

## Knowledge and Practice of Adolescent Females about Menstruation in Baghdad

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### Abstract

**Background:** Menstruation is the periodic and cyclical discharge of blood, mucus and cellular debris from the uterine mucosa, which occurs due to progesterone withdrawal after ovulation in non-fertile cycles. Menstruation and menstrual practices are still clouded by taboos and socio-cultural restrictions resulting in adolescent girls remaining ignorant of the scientific facts and hygienic health practices, which sometimes result into adverse health outcomes.

**Aim:** To determine the level of knowledge of adolescent females about menstrual cycle and their practice and restrictions during menstruation.

**Subjects and method:** A descriptive cross sectional study was conducted to involve 1084 female students aged 15-21 years in Baghdad from 10 randomly selected secondary schools in different districts of Baghdad during the period April the 10<sup>th</sup> through May using direct interview questionnaire, each student was interviewed separately & privately, scoring for knowledge was calculated using Excel, and knowledge was classified as good or poor.

**Results:** Good knowledge had been seen in 36% of them, as the mothers formed the major source of knowledge (74%), Food quantity or quality during menstruation was not changed in 38%, while 21% of girls consume fruit & vegetables during menstruation.

84.2% of the girls restrict their physical activity while menstruating.

22.6% of the girls did not take a bath during menstruation at all while 13.3% took bath after the 1<sup>st</sup> day. Analgesics were used without prescription in 54% of the girls during menstruation, 14% required medical help for various menstrual causes and Absenteeism from school from 23.6% from total.

**Conclusion:** The knowledge regarding menstruation was poor in the majority of the girls, and mothers were their major source of information, certain practices were restricted during menstruation such as bathing and physical activity and absenteeism from school was considerable.

**Keywords:** Knowledge; Practice; Adolescent; Females; Menstruation

### Introduction

Adolescence is defined as the period of transition from childhood to adulthood & the World health organization has defined adolescence as the age group of 10-19 years. Adolescence can be divided into three stages, early adolescence (11-14 years of age, middle adolescence (15-17 years of age and late adolescence (18-21 years of age). The onset of menstruation is one of the most important changes occurring among girls during the adolescent years [1,2].

Handling menstruation is considered a major challenge before every adolescent girl, which is a normal body function in females [3].

The profile of the woman's reproductive health is greatly influenced by the girl's reaction to menarche, her beliefs and attitude towards menstruation, and more important her behaviour during it [4].

Girls are affected by old women tales, thus, early in the first few years during the puberty period; a young girl is conditioned to the idea of dysmenorrhea. She may be discouraged from somatic, outdoor activities, discontinue bathing, and she may be encouraged to stay at home for a day from school [5].

Regarding religious restrictions during menstruation, a menstruating Muslim woman is not allowed to enter the mosque for prayer, touch the Qur'an, or fast in Ramadan [6].

Young patients frequently have difficulty assessing what constitutes normal menstrual cycles or patterns of bleeding. Girls may be unfamiliar

with what is normal and may not inform their parents about menstrual irregularities or missed menses. Some girls will seek medical attention for cycle variations that actually fall within the normal range. Others are unaware that their bleeding patterns are abnormal and may be attributable to significant underlying medical issues with the potential for long-term health consequence [7].

### Subjects and Method

A descriptive cross sectional study was carried out in Baghdad enrolling 1084 girls, randomly selected from 10 secondary schools aged 15-21 years. During the visit of each school, the researcher introduced herself to the principal and the purpose of the visit was explained then the permission of the ministry of education was shown to her, the approval of the principal was taken so that no interruption would affect the sessions of the students.

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The researcher with the help of one of the teachers was lead to the classes and there again the researcher introduced herself to the students and the purpose of the visit and the way of the interview was explained to them. A direct interview was done by the researcher herself with each student separately and privately using a questionnaire composing of questions regarding knowledge and practice during menstrual cycle, which took around 10 -15 minutes, and at the end of the interview the participant was thanked for cooperation. The response rate was 100%. Scoring for knowledge was calculated using Excel Microsoft office 2013, and the level of knowledge was graded as good or poor.

### Discussion

The study revealed a good level of knowledge regarding menstruation in 36% of secondary school female students in Baghdad (Figure 1), which was higher when compared with the study done in Osun State, Nigeria involving 400 college student females with mean age 14-18 years during January 2010 where the knowledge was only 29% [8]. While for the 130 student girls in Haryana, India during 1999, their knowledge regarding menstruation was classified as poor [9].

The girl’s knowledge, whether good or poor, was obtained from their mothers among 74% of them (Figure 2), which was comparable to a study done in India during 2011 on 117 adolescent girls where mothers formed 80.4% of the residential areas [10].

