge about menstruation can lead to non-observance of menstrual hygiene and cause various health problems in person such as cystic infection and infertility. Menstrual hygiene practices have been reported in different studies, such as in Karachi, Pakistan, 50% of participants did not bathe.[14] Also, 55.7% used unsanitary absorbents.[14] In Nigeria, 75% bathed during menstruation.[11] In India, 78.9% preferred sanitary napkins.[15]

Many societies believe that women and girls cannot eat and drink certain foods such as sour or cold foods and cold drinks during menstruation.[16] In fact, there are no medical restrictions on the types of foods that menstruating people can or should eat, and dietary restrictions can put them at risk by limiting nutrient intake.[16] A study among medical and nursing students in India claims that despite medical knowledge, there are still beliefs, superstitions and myths about menstruation among students.

In Saudi Arabia, women had false beliefs about menstruation, such as: believing in the negative effect of using pickles, dairy products, cold drinks, bathing with hot and cold water, the harmfulness of exercise and analgesics during menstruation. In addition, they believed that menstrual pains decrease after marriage.[8] In India, girls do not have the right to bathe until the first 3 days of menstruation, they are still prohibited from entering the kitchen.[15] In Pakistan and Afghanistan, girls are prohibited from bathing during menstruation and they even believe that bathing during menstruation causes infertility in women.[7,13] Various food taboos have been observed in these countries. In Afghanistan, menstruation itself is a taboo that even women do not want to discuss it, and the majority of girls experienced shame and fear during their first period,[17] not only in Afghanistan but also a study conducted in Iran confirms it.[6]

Until now, the Ministry of Public Health of Afghanistan does not have any statistics on the level of awareness of women and girls about menstruation and how to observe hygiene during this period. However, UNICEF's survey in schools shows that 50% of girls who experience menstruation for the first time do not know about it, 38% of girls do not go to school during menstruation, 12% do not use sanitary products such as sanitary napkins, clean water and soap. They do not have access and 70% of these girls, according to their beliefs, do not bathe during their period.[17]

In Afghanistan, girls' puberty is more than anything else is a sign of a girl's readiness for marriage, which in turn causes early marriages and its negative consequences.[17] In addition of taboos, there are also menstrual problems that girls suffer from. Studies show that medical students are at high risk of menstrual irregularities.[18] Irregularity is caused by a stressful lifestyle, irregular food, and exercise habits.[18] Medical students have to study harder and are vulnerable to stress, which may lead to dysfunction of the hypothalamus-pituitary axis and cause menstrual disorders. More than 90% of menstrual problems can be prevented only with early diagnosis and proper treatment.[18]

The present study selected the best population, which is students of health disciplines, because how beliefs, knowledge and performance related to menstruation are increasingly important to this group as health missionaries and trusted authorities of society. By revealing how they believe, know and practice about menstruation, health officials will make better decisions to invest in educational programs to eradicate the gap in beliefs, knowledge and practice related to menstruation.

Materials and Methods

Type of Study

This research is a basic study from the practical point of view, and a quantitative study from the question point of view, in terms of obtaining the information it is an elementary study and in terms of objective it is a descriptive study and descriptive cross-sectional method has been done.

Study Setting

The research has been done in one of Afghanistan's governmental universities, Kabul University of Medical Science (Abu Ali Ibn Sina) located in the third district of Kabul city. According to the report of the department of student affairs,

the owner of the database the total number of male and female students are 3467 including the number of female students (1752), and has 7 faculties (curative medicine, stomatology, public health, midwifery-nursing and Allied health).

Duration

The study has been done in 8 weeks, it started from the 4th Week of October 2022 until the 3rd week of December 2022 finished.

