

Assessment of Female students' Knowledge toward Menstrual Hygiene at College of Nursing, University of Kufa, Iraq

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ABSTRACT:

Background: Managing menstruation is typically dealing with menstrual flow and also in continuing daily activities like going to university, working etc. However, menstruation can place important difficulties in girls' access to health, education and future prospects if they are not prepared for effective menstrual hygiene. Also, inadequate menstrual health management may lead to health symptoms including urology and genital problem.

Female require more knowledge and attention during menstrual period due to effect of this period on their physical and psychological health in addition to accompanying pain. Therefore, maintain health of woman start from personal hygiene at this period.

Aims of the study:

To assess the students' knowledge toward management of menstrual hygiene among female students in nursing college/ university of Kufa

Methodology: A cross-sectional descriptive purposive study is conducted through the period of 20th February to 25th June 2021. The study was purposive (non-probability) sample of (175) students, whose age are between 18 - ≥ 24 Years old have been selected at college of Nursing/ University of Kufa in AL- Najaf City/ Iraq.

Results: the overall assessment of items was good knowledge. Likewise, the general assessment was (2.9029 ± 0.08519) related to students' knowledge toward menstrual cycle. In addition, the assessment of knowledge regarding menstruation hygiene management was good knowledge for all items. Also, the general assessment was (2.9133 ± 0.07285) .

Conclusion: the results found that these young females had adequate knowledge and their knowledge not requires to improve.

Recommendations: mothers are the main source of information regarding menstruation and menstrual hygiene, therefore proper education of mothers and adolescent girls is very important. It is good for students to have knowledge of menstruation and this makes them a reliable source for spreading knowledge about menstruation and about managing proper hygiene practices.

Keywords: Assessment, Knowledge, Menstrual Hygiene.

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INTRODUCTION

At the onset of puberty, many significant marks of change occur in transition period from girlhood to womanhood. It expresses of the reproductive maturity between the ages of 10-19 years. Among the behavioral, physiological and psychological changes at this phase, menstruation is one of the most noticeable. Menstruation is a natural health

condition that occurs to females which indicates the potential beginning for sexual reproduction ⁽¹⁾.

Menstrual cycle happening between two important events, the time when a period begins, called menarche, at age 8-9 years where it appears early and terminate at age 15 or 16 years. However, 12-13 years is the average age of menarche in most developing countries ⁽²⁾.

On the other hand, the time when period ends, called menopause. Menopause is a physiological process characterized by stop of menstrual cycle which occur naturally at age (45-55) years. When production of progesterone, Gonadotropins and Estrogen hormones decreases due to aging of the ovaries ⁽³⁾.

During menstruation, the uterus is the source of bleeding. The contraction of the uterus controls the amount of blood while the rhythm of the menstrual cycle is controlled by the hypothalamus and pituitary gland. The period starts from 3-7 days and repeats every 28 days, Delayed menstruation for 2-3 days is very common if the woman does not pregnant ⁽⁴⁾.

The inconvenience, embarrassment, and ignorance related to menstruation are recognized as key reasons for keeping girls away from school, both intermittently as well as permanently. In developing countries, menstruation forces girls to stay home from school for several days each month, arguments say, resulting in them missing up to an entire month of school days each year and decreasing the quality of their education and ultimately their life chances. In 28 May, was declared as the Menstrual Hygiene Day, Let's start talking about the menstrual cycle. The slogan that was raised in 2014 to increase health awareness and the importance of hygiene management during the menstrual cycle ⁽⁵⁾.

Managing menstruation is basically dealing with menstrual flow and also in continuing daily activities like going to university, working etc. However, menstruation can place important difficulties in girls' access to health, education and future prospects if they are not prepared for effective menstrual hygiene. Also, inadequate menstrual health management may lead to health symptoms including urology and genital problem⁽⁵⁾.

1.3. Importance of the study:

Female require more knowledge and attention during menstrual period due to effect of this period on their physical and psychological health in addition to accompanying pain. Therefore, maintain health of woman start from personal hygiene at this period.

Lack of healthy menstrual health management elements (sorbents) Poor water, sanitation and hygiene (WASH) facilities in schools, inadequate puberty education and lack of hygienic menstrual health management items (absorbents) cause girls to experience menstruation as shameful and uncomfortable⁽⁶⁾.

Several health symptoms involving the urinary and reproductive tracts can develop due to insufficient knowledge of menstrual hygiene management. International attention has focused on menstrual health management currently, spearheaded through work to improve WASH in schools, has focused on the need for dignity and privacy, on raising awareness to break the silence and stigma, making safe and effective menstrual health management absorbents accessible, and improving the school WASH environment. The latter includes separate water and cleansing materials, toilets for girls, and safe disposal of soiled materials⁽⁶⁾.

AIMS OF THE STUDY

To assess the students' knowledge toward management of menstrual hygiene among female students in nursing college/ university of Kufa.

METHODOLOGY

2.1. Study Design: the descriptive, cross-sectional study design was performed from the (24th February 2021-20th June 2021).

The main objective of this study is to identify

1- To assess the menstrual knowledge and management hygiene among female students of medical group college.

2.2. Setting of the study: The study was conducted in college of nursing at University of Kufa.

2.3. Sample of the study: A non-probability sampling technique, purposive sample. The main goal of purposive sampling is to focus on specific characteristics of a females that are of interest, which will best assist researcher to answer the questions of research. That include (175) student from college of Nursing at University of Kufa according to following criteria:

1- Select undergraduate females at University of Kufa.

2- They agree to participate in study.

Inclusion and exclusion criteria This study focuses on evidence relating to female (aged 18- \geq 24 years) girls' knowledge about puberty, menstruation, and menstrual hygiene. Evidence is included about both the content and source of girls' knowledge as well as the approaches used to deliver this knowledge.

2.4. Instrument of the Study: By reviewing related literatures and studies the questionnaire was prepared depending on ⁽¹⁾⁽⁴⁾ it was included three main parts.

Part I/ designed to collect socio-demographic data of participants, it includes their age, stage of education, marital status, your period affects your attendance at college, and source of knowledge.

Part II/ To assess females' knowledge regarding the menstrual cycle, part II was containing (7) items. Answers of participations were ranked into to 3-point Likert scale, which rated from (3- I know, 2- Not sure, 1- I don't know).

Part III/ To assess females' knowledge regarding the menstruation hygiene management, this part was containing (6) items. Answers of participations were ranked into to 3-point Likert scale, which rated from (3- I know, 2- Not sure, 1- I don't know).

Data was collected through self-report questionnaires that were distributed to female student online in google form. Respondents in a survey answered the questions based on demography, knowledge of menstruation, source of information and knowledge of practices towards menstruation. Data was then manipulated by the Statistical Package of Social Science SPSS version20.

2.5. The validity of study: Validity, the ability of collect the necessary data through questionnaire. Pilot study: Current pilot study was objective to obtain evidence about reliability of questionnaire, recognized ability of applied instrument and estimate the required time to collect data. By taking sample of fourteen respondents from various stages within one week.

2.6. Reliability: The Cronbach’s Alpha coefficient test was used to definite the reliability of the study questionnaire. The value of Cronbach’s Alpha coefficient test which was (0.87) for knowledge scale. The result showed the acceptable reliability to begin data collection. Data Collection: Participation and agreement in this study was voluntary obtained from each participant after clarified the subject of study and its objectives besides, the instructions on the way of how filled questionnaire with kept confidentiality of participants secret. Collection data were throughout period from 20th March to 20th May 2021.

2.7. Statistical analysis:

Data collected were organized and tabulated by using software application, Microsoft Excel 2010 and the analysis was assumed with the help of Statistical Package for the Social Sciences (SPSS), version 20. Descriptive statistics were used to describe and summarize the were described sample’s demographic characteristics by using frequency, mean and standard deviation analysis.

To assess the level of knowledge:

level	Assessment of knowledge
1-1.6 =	low knowledge
1.7-2.3 =	fair knowledge
2.4 - 3 =	good knowledge

RESULTS:

Table (1): Distribution of Socio-demographical characteristics of students N=175

Variables		Study Sample (N=175)	
		F	%
Age groups	(18-19) years	19	10.8
	(20-21) years	63	36
	(22-23) years	79	45

	(≥24) years	14	8
Stage of Education	1st stage	31	17.7
	2nd stage	28	16
	3rd stage	27	15.4
	4th stage	90	51.4
Marital Status	unmarried	157	89.7
	Married	18	10.3
Your period affects your attendance at college	yes	81	46.2
	No	93	53.1
Source of knowledge	mother	68	38.8
	Friends	3	1.71
	physician	10	5.7
	reading	34	19.4
	internet	60	34.2

Table (1) shows the distribution of personal characteristic when age group (22-23) years was (45%). While, highest percentage (51.4%) of them were in fourth stage. depending on their marital status (89.7%) of them were unmarried, also (53.1%) of the participants their period not affects on attendance at college. Concerning the source of knowledge (38.8%) of them have knowledge from their mother.

Table (2): Knowledge of the students regarding the menstrual cycle

N	items	Mean ±SD	Assessment
1.	menstruation It is a normal phenomenon	2.99±0.076	Good knowledge
2.	Menstruation is a Physiological process	2.77±0.530	Good knowledge
3.	Hormones are causes of menstruation	2.90±0.350	Good knowledge
4.	Uterus as the source of bleeding	2.98±0.184	Good knowledge
5.	Menstruation is usually ceased at 45-55 years	2.98±0.184	Good knowledge
6.	normal flow of blood 3-7 days	2.87±0.415	Good knowledge
7.	interval period between two normal menstrual cycle is 26-30 days	2.83±0.456	Good knowledge
General assessment		2.9029±0.08519	Good knowledge

(1-1.6= low knowledge, 1.7-2.3= fair knowledge, 2.4-3= good knowledge)

Table (2) demonstrates the assessment of students' knowledge related to menstrual cycle, the major assessment of items was good knowledge.

Likewise, the general assessment was (2.9029±0.08519) which indicates good knowledge depending on mean of all items.

Table (3) Knowledge of female students regarding menstruation hygiene management

NO.	Items	Mean ±SD	Assessment
1.	Did you know that sanitary pads should be used during menstruation	2.99±0.076	Good knowledge
2.	Did you know that sanitary pads should be changed every 4-6 hours a day	2.83±0.494	Good knowledge
3.	Did you know that pads of any kind should not be reused?	2.82±0.544	Good knowledge
4.	Do you know that the hygiene of the genitals should be taken care of during the menstrual cycle	2.93±0.332	Good knowledge
5.	Do you know that you should take a break during your period?	2.93±0.350	Good knowledge
6.	Do you know that there are restrictions during menstruation (visiting places of worship, touching religious items or praying)	2.98±0.169	Good knowledge
General assessment		2.9133±0.07285	Good knowledge

(1-1.6= low knowledge, 1.7-2.3= fair knowledge, 2.4-3=good knowledge)

In current table, the assessment of knowledge regarding menstruation hygiene management was good knowledge for all items. Also, the general assessment (2.9133±0.07285) showed good knowledge.

DISCUSSION:

Menstruation is a compound process which including many different hormones, the nervous system and the sexual organs. Regular exercise and

keeping fit and healthy can help to regulate the menstrual cycle. Menstruation is an awkward subject to talk about - especially with preteen girls, who seem to get embarrassed easily. Inadequate knowledge and poor personal hygienic practices during menstruation may lead to various gynecological problems in the reproductive life of females ⁽⁷⁾.

Table (1) found that the high percentage (45%) of the participants age ranged from 22-23 years old, that explain the official age of study at the university. The majority of participants (51.4%) were from fourth stage, this demonstrates that the questionnaire was easily distributed to the same stage for the researchers.

Regarding the marital status, table one shows the highest percentage (89.7%) of participants were unmarried. This indicates that the majority of females prefer to marry after completing university studies. Also, this result reflects the fact that people first seek their own income and personal status in order to be personally satisfied, and for this reason, they begin to study for universal education before committing to marriage. Along the same line with the results of study done by Gultie that found (96.7%) female were single while (3.3%) were married⁽⁸⁾.

According to the results (53.1%) toward period which effects on attendance at college (see Table-1), there seems little indication of females staying home during menstruation. Where there can be some effect of menstruation on females' education. This does not mean that absence due to menstruation is not worth preventing; but it does suggest that such findings might be exaggerated. while, in study by Adhikari that found (70.7%) girls do not go to schools during their period ⁽⁴⁾.

Furthermore, majority (38.8%) of them reported having received information about menstruation from unreliable sources (mother), while

(5.7%) of females receive information from reliable source (physician). Likewise, the results of study done by Subhash that showed the most important sources of the information were mothers (71.33%)⁽⁹⁾.

Table (2) represents the students' knowledge regarding the general information about menstruation as a physiological process, normal phenomenon and resulting from hormonal change. This result indicate that menstruation related to the study and interest of nursing. In addition to average flow and duration of cycle they seem to be have adequate knowledge. Contrary to the results found in the study done by Maji which showed varying percentages of girls' knowledge toward menstruation⁽⁷⁾.

In current study that conducted at the University of Kufa showed that the female students had good knowledge about the uterus as a source of bleeding, and the age of menstruation cessation. On the other hand, the duration of the normal flow of blood and the interval between two normal menstrual bleeding periods. Likewise, the study carried by Neupane revealed that two third of the adolescent girls had adequate knowledge on menstruation and three fourth adolescent girls had good menstrual hygiene practices

Table (3) showed the overall knowledge toward menstruation hygiene management, which found good knowledge. In addition to assessment knowledge toward using of sanitary pads during menstruation the results found good knowledge.

Good knowledge about religious restrictions especially prayer. Similarly, these findings support previous study done by Thakur, that shows the majority (97.6%) of the participants have some kind of restrictions on them during the menstruation and most of these are religious restrictions rather than physical or social restrictions (10.8%)⁽¹⁰⁾.

CONCLUSIONS

Menstruation and menstrual hygiene are important for all females to maintain healthy life. this study revealed that the majority of participants have adequate knowledge on menstruation and most of them have good knowledge toward menstrual hygiene management.

The overall knowledge of female students was good knowledge regarding menstrual cycle, whereas the overall was good knowledge toward menstrual hygiene management. So, we found that the knowledge of these young females not requires to improve.

Though this study is done in a small sample, but we are successful to find out the standard of the young student females of Al-Najaf. To the best of our knowledge this is the first research done in this area.

RECOMMENDATIONS:

- there is need of support programs for the females to improve their knowledge as well as for encouraging safe hygienic practices during menstruation.
- In current study, the main source of information are mothers regarding menstruation and menstrual hygiene, therefore proper education of mothers and females is very important.
- It is important for females to understand menstrual patterns, to be able to differentiate between normal and abnormal menstruation, and to know how to assess pathological condition.
- We should make Health workers / Parents / Teachers to motivate and improve the knowledge and practices about menstruation of these girls. And should also focus on this topic by giving different programs on televisions, Radios and Newspapers.

- Conducting ongoing researches for females to match their knowledge of the menstrual cycle with daily practices.

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