



**ORIGINAL RESEARCH PAPER**

**Obstetrics & Gynaecology**

**TEENAGE PREGNANCIES AND ITS OBSTETRIC OUTCOME – A STUDY IN A TERTIARY CARE CENTRE**

**KEY WORDS:** Teenage pregnancies, Hypertension in pregnancy, Low birth weight, Maternal health, Preterm birth.

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**ABSTRACT**

Teenage pregnancy has been viewed with increasing concern in recent years. Health concerns have focused on the medical risks to the young mother and her infant. The aim of the present study was to observe the obstetric outcome in such teenage pregnancies. A prospective analysis of all Teenage pregnancies was done over a period of 1 year from November 2016 to October 2017. Maternal and neonatal outcome were analyzed. Among the 16,101 admissions during the study period, teenage pregnancies were 248. The prevalence of teenage pregnancies was 1.54%. Caesarean delivery rate was 29% among teenagers. Preterm delivery rate was 12% in teenage mothers. 13% had developed hypertension in pregnancy. Teenage mothers had increased low birth weight rates - 43%. Teenage pregnancies have a detrimental effect on maternal and perinatal health. Hence strict laws are the need of the hour to stop teenage marriages. Adolescent girls should be educated about safe sex practices, contraceptive methods and maternal and fetal complications of teenage pregnancies.

In India, teenage pregnancy is still an important public-health problem. Although the national policy of the Government of India advocates the minimum legal age of marriage for girls to be 18 years, child marriage is still prevalent in some parts of the country(1). Teenage women have been reported at increased risk of pregnancy complications. Various social and personal factors are involved. The pregnancy rates vary between countries because of differences in levels of sexual activity, general sex education provided and access to affordable contraceptive options(2).

Data of the National Family Health Survey (NFHS) revealed that 16% of women, aged 15-19 years, have already started child bearing(3). About 16 million girls aged 15-19 years give birth every year-roughly 11% of all births worldwide. Complications linked to pregnancy and childbirth is the second cause of death for 15-19-year old girls globally (4).

Poor nutrition and early child bearing expose young women to serious health risks during pregnancy and childbirth, like damage to the reproductive tract and various pregnancy related complications, such as anaemia, pregnancy induced hypertension, preterm labor, cephalo-pelvic disproportion and low birth weight (5,6).

Risk factors for teenage pregnancies mainly are linked to poverty, age at marriage, poor transition from school to work at 16 years of age, lower socio-economic group, sexual abuse, low educational achievement, mental health problems, having had teenage parents, crime, out of wedlock pregnancy, social deprivation, being in the care of social services, other risks.

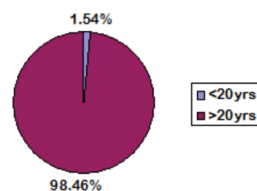
**METHODS**

This was a prospective study of 248 teenage mothers done in Department of Obstetrics and Gynecology in Thanjavur medical college Hospital from November 2016 to October 2017. Inclusion criteria all booked and unbooked primigravida cases attending Thanjavur Medical College Hospital within the age group of 13 – 19 years. Written informed consent was taken. The educational status, marital status, booking status was recorded. A thorough general and obstetrics examination was done. Investigation such as haemoglobin estimation, urine analysis, VDRL test, HIV, HBsAg, Blood grouping and Rh typing were done. Any medical or obstetrical problem in antenatal, intranatal or postnatal period was noted. Labour and its progress were closely monitored. Mode of delivery and perinatal outcome were noted in both groups. The statistical significance was considered at p-value <0.05.

**RESULTS**

Among the 16101 admissions during the study period, teenage pregnancies were 248. The prevalence of teenage pregnancies was 1.54% (figure 1).

**Figure 1: Prevalence rate.**



In terms of education it was seen that only 1% of teenage women had college education. Early marriage and early childbearing affects the education of girl child in India. Going by the marital status, only 2% of the teenage group were unmarried. This shows that teen age marriage is still highly prevalent in our society. Considering the booking status 9% of cases were Unbooked. The majority were booked and this was because of the widespread health coverage at primary health centre level.

The Maternal morbidity was significantly more among the teenage mothers (52%)

Gestational hypertension and its complications (eclampsia) was the most common medical complication noted in teenage group (18%) followed by anaemia (10%). Eclampsia, a deadly complication of GHT, which has high maternal mortality was seen in 13 cases. Abortions were 9%.

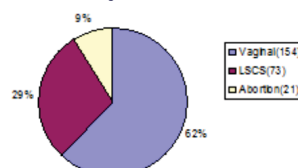
Gestational age suggests that more preterm births were associated with teenage primigravida (12%) (Table 1).

**Table 1: Maternal complications.**

Sl.No	Complications	No. of cases	%
1	Abortions	21	9
2	Anemia	27	10
3	GHT	32	13
4	GDM	4	2
5	Eclampsia	13	5
6	Preterm	30	12
7	PPH	2	1

In the mode of delivery, LSCS is significantly more with teenage primigravida (29%) (figure 2).

**Figure 2: Mode of delivery.**



Incidence of failed induction, fetal distress, oligohydramnios and CPD are significantly more common with teenage primigravida. Considering the neonatal outcome the incidence of prematurity was 16% among the newborn. The incidence of low birth weight was significantly more in the teenage group (43%). About 31% of babies required NICU admissions and 3 neonatal deaths due to prematurity.

### DISCUSSION

In the study, the prevalence rate of teenage pregnancy was 1.54% which was comparable to the incidence noted by Rajoriya M et al. (2.5%), Yasmin G et al. (5.1%), Dubashi (4.5%), Ambedkar (3.94%) and Mamatha (10%). But Prachi Saurabh Koranne et al. got an incidence of 24.17% (7).

In the present study 98% of the teenagers were married, reflecting the tendency for early marriages in our part of the world. Studies by Yasmin G, Mulahopadhya Mamatha and Dharmendra Raut showed similar results (8,9).

The study found 18% preeclampsia in our teenagers, other studies showed an incidence of 7- 32% (10). The study shows 10 % of our teenagers were anaemic. Other studies showed the incidence of anaemia ranging from 22-75% (11,12). The relatively lower incidence of anaemia in our study is because majority were booked in the primary health centres and were advised oral/parenteral iron preparations.

The study had 12% of the teenagers delivered preterm, which was comparable to the findings of Rajoriya M (13%), Mamatha (12.5%) and Kavitha N Singh (7.14%). In the study, 29% of teenagers underwent LSCS. It is found that 43% of babies born to teenagers were LBW, and other studies showed an incidence of 39-65%. Poor antenatal care, preeclampsia, IUGR, low socioeconomic status and spontaneous or induced preterm labour could be the cause of LBW babies.

### CONCLUSION

From the present study it is concluded that teenage mothers had significant number of complications in pregnancy such as anemia, pre-eclampsia and preterm labor as compared to primigravidae in their twenties. Maternal / neonatal morbidity was more due to increased operative interference, and higher number of NICU admissions. Laws prohibiting teenage marriage are the need of the hour. Moreover contraceptive practices need to be promoted among adolescent girls to prevent or to postpone an unwanted pregnancy. Girls should be given rights to take decisions on their own and to live a quality life in this modern era.

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