



Clinico- Pathological profiling of Emergency Adolescent Gynecological Problems: A Six Months Retrospective Study

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Abstract

Background: India is one of the fastest growing countries and is home for more than 243 million adolescents. Adolescent gynecological problem needs careful and important attention as it has immense implication on future reproductive and personal health of women.

Objective(s): To study the profile of adolescent girls, seeking in patient treatment for emergency gynecological problems.

Method(s): A total of 294 adolescent girls admitted for inpatient treatment for their emergency gynecological problems. Meticulous history taking, examination and investigations were done.

Results: 294 adolescent girls attended emergency for in-patient treatment in the study period (July 2014 – December 2014). Patients with pregnancy related complications [230, (78%)] outnumbered the patients having gynecological problems [64 (22%)]. Among pregnancy related complications, incomplete abortion [104, 35%] was the single most common cause for hospital admission, seeking inpatient treatment whereas among gynecological causes, menorrhagia [18, 6%] was most common cause.

Conclusion: Adolescent gynecology needs increased awareness and greater attention in order to protect and promote the health of teenagers with the help of specialized adolescent clinic. Measures should be taken to prevent teenage pregnancy and unwanted pregnancy.

Keywords: Adolescence, emergency gynecological problems.

Introduction

India is the second most populous country in the world and is home for more than 1.27 billion population. 50% of the total population is below the age of 25 yrs. Adolescents form a large section of population. In India, the adolescent population constitutes more than one fifth (23%) of the total population.¹ In India, 10.3% of the female population belongs to the age group of 15-19 years.² Adolescence has been defined by World Health Organization as the period of life spanning between 10-19 years. Adolescent pregnancy is a common problem in the Indian society. The prevalence of teenage pregnancy in India varies from 3% to 52%.^{2,3,4} Gynecological problems of adolescents occupy a special space in the spectrum of gynecological disorders of all ages. In this age, the nature of gynecological problems is unique. With this preview, a study has been done to find the gynecological problems of

the adolescents attending emergency for inpatient treatment.

Methods

It was a retrospective study, spanning over six months (July 2014 – December 2014). It was conducted in Bankura Sammilani Medical College, Department of Gynecology and Obstetrics. Study population were, all the adolescent girls (age 10 yrs – 19 yrs), who were admitted at emergency. Emergency gynecological services comprise of services for patients with suspected gynecological problems who cannot wait for a routine Gynecology Outpatient appointment. Detailed history of their problems was taken. In addition to the general examination, height, weight, and secondary sex characteristics were recorded and all the necessary investigations such as hemogram, pelvic ultrasound, and various hormonal assays were done, as and when indicated.

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Results

Total number of patients was 294. Number of pregnancy related complications (obstetrics) was 230 (78%) and number of adolescent gynecological emergency was 64 (22%). Incomplete abortion (104) was the most common cause (35%) of hospital admission among these cases. Most common gynecological problem was menorrhagia (6%).

In our study, "pregnancy related complications" this broad category can be subdivided into several sub categories, namely abortions, other early trimester complications, puerperal complications, and medical complications of pregnancy. Total number of abortions in our study was 163

(Incomplete abortions 104, Threatened abortions 51, Missed abortions 8). Other early trimester complications were hyperemesis gravidarum (12), molar pregnancy (5), and ectopic pregnancy (3). Puerperal complications- this subcategory comprises of secondary PPH (7), vulval hematoma (1), and wound gaping following delivery (9). Medical complications- this sub category comprises of Eclampsia (1), pregnancy with severe anemia (2), jaundice in pregnancy (1), fever in pregnancy (9), respiratory distress in pregnancy (3), UTI in pregnancy (8), acute gastroenteritis in pregnancy (2). In our study, total number of gynecological cases was 64 (22%). Most common gynecological problem was menorrhagia (18) followed by dysmenorrhea (16).

Total number of cases	294
Total obstetrics cases	230 (78%)
Total Gynecological cases	64 (22%)
Incomplete abortion (most common cause of admission)	104 (35%)
Menorrhagia (most common gynecological cause of admission)	18 (6%)
Month	Admission
July-2014	53
August-2014	54
September-2014	66
October-2014	41
November-2014	40
December-2014	40
July-2014-december-2014	Total-294
Types of obstetrics complications	Number
Incomplete abortion	104 (35%)
Threatened abortion	51 (17.34%)
Missed abortion	8 (2.72%)
Molar pregnancy	5 (1.70%)
Ectopic pregnancy	3 (1.02%)
Hyperemesis gravidarum	12 (4.08%)
Retention of urine	3 (1.02%)
Secondary pph	7 (2.38%)
Pregnancy with severe anemia	2 (.68%)
Pregnancy with fever	9 (3.06%)
Vulval hematoma	1 (0.34%)
Eclampsia	1 (0.34%)
Wound gaping following delivery	9 (3.06%)
Acute diarrhea in pregnancy	2 (0.68%)
Respiratory distress in pregnancy	3 (1.02%)
Pregnancy with chicken pox	1 (0.34%)
Jaundice in pregnancy	1 (0.34%)
UTI in pregnancy	8 (2.72%)
Total	230 (78%)

Table 1.Obstetrical problems

Types Of Gynecological Problems	Number
Menorrhagia	18 (6.12%)
Dysmenorrhea	16 (5.44%)
Malignancy And Treatment Related To It	13 (4.42%)
Sexual Assault	2 (0.68%)
Labial Cyst	2 (0.68%)
White Discharge	2 (0.68%)
Straddle Injuries	2 (0.68%)
Post Coital Tear	33 (1.02%)
Cryptomenorrhea	1 (0.34%)
Twisted Ovarian Cyst	33 (1.02%)
Mtp	2 (0.68%)
Total	64 (22%)

