



**Incidence of Adolescent pregnancy during Covid-19 Pandemic – A hospital based study**

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**Abstract**

Adolescence is the phase of life between childhood and adulthood from ages 10 to 19. This is the time when structural, functional, and psychosocial developments occur. Globally, 1.2 billion people are estimated to be between the ages of 10 and 19. Their health and its governance is of utmost importance for the upcoming healthy generations. There are so many health issues faced by adolescents like social media, urbanization, unhealthy diets, armed conflicts ,emergence of new diseases like covid-19 etc., It has been estimated that 1.2 million still die each year mostly from preventable causes. Many lack access to the essential information, quality services and protective environments they need to stay healthy and well. Self-harm is a leading cause of death for adolescents between the ages of 15 and 19.Mental health conditions like depression, is emerging as a leading cause of adolescent illness and disability. For adolescent girls, the onset of puberty brings additional threats. Poverty and discriminatory social and gender norms can restrict girls’ life choices and exclude them from educational, social and economic opportunities.

Each year, an estimated 23 million adolescent girls become pregnant, which contributes to maternal mortality and morbidity. The adolescent pregnancy has shown an increase during this covid pandemic especially due to financial constraints and loss of schooling. So this study has been conducted to evaluate the incidence of teenage pregnancies and its complications.

**Keywords:** Pregnant, Morbidity, Covid -19.

**Introduction**

Adolescence is defined as a transition from childhood to adulthood, between the ages from 10-19 years. Adolescent pregnancy has become a major health problem .In 2017, an estimate of 11.8 million teenage pregnancies occurred in India. According to the National Family Health Survey 4 (NFHS 4), 7.9% of women aged 15-19 years, were already mothers or pregnant at the time of the survey, with the prevalence higher in rural areas (9.2%) compared to urban areas (5%).

Complications during pregnancy and childbirth are the leading cause of death for 15–19-year- old girls globally. Of the estimated 5.6 million abortions that occur each year among adolescent girls aged 15–19 years, 3.9 million are

unsafe, contributing to maternal mortality, morbidity and lasting health problems.

Adolescent mothers (ages 10–19 years) face higher risks of eclampsia, puerperal endometritis, and systemic infections than women aged 20 to 24 years, and babies of adolescent mothers face higher risks of low birth weight, preterm delivery and severe neonatal conditions.

#### Aim of the study

To estimate the incidence of teenage pregnancies and deliveries

#### Objectives of the study

To evaluate the maternal and neonatal morbidity and mortality.

#### Methodology

The study was conducted in the Department of Obstetrics and Gynecology, GMCH, Dindigul, during the period from June 2021 to August 2021.

#### Inclusion criteria

1. Teenage  $\leq$  19 years
2. Admission for antenatal problems like anemia, preeclampsia etc.,
3. Admission for delivery
4. Admission for postpartum complications

#### Results

In our study, the incidence of teenage pregnancy was found to be 9%. The incidence of teenage deliveries was 11 %.

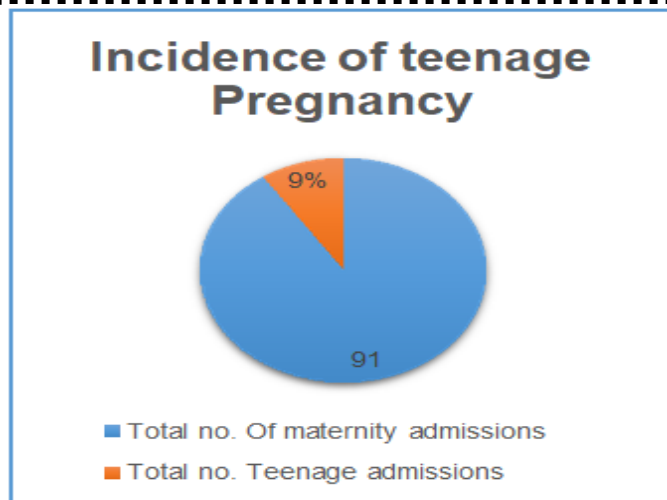


Figure 1

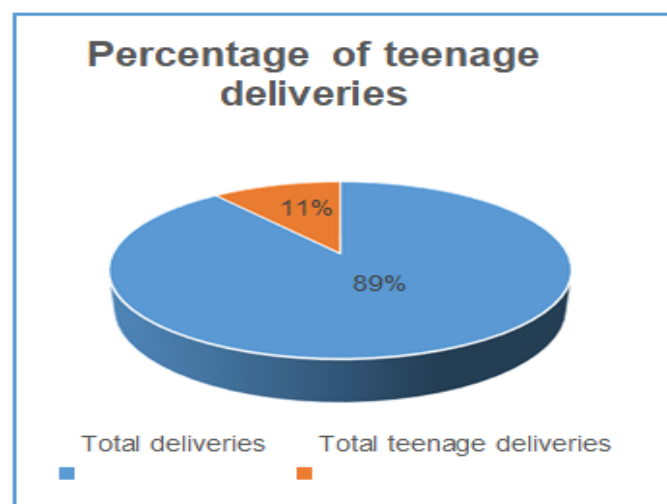


Figure 2

The parity and age distribution in our study group are as follows.

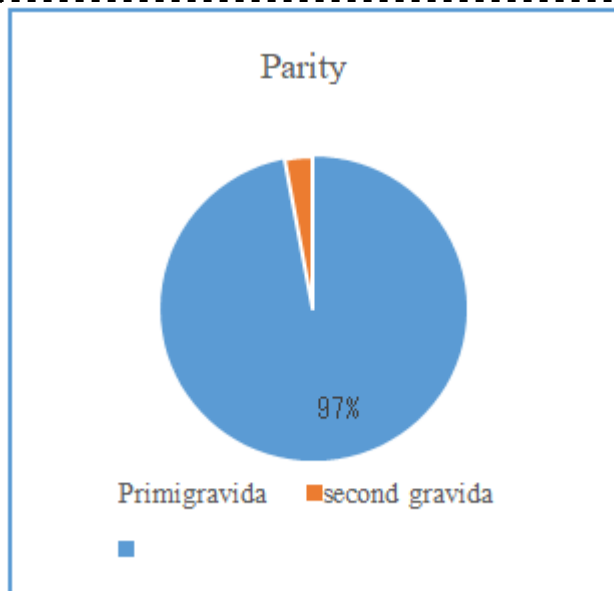


Figure 3

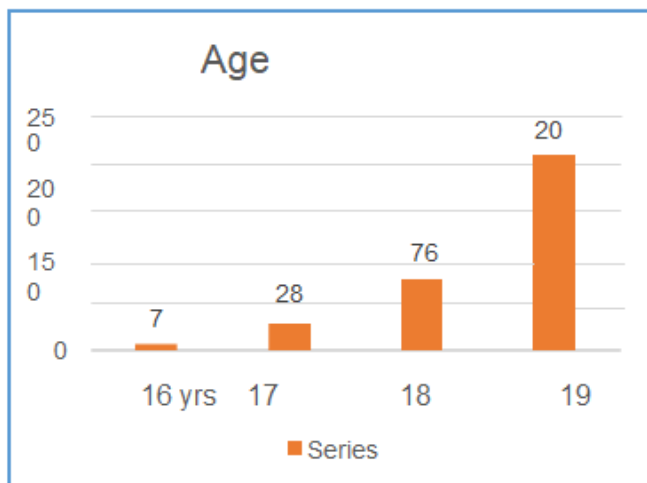


Figure 4

The mode of delivery was found to be as follows.

Mode of Delivery	Number of Deliveries	%
Labour Natural	205	73 %
LSCS	65	23%
Outlet Forceps	6	0.02%
Vacuum	6	0.02%
Assisted Breech	1	0.003%

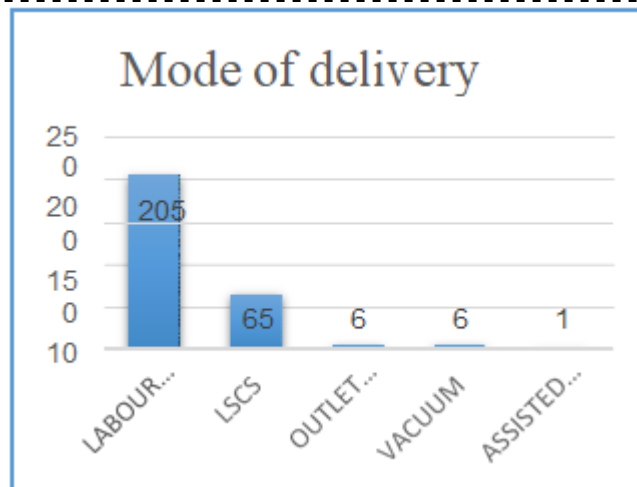


Figure 5

The following complications were evaluated in our study.

Sn.	Maternal Complications	Number
1	Miscarriage	4
2	Anemia	20
3	Hypertensive disorders of pregnancy	15
4	STI/HIV	0
5	MAL presentations	6
6	Preterm labour	10
7	Prolonged labour	12
8	Operative vaginal delivery	12
9	Caesarean delivery	65
10	PPH	5 Mild - 4 Severe - 1
11	Eclampsia	1
12	Placenta praevia	1
13	Abruptio placentae	1
14	Perineal injuries	2
15	Psychological problem(postpartum depression)	1
16	Puerperal sepsis	1
17	CPD	30
18	Mortality	1
19	Unmarried (ectopic)	1

Sn.	Neonatal Complications	Number
1	Birth injuries	0
2	Nicu admission	10
3	Mas/rds	2
4	Low birth weight	10
5	Iud	5
6	Stillbirth	1
7	Birth injuries	0

**Discussion**

Although the legal age at marriage is 18 years for females and 21 years for males in India, early marriage is common. By the age of 15 years, 26% of females are married, and by the age of 18 years, this figure rises to 54%. Most reproduction in India occurs within marriage; so, the low age at marriage automatically links to early onset of sexual activity and thereby fertility. Pregnancies occurring outside wedlock have the risk of terminating in unsafe abortions by quacks and often do not reach the tertiary hospital. In this study, all the teenage mothers were married except 1 (unmarried) who presented as ectopic pregnancy. The incidence of teenage pregnancies in India is 9.2% in rural areas and 5% in urban areas. In our study also the incidence was 9 %. The incidence of teenage deliveries in India accounts to 10% of the deliveries. In our study, we got 11% of teenage deliveries. Most of them were primigravidae 97% and 74% were 19 yrs. The educational status in our study group is poor, all of them were studied upto high school level only. They all belonged to lower socioeconomic class. Antenatal complications were also high when compared to the adult, in terms of anemia and GHT. We had one case of eclampsia, 3 cases of abruption placentae and 1 case of placenta previa. Instrumental deliveries were more mainly due to maternal exhaustion and fetal distress due to prolonged labour. The most common

overall indication for caesarean section was foetal distress, followed by cephalopelvic disproportion . We also had 1 mortality due to severe PPH –the patient delivered in a PHC and referred in the state of shock with DIC. Preterm deliveries and low birth weight babies were 10/282 deliveries. Intrauterine death rate was higher 5/282, when compared to adult population. The maternal and neonatal complications were high in the adolescent pregnancies.

**Conclusion**

The present study was an attempt to throw light on the different sociodemographic characteristics relating to teenage pregnancy and their outcomes and complications. And also to bring out the non-infective impact of covid-19 pandemic. In general, it was found that the teenage mothers were from a socioeconomically-disadvantaged background with lower levels of education and used lesser antenatal healthcare services. They developed more perinatal complications, such as preterm births, stillbirths, and neonatal deaths, and delivered babies with low-birth weight compared to the older mothers. The adverse outcomes of teenage pregnancy could be attributed not only to lower maternal age but also to their relatively-disadvantaged socioeconomic background. All these predecessors were accentuated due to covid pandemic leading to an increase in adolescent marriages and pregnancies & its consequences. Efforts need to be directed towards strict enforcement of laws prohibiting teenage marriage in India. Access to quality health services that are gender-sensitive and adolescent-friendly should be ensured.

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