

Feto Maternal Outcome of Teenage Pregnancy in a Peripheral Military Hospital

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ABSTRACT

Objectives: In this study our main aim is to evaluate feto maternal outcome of teenage pregnancy in a Peripheral Military Hospital.

Methods: This Cross-sectional study was done at Combined Military Hospital, Bogura, 1 year from August 2017 to July 2018. 100 Teenage pregnant ladies between 18 to 20 years were taken up as a case group for the study. 108 control group pregnant women of 21 to 35 years age, without any preexisting co-morbidities and history of previous caesarean section.

Results: In the study, 23% had vaginal deliveries whereas 77% cases had caesarean deliveries. Failed induction was common in both case and control group, 14.5% and 9.25%. Also, in case group 12.8% neonates were suffered from fetal distress, where as in control group it was 9.2%.

Conclusion: From our study we can say that, in order to improve the teenage health periodic information, education,

community activities, ANC camps to be held at primary health care centers. Further study is needed for better outcome.

Key words: Maternal Outcome, Teenage Pregnancy, Caesarean Deliveries.

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INTRODUCTION

In recent decade, adolescent pregnancy has become important health issue in a great number of countries, both developed and developing.¹ WHO defines teenage pregnancy as any pregnancy from a girl who is 10 to 19 years of age, age being defined as her age at the time of delivery.² Adolescent pregnancy rate is on rise, emerging as serious problem all over the world and more so in developing countries like India. It constitutes 11 percent of all the births worldwide and 23 percent of overall disease burden due to pregnancy and child birth due to improper prenatal care needed for monitoring of maternal and fetal development.

The incidence of teenage pregnancy varies dramatically between the different countries, of which 90 percent is contributed by developing countries.³ Nevertheless teenage pregnancy and delivery rate is significantly less in developed countries compared to developing countries.⁴ Incidence of teenage pregnancy in India is 2 women out of every 1000 pregnancies.⁵ Teenage pregnancy is associated with series of maternal and fetal complications. Anaemia, pre-eclampsia, eclampsia, preterm delivery, instrumental delivery, increased LSCS rate due to cephalopelvic disproportion and fetal distress are strongly associated maternal complications in teenage pregnancy. In this study our main objective is to evaluate feto maternal outcome of teenage pregnancy in a Peripheral Military Hospital.

OBJECTIVE

General Objective

- In this study our main goal is to assess feto maternal outcome of teenage pregnancy in a Peripheral Military Hospital.

Specific Objective

- To identify Total number of deliveries.
- To detect complications associated with teenage pregnancy.

METHODOLOGY

Type of Study: Cross sectional study.

Place of Study: Combined Military Hospital, Bogura

Study Period: 1 year from August 2017 to July 2018

Study Population: Teenage pregnant ladies between 18 to 20 years were taken up for the study

Sampling Technique: Purposive

Method

- During the study, during this period, all cases were included in the study, irrespective of their booking and unbooking statuses after 28 weeks of pregnancy. 100 Teenage pregnant ladies between 18 to 20 years were taken up as a case group for the study. 108 control group pregnant women of 21 to 35 years age, without any preexisting co-morbidities and history of previous caesarean section.

- In the study, detail history of the patient has been taken in a prescribed data sheet with the informed consent of the patient or from the patient's guardian. Data collected regarding mode of delivery, whether vaginal delivery or caesarean delivery, full term vaginal delivery or preterm delivery, if LSCS then indication for LSCS, fetal outcome in terms of prematurity, RDS, low birth weight, still birth, anomalous fetus, NICU admission.

Data Analysis: Statistical analysis was performed using the Statistical package for social science SPSS version 15.0. A descriptive analysis was performed for clinical features and results were presented as mean ± standard deviation for quantitative variables and numbers (percentages) for qualitative variables.

RESULTS

In table-1 shows total number of deliveries where total number of babies delivered-892. Where teenage pregnancy was 100 (11.21%).

In figure-1 shows educational status of the study group where in case group most of the patients completed only their SSC, no one completed their masters (age won't permit) where as in control group 7 people completed their masters.

In figure-2 shows mode of delivery in case group where 23% had vaginal deliveries whereas 77% cases had caesarean deliveries.

In table-2 shows complications associated with teenage pregnancy, where failed induction was common in both case and control group, 14.5% and 9.25%.