While mothers formed only 36.1% in Haryana and 37.5% of the source of information in India study on 160 secondary school girls during April 2008 [9,11].

For the rest source of information in the present study, 10% of girls depend upon themselves to get information, 8% of girls got their information from school text books which forms around one to nine folds when compared to mothers as a source of information, such percentage reflects that school text books are deficient and does not answer all questions an adolescent might need to know or practice.

Older sisters formed only 4% of the source of information for girls whom had an old sister. In Figure 2 such a very low percentage when compared to mothers which form almost 20 folds not like the east Delhi study where older sisters were more influential in a 22.4% (mothers formed only 2 folds in 41%) as source of information [12].

Friends were the first informant in about 31.8 % of 453 adolescent girls in Uttarakhand in India during 2012, and also in Meghalaya district of India involving 100 adolescent girls in which friends formed (50%) as the main contributors for getting the knowledge followed by mothers (36%) and aunts/relatives (19%) [13-16].

In the present study, 38% of girls make neither change of food quality nor quantity during menstruation while 21% of them consume more fruits & vegetables as they believe that such food will replenish the lost blood during menstrual flow.

“Hot drinks are helpful to alleviate pain during menstrual cycle” , 12% of the girls said ,and 3% of them said that sour & spicy food should be avoided during menses because they believe that such food will disturb or stop the menstrual flow (Figure 3).

Such belief was also present in Singur, West Bengal in which 50% of the 160 adolescent girls did not consume sour food during menstrual flow and in 56% of girls of Nair whom did not consume spicy food [11,12].

In another study also done in West Bengal in 2010 more than half

of Muslim girls involved in the study make restriction of certain types of food during menstruation [14].

As far as exercise, 84.2% of the adolescent girls restricted their physical activities during menstruation (Figure 4) to alleviate pain such practice completely lacks the information in that exercise seems to reduce menstrual symptoms, including pain [17].

Such percentage was much higher (about double) than the study done in Singur west Bengal in which (42.65%) of the 160 involved girls did not play, (33.82%) girls did not perform any household work, during menstruation [11]. The rural area of east Delhi percentage approximates the present study percentage (70%) of the 251 involved adolescent girls were restricted from participating in household

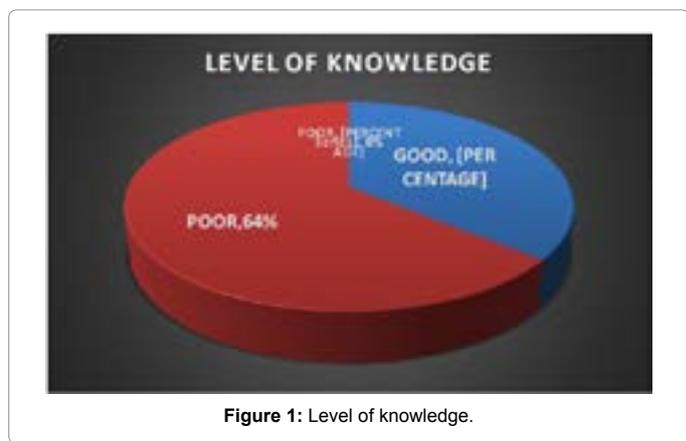


Figure 1: Level of knowledge.

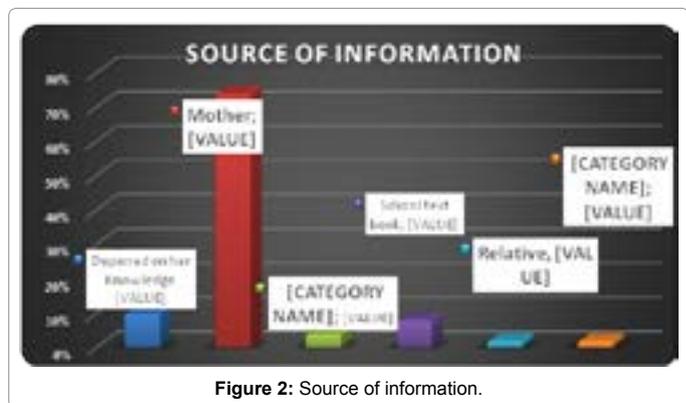


Figure 2: Source of information.

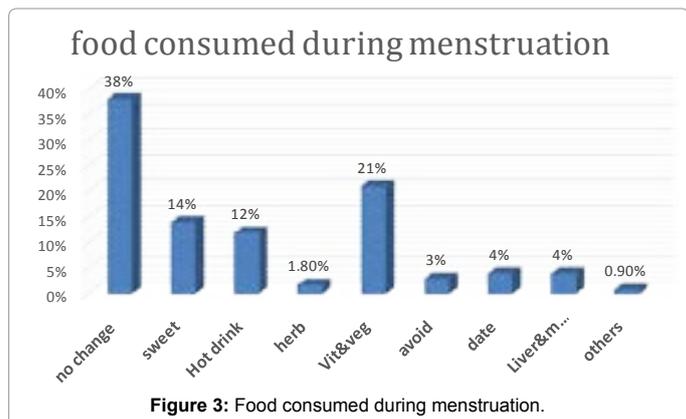


Figure 3: Food consumed during menstruation.

activities, while only 8% of the Brazilian girls restrict their activity [12,15].

