

3. Associated medical disorders like cardiovascular disorder, hypertensive disorder, endocrinological disorder or respiratory disorder.
4. Pregnancy of less than 24 weeks.

3. Observation and Discussion

Distribution of subjects according to maternal age:

Age