Information, Beliefs and Attitudes towards Menarche in a Sample of Adolescent Student Girls in Baghdad city

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Abstract:

Back ground: Menarche is the first menstrual period in the females of human beings and it is a later event which occurs variably after the peak of total body growth spurt has passed, from both social and medical perspective it is often considered as a central event of human puberty, as it signals the possibility of fertility.

Objectives: To find out the information, beliefs and attitudes towards menarche in a sample of adolescent student girls in Baghdad city.

Subjects & Methods: A cross sectional was conducted in Baghdad during the period from the 20th of February to the 30th of April 2008.

A convenient sample of 992 adolescent girls from the 7th to 12th educational grades were chosen from (intermediate and secondary schools) selected from Al- Karkh and Al- Russafa areas, in Baghdad**.** Collection of data was achieved by direct interview.

Results: The study showed that (87%) of girls had attained menarche, of these (61.3%) had information about menarche. The mother was the main source of information and she was the first who informed about menarche.

Conclusion: Two thirds of the menstruating girls had knowledge about menarche before they attain it. Shyness and unavailability of information were the major causes behind absence of knowledge.

Key Words: Menarche, adolescent, information, beliefs& attitudes

Introduction:

Adolescence in girls is a turbulent period; include (stressful) events like menarche, considered as a land mark of female puberty, negative responses such as fear, shame, anxiety and depression are more common, myth mystery and superstition have long enveloped the fact about menarche [1].

The combination of Eastern traditional culture and negative attitudes of school officials has strong impact on the discussion of the lack of sex education and related issues for youngsters in schools, mass media perception and beliefs about dysmenorrheal and menstrual hygiene in the rural area [2]. Other health hazards due to ignorance of physical, emotional pubertal adolescents health are studied in the developed countries [3], but there are few strategies in these regard in developing countries[4,5], especially in Islamic societies. As many individual physical, mental and social problems emerge during this period so the quality of health education must be emphasized for health promotion in developing countries [6].

This study is conducted to find out the information, beliefs and attitudes towards menarche in a sample of adolescent menstruating and non menstruating student girls in Baghdad city

Subjects Methods:

A Cross-sectional study was carried out during the period from the 20th of February to the 30th of April 2008.The sampling procedure was a convenient non randomized sampling, taking in consideration the security situations, the data was collected from student girls from 15 selected schools in Baghdad,in the 7th educational to 12th educational grades .

Collection of data was achieved by direct interview using

A questionnaire form containing information about the demographic variables ,information about menarche, the causes of lack of information, the source of information, the awareness about other pubertal changes (breast enlargement, axillary and pubic hair appearance and the general body growing) were also asked about .For the girl who had information about menarche, she was asked about the definition of menarche, the investigator depended on the medical definition of menarche: (menarche is the first menstrual period, marked by the passage of blood flow for 4-5 days from the uterus per the vagina each 28 days or monthly, which commonly starts two years after the first sign of puberty)[7].

Before the interview the aim of the study was explained, the permition of the participants and school directors were sought, privacy was taken into consideration and at the end of each interview the participant was thanked for their cooperation. The response rate was 100%.

Simple descriptive statistics (frequency, percentage, mean and range) were used.

Results:

The total number of the students who participated in the current study were 992, of these 864 (87.1%) had attained menarche and 128 (12.9%) did not.

The mean age of the girls was 15.03 ± 1.80

(range 12-22) years, the mean age of the non menstruating girls was 12.97 ± 0.78 (range 11-16) years, the mean age of the menstruating girls was 15.03 ± 1.80 (range 12-22), the mean age of menarche was 12.07 ±1.33 (range 9-17) years.

Two (1.6%) of the non menstruating girls were married and 26 (3.0%) of the menstruating girls were married.

Regarding the information about menarche, the present study showed that 54 (42.2%) of the non menstruating girls didn't have information about menarche and 74 (57.8%) have information, from the last only 13 (17.6%) defined menarche correctly and 61 (82.4%) did not while 530 (61.3%) of the menstruating girls have information about menarche.