Sample Technique

In this study, the quota sampling method was used. The sample size by Epi-info (version 3.2.5.0) whereas the total population of 1752 female students, 5% standard error, 50% frequency, and 95% confidence interval of 315 students were received and considering 10% (31 people) of non-response the final sample size became 346 people. Then quotas have been set for each faculty as follows: curative medicine 31% (107 persons), stomatology 24% (83 persons), public health 9% (31 persons), nursing 10% (35 persons), medical technology 7% (24 persons), anesthesia 5% (17 persons) and midwifery 14% (48 persons), respectively. Then the number of samples from each faculty were classified to the number of classes (first, second, third, fourth, and fifth) and the questionnaires were distributed to available sample in the classes.

Participants

The target population in this research includes all female students of Kabul University of Medical Science, the source population includes students from the 1st to the 5th classes of curative medicine, stomatology, and 1st to 4th classes of public health, nursing, midwifery, and allied health. The studied population was those based on the quotes of the faculties and from the sample size accessible. The available sample consisted of 346 female students of which 339 students participated in the study.

Sample Size

The sample size from the target population (1752) using Epi-info version 3.5.2.0 with comment expected 50% frequency, 95% confidence interval, and 5% standard error 315 students were selected by considering 10% (31 people) of non-response the sample size was 346 students out of 1752.

Data Source and Management

Tool and source of information to obtain knowledge, beliefs, and practices about menstruation a standard related questionnaire taken from the review of literature that was published in PubMed from references[5,8,9] used which includes the following 5 sections, namely: (demographic characteristics, menstrual history, menstruation knowledge, menstruation beliefs and practice related to maintaining menstrual hygiene).

Menstrual Knowledge Measurement

Including 14 questions, each of which had one score, and based on these scores, menstrual knowledge is divided into 3 categories: good knowledge of menstruation, score 10.5≥, Acceptable knowledge of menstruation, score 10–7.5, And poor knowledge of menstruation, score 7 or less than that.[5,9]

Menstrual Beliefs Measurement

It includes 10 common beliefs about menstruation if a belief is confirmed, it gets zero score and its rejection gets one score. First, the frequency of both confirmation and rejection of a belief is found then out of 10 score, if a person gets 10–7.5 score in the good belief category and if gets 0–7 score entered the poor belief category[8] (Table 1).

Table 1 How to Measure Knowledge, Beliefs, and Performance

Parameter	Measurement Method
Knowledge	14 scores
Good knowledge	10.5 scores and more
Acceptable knowledge	7–10 Score
Poor knowledge	7 scores and less than that
Beliefs	10 scores
Good beliefs	7.5–10 score
Weak beliefs	0–7 score
Practice	100%
Good Practice	50% and more
Poor Practice	Less than 50%

Menstrual Practice Measurement

To measure the practice method related to maintaining menstrual hygiene from 3 questions that indicate poor practice or it is good and only the frequency of each of the action has been found, 50% and above of correct answers is classified as good practice and below 50% is classified poor practice related to maintaining menstrual hygiene.[5]

Menstrual Disorders Symptoms

The frequency and percentage of each disorder before and during menstruation are measured.[5]

Menstrual Pattern Measurement

Only the frequency and percentage of each element are obtained.[5]

Statistical Methods

After completing the data collection stage and completing the determined number of questionnaires, the related database in SPSS version 24.0 was arranged and data entry of all questionnaires was done in the software, descriptive statistics and chi-square were used for data analysis.

Ethical Consideration

The proposal of research along with questionnaire submitted to the public health faculty Institutional Review Board prior to the distribution of questionnaire and interview and the IRB was obtained from public health faculty research committee, inform consent letter was obtained from each participant prior to fill their participation. We never have written the name of participants, the all process of study conducted regarding the obtained IRB and university policies, all the ethical issues have been considered according to the declaration of Helsinki.

Results

Demographic Profile of Participants

In the present study, two age categories (less than 20 years and more than 20 years) were used.[8] The majority of 70.5% (238 people) of the respondents were more than 20 years old, and the remaining 29.5% (100 people) were less than 20 years old. Ninety percent (302 people) of them were single, and the rest were married. The study participants (339 people) were from all 7 faculties (medical medicine, stomatology, public health, nursing, midwifery, anesthesia, and technology). From the first grade to the fifth grade, students who related to the percentages are shown in the Table 2. About one-third of the participating mothers, 33.6% (114 people), were illiterate; the rest had primary, secondary, and higher education. For more clarification, refer to the Table 2.

