



**Comparison of our study with general population for term and preterm delivery:**

	Term Delivery	Preterm Delivery
Teenage pregnancy(n-100)	55(55%)	45(45%)
General population(n-7697)	7256(94.27%)	441(5.73%)

- On comparison with general population rate of preterm delivery was higher than term delivery which was statistically significant (p-value <0.05)

**Distribution of subjects according to associated complications on admission:**

Associated Complications	No. of Subject (n-100)
Anaemia	45
Preterm labour	35
Eclampsia	19
Preeclampsia	14
PROM	13
Chorioamnionitis	01

- The above table shows that most common associated complication was anaemia. Second most common complication was preterm labour and third most common complication was eclampsia.

**Distribution of subjects according to mode of delivery in teenage pregnancy:**

Mode of Delivery	No. of subjects (n-100)	Genarel Population (n-7570)	P-Value
Vaginal delivery	69(69%)	5645(74.57%)	<0.05
LSCS	28(28%)	1832(24.20%)	<0.05
Instrumental delivery	3(3%)	93(1.23%)	>0.05

- The above table shows that 69% of subjects were delivered vaginally, either full term or preterm delivery.
- 28% subjects were delivered by LSCS and 3% subjects were delivered instrumentally.
- On comparison, rate of vaginal delivery was lower in teenage subjects than general population which was statistically significant (<0.05).

**Distribution of subjects according to indication of LSCS in teenage pregnancy:**

Indication of LSCS	NO.OF Subjects (n-28)	Genarel Population (n-1308)	P-Value
CPD	09(32.15%)	384(29.35%)	>0.05
Eclampsia with unfavorable cervix	05(17.86 %)	60(4.60%)	<0.05
MSL with unfavorable cervix	05(17.86%)	264(20.29%)	>0.05
Foetal distress in 1 <sup>st</sup> stage of labour	03(10.71%)	288(22.01%)	
Non progress of labour	03(10.71%)	132(10.01%)	>0.05
Severe oligohydramnios with IUGR	02(07.14%)	33(2.52%)	>0.05
Breech	01(3.57%)	147(11.23%)	

- The above table shows that most common indication of LSCS in our subjects was CPD that was 32% the possible explanation could be underdevelopment of pelvis in younger mothers.
- Second most common indication was eclampsia with unfavorable cervix, which was 21%.

**Distribution of maternal complications in subjects (overall):**

Maternal Complication	No. of Subjects (n-100)	General Population (n-7811)	P-Value
Anaemia	60(60%)	1851(23.7%)	<0.05
Preterm labour pain	45(45%)	441(05.6%)	<0.01
Preeclampsia	14(14%)	499(06.4%)	>0.07
Eclampsia	12(12%)	90(01.6%)	<0.05
Hypertension	11(11%)	289(03.7%)	<0.05
Chorioamnionitis	01(01%)	05(0.06%)	>0.08
Mortality	00	47(0.6%)	

- The most common complication in subjects was anaemia that was 49%. Second most common complication was preterm labour that was 35%.
- On comparison with general population rate of anaemia was significantly higher in our study (p value-<0.05)
- Comparison of our study to another study:**

Mode of delivery	Our study	R N chaudhri et al (2007)	A K Sharma et al (2003)	IMR Goodnewardene et al (2005)
Vaginal delivery	69%	85.7%	95.3%	94.4%
LSCS	28%	08.3%	04.9%	06.3%
Instrumental delivery	03%	06.0%		02.4%
Maternal Complications				
Anaemia	49%	28.5%	34.7%	50.5%
Preterm delivery	43%	27.7%	03.2%	10.7%
Preeclampsia	14%	19.4%	25.0%	11.8%
Eclampsia	12%	04.8%	05.4%	06.8%

**4. Discussion**

The incidence of teenage pregnancy shows marked variation in developed and developing countries<sup>11</sup>. As per DLHS<sup>12</sup> 3(District level Household and Facility Survey), in India, over all incidence of adolescent pregnancy is 5.6% (rural 6.4% and urban 3.5%), there is wide range of variation among states. Gujrat has 3.4% of adolescent pregnancy. There are some extrinsic factors such as inadequate prenatal care, illiteracy, and poor socioeconomic conditions that affect the outcome of pregnancy in teenage girls<sup>7-9</sup>. Several medical complications like preterm birth, poor maternal weight gain, pregnancy induced hypertension, anaemia and sexually transmitted diseases are strongly associated with teenage pregnancy.

In our study 52% of subjects were 19 years of age and 48 % of subjects were 18 to 16 years of age. 96% of subjects were primi gravida and 4 % of subjects were second gravida.

Early marriage in our society are associated with low level of schooling and education as well as early pregnancies. Attainment of higher education is associated with better awareness and wisdom, and consequently an urge for professional pursuit and desire for economic independence. This in turn leads to late marriage and late conception preventing unintended adolescent pregnancies.

In our study 52% of subjects were emergency admission who had not taken single ANC visit, 23% subjects were registered subjects and 25% were referred from rural area.

In our study 69% of subjects were delivered vaginally, either full term or preterm delivery. 28% subjects were delivered by LSCS and 3% subjects were delivered instrumentally. On comparison, rate of vaginal delivery was lower in teenage subjects than general population which was statistically significant (<0.05). most common indication of LSCS in our subjects was CPD that was 32% the possible explanation could be underdevelopment of pelvis in younger mothers. Second most common indication was eclampsia with unfavorable cervix, which was 21%.

Maternal complication like anaemia and preeclampsia were comparable with other study while rates of preterm delivery and eclampsia were higher in our study. In India **Aznar et al**<sup>10</sup> had observed incidence of 10% eclampsia in their adolescent group and the frequency was more in girls less than 15 years (ACOG, 1998; National Health Statistics, 1997). He had also reported increase in primary cesarean section by 28% in patients of 15 years or below.

## 5. Conclusion

From present study we found that there are maternal complications like anaemia, eclampsia, pre-eclampsia were higher in teenage pregnancy as compared to general population. Also we found that neonatal complications like low birth weight, prematurity, IUGR were higher as compared to general population. The adverse outcome of teenage pregnancy could be attributed not only to lower maternal age but also to their relatively disadvantaged socioeconomic background. 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.

## References

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