Table (1) shows that, from the total student girls who have information about menarche, whether menstruating and non menstruating, the mother is the major source of information in 357 (59.1%)

The distribution of the sample according to the awareness about other pubertal changes in the menstruating and the non menstruating girls is shown in **table (2.).**

Only (12%) of the girls (menstruating and non menstruating) had awareness about other pubertal changes other than menarche like breast enlargement, auxiliary and pubic hair appearance and body contour change, the awareness was (13.3%) in the menstruating girls before they attained menarche and (3.1%) in the non menstruating girls.

Table (1):- Distribution of the sample according to the source of information about menarche

Source of information	Menstruating	Non Menstruating	Total %
The mother	311 (58.67%)	46(62.16%)	357 (59.1%)
The older sister	125 (23.58%)	10(13.51%)	135(22.4%)
The friend	58 (10.9%)	8 (10.8%)	66 (10.9%)
The relative	10 (1.88%)	5 (6.75%)	15 (2.5%)
The teacher	5 (0.94%)	3 (4.0%)	8 (1.3%)
The doctor	3 (0.5%)	1 (1.3%)	4 (0.7%)
Others: (Tv, magazine, school, curriculum)	18 (3.4%)	1 (1.3%)	19 (3.1%)
Total	530	74	604

Table (2):- Distribution of the sample according to the awareness about other pubertal changes

Awareness about other pubertal change	Menstruating girls	Non Menstruating girls	Total %
Yes	**115 (13.3%)**	**4 (3.1%)**	**119 (12.0%)**
No	**749 (86.7%)**	**124 (96.9%)**	**873 (88.0 %)**
Total	**864**	**128**	**992**

From (74) non menstruating girls who have information about menarche, 58 (78.4%) student girls consider menarche as an important event, due to a number of causes: 20 (34.4%) consider menarche important for them because it is a positive, necessary, maturity step 15 (25.9%), because it is a social transformation step, 8 (13.8%) due to all above causes. Those 16 (21.6%) who don't consider menarche important event, 3(18.75%) consider other signs of growth are more important than menarche and 13 (81.85%) girls have other explanations like customs or they do not care. Regarding the causes of absence of information in the menstruating and non menstruating girls, are summarized in **table (3).**

Concerning the first person who informed about menarche and the first reaction at menarche, are shown in tables (4) & (5) respectively.

Table (3):- The distribution of the sample according to the causes of lack of information about menarche

causes	Menstruating girls	Non Menstruating girls	Total %
Shyness	**155(46.4%)**	**18(33.3%)**	**173(44.6%)**
No information	**89 (26.6%)**	**14 (25.9%)**	**103 (26.5%)**
Do not care	**33(9.9%)**	**5(9.3%)**	**38(9.8%)**
Ignorant	**14 (4.2%)**	**5 (9.3%)**	**19 (4.9%)**
Customs	**11 (3.3%)**	**1 (1.8%)**	**12 (3.1%)**
Multiple causes	**32 (9.6%)**	**11 (20.4%)**	**43 (11.1%)**
Total	**334**	**54**	**388**

Table (4): The distribution according to the first who informed about menarche in menstruating girls.

The first informed	No.	%
Mother	626	72.5
oldest sister	148	17.1
No body	38	4.4
Relatives	27	3.1
friend	15	1.7
Teacher	6	0.7
Others(doctor, husband)	4	0.5
Total	864	100

Table (5):- The distribution according to the first reaction to menarche in the menstruating girls.

The first reaction	No.	%
Normal	257	29.8
Shyness	215	24.9
Scared	200	23.1
Happiness	45	5.2
Surprise	31	3.6
Depression	22	2.5
Mixed feelings	94	10.9
Total	864	100

From the total menstruating girls 523 (60.5%) percept menarche as a normal process, 297 (34.4%) as a disease symptom and 44 (5.1%) as a life threatening disease.

Out of 864 menstruating girls who have been asked about the role of the school about information towards menarche, 482 (55.8%) believe that the teacher should be the source of information about menarche and 321 (37.2%) believe that, the curriculum should be the source of information about menarche, 662 (76.6%) believe that, there is enough information about menarche in their schools, 100 (11.6%) believe that there is a need for more information about menarche.