Table 2 Distribution of Demographic Characteristics of Participants

Variables	Frequency (N)	Percentage (%)
Age		
Less than 20 years	100	29%
20 years and more	238	70.2%
No response	1	0.3%
Total	339	100%
Marital Status		
Single	302	90%
Married	37	10%
Total	339	100%
Faculty		
Curative medicine	107	31.6%
Stomatology	83	24.5%
Public Health	31	9.1%
Midwifery	42	12.4%
Nursing	35	10.3%
Anesthesia	17	5%
Technology	24	7.1%
Total	339	100%
Classes		
First grade	88	26%
Second grade	56	16%
Third grade	74	22%
Fourth grade	78	23%
5th Grade	43	13%
Total	339	100%
Maternal Literacy		
Illiterate	114	33.6%
Primary Literacy	91	26.8%
Secondary Literacy	63	18.6%
Higher Education	70	20.6%
No response	1	0.3%
Total	339	100%

Awareness Before Menstruation

More than half of the participants 59.6% (202 people) were aware of menstruation before their first period (menarche), and the remaining 39.80% (135 people) were not aware. Out of the total number of participants (339), two (0.6%) refused to answer, for more clarification, refer to the Table 3.

Table 3 Distribution of Participants According to Pre-Menarche Awareness

Awareness	Frequency	Percentage
Yes	202	59.60%
No	135	39.80%
No response	2	0.60%
Total	339	100%

Information Sources for Participants About Menstruation Before Menarche

Among the 59.6% (202 people) of the informed participants who knew about menstruation, their mothers were their biggest source of knowledge and information 37.5% (127 people). The second most common source was relatives and friends, 19.8% (67 people). Health workers played the least important role in premenstrual awareness 0.3% (1 people), and mass media played 1.80% role in this regards.

History of Menstruation

In this section, the age of the first menstruation, the menstrual pattern, and the menstrual disorders among the participants are discussed.

Age of First Menstruation (Menarche)

The average age of the first menstruation among the respondents was 13.5 years. Most of the respondents 32.4% (110 people) at 14 years old and 26.3% (89 people) at 13 years old experienced their menstruation, and only one at 19 years old, which we consider an outlier. For more clarification, refer to Table 4.

Characteristics and Menstrual Patterns of Participants

The majority of the participants had a regular menstrual cycle: 77.6% (263 people). More than half of the participants (51.90%) had painful menstruation (dysmenorrhea). The majority of 70 to 80% (240 people) of their menstrual cycles occur within the normal range (between 21 and 35 days). More than half of the participants, 55.8%, had a normal number of menstrual days (3–7 days per month). And the limited number mentioned had Oligomenorrhea (less than 3 days) and Polymenorrhea (more than 7 days). For more information, refer to Table 5.

Symptoms of Menstrual Disorders Among Participants

In this research, the symptoms of menstrual disorders are divided into two categories: those occurring one week before menstruation and those occurring during menstruation. During menstruation, the majority of the participants had abdominal pain and heartburn 58.1% (197 people), back pain 56.1% (190 people), and leg pain 45.4% (154 people). In pre-menstrual disorders, mood changes 53.1%, skin vapors 45.2%, and breast tenderness and pain 31.2% were the most mixed figures which are shown in Table 6 (The total is not 100% because there were several symptoms in the study population).

How to Gain Knowledge About Menstruation and the Variables Affecting It

Participants' knowledge about menstruation, according to good, acceptable, and poor knowledge of menstruation respectively 33.6% (114 people), 63.1% (214 people), and 3.2% (11 people) have received.

