

Study on Adolescents Reproductive Health & Problems in a Tertiary Care Hospital, Chattogram

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Abstract

Background: Adolescence is a stage where the physical and psychological development of a child takes place. In other words, teenagers passing the years between the puberty and adulthood, from ages 10-19 years. Adolescents are likely to face a range of health and social challenges, for instance initiation of sexual activity while there is still lack of adequate knowledge and skill. High prevalence of early marriage and child bearing are associated with higher rate of morbidity and mortality. They are also in higher risk of unwanted pregnancy, unsafe abortion and sexually transmitted infections. The main objective of this study is to suggest the strategies for improvement of adolescents reproductive health status in Bangladesh.

Materials and methods: This retrospective observational study was conducted in the Obs and Gynae Department of Chattagram Maa-O-Shishu Hospital Medical College (CMOSHMC) from July to December 2022. Total 436 adolescents were included in this study who were admitted in Obs and Gynae Department in study period. All cases reviewed retrospectively from in patients records. An inclusion criterion of age in this study is 10-19 years.

Results: A Total 436 patients were enrolled in this study with age limit between 10-19 years. Total Obstetric patients were 360 (82.57 %). Among them antenatal patients were 348 (97 %), postnatal patients were 12 (3%). Among antenatal patients primipara 344 (99 %), multi para (2nd pregnancy) 4 (1%). Total delivery occurred in 302 patients. Vaginal delivery occurred in 147 patients (49 %), cesarean section were needed in 140 patients (46%). Repair of perineal tear done in 2 post natal patients. Secondary wound closure was done in 1 patient. Conservative management was given to 70 patients. Sexual abuse in 3 patients, came with 14, 16 and 25 weeks of pregnancy and medical termination were done in all cases. Maternal death was 1 (4.2%) due to primary PPH following LSCS due to central placenta Previa with postoperative cardiac arrest.

Total baby delivered 302, alive 287(95%), intrauterine death 15 (5%). LBW (Low Birth Weight) 49 (17 % of alive baby), IUGR (Intrauterine Growth Restriction) 6 (2%), NND (Neonatal Death) 5 (1.7%). Total Gynae patients admitted were 76 (17.43%), abortion related complications were 52 (68%), menstrual abnormality were 7(9.2%), ruptured ectopic pregnancy following sexual abuse was 1 (0.92% of total patients) .

Conclusion: There is growing attention being paid to improving access to quality maternal care for pregnant and parenting adolescents preventing pregnancy among adolescents are fundamental to achieving positive health outcomes across the life course and imperative for achieving the SDGS (Sustainable Developmental Goals) related to maternal and newborn health.

Key words: Adolescent pregnancy; abortion; LBW (Low Birth Weight); PPH (Post-Partum Hemorrhage); Sexual abuse.

INTRODUCTION

Adolescence, a near universal life stage of the socialisation process, is defined as a period of human growth and development that occurs after childhood and before adulthood and includes those persons between 10 and 19 years of age.¹ As a development phase in human life, adolescence is further divided into-early adolescence (10-14 years) and late adolescence (15 – 19 years).⁴

By 2017 UNICEF estimated that there are more than 32 million adolescents living in Bangladesh, comparing 22 percent of the total population.³ Adolescents experience rapid physical cognitive and psychological growth. This affects how they feel, think, make decisions and interact with the world around them. Adolescents are likely to face a range of health and social challenges, for instance initiation of sexual activity while there is still lack of adequate knowledge and skill. High prevalence of early marriage and child bearing and associated with higher rate of morbidity and mortality. There are also in high risk of unwanted pregnancy, Unsafe abortion and sexually transmitted infections.

Adolescent pregnancy is a global phenomenon with serious health, social and economic consequences. WHO promotes adolescents sexual and reproductive health to meet these challenges by improving health care system for providing adolescence friendly health services. The Objectives of the study are to develop awareness on factors that affect adolescent health and problems, as well as to raise awareness about negative effect of early marriage and adolescent pregnancy.

MATERIALS AND METHODS

This retrospective observational study was conducted in the Obs and Gynae Department of Chattagram Maa-O-Shishu Hospital Medical College (CMOSHMC) from July to December 2022. Total 436 adolescents were included in this study who were admitted in Obs and Gynae Department in study period. All cases reviewed retrospectively from in patients records. Inclusions criteria of age in this study are 10-19 years. Data collected and analyzed by simple statistical measures like percentage and proportion.

RESULTS

A total 436 patients were enrolled in this study with age limit between 10 – 19 years. Total obstetric patients were 360 (82.57%). Total gynae patients admitted were 76 (17.43%). The result and observations of the present study are presented in the following tables and graphs.

Table I Distribution of adolescent mothers (Obstetric patients) by study variables

Parameter	Frequent	Percentage
Age : Below 18 years	20	5.56%
Age : 18 – 19 years	340	94.44%
Pregnancy status : 1 st Time Pregnant	344	98.85%
Pregnancy status : 2 nd Time Pregnant	4	1.15%

Table II Obstetric patients profile and outcome

Parameter	Frequent	Percentage
Antenatal Patient	348	96.7%
Post Natal Patient	12	3.3%
Vaginal delivery occurred	147	42.2%
Cesarean section needed	140	40.2%
Conservative Treatment given	70	20.1%
Unwanted pregnancy	3	0.86%
Maternal death	1	4.2%

Table III Obstetric (Antenatal) patients variable analysis

Obstetrics patients with problems	Frequent	Percentage
Term pregnancywithLP	80	23%
Post dated pregnancy	45	13%
Post Term pregnancy	6	1.7%
Preterm Labour	17	4.9%
PROM		
(Premature Rupture of Membranes)	9	2.6%
Gestational Hypertension	9	2.6%
Pre-eclampsia with severe features	6	1.7%
Antepartum eclampsia	1	0.29%
IUGR (Intrauterine Growth Restriction)	13	3.7%
Pregnancy with anaemia	7	2%
Thyroid abnormality	4	1.2%
Gestational Diabetes Mellitus	3	0.9%
Urinary Tract infection	14	4%
Congenital anomaly of fetus	6	1.7%
Hyper emesis gravidarm	8	2.3%
Placenta Previa	2	0.57%

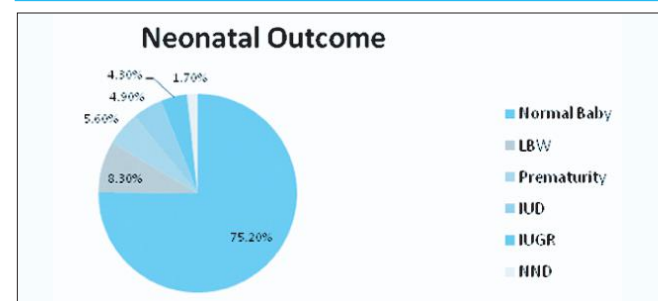


Figure 1 Neonatal outcome of adolescent pregnant patients admitted for delivery

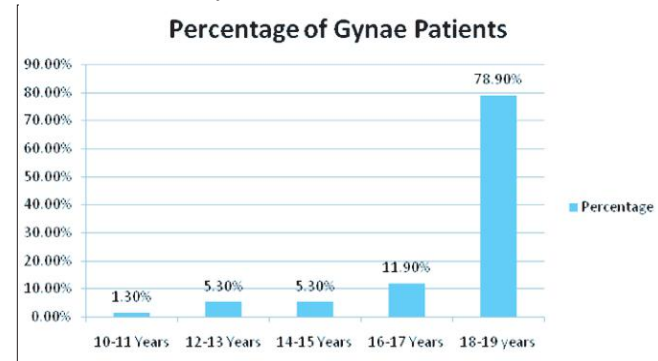


Figure 2 Age distribution of the adolescent gynae patients admitted

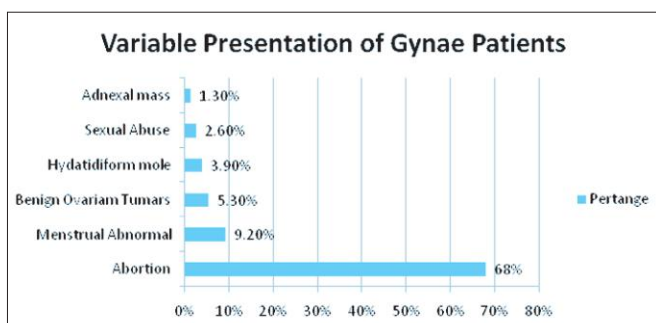


Figure 3 Percentage of variable presentation of adolescent gynecological patient

DISCUSSION

Adolescent pregnancy is a serious public health issue because of its association with adverse negative consequences to both the mother and child.⁵⁻⁶

A total 436 patients were studied, among them antenatal patients were 348, 1st time pregnant 344, have already 1 child & now 2nd pregnant is 4 patients. Operative interference was needed in 140 pregnant adolescents.

