



CLINICAL STUDY OF MENSTRUAL DISTURBANCES IN ADOLESCENT GIRLS

Dr S. Yogalakshmi MS OG, Assistant Professor, KAPV Govt Medical College, Trichy, Tamilnadu.

Dr P. Suganthi* MS OG, Assistant Professor, Govt Thiruvavur Medical College, Thiruvavur, Tamilnadu. *Corresponding Author

ABSTRACT

AIM: The aim of the study is to evaluate the various menstrual problems predominant among the adolescent girls and to know various cause and factors associated with it. **MATERIALS AND METHODS:**

This is a prospective study conducted at MGMGH trichy from November 2019 to December 2020 with a sample size of 300 pts after getting ethical committee approval. Based on the inclusion and exclusion criteria the results were entered and analysed.

CONCLUSION: Adolescent gynecology is not a new subject. But, it still needs greater attention and increased awareness, in order to protect and promote the health of adolescents. This study helps in further developing strategies and also further evaluation of the irregularities for appropriate management physically and psychologically.

KEYWORDS :**INTRODUCTION :**

The term adolescence comes from Latin word meaning "to grow to maturity".¹ WHO has defined adolescence as a period between 10-19 years. This is the period of evolution from childhood to adulthood which are formative years when maximum amount of physical, psychological and behavioral changes happens.² This period is further divided into following stages as early adolescence from 10-14 years and late adolescence from 15-19 years.³ Yet the period of adolescence differ widely depending on the tradition, culture and social factors within each society. Currently, one in every five person globally is an adolescent and 85% of these adolescents live in developing countries. In India, 20.07% of our total population is adolescents.⁴ Hence adolescents in India represent over one fifth of population.⁵ They form a more vulnerable group particularly in the developing countries where they are usually married at an early age and are exposed to bigger risk of reproductive morbidity and mortality. Generally adolescent girls are the poor sufferers of the consequences of several forms of malnutrition due to their augmented nutritional requirements and low social power.⁶

MATERIALS AND METHODS**STUDY DESIGN:**

Prospective study of 300 adolescent girls with menstrual disturbances aged 12 to 19 yrs using personal interview, questionnaire clinical examination, and investigations

Study place : MGMGH, Trichy.

Period of study : November 2019 to December 2020

Inclusion Criteria

1. Adolescent girls age between 12 to 19 yrs attending MGMGH gynecology OPD
2. Unmarried

Exclusion Criteria

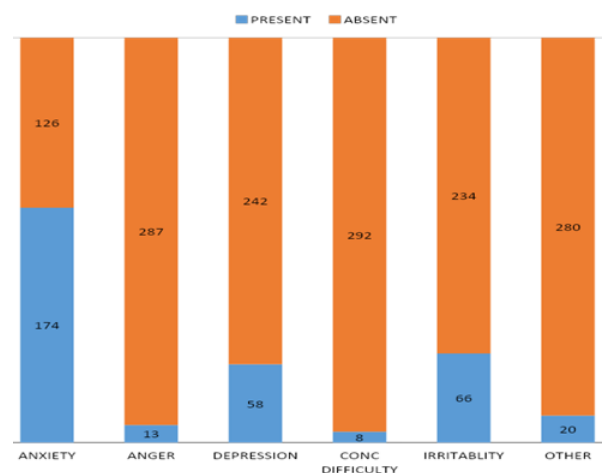
1. Age < 12yrs and > 19 yrs
2. Married
3. Teenage pregnancy

Sample Size: 300

Detailed history with regard to the gynaecological problems was taken from the patient and girl's mother was also interviewed to get accurate details about any previous medical problems if present.

RESULTS AND ANALYSIS**MENSTRUAL DISORDER**

MENSTRUAL DISORDER	NO OF PATIENTS	PERCENTAGE
AMENORRHOEA	30	10%
MENORRHAGIA	42	14%
OLIGOMENORRHOEA	159	53%
DYSMENORRHOEA	54	18%
OTHER	15	5%

PSYCHOLOGICAL SYMPTOMS**DISCUSSION**

This study was conducted at MGMGH, Trichy to evaluate the various menstrual problems predominant among the adolescent girls and to know various cause and factors associated with it.

Adolescence is a period of maturity, a point of physical, emotional, social and psychological change. It is considered to be the period between ages 12 and 19. Menstrual problems are generally perceived as only minor health concern and thus irrelevant to the public health agenda particularly for women in developing countries who may face life threatening condition. Menstrual cycle is normal physiological process that is characterized by periodic and cyclic shedding of progesterational endometrium accompanied by loss of blood. Some variety of menstrual dysfunction occurs in adolescent girls which may affect normal life of adolescent and young adult women. Physical, Mental, Social, Psychological, Reproductive problems are often associated with menstrual irregularities and menstrual problems. Due to change in life style, habits, diet, the prevalence of obesity has

increased in developed world which results in decreased age at menarche.

In the present study, maximum incidence of menstrual problems was seen in the age group of 18- 19 years (55%). More than half of the patients in our study group were either 18 or 19 years of age. A review by Nazish et al¹⁷ showed that, 20-90% of adolescent girls reported dysmenorrhea, and almost 15% of those experienced severe dysmenorrhea. Several studies have reported prevalence and pattern of menstrual disorders in university students and school girls. No study so far has explored the longitudinal information on menstrual abnormality from post-menarche age to young adult age as majority of menstrual disorders at post-menarche are transitional.

Majority of them belonged to family of Class IV and Class V socio- economic status 58% were of class IV and 28% were of Class V of socioeconomic status and 74% of our patients came from urban areas. A study done by Elsheikh et al¹⁸ showed similar result where the study found statistically significant differences in age at menarche between girls whose parents had a high educational level and those with a low educational level and also according to the economic status and size of the family. In fact, the economic status showed the highest influence in mean age at menarche, menstrual disturbances².

Body mass index were analysed in our study group where around 70 patients (23%) were either overweight or obese, while around 18% of girls were underweight. There have been 2 large studies by Karlberg and Wang^{19,20,21} that have confirmed earlier onset of puberty related to a higher gain in BMI. Other studies³ reported later appearance of Menarche at later age, menstrual cycle disorders and problems with conception, related to reduced body fat and weight loss.

We also evaluated the anemic status of our patients where most of the girls were anemic with around 90% of girls had hemoglobin levels between 8- 11 gms. Blood transfusion required in 13 patients in our study. Low level of hemoglobin and nutritional status is frequently correlated with irregularities of menstrual and problems among the females in different age groups. Anemia affects approximately 30% to 55% of adolescents of all over the world.²⁵ It is particularly more pronounced in adolescents in this age group due to the physical changes that occur at puberty, utilizing a large portion of macronutrients, vitamins, and minerals and tend to have an increasing need for energy, especially during the growth spurt. In present study amenorrhoea accounted for 10% (30) of cases, in comparison to that reported by Sebanti et al²⁶ (6.45 %) and study by Archana et al (6.25%)²⁷. Out of the total of 10 cases of Primary amenorrhoea four cases were diagnosed as Turner syndrome. Commonest cause of primary amenorrhoea with delayed secondary sexual characteristics were (Garden et al., 1998²⁸, Edmond et al., 1999²⁹) Turner syndrome. gonadotrophin deficiency and constitutional delay. In present study, Turner syndrome is the commonest cause of primary amenorrhoea with delayed secondary sexual character. In our study there was around 4 cases of Turner syndrome, constitutional delay in 3 cases and Rokitansky meyer syndrome in two cases, transverse vaginal septum 1 case.

Oligomenorrhoea is the most common menstrual complaint in the present study (54%). Morgan and London et al³⁰, 1993 showed that the most common cause of oligomenorrhoea is immature HPO axis followed by causes like PCOS, stress, thyroid disorder etc.

SUMMARY

- Low socio economic group coming from urban population was the maximum group of girls in our study.

- Maximum patients attending outpatient department for menstrual problems was seen in the age group of 18-19 years.
- Among the various presenting complaints studied in adolescent girls, menstrual irregularities were the most common which we took as inclusion criteria for this study.
- Oligomenorrhoea was the most common menstrual problem in this study.
- The most commonest cause of oligomenorrhoea was a probably Hypothalamic -pituitary – gonadal axis dysfunction.
- PCOS and hypothyroidism were the other endocrinological abnormalities common among the adolescent girls.
- Majority of teenage girls (81.2%) suffered from anemia ranging from mild to severe types of anaemia.
- Most of patients (96%) presented with anemia in our study group.
- 4 percent of patients with menorrhagia received blood transfusion in our study.
- Counseling and reassurance was an integral part of treatment strategies.
- Dysmenorrhoea was more common among the late adolescent age group.
- Leucorrhoea in adolescent girls in the present study were second most common presenting complaint.
- Turner Syndrome is the commonest cause of primary amenorrhoea.
- In most of patients the daily work has been affected disturbing quality of life.
- Physical symptoms was seen in 102 patients among which fatigue was commonest
- Psychological symptom was seen in 51 patients among which anxiety is commonest

CONCLUSION

Adolescent gynecology is an important sub-specialized part of gynecology. The significance of the reproductive health problems among the adolescent has developed immensely during recent years.

Endocrinal abnormalities like PCOS and hypothyroidism presenting with menstrual irregularities in the adolescents are associated with future reproductive as well as metabolic morbidity like obesity. Therefore, it is very important to evaluate and manage menstrual abnormalities in adolescent correctly for safe healthy reproductive life and change in lifestyle.

Menorrhagia, at all stages of life relentlessly affects the quality of life. Effective management of puberty menorrhagia is required in order to avoid adolescent with anaemia. As mentioned earlier, adolescent girls being the direct reproducer of future generation, it is important to avoid adolescent getting into pregnancy with anaemia in future, which in long run reduce perinatal and maternal morbidity and mortality.

Teenage problems need to be dealt with utmost sensitivity. Counselling teenage girls as well as parents is an integral part of the treatment strategies. Awareness regarding health, nutrition and hygiene should be included in the counselling in order to curtail problems like anemia, leucorrhoea.

Though, adolescent gynecology is not a new subject. But, it still needs greater attention and increased awareness, in order to protect and promote the health of adolescents. Hence this study will help in further developing strategies and also further evaluation of the irregularities for appropriate management physically and psychologically.

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