Table 4 Age Distribution of Participants' Menarche

Age	Frequency	Percentage	Average of Monarch
9-year-old	2	0.60%	13.5 years old
10-years old	2	0.60%	
11-years old	8	2.4%	
12-years old	53	15.6%	
13-years old	89	26.3%	
14-years old	110	32.4%	
15-years old	47	13.9%	
17-years old	2	0.60%	
19-year-old	1	0.30%	

Table 5 Distribution of Participants' Menstrual Characteristics and Patterns

Variables	Frequency	Percentage
Menstrual cyclone		
Regular	263	77.6%
Unregulated	72	21.20%
Dysmenorrhea	176	51.90%
Duration of menstrual period		
Less than 21 days	55	16.20%
Between 21–35 days	240	70.80%
More than 35 days	36	10.60%
Duration of bleeding		
Less than 3 days	10	2.90%
Between 3–7 days	189	55.80%
More than 7 days	133	39.20%

Table 6 Distribution of Symptoms of Menstrual Disorders

Percentage (%)	Frequency	Symptoms of Menstrual Disorders One Week Before Menstruation
51.3	174	Mood changes
18.80	60	Headaches
23	77	Anxiety
31.20	106	Sensitive and painful breasts
8.3	28	Diarrhea
9.8	33	Vomiting and heartache
45.2	153	Steam (cutaneous acne)
15.40	52	Sleep disorders
Percentage (%)	**Frequency**	**Symptoms of Menstrual Flow Disorders**
54.20	82	Weakness
56.1	190	Low back pain
58.1	197	Ventricular pain and heartache
45.4	154	Pain in the legs

In this study, the academic year had an effective role in the level of student's knowledge about menstruation, The Pearson value of 0.005 was found to be significant. Based on this, the students of higher grades (fifth, fourth, and third) had good and acceptable knowledge of menstruation and less poor knowledge than other grades.

In addition to the academic year, there is a significant difference in the opinion about menstruation among related faculties It was reported with a Pearson value of 0.02. Accordingly, medical, stomatology, and midwifery courses had more acceptable and good knowledge about menstruation than other courses (Table 7).

Beliefs Related to Menstruation

Of the existing beliefs about menstruation among the participants, mostly 92.6% (314 people) had weak beliefs and only 7.4% (25 people) had good beliefs about menstruation.

In Table 8, 10 common beliefs about menstruation that were believed by the participants have been collected. Among these, four beliefs are more common among participants than other beliefs. Among them, 78.5% believed that you should not drink cold drinks during menstruation, 75.5% said to avoid spicy foods, 66.1% said to avoid bathing with cold water, and 50.7% said to reduce post-menstrual pains, they believed in marriage and belief the menstrual pain reduces after the marriage (Table 8).

Table 7 Distribution of Knowledge Levels Considering Faculty and Classes

Variables	Level of Knowledge			Chi-Square Test	
	Good Knowledge	Acceptable Knowledge	Poor Knowledge	Degree of Independence(df)	(P value) Pearson's value
Faculty					
Medical Treatment	11.2%	18.3%	1.8%	12	0.02
Stomatology	9.1%	15.00%	0.3%		
Public Health	2.7%	6.5%	0.0%		
Midwifery	4.7%	8.00%	0.0%		
Nursing	1.8%	7.4%	1.2%		
Anesthesia	2.7%	2.4%	0.0%		
Technology	1.5%	5.6%	0.0%		
Total	33.6%	63.1%	3.2%		
Class					
First grade	4.7%	19.8%	1.5%	8	0.005
Second grade	5.3%	10.9%	0.3%		
Third grade	9.4%	12.4%	0.0%		
Fourth grade	8.6%	13.0%	1.5%		
5th Grade	5.6%	7.1%	0.0%		
Total	33.6%	63.1%	3.2%		