PTL (Preterm Labour) 17 (4.9%), PROM Premature Rapture of Membrane 9 (2.6%), Severe pre-eclampsia, 6 (1.7%), APE (Antepartum Eclampsia) 1 (0.29%), IUGR 13 (3.7%), Pregnancy with anaemia 7 (2.0%), Thyroid abnormality 4 (1.2%), UTI (Urinary Tract Infection) 14 (4%), Pregnancy with congenital anomaly 6 (1.7%), Anencephaly 3, Hydrocephalus 2, Hirschsprung disease 1, Maternal death 1 due to postoperative cardiac arrest following cesarean section due to APH (Antepartum Hemorrhage) due to placenta previa. Primary PPH 6, Atonicity 2, Retained Placenta 3, Trauma 1, Severe anaemia 1, Post-partum eclampsia 1, Wound infection admitted 2, 2nd degree perineal tear 1.

LBW - 25 (8.3%), IUGR – 13 (4.3%), Prematurity – 17 (5.6%), NND (Neonatal Death)-5 (1.7%).

Several studies have shown that quality Antenatal Care (ANC) contributes to desired motherhood outcome such as increased skilled birth attendance, reduction of maternal neonatal and perinatal morbidity and mortality.⁷⁻⁹

It has been documented that low utilization of antenatal care by adolescents is attributed to unplanned pregnancies and limited financial and social support.¹⁰⁻¹¹

Adolescents across the world face considerable challenges to their sexual and reproductive health and rights. These includes : Sexual coercion and intimate partner violence, lack of education and information, high rate of early and unwanted pregnancy, lack of access to health services, specially for contraception and safe abortion, early forced marriage and risk of STIs (Including HIV).¹²

Total patients 76, abortion related complications 52 (68%), among them most common is incomplete abortions 24 (44.44%), other abortion related complication are 28 (36.8%), menstrual abnormality 7 (9.2%), Hydatidiform mole 3 (3.9%), Sexual abuse ruptured ectopic pregnancy 2 (2.6%).

Adolescent sexual abuse increase the risk of unintended pregnancies. A WHO report dated 2020 estimates that 120 million girls aged <20 years have experienced some form of forced sexual contact. In this study the number of total sexual abuse 5. Among then 3 were up to mid-trimester pregnancy (1 up to 14 weeks, 1 up to 16 weeks, 1 up to 25 weeks). Successful medical termination done within 7 days. Another 2 patients admitted with ruptured ectopic pregnancy, laparotomy and unilateral salpingectomy were needed. In Bangladesh adolescents are at higher risk of adverse health outcome, increased risk of child abuse, under nutrition and unemployment.¹³

National strategy for adolescent health, 2017-2030, states that by 2030 all adolescents in Bangladesh will attain a healthy reproductive life in a socially secure and supportive environment. The strategy focuses on four health area: Sexual and reproductive health, intimate partner violence, nutrition and mental health.

LIMITATION

- The study had a relatively small number of included patients.
- Samples were conveniently selected from a single tertiary care hospital.
- Family planning services are not included here.

CONCLUSION

Growing attention should be paid for improving access to quality material care for pregnant and parenting adolescents. There is global, regional and national commitment to preventing child marriage and adolescent pregnancy and child bearing. It is also a part of SDG (Sustainable development goal) agenda with dedicated indicators. Based on the study results, it could be suggested that adolescents of low resource countries like Bangladesh need proper counseling regarding marriage at proper age, safe sexual behavior & use of barrier method of contraception and if pregnant, adequate antenatal care and also safe abortion service in case of unwanted pregnancy.

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DISCLOSURE

All the authors declared no competing interest.

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