

Adolescent Gynaecology: An Outpatient Study at a Tertiary Care Center in North India

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ABSTRACT

Aims and Objectives: To study the prevalence, etiological factors, treatment required, and the outcomes of various gynecological problems in adolescent girls 10-19 years of age, attending the Outpatient Department (OPD) of a tertiary care center in North India.

Materials and Methods: This study is a hospital-based prospective study done in patients attending the Gynecological OPD of a tertiary care center in North India from the age group of 10-19 years. Detailed history, physical examination, relevant investigations, treatment required, and outcomes were noted and evaluated.

Results: During the study period a total of 70 adolescent girls presented to the outpatient department with gynecological complaints. The mean age of menarche was 13.5 years and about two-thirds of the patients presented with menstrual complaints.

Conclusion: In conclusion preventive, curative as well as counseling services and routine check-ups should be provided regularly to adolescents, married and unmarried girls to ensure the healthy and holistic development of this extremely important section of our country.

Keywords: Adolescent; Menorrhagia; Menstrual Irregularity

INTRODUCTION

Adolescent health forms an integral part of any nation's health system. In India, one in every ten persons is an adolescent girl, which accounts for 20% of the world's population of adolescent girls [1]. Therefore, investment in adolescent health is extremely crucial and the need of the hour. The International Federation of Gynecology and Obstetrics (FIGO) emphasizes that Adolescent Sexual and Reproductive Health (ASRH) is an important area of concern for women, especially in developing countries like India. Teenage girls are in a transient phase of life and susceptible to several preventable and treatable health problems. The Gynecological problems of adolescents are unique, special, and specific for the age group [2]. Moreover emotional and psychological factors are also associated with the gynecological complaints in this age group.

It is important to have a thorough knowledge of physiology as well as of the disease process, along with the demographic pattern of distribution and prevalence of specific gynecological problems to offer quality services to this vulnerable group of patients. Consequently, policies and programs for promoting adolescent health in India demand more research on adolescent girl problems while taking into consideration the existing variations in several

aspects of adolescent well-being so that effective measures can be taken to improve the same.

The present study aims to evaluate the prevalence, etiological factors, investigations required, treatment is given and outcomes of various gynecological problems in adolescent girls 10-19 years of age, attending the Outpatient Department (OPD) of a tertiary care center in North India.

AIMS AND OBJECTIVES

To study the prevalence, etiological factors, investigations required, treatment is given and outcomes of various gynecological problems in adolescent girls 10-19 years of age, attending the Outpatient Department (OPD) of a tertiary care center in North India.

METHODS AND METHODOLOGY

This study is a hospital-based prospective study done over a period of 6 months in patients attending Gynecological OPD of a tertiary care center in North India.

Patients attending Gynecological OPD of our tertiary care center in North India from the age group of 10 years and up to the age of

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19 years were included. Written informed consent was taken from the patient and/or parent as age-appropriate.

A detailed history was taken regarding age at menarche, menstrual history, and treatment history. The detailed history of gynecological problems and other associated problems was taken.

Physical examination including height and weight, general examination, appropriate systemic examination, and pubertal development were noted. Privacy, confidentiality, and friendliness were provided to the patient for getting any sensitive information and sexual activity.

The treatment given was noted and the patients were further followed up to assess the duration of treatment and outcome.

RESULTS

During the study period, a total of 70 adolescent girls presented to the outpatient department with gynecological complaints.

The demographic variables of the adolescent girls including the age at the time of presentation, a distance of hospital from home, age of menarche, and level of education have been summarized in Table 1.

The presenting complaints were varied and included menstrual disturbances, primary amenorrhea, discharge per vaginum, urinary complaints, pain abdomen, and some girls had come for reviewing ultrasound reports. The various chief complaints along with their frequency are shown in Table 2.

Table 1: Demographic variables of the adolescent girls visiting Gynaecology OPD.

Age at menarche (year)	Number (n=70)	Percentage (%)
11	1	1.42
12	13	18.57
13	20	28.57
14	18	25.71
15	12	17.14
16	0	0
17	1	1.42
Not attained menarche yet	5	7.14
Mean age	13.47 years	
Age of presentation (years)	Number (n=70)	Percentage (%)
10-14 (early adolescent)	15	21.43
15-17 (middle adolescent)	29	41.43
18-19 (late adolescent)	26	37.14
Distance of home from hospital (km)	Number (n=70)	Percentage (%)
<5 km	29	41.42
5-10 km	26	37.14
10-15 km	12	17.14
>15 km	3	4.28
Education	Number (n=70)	Percentage (%)
Currently studying	54	77.14
Never went to school	1	1.42
Left studies	15	21.42
After class 5	4	5.71
After class 8	7	10
After class 10	4	5.71

Haemoglobin levels of 23 girls was evaluated and 60.87% (n=14) were found to have Hb levels more than 10 gm/dl, 21.74% (n=5) had Hb levels between 7-10 gm/dl; 13.04% (n=3) had Hb levels between 4-7 gm/dl while 4.34% (n=1) had very severe anemia with Hb levels being less than 4 gm/dl.

Table 3 enumerates the various treatment modalities used in the management of adolescent girls.