Table 2. Gynecological problems

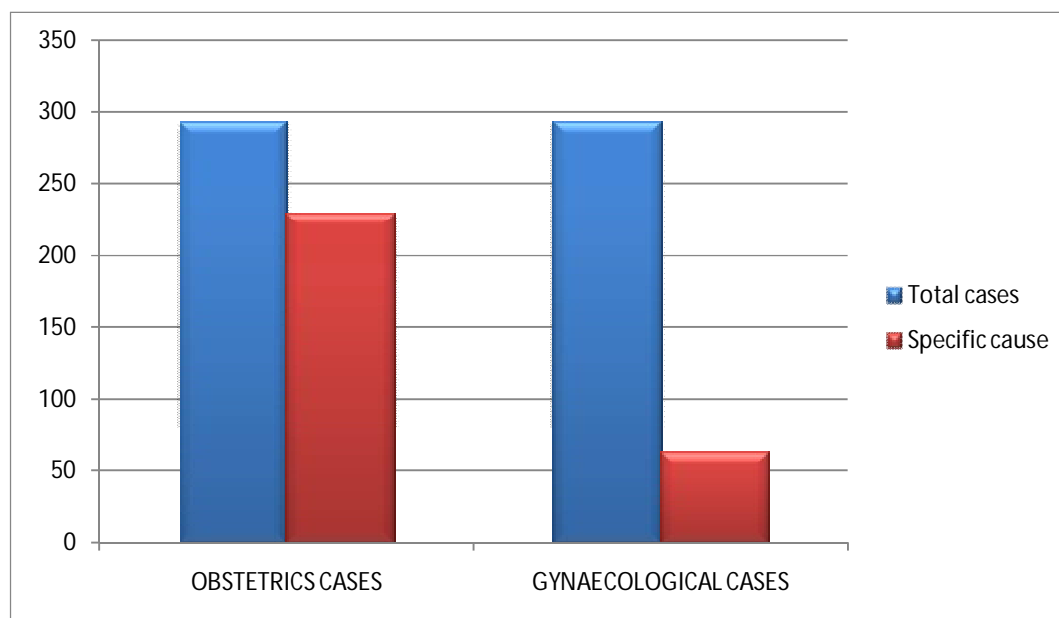


Figure 1. Bar diagram showing comparison of obstetrics and gynecological cases

Discussion

More than 243 million adolescents of India stand at the cross roads of childhood and adult world. Most young people are presumed to be healthy but, as per WHO, an estimated 2.6 million young people aged 10 to 24 yr. die each year and a much greater number of young people suffer from illnesses, 'behaviors' which hinder their ability to grow and develop to their full potential.

Present study shows total number of adolescent girls seeking inpatient treatment in the emergency of gynecology and obstetrics was 294, one percent of total admission in the same department. Most of the cases (230) were suffering from pregnancy related complication (78%). Considering the low median age of marriage in rural area and large number of adolescent girls become pregnant, this finding is quite expected. In 1997, the age specific fertility rate was found to be 52.5 live births per 1000 rural women

aged between 15-19 years.⁵ In rural areas in India, early marriage is a common problem and this tradition of early marriage heavily depends on traditional beliefs regarding preserving a girl's chastity and family needs to reduce expenditure.⁶ Among pregnancy related complications, most common complication was incomplete abortion (104) followed by threatened abortion (51), 35% and 17% respectively.

Teenage pregnancy is an important public health problem. Practices of family planning methods are limited in this group. Many of the adolescent girls are illiterate in rural India and unaware of government services regarding family planning and even if they are aware, they cannot afford it because of social inhibition and pressure for early pregnancy from in-laws.⁷

DUB is more common in adolescence than in adult.⁸ 95% abnormal vaginal bleeding may be associated with DUB.⁹

13 cases attended emergency with malignancy related condition. Sebanti et al. found the incidence of ovarian tumor is 15.32% in their study. 2 patients attended emergency for white discharge. STIs (Chlamydia, Human papilloma virus and herpes simplex virus infection) were reported in 8 to 27% of adolescent girls in western countries.¹⁰ Gynecologists should have a high index of suspicion of STIs in this age group. 2 cases presented with history of sexual assault. Though these patients were victims of adverse situations, they needed proper counselling and treatment so that they do not end up having unwanted pregnancy and sexually transmitted diseases.

In our study, 2 cases had labial cyst and one case had straddle injury. 2 cases presented with post coital tear. Considering the low age of marriage in rural settings, this finding is nothing unusual. 3 cases presented with twisted ovarian cyst. 2 cases admitted for MTP. WHO estimates that 2.5 million adolescents have unsafe abortions annually. So two cases, is the tip of the iceberg only.

Conclusion

Though a subspecialty, adolescent gynecology demands more importance considering its implication on future reproductive and personal life of a woman. Teenage gynecological problems need to be dealt more passionately. In our study, almost 78% cases were pregnancy related complications. This is a matter of concern and need immediate attention of health planner and policy maker. Sex education should include safe sex practices, various STIs and various contraceptive methods including emergency contraception. Setting up of specialized "Adolescent Gynecological Clinics", perhaps serves the purpose.

Conflict of Interest: Nil

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