Regarding the relation of menarche with entering real sexual maturity, conception, marriage time, 661 (76.5%) of the menstruating girls consider menarche as a sign of entering real sexual maturity, 431 (49.9%) believe that there is no relation between menarche and ability to conceive and 158 (18.3%) consider menarche as a sign of reaching the age of marriage. More than half of the menstruating girls 502 (58.0%) use medical treatment during menstrual cycle and the source of information about this medical treatment is the mother in 301 (59.96%) of cases, 69(13.7%) the doctor, 46 (9.2%) the older sister, 41 (8.2%) self invented, 18 (3.6%) the television and magazine, 17 (3.4%) friends, 7 (1.4%) the relatives, 3 (0.6%) the teacher.

Discussion:

The current work reveals that the mean age of menarche is 12.07 ± 1.33 with a range of 9-17 years. This figure is nearly similar to that reported in Baghdad by Al-Qadhi 2002, which was 12.61±1.74 with a range of 9-16 years [8].

It also reveals that (61.3%) of girls had information about menarche before they attained it, this finding is similar to that reported by Tiwari et al in India 2006 who stated that 62.7% of girls had information about menarche [9], but higher figure were reported by other workers: Moawed in Saudi Arabia 2001 and Pelon in Bangladesh 2002 who found that (43.7%) and (38%) of girls had knowledge about menarche respectively [10, 11].

Pelon showed that, the lack of knowledge about reproductive health and basic physiology among young people reflects the lack of knowledge about the risks associated with health of their bodies (Sexually transmitted infections, early child bearing age) and how to avoid it [11].

Out of the total who participated in this study, 128 (12.9%) of girls did not attain menarche, more than half of them (57.8%) have knowledge about menarche and this knowledge is right in 17.6% of the girls, in comparison with another community based cross sectional study carried by Parvathy et al in India 1998 who found that 71% of girls have knowledge about menarche and 2.5% of them had right knowledge [12], and these differences may be

due to different community, custom and beliefs.

In the present work, the mother was the main source of information about menarche in (59.1%), this finding is in correspondence with that reported by Pandit et al in india 2006 that the mothers were the main source of information in (60.7%) [13], but disagrees with Al-Gilany et.al., in Egypt 2005, who reported that the mass media is the main source of information about menarche [14], and the findings of the Indonesia Young Adolescent Reproductive Health Survey (IYARHS) 2002-2003 which showed that the friend is the major source of information about menarche in (55%) [15], the authors related this result to the limited communication between the parents and children. Another study carried out by Moawed in Al-Saudi Arabia 2001 found that (34.2%) of girls stated that the mother was the source of information about menarche[10].Achmad and Westley in Indonesia 1999 found that less than 30% of young adults spoke with the parents about their reproductive and subjective matters [16].

In this study, the teacher had low percentage (1.3%) as a source of information about menarche, which disagrees with the results found by Chin-Yu et al, in Taiwan 2007, who found that (73%) of girls had their information about menarche from the teacher [17].

In the current study (60.5%) percept menarche normally, this finding coincides with the result of Tiwari et al 2006 in India who found that (60%) of the girls percept menarche normally [9].

In this study, the first who is informed about menarche is the mother in (72.5%), which, in agreement with figures reported in the Indonesia Young Adult Reproductive Health Survey (IYARHS) 2002-2003 which showed that the mother was the first to be informed about menarche in (70.0%) [15] .

The results of this study revealed that (29.8%) of the girls had normal reaction and (24.9%) of menstruating girls had scarey reaction as a first reaction at menarche which disagrees with the figure reported by Pelon in Bangladesh 2002, who found that (84%) of girls had scared reaction at menarche and he related this finding to lack of knowledge about menarche (11) and Deo and Ghattargi in India 2000, who found that scared reaction at menarche was (44.8%) [18].

A study conducted in north India results from both qualitative research data and quantitative survey, that prior to menarche, knowledge about menstruation was deficient among the respondents. There was strong belief among the women respondents of the study area about the effect of diet on menstruation, age of menarche; date of bleeding and amount of bleeding, 10% of women reported observance of various taboo-behaviors related to menstruation [19].

From the results of the current work, we feel that there is a need for the establishment of a comprehensive school health education program with strong familial input and strategies that address the component of puberty education. Parental and adolescent perceptions' of family dynamics energy change at menarche, and adolescent's perceptions relationships with other family members (the mother) need to be included in educational programs related to menarche, menstruation and sexual development.

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