In a study done in Tehran, the capital of Iran involving 250 adolescent girls, about 33% of the students avoided any physical activity or even mild exercise during menstrual period [18].

22.6% of the girls in the present study do not take a bath during menstrual cycle at all while 13.3% do not bathe during the 1<sup>st</sup> day only (Figure 5) a practice justified as “bathing during menstrual flow is harmful to them” which is the reverse of what Bharthi et al. have found in that there is a decrease in sickness absenteeism and in the pain during the first day of menstruation if sitting in tub with hot water [19].

Upon comparison with Nair study in East Delhi, Only 1.6% avoided bathing during menstruation [12]. While for the study done in west Bengal, India, 85.7% of the girls had daily bath and the rest felt that bathing should be restricted in the first two days of menstruation as bathing increases the menstrual flow [14].

Only 32% practiced the personal health taking behavior, such as taking a bath in the adolescent girls in Tehran [17]. Regarding the use of analgesia, 54% of the girls in the present study use analgesia without prescription to relieve menstrual cycle pain (Figure 6).

Such a high percentage is of major concern, since in Iraq all medications apart from narcotics are over the counter (used without prescription) endangering adolescent girls for overuse and side effects. For adolescent girls in Haryana, India, the use of analgesics among them was 22.4% [9]. While in a study in Morocco 1999 on

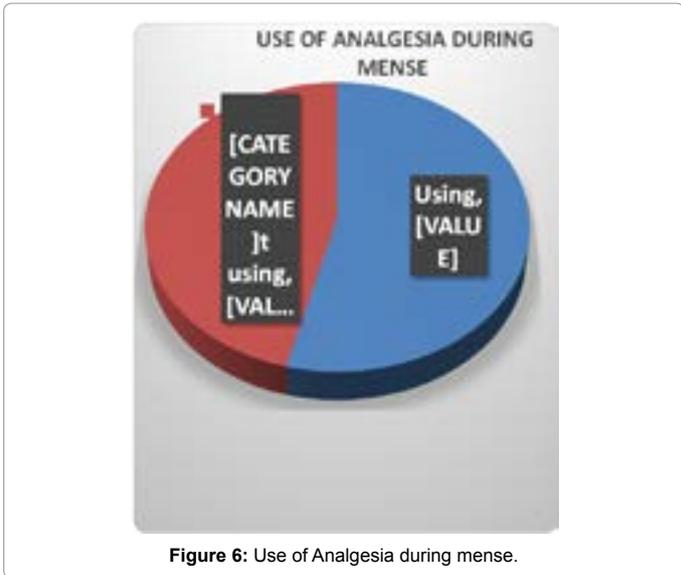


Figure 6: Use of Analgesia during mense.

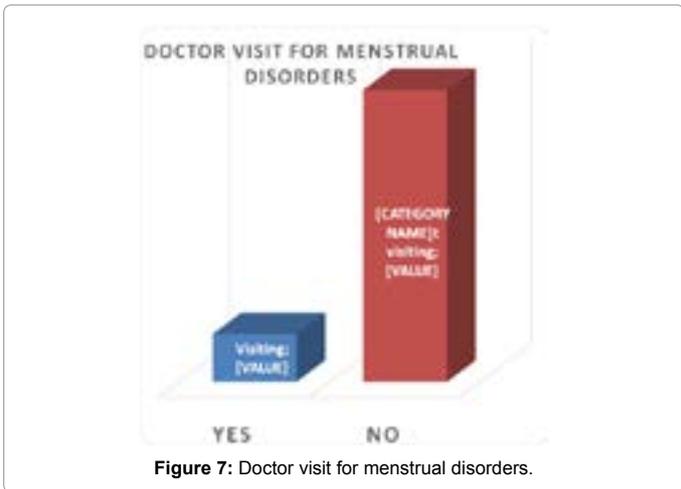


Figure 7: Doctor visit for menstrual disorders.

