Awareness of Menstrual Pattern and Disorders in Adolescent Females

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ABSTRACT

Objective To determine the level of awareness of adolescent females about the menstrual pattern / problems and their understanding about its treatment.

Study design Cross-sectional study.

Place & Duration of study This study was conducted at the Department of Gynaecology & Obstetrics, Dow University Hospital Ojha Campus Karachi, from February 2011 to February 2012.

Methodology Adolescent girls, who came as attendants with their patients, were included in the study. A structured questionnaire was used to determine age, socioeconomic status, educational status, age of menarche, menstrual pattern, dysmenorrhea, menorrhagia and consultation for menstrual problems.

Results A total of 222 adolescents were included in the study. Mean age of the participants was 16.5 year. Mean age of menarche was 15 year. Out of 222 participants 57% of girls had normal cycle duration. Heavy bleeding was reported in 23%. Of the total, 57% participants had duration of flow between 3 to 6 days, and 74% experienced dysmenorrhea. Daily activities and academic activities were affected in 69.4% and 73% of the subjects respectively. In this study statistically significant relation was found between age and dysmenorrhea (p=0.004). Out of the total, 63% participants believed in home remedies, 77% in advice from family members and 34.7% on self-medication. 61% participants considered the menstrual abnormality as problem. Around 42% participants were aware of medical treatment and 80% participants did not have knowledge of menstrual abnormality, which had statistically significant relation with the age of the participant (p=value of 0.001).

Conclusions Menstrual problems among adolescent female were common. Lack of knowledge and awareness demands health education on puberty and menstrual problems.

Key words Menstruation, Puberty, Adolescent females, Awareness.

INTRODUCTION:

Menstruation is a normal physiological process that begins during adolescence in females. According to WHO, adolescents comprise of people between the age of 10-19 year. Menstrual disturbances are common among the adolescents and usually caused by immaturity of hypothalamic-pituitary-ovarian axis. Positive feedback response to estrogen is frequently absent in the immediate postmenarchal period.1

The onset of menstruation or menarche is the first step towards the womenhood. Regarding the normal menstrual pattern, age of menarche is less than 16 year, length of menstrual cycle range is 21-35 days, length of flow 3-7 days and amount of flow < 80ml. Common menstrual disorders among the adolescents are primary dysmenorrhea, premenstrual syndrome, menorrhagia, and irregular

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A study conducted by Haldar et al found that 43.3% of girls suffered from dysmenorrhea. A study conducted by Lau JT et al showed that half of the adolescent girls did not seek the treatment for menstrual pain.

The frequency of irregular cycles ranged from 5% to 17% as reported in developing countries. Study conducted in Iran reported that about 60% of adolescent girls and women in reproductive age suffer from premenstrual syndrome. A recent study showed that majority of the girls had no knowledge about irregular periods. There is lack of current information concerning the knowledge and attitude of adolescents regarding menstruation. Cultural belief may affect attitude towards menstruation.

The objective of current study was to determine the awareness of adolescent females about the menstrual problems and their approach to its remedy. This information might help for improving reproductive health of females.

**METHODOLOGY:**
This cross sectional study was conducted from February 2011 to February 2012. The adolescents were selected from Dow University Hospital, who came as attendants to their patients. Informed assent was taken from each participant and consent from their parents after explaining the study purpose. Data was collected on pre designed questionnaire which included demographic variables, like age, age of menarche, variation in menstrual pattern which included regularity of cycle, amount of bleeding, duration and rhythm of cycle. Respondents were also asked about premenstrual syndrome, dysmenorrhea and consultation for menstrual problems. The impact of menstrual disorders on daily activities and absenteeism from school or college were also asked. The factors were also addressed in detail that lead to avoidance of health seeking behaviour. The data analysis was done using SPSS-14. Descriptive statistics were used for all variables in the study. Chi-square test was applied and a p-value <0.005 was considered as statistically significant.

**RESULTS:**
A total of 222 adolescents were included in the study, out of which 78 (35%) participants were of up to 15 year of age and 144 (64.9%) were between 15-19 year. Mean age of participants was 16.5 year. Mean age of menarche was 15 year. Age of menarche was less than 13 year in 145 (65%) subjects, between 13-15 year in 72 (33%) and more than 15 year in 5 (2%).

Out of the total, 55 (25%) participants were uneducated. Twelve (5.4%) girls belonged to upper class, 20 (09%) to lower class and remaining 190 (86%) to middle class. There was no statistically significant association found between the socioeconomic class and awareness about medical treatment (p=.016).

About the characteristics of menstrual cycle, 127 (57%) girls had normal cycle length, while 37 (16%) and 58 (27%) had short and prolonged cycles respectively. Heavy bleeding was reported in 50 (23%) subjects while irregular cycle was found in 34 (14%) girls. Duration of flow in 127 (57%) participants was 3-6 days, 35 (15%) had less than 3 days and 39 (18%) greater than 6 days.

Of the total, 165 (74%) experienced dysmenorrhea, of which 35 (15%) stayed at home due to discomfort from pain and heavy vaginal bleeding. Daily activities and academic activities were affected in 154 (69.4%) and 162 (73%) subjects respectively. The mean age was 17 year in participants with dysmenorrhea (n=165 - 74%) and 14.9 year in those without dysmenorrhea (n=57 - 26%).

Of total, 138 (63%) respondents believed in home remedies, 172 (77%) believed in taking advice from family members and 77 (34.7%) used self-medication. Majority (n=135, 61%) of the participants considered the menstrual abnormality as a problem. Only 93 (42%) adolescents were aware of the fact that medical treatment was available for menstrual abnormalities.

There was complete lack of knowledge about menstrual problems in 178(80%) respondents. Knowledge of irregular cycle, prolonged and short cycle were more in participants who were of between 15-19 year of age. There was a statistically significant relationship between the age and knowledge of irregular, prolonged and short cycle (p=.001). There was statistically significant association found between age and dysmenorrhea (p=0.004).

**DISCUSSION:**
Mean age of adolescents was 16.5 year in our...
study. The study conducted by Demir SC et al reported mean age of 14 year. Mean age of menarche was 15 year in this study. Study conducted by Verma PB et al found the mean age of menarche as 13.9 year. Our study found that 57% of girls had normal cycle length. Study conducted on women in Singapore showed normal cycle of 21-35 days in 62.8% adolescents, short cycle (<21 days) in 21%, and prolonged cycle (>35 days) in 14% participants.

Heavy bleeding was reported in 23% of subjects in our study. Study conducted by Dutta S et al also reported heavy bleeding in adolescents. Out of 222 participants in current study 57% had duration of flow between 3-6 days. Study conducted in Singapore showed that 88% adolescents had duration of cycle for 3-7 days. Frequency of dysmenorrhea was reported as 74% in our study. Variable prevalence (62-84%) was reported in different studies.

This study showed that 15% of girls remained absent from schools / colleges due to menstrual problem. These results are consistent with study conducted in Tehran. Banikarim C et al also showed absenteeism in 38% and prevalence of dysmenorrhea in 85% participants. Daily activities were affected in 69% of subjects and academic activities in 73% in our study. It was also reported in other studies that ability of work performance was poor.

Results of the current study revealed that 63% participant believed in home remedies. These results were consistent with the study conducted by Banikarim et al. In current study 34.7% participants have preferred the self-medication. Another study conducted by Poureslami M showed this percentage around 67%. Seventy seven per cent participants took advice from family member about menstrual problems in our study. This is close to study conducted in Tehran, in which 61% took advice from mother. In current study, 10% of study subjects consulted doctor for their menstrual problems. In another study rate of consultation ranged between 6-14%.

CONCLUSIONS:
The results revealed that majority of respondents were unaware of menstrual problems and suffered from reproductive health morbidities, which include dysmenorrhea, menorrhagia and irregular menstruation.

REFERENCES:


