

## Adolescent Clinic—Need of the Era

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### ABSTRACT

As per WHO, adolescence age includes 10-19 years. It is further divided into early adolescence i.e. 10-14 years age group, and late adolescence between 15-19 years. Adolescent gynae has special importance in gynecology as problems of this group are very specific, having specific management. But adolescent gynae is still not explored optimally. Aims and objective: To create awareness regarding the need of the adolescent clinic and study the prevalence of gynaecological problems in adolescent patients. This was a cross-sectional observational study, conducted in the Dept. of OBGY, over a period of 12 months from 1st January 2020 – 31 December 2020. Total 200 patients were enrolled in the study. Detailed history was taken and thorough physical examination was done. Data were collected using a structured and self-administered questionnaire. Maximum patients (68%) had menstrual problems, 31.5% patients had complaints of leucorrhoea, and 27% had complaints related to weight gain or weight loss and pain in abdomen. Oligomenorrhea was the most common menstrual disorder (43% patients), followed by heavy menstrual bleeding. Maximum patients had associated condition like anemia and abnormal USG findings like, polycystic ovarian disease, simple ovarian cyst, endometriotic cyst, hematocolpos, atropic uterus. In our study, most common disorder of adolescent was menstrual problems and anemia, which can be managed effectively only on OPD basis, if consulted at an early stage. Thus setting up an adolescent clinic where only adolescents would be dealt, will help them to manage their problems more effectively.

**KEY WORDS:** ADOLESCENCE, SPECIFIC MANAGEMENT, ERA.

### INTRODUCTION

Adolescence is a transitional stage of physical and psychological development when a girl enters from childhood to womanhood. As per WHO, adolescence age includes 10-19 years (Gluckman PD and Hanson, 2006). It is further divided into early adolescence i.e. 10-14 years age group where physical growth spurts occurs followed by development of secondary sexual characters and late adolescence between 15-19 years where body continues to undergo transformation and also become emotional labile with issues like eating disorders of anorexia/bulimia and menstrual abnormalities (Gluckman PD and

Hanson, 2006; Wood et al., 2019). Girls of adolescent group has significant anxiety, psychological stress and also excitement for the transformation of reproductive system, sometimes causing embarrassment and therefore seeking late consultation. It is important to have thorough knowledge about this changes in body and it has to be handled gently and emotionally, because any unsolved problems during this period can directly affect physical, sexual and mental growth of a female.

In major part of country, adolescent problems are avoided and not taken care of because of lack of knowledge and awareness, cultural taboos, and taken for granted attitude of adults towards young females. Even in urban and higher societies, it is neglected or considered secondary as this adolescent period also form the important landmark for educational carrier. Adolescent gynae has special importance in gynecology as problems of this group are very specific, having specific management. But adolescent gynae is still not explored optimally. In our study, we attempt to review the gynecology problems in adolescent

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age group and try to create awareness of the need of adolescent clinic.

**Aims and objectives:** The aim of this study was to create awareness regarding the need of the adolescent clinic for providing safe and healthy platform for taking consultation regarding normal gynaecological changes and problems in adolescent female patients.

**Objectives:**

1. To study the prevalence of gynaecological problems in adolescent patients.
2. To create awareness of the need of consultation for adolescent problems.

## MATERIAL AND METHODS

This was a cross-sectional observational study, conducted in the Dept. of OBGY at DattaMeghe Medical College, ShalinitaiMeghe Hospital and Research Centre, Nag-pur in collaboration with Jawaharlal Nehru Medical College, DattaMeghe Institute of Medical Sciences, Wardha over a period of 12 months from 1st January 2020 – 31 December 2020. Total 200 patients were enrolled in the study.

**Inclusion criteria:** All adolescent females of age group 10-19 years who attended the gynecology OPD (outpatient department) were included in the study.

**Exclusion criteria**

- Patients not willing to participate in the study.
- Patients attending OPD for other medical or surgical or pregnancy related problems.

Patients attending gynae OPD were informed about the aim and objective of study and were included in the study, after taking proper consent. Detailed history was taken and thorough physical examination was done. Total 200 patients were evaluated during this study, Data were collected using a structured and self-administered questionnaire. Clinical examinations included height, weight, general examination including secondary sexual characters, signs of hyperandrogenism like hirsutism, acne, acanthosisnigricans. Patients were given complete privacy and friendly environment during their examination and made them comfortable while discussing confidential information. Investigations such as haemogram, hormone profile like Thyroid profile, Prolactin, FSH, LH, coagulation profile, ultrasound of abdomen and pelvis were done as and when indicated. Counselling were done regarding the good nutrition, exercise, physical fitness, menstrual hygiene, sexual behaviour, contraception as per the need of patient and were managed as per their problems.

**Statistical Analysis:** Statistical analysis was done by using SPSS software 23.0

## RESULTS

Total 200 patients were enrolled in the study and were

evaluated and managed as per their problems. They were divided as early adolescent(10-14 years) and late adolescent (15-19 years). Late adolescent group also involved married girls(20 patients) who were not pregnant.

Table 1. Age distribution

Age group	No. of patients	Percentage
10-14 years	32	16%
15-19 years	168	84%
Total	200	

Table 2. Gynaecological problems among adolescent girls

Problems	No. of patients	Percentage
Menstrual problems	147	73.5%
Weight gain/ loss	54	27%
Leucorrhoea	63	31.5%
Urinary tract infection	38	19%
Hirsutism	21	10.5%
Abdominal pain	54	27%
Breast problem	12	6%

Maximum patients (68%) had menstrual problems which were chronic and visited the OPD only when these problems started interfering with their physical health and routine work. 31.5% patients had complaints of leucorrhoea, and 27% patients had complaints related to weight gain and weight loss and pain in abdomen. Maximum patients complaining of menstrual disorder had history of oligomenorrhea in late adolescent group (15-19 years) whereas in early adolescent group (10-14 years) maximum patients had history of heavy menstrual bleeding and polymenorrhea. 2 patients from 15-19 years group had primary amenorrhea( one patient had imperforate hymen and one patient had atrophic uterus). Maximum patients of 10-14 years group had history of anemia whereas in 15-19 years group maximum patients had high LH/FSH ratio and abnormal USG findings like, polycystic ovarian disease, simple ovarian cyst, endometriotic cyst, hematocolpos, atrophic uterus.

## DISCUSSION

Adolescence is the most turbulent phase of life where physical changes, hormonal changes, exposure to outer world and educational carrier are going simultaneously. If girls of this group are not handled with care and with proper knowledge, it can result in unhealthy woman with mental instability and rebellious behaviour. In our study, total 200 patients were enrolled. Maximum patients for consultation were from 15-19 years group (84%). Negligence at early stage, fear of unwanted pregnancy and preparing these girls for marriage physically and

mentally could be the reason for more consultation in this group. Similar findings were seen in study of Gupta N et al. (2020) and Gandhi AB et al. (2015) where adolescent patients from 15-19 years group were more. In our study,

only 16 % patients were from early adolescent group, as they might be considered less threatening for family, taken for granted attitude of family.

Table 3. Menstrual disorder:

Menstrual disorder	No. of patients 10-14years group (32)	Percentage	No. of patients 15-19years group (168)	Percentage	Total no. of patients (200)
Oligomenorrhea/ secondary amenorrhea (43%)	7	21.87%	79	47.02%	86
Hypomenorrhea	4	12.5%	10	5.95%	14(7%)
Heavy menstrual bleeding (33%)	21	65%	45	26.78%	66
Polymenorrhea	17	53.12%	24	14.28%	41(20.5%)
Primary Amenorrhea	0	0	2	1.19%	2 (1%)
Dysmenorrhea	10	31.25%	59	35.11%	69 (34.5%)

Table 4. Associated condition

	No. of patients 10-14years group (32)	No. of patients 15-19years group (168)	Total patients (200)	Percentage
Anemia	18(56.25%)	38(22.61%)	56	28%
Hypothyroidism	2(6.25%)	6(3.57%)	8	4%
Hyperprolactinemia	2(6.25%)	18(10.71%)	20	10%
High LH/FSH ratio	4(12.5%)	38(22.61%)	42	21%
Abnormal USG report	3(9.37%)	38(22.61%)	41	20.5%

Maximum patients coming to hospitals of this early adolescent group need admission as they came in critical condition, which are not manageable on OPD basis. Mostly patients of the study presented with menstrual problems (73.5%). Other common problems were leucorrhoea (vaginal discharge) seen in 31.5% of patients, weight gain related problem in 27% and abdominal pain in 27% of patients. In other studies of Dighikar et al., (2020) and Rathod et al., (2016) maximum patients presented with menstrual related problems. Menstrual cycle are regulated by co-ordination of hypothalamic-pituitary-ovarian axis, which are readily influenced by psychological and pathological factors (Wood et al., 2019) and this could be the reason for more menstrual problems in this group. Oligomenorrhea was the most common menstrual disorder seen in our study (43% patients). Similar findings were seen in study of Ramaraju H.E. et al., (2015), and Goswami et al., (2005) where oligomenorrhea was seen in 45.45% and 56.86% of girls, respectively. Heavy menstrual bleeding was more commonly seen in age group of 10-14 years, and most common reason was puberty menorrhagia of idiopathic etiology for which patient needed hospitalisation.

34.5% of patients had complaints of dysmenorrhea, which were managed on OPD basis. 31.5% patients had complaints of leucorrhoea or excess vaginal discharge. It could be physiological or pathological. Due to increased levels of endogenous estrogen, there is overgrowth of endocervical epithelium, encroaching outward, causing ectocervical erosion, thus leading to excessive vaginal discharge (Dighikar et al., 2020). Maximum patients had physiological vaginal discharge for which they needed proper counselling and education. In the study of Gupta et al., (2020) was seen in 18.3%. Around 19% patients had complaints of urinary tract infection (UTI), 10.5% had complaints of excessive hair growth at abnormal sites (hirsutism) and 6% patients complained of either breast tenderness or lump in breast.

In the study of Gupta et al., (2020) incidence of UTI was seen in 9.7% patients, and in study of Goswami et al, UTI was seen in 4% patients. In the study of Dighikar, Vrushali, et al., (2020) UTI was seen in 3.3% patients and breast problems in 3.3% patients. In our study, 28% patients had anemia, whereas in the study of Gandhi AB et al and Goswami et al, anemia was seen in 26% and 33.3% girls. In adolescent girls, iron requirement

increases rapidly due to increase in lean body mass, total blood volume and onset of menstruation, thus making them more susceptible to anemia (Gandhi et al., 2015; Goswami et al., 2005). In our study, hypothyroidism was seen in 8%, hyperprolactinemia in 4%, high LH/FSH ratio was seen in 21% patients. 20.5% patients had abnormal USG report which include polycystic ovary (26 patients), simple ovarian cyst(2 patients), endometriotic cyst(2 patients), paraovarian mass (1 patients), atrophic uterus(1 patient), dermoid cyst (1patient). In the study of Gnadhi et al, PCOS findings were seen in 32% patients, hypothyroidism was seen in 7.9% patients (Gandhi et al., 2015).

## CONCLUSION

Adolescence is a bridge between childhood and adulthood, thus is an important phase of life, which have to taken care of properly for developing them into healthy adult. In our study, most common disorder of adolescent was menstrual problems and anemia, which can be managed effectively only on OPD basis, if consulted at an early stage. In our study, we had not included teenage pregnancy, as it needed to be consulted with more special skills and medicolegal formalities. Thus setting up an adolescent clinic where only adolsecents would be dealt, will help them to manage their problems more effectively, thus developing into healthy citizens of nation and healthy mother in future.

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