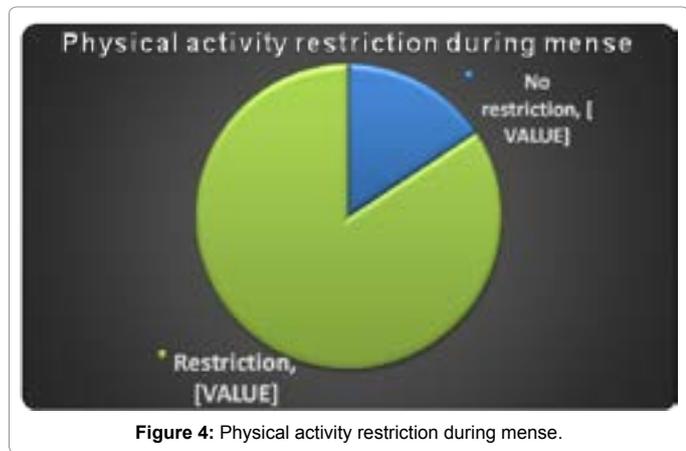


Figure 4: Physical activity restriction during mense.

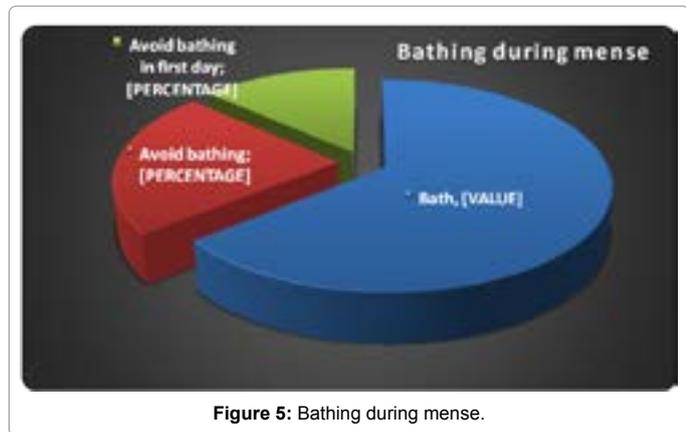
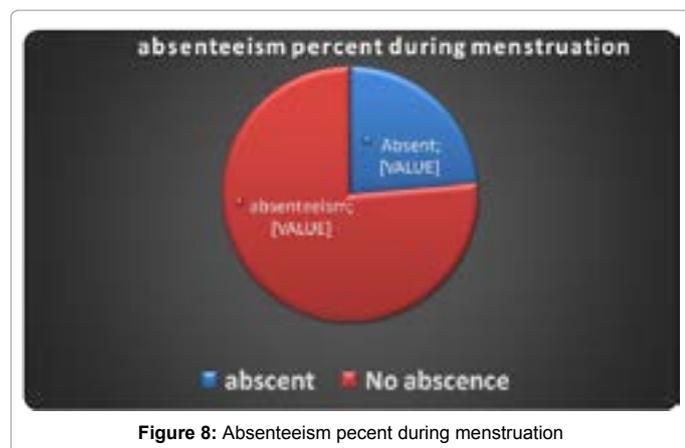


Figure 5: Bathing during mense.

adolescent girls analgesic use was 21% for dysmenorrhea associated with menstruation [15]. Over 67% of the girls in Tehran reported to take palliative medicine for their menstrual pain without prescription by a doctor [17].

Only 14% of the girls sought medical help for various menstrual aberrations in the present study. Figure 7, the lack of knowledge about expected changes in menstrual function during puberty make it difficult for them to separate normal age-related changes in bleeding patterns from menstrual morbidity, so they may pay unnecessary medical visits (Figure 7). In comparison to (10.8%) amongst Students in Urban Area of Ile-Ife, Osun State, Nigeria whom sought medical help, while only 5.3% consulted a doctor in Haryana adolescents [8,9].

Absenteeism because of dysmenorrhea was 23.6% in the present study (Figure 8), which is around two folds of the reported school absenteeism in Nigerian adolescents due to dysmenorrhea (12.5%) [8]. In Singur West Bengal, (16.18%) of girls did not attend school. (11), 26% of Turkish girls miss school while in Morocco and Mexico absenteeism occurred in 7% and 4-20% of girls respectively [15]. In the study in Iran fifteen percent of the adolescent girls stated that dysmenorrhea has interfered with their daily life activities and caused them to be absent from school [17].



School absenteeism was the highest in Omani high schoolgirls (45%) due to dysmenorrhea [20]. While in a study done in Nepal including 4 different schools, absenteeism was of 53% for hygienic causes and embarrassment not dysmenorrhea [21].

## Conclusion and Recommendation

Since the knowledge regarding menstruation was poor in the majority of the girls, and mothers were their major source of information it is recommended to increase their knowledge by Health education on menstrual cycle targeting mothers, and also to include more details about the normal menstrual cycle variation, hygiene and activity during menstruation in the school text books curriculum to improve the students' knowledge and ameliorate their practices which were in most of them away from scientific facts but mainly cultural in nature.

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