Table 1: Total number of deliveries

Total Number of delivery	Teenage pregnancy	More than 20 years pregnancy
892	100 (11.21%).	118(88.79%)

Table 2: Complications associated with teenage pregnancy

Variable	Case (n=100)	Control (n=118)	P value
GDM	3(1.4%)	16(7.3%)	0.007
PIH	8(3.7%)	12(5.5%)	0.643
Eclampsia	1(0.5%)	0	0.459
Pre-term labour	9(4.1%)	5(2.3%)	0.175
Postdated pregnancy	6(3.3%)	16(7.3%)	0.630
Failed induction	31(14.5%)	20(9.2%)	<0.001

Table 3: Neonatal outcome

Neonatal outcome	Case	Control	P value
Fetal distress	28(12.8%)	20(9.2%)	0.071
Perinatal death	2(0.9%)	3 (1.4%)	0.578
Fetal weight	2.83±0.385	3.27±0.337	<0.001
NICU admission	18 (8.3%)	14(6.4%)	0.250

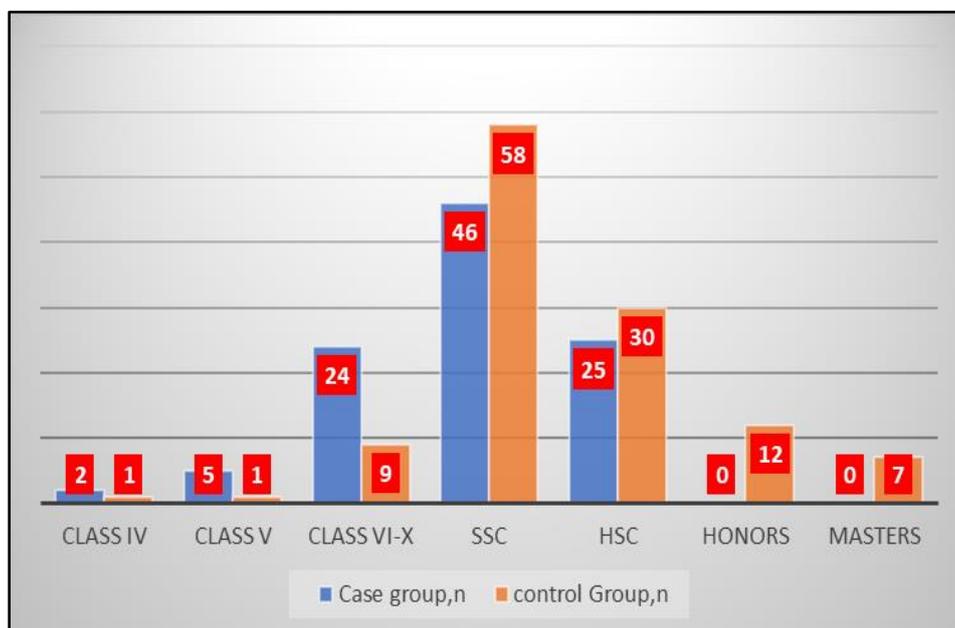


Figure 1: Educational status of the study group.

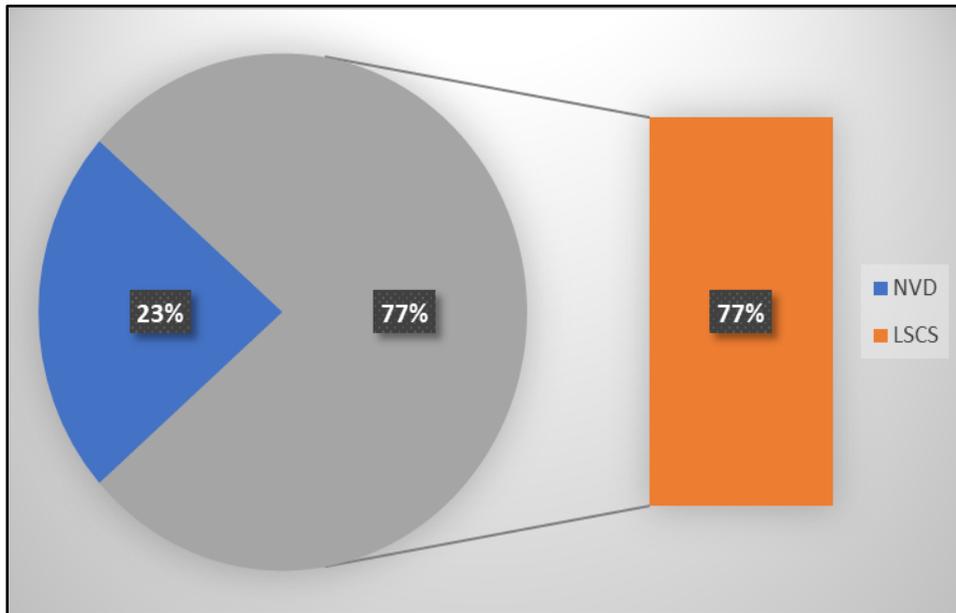


Figure 2: Mode of delivery in case group.

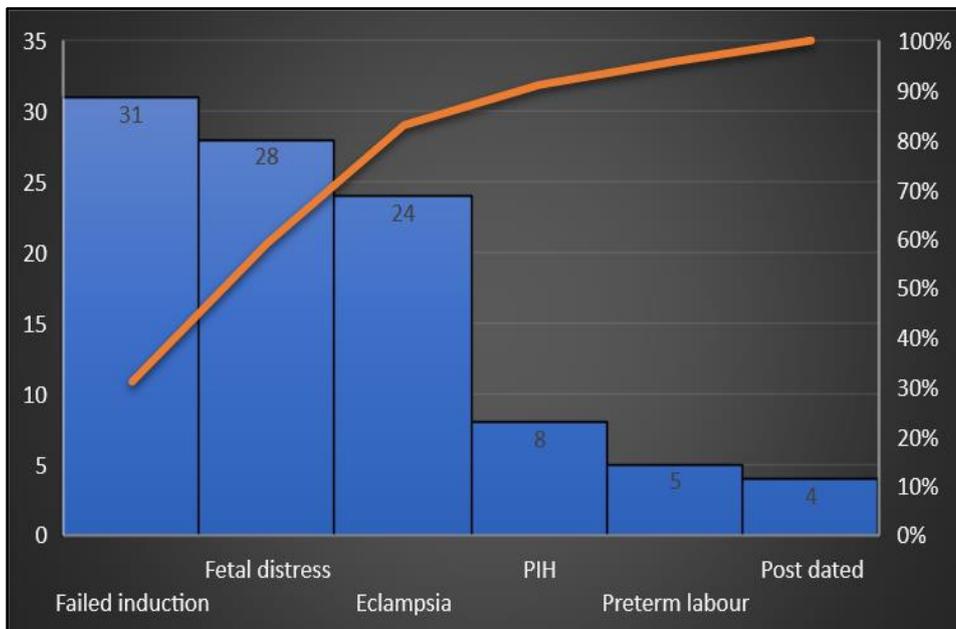


Figure 3: Indications of caesarean delivery in teenage pregnancy

In table-3 shows neonatal outcome where in case group 12.8% neonates were suffered from fetal distress, where as in control group it was 9.2%.

In figure-3 shows indications of caesarean delivery in teenage pregnancy where failed induction is in teenage pregnancy with 31 cases and eclampsia and fetal distress contributing to 24 and 28 cases each.

DISCUSSION

In our study we found that, adverse outcome of teenage pregnancy arises not only from physical and medical causes associated but also depends on individual, family, social, cultural, economic factors besides lack of access to health care resources, contraception, education.

Increased incidence of LSCS in teenage pregnancies and medical complications associated with it like anemia, PIH, and fetal

complications being, prematurity, IUGR, Low birth weight are preventable factors.⁶

In one study reported that, teenage pregnancy exposes mothers to many health-related complications and newborns to poor birth outcome. Adverse outcome of teenage pregnancy arises not only from physical and medical causes associated but also depends on individual, family, social, cultural, economic factors besides lack of access to health care, contraception, resources, education.⁷ In our study we noted that, both case and control group most of the people completed their SSC and HSC. In control group 30 people did their HSC where as in case group number was 25. After given SSC in control group 7 people completed their masters. In case group no one completed their graduation or masters. They dropped out. This implies that teenage mothers are less careful about their pregnancy probably secondary to lack of awareness, maturity and other social factors.

In one study reported that, increased incidence of LSCS in teenage pregnancies and medical complications associated with it like anemia, PIH, and fetal complications being, prematurity, IUGR, Low birth weight are preventable factors.⁸ In our study we found that, 23% had vaginal deliveries whereas 77% cases had caesarean deliveries. Which similar to other studies.

Teenage pregnancy remains major health issue in our country due to prevailing social dogmas, age old traditions and poor access to health care in remote rural areas, illiteracy leads to lack of knowledge about family planning and puts the adolescents at risk for early pregnancy. Education play major role in decreasing the incidence of teenage pregnancy and its attendant health risks and psychological issues. Rate of caesarean delivery was high, predominant indication being cephalo pelvic disproportion, fetal distress, medical disorders associated like pre-eclampsia, eclampsia. Vaginal delivery was seen in cases with low birth weight baby's secondary to growth restriction or prematurity.⁹ In our study we found that, in case group 12.8% neonates were suffered from fetal distress, where as in control group it was 9.2%. In teenage pregnancy where failed induction is in teenage pregnancy with 31 cases and eclampsia and fetal distress contributing to 24 and 28 cases each. Significant number of neonates born to teenage mothers had low birth weight, probably due to malnutrition, medical diseases associated with pregnancy leading to intrauterine growth restriction and prematurity.⁹

CONCLUSION

From our study we can say that, in order to improve the teenage health periodic information, education, community activities, ANC camps to be held at primary health care centers. Further study is needed for better outcome.

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