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Assessment of Menstrual Disorders Among Girls Visited in Hospital: A Prospective Study

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ABSTRACT

Background: Adolescence is a transitional stage characterized by rapid physical, mental and sexual changes, hormonal changes. Menstrual cycle is an important indicator of women's reproductive health. As girls attain puberty at this age, they have various problems associated with menstruation. The present prospective study was conducted to assess menstrual disorders among girls visited in hospital.

Methods: The present prospective study was conducted in the Department of Obstetrics & Gynecology, Government Medical College, Barmer, Rajasthan, India over the period of 1 year. The sample size was 390 adolescent girls. The complete menstrual history was taken.

Results: In the present study maximum number of adolescent girls of age group of 10-13 years (68.20%). Maximum number of girls had menstruation for 3-7 days (48.46%). Dysmenorrhea was the most common disorder among adolescent girls.

Conclusions: Our study concluded that menstrual disorders were present in most of the adolescent girls. Dysmenorrhea was the most common disorder among adolescent girls.

Keywords: Dysmenorrhea, menstruation, menstrual disorders

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INTRODUCTION

Adolescence is the time of life between puberty and psychophysical maturity when crucial endocrinological, metabolic, somatic and psychological changes occur in girls. During this process, sequential phases mark the maturation of the complex endocrinological system that comprises the hypothalamus, pituitary gland, and ovary, and their interactions. Healthy reproductive function is the expected endpoint of this process.¹⁻³ Menarche is one of the markers of puberty and therefore can be considered as an important event in the life of adolescent girls. Studies suggested that menarche tends to appear earlier in life as the sanitary, nutritional, and economic conditions of a society

improve.^{4,5} For most females, it occurs between the age of 10 and 16 years; however, it shows a remarkable range of variation.⁶ The normal range for ovulatory cycles is between 21 and 35 days. While most periods last from 3 to 5 days, duration of menstrual flow normally ranges from 2 to 7 days. For the first few years after menarche, irregular and longer cycles are common.⁴⁻⁸ Although menstruation is a natural process, it is linked with several misconceptions and practices, which sometimes result into adverse health outcomes.⁹ The present prospective study was conducted to assess menstrual disorders among girls visited in hospital.

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METHODS

The present prospective study was conducted in the Department of Obstetrics & Gynecology, Government Medical College, Barmer, Rajasthan, India over the period of 1 year. Before the commencement of study, permission was taken from the ethical committee of the institution. The sample size was 390 adolescent girls. Girls who were between the age group of 10-17 years with any complaints of menstrual disorder were included in the study. The girls who were suffering from any chronic condition were excluded from the study. The complete menstrual history was taken.

RESULTS

In the present study maximum number of adolescent girls of age group of 10-13 years (68.20%). Maximum number of girls had menstruation for 3-7 days (48.46%). Dysmenorrhea was the most common disorder among adolescent girls.

Table 1: Distribution of adolescent girls according to age.

Age (Yrs)	N(%)
10-13	266(68.20%)
14-17	124(31.79%)
Total	390(100%)

Table 2: Distribution of adolescent girls according to duration of menstruation

Duration of menstruation(days)	Frequency (%)
<3	72(18.46%)
3-7	189(48.46%)
>7	129(33.07%)
Total	390(100%)

Table 3: Distribution of adolescent girls according to problems during menstruation

Problems	Frequency(%)
Nil	62(15.89%)
Dysmenorrhoea	118(30.25%)
Breast tenderness	38(9.74%)
Pre-menstrual symptoms	59(15.12%)
Headache/constipation	42(10.76%)
Weakness/ breathlessness/ giddiness	71(18.20%)
Total	390(100%)

DISCUSSION

Adolescents comprise nearly one-fifth (22%) of the India's total population. The country also has the world's largest adolescent girl population (20%).¹⁰ In the present study maximum number of adolescent girls of age group of 10-13 years (68.20%). Maximum number of girls had menstruation for 3-7 days (48.46%). Dysmenorrhea was the most common disorder among adolescent girls.

A study conducted by Vivek et al in Sangly district of Maharashtra among college going students where mean age of menarche is 13.73.¹¹

A study conducted by Singh in Lucknow slum area found that mean age of menarche is 13.3 (± 1.2).¹² Menarche age is the most widely used indicator of sexual maturation and influenced by many factors such as genetic and environmental conditions, family size, body mass index, SES, and level of education.^{7,13}

A study conducted by Rupavani et al among school going girls in Pondicherry reported 76.5% of girls reported one or more problems while it is 42.5% in college going girls in Sangly district of Maharashtra.^{11,14}

A similar study done by Sharma S et al. had 53.5% girls with dysmenorrhea, whereas Agarwal et al. noticed 37.96% of dysmenorrhea in their study.^{15,16}

Menstrual symptoms are a broad collection of affective and somatic concerns that occur around the time of menses. Some women manage their monthly periods easily with few or no concerns, while others experience a number of physical and emotional symptoms that may cause psychological and physical discomfort.¹⁷

CONCLUSION

Our study concluded that menstrual disorders were present in most of the adolescent girls. Dysmenorrhea was the most common disorder among adolescent girls.

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