10 out of 11 patients with the complaint of discharge per vaginum had physiological mucoid discharge and only 1 out of 11 had a candidal discharge. 4 of 5 patients' USG showed physiological follicular cyst, 1 required further evaluation for adnexal mass. All 7 patients with a complaint of pain abdomen had normal per abdominal examination and/or USG and responded to lifestyle modification.

DISCUSSION

In our study, around 80% of the girls belonged to the middle and late adolescent group, similar to a study conducted by Anuradha et

Table 2: Presenting complaints of teenage girls.

Presenting complaintT	Number (n=70)	Percentage (%)
Menstrual complaint	46	65.71
Regular cycle+heavy flow	14	20
Frequent cycle+heavy flow	2	2.85
Infrequent cycle+heavy flow	7	10
Infrequent cycle	7	10
Dysmenorrhea	7	10
Secondary amenorrhea	2	2.85
Not attained menses: MRKH	1	1.42
Age<15 years	2	2.85
Wrongly perceived menstrual pattern as abnormal	4	5.71
Discharge per vaginum	11	15.7
Physiological	10	14.28
Abnormal discharge	1	1.42
For a review of USG	5	7.14
Normal/follicular cyst	4	5.71
Required further evaluation	1	1.42
Generalized pain abdomen	7	10
Normal examination and/or scan	7	10
Abnormal per abdominal examination	0	0
Urinary complaint (incontinence)	1	1.42

Table 3: The various treatment modalities used in the management of adolescent girls with menstrual complaints.

Treatment	Number	Percentage (%)
Tranexamic acid+/-NSAIDS	12	26.09
NSAIDS alone	5	10.86
Hormonal treatment	14	30.43
Hospitalization and blood transfusion		
In this visit	2	4.35
In the past	2	4.35
Planned for vaginoplasty	1	2.17
Total	36 out of 46	78.26
No treatment required	10 out of 46	21.74

al. who evaluated the gynecological problems occurring in teenagers attending the OPD clinic in Andhra Pradesh. She reported that among 312 cases, 89% of adolescents belonged to the age group of 15-19 years [3].

We discovered that although 40% of girls lived within 5 km of our hospital, almost one fifth lived more than 10 km away and hence did not have easy access to the health care facility. Easy accessibility serves as an important factor in determining the utilization of the existent adolescent health services. Adolescent Friendly Health Clinics (AFHC) have been set up in India to provide a variety of services which are delivered through trained service providers located at Primary Health Centers (PHCs), Community Health Centers (CHCs), and District Hospitals (DHs), and Medical Colleges [4].

In our study, while 77% of the girls were still studying, 22% had dropped out of school. Anuradha et al. reported that in their study 84% of girls were educated and 16% were uneducated [3]. It is imperative to educate the girls to bring about changes at the root level to improve adolescent health in the country. Apt education not only ensures the prevention, early diagnosis, and prompt treatment of most ailments but also offers an opportunity to the teenage girls to be a part of the adolescent girl's platform. This will help in rearing a new generation of active and responsible citizens.

The complaints that adolescent girls present with, to the gynecology OPD are diverse. Disturbances of menstruation, either actual or perceived, are the commonest presenting complaint in adolescent gynecology clinic [5]. In the present study also, the most common complaints were found to be menstrual abnormalities and menorrhagia was most frequently reported. Similarly, in a study done by Goswami et al. in 2015 in Gwalior, menstrual disorders were the most common gynecological problems amongst adolescents (60%), and 25 out of 45 (55.55%) adolescent girls with menstrual disorders had menorrhagia [6]. Focusing on the management of menstrual disorders along with proper counseling of these teenage girls regarding menstrual hygiene and related issues can go a long way in alleviating their problems.

The prevalence of various other gynecological problems was limited to 11% of vaginal discharges, 10% pain abdomen and a much lower proportion of girls also complained of urinary symptoms. Different gynecological problems amongst teenage girls evaluated by Goswami et al. were menstrual disorders (60%), leucorrhoea (10.66%), infections (8%), an ovarian cyst (5.33%), sexual assault (2.66%), teenage pregnancy (10.66%) and infertility (2.66%) [6].

More than three-fifths of patients who presented to OPD with menstrual complaints required treatment either in the form of antifibrinolytics, NSAIDs, or hormonal treatment [4] out of 46 patients required hospitalization to correct severe anemia resulting from heavy menstrual bleeding and for further evaluation of the cause of bleeding. One patient identified as MRKH was planned for surgical correction.

A similar study was conducted by Patil et al. in 2019 who assessed the gynecological problems of adolescent girls attending a rural tertiary care center in Karnataka and felt that setting up a separate adolescent clinic is necessary for efficient management of menstrual disorders in adolescents [7].

In conclusion, around 21.4% of the population in India is contributed by adolescents [8]. The government of India has already launched ARSH (Adolescent-Friendly Reproductive and Sexual Health Services), which apart from dealing with other adolescent issues also addresses problems related to menstruation and a balanced nutritious diet and includes counseling about common concerns of the teenagers [9]. Ghandi et al. was stated in their paper that health professionals dealing with adolescent age groups should have empathy, friendliness, and a non-judgmental attitude towards their patients [10].

Therefore preventive, curative as well as counseling services and routine check-ups should be provided regularly to adolescents, married and unmarried girls to ensure healthy and holistic development of this extremely important section of our country.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

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