Table 8 Distribution of Participants' Menstrual Beliefs

Beliefs	Frequency	Percentage
Bathing with cold water during menstruation has a negative effect on menstruation.	224	66.1%
Bathing with hot water during menstruation negatively affects it.	86	25.4%
Generally, bathing during menstruation is harmful to menstruation.	113	33.3%
Eating pickles during menstruation is harmful to menstruation.	256	75.5%
Menstrual pain decreases after marriage.	172	50.7%
Hot drinks hurt menstruation.	37	10.9%
Exercise during menstruation harms menstruation.	127	37.5%
During menstruation, dairy products, especially yogurt, should not be eaten.	115	33.5%
During menstruation, one should not drink cold drinks.	266	78.5%
Taking analgesic during menstruation to relieve menstrual pain has a negative effect on the menstrual cycle.	129	31.8%

Beliefs and Variables Affecting It

Age is one of the variables affecting menstruation beliefs. This finding indicates that those who were 20 years old have good beliefs 6.5% and those who are less than 20 years old, only 0.90% of them had good beliefs. This difference was statistically significant with Pearson's value (0.04). The level of the mother's education did not affect the level of participants' beliefs about menstruation (p-value equal to 0.4) (Table 9).

Practice Related to Menstruation Among the Participants

In total, the majority of participants had a good menstrual practice, 74.9% (254 people) and the remaining 29.20% (82 people) had a poor menstrual practice. These are the additional findings of the research that we pointed out to make our research more interesting (Table 10).

Discussion

The menstrual cycle is an acceptable indicator of the changes that occur during adolescence. The natural changes that occur in the uterus and ovaries are associated with changes in the physical, psychological, and social aspects of a woman's life.[8] In this

Table 9 Distribution of Participants' Beliefs and Variables Affecting

Variables	Good Beliefs	Weak Beliefs	Degree of Independence(df)	Pearson value (P value)
Age				
20 years and less	0.9%	28.5%	1	0.04
More than 20 years	6.5%	64.1%		
Total	**7.4%**	**92.6%**		
Mother's Literacy				
Illiterate	1.8%	32.00%	3	0.4
Primary Literacy	2.1%	24.6%		
Secondary Literacy	1.2%	17.5%		
Higher education	2.4%	18.4%		
Total	**7.4%**	**92.6%**		

Table 10 Function Related to Menstruation Among the Participants

Performance	Frequency	Percentage
Menstrual Bathing	256	75.5%
Use pad	288	85.00%
Use fragments	42	12.4%
Excretion of absorbents		
Wash and use again	34	10.00%
Dumping in garbage	296	87.3%

study, the average age of the first menstruation was found to be 13.5 years, which is similar to the studies conducted in Herat, Afghanistan (13 years).[13] Bangladesh (13 years),[13] Nigeria (12.9 years),[12] India (12.96 years),[11] Pakistan (12.7 years),[15] and Iran (12.5 years)[7] had a close similarity, the existing similarity is most likely based on common climatic, social, cultural and economic characteristics. In addition, one of the reasons for the small difference, a little late menstruation in girls, can be due to the poor economic, social, and cultural situation in Afghanistan and the difference in climate, which affects the growth and development of girls. In the present study, based on the current conditions of our country, the closure of girls' schools with the given time and facilities the age of university students was the best age to conduct this research. The results of the study showed that 59.6% of the respondents were aware of menstruation before their first period, which was slightly less than the findings of the study on North Indian University students[6] (65%). The existing difference is probably due to the high prevalence of the culture of silence about menstruation in the studied population. Also, this finding is related to the key findings of UNICEF about awareness before Menarche (50%) in Afghanistan.[18]

Among those who knew about menstruation before Menarche, there is no doubt that mothers (37.5%) were the largest source of information for their knowledge, which confirms the findings of studies conducted in Nigeria (48.4%),[17] Iran (37.4%)[6] and Saudi Arabia (58.8%).[9] The existing similarity is probably the product of the common culture and beliefs of the compared populations.

In the present study, the majority had regular menstrual cycles (77.6%, which is related to a study conducted in Nigeria (74.5%),[19] more than half of the participants in this study had painful menstruation (51.90%), which is consistent with a study conducted in India (48%) was similar,[18] the majority had a regular menstrual cycle duration (31–35 days) (70.80%) and it was similar to the menstrual cycle duration in the study conducted on the students of North Indian University of Medical Sciences (72%).[18] More than Half of the participants had normal bleeding time (55.80%), which was found by the study conducted in India (56.2%),[5] in addition, (2.9%) of participants had less Oligomenorrhea than the study in India (35.9%) and Polymenorrhea was received more than (39.20%) than the study in India (8%).[5]

In the present study, the participants had several symptoms of pre-menstrual disorders, such as abdominal pain and cramps (58.1%), back pain (56.1%), leg pain (45.4%), and mood changes (51.3%), skin rashes (45.2%) and sensitive and painful tears (31.20%). Considering the studies conducted in India and Nigeria, these figures were almost twice reported[5,11]. The existing differences are probably due to the differences in the psychological, social, educational, economic, physical, and cultural conditions of the participants.

The participants of the present study had different levels of knowledge, in order, 33.6% had good knowledge, 63.1% had acceptable knowledge, and only 3.20% had poor knowledge about menstruation. This finding of the study shows the existence of specialized knowledge of the participants about menstruation (96.80%), which is more than the study conducted on the students of Herat school (53.3%)[13] and the good knowledge of menstruation 33.6% of the study conducted in Prince Noura University of Saudi Arabia, good knowledge of menstruation (24.1%) was found more. Also, in the study that was conducted in Kermanshah, Iran, on educated people (64%), they had poor knowledge about menstruation.[6] The difference is probably due to having medical knowledge of Students who participated in this research.

Numerous studies show the role of age and education in the knowledge level of students. The present study also showed the effect of these two variables on the level of knowledge was statistically significant (P value=0.005) and (P value=0.02).

In a study entitled "Knowledge and Beliefs Related to Menstruation among the Students of Prince Noura University of Saudi Arabia". There were many beliefs and myths about menstruation. The majority of them (73.4%) had weak beliefs about menstruation. The most common belief among the participants was that drinking cold drinks during menstruation has a negative effect (89.6%), showering with cold water (85.4%), consuming pickles (64.4%), and Dairy products (27.6%) were considered harmful during menstruation. About (79%) believed that menstrual pains decrease after marriage.[8] In the present study, drinking cold drinks was considered the most common belief (78.5%), consumption of pickles (75.5%), showering with cold water (66.1%) during menstruation were considered harmful and 50–70% believed that Menstruation pains decrease after marriage.

In India, more than half of the students had shown certain beliefs about menstruation,[15] which is related to this study, 45% of the participants believed that one should not exercise during menstruation, and in the present study (38.1%) also believed that. In India (54.7%) there were some food and dairy taboos.[15] A brief reminder of the existence of false beliefs had existed in Iran and Pakistan.[6,14]

As shown in many previous studies, information and myths about menstruation are being transmitted from one generation to another by mothers regardless of their level of education.[6,8] In the present study, the literacy of mothers was none. It had no role in the girls' beliefs. But the type of beliefs had a significant relationship with increasing age (P-value = 0.04), which was conducted in a study among students of Saudi nursing was consistent.[9]

Practice related to menstrual hygiene was evaluated as positive and good (75%), bathing (75%), use of sanitary napkins (85%), and excretion of absorbents (87. 13%) which was done with the study. In Nigeria (75%), they used to take a bath, with the study done in India (78.9%) using sanitary napkins. They did and dropped it,[5] but it is different from the studies done in Iran, and Pakistan[6,7] and so the difference in the findings is probably due to the level of education and characteristics of the sampled population.

Conclusion

The study showed that female students at Kabul University of Medical Sciences had good and acceptable knowledge about menstruation. In addition, the students had good and positive practice towards menstruation. Despite the good knowledge and practice, the respondents' beliefs related to menstruation were poorer than what was expected from medical disciplines students. The most source of information was mothers, indicating the role of mothers in informing girls about menstruation. Half of them were aware of menstruation before menarche. Their frequent source of information was their mothers. Which highlights the provision of information and education for mothers and all females.

Disclosure

The authors report no conflicts of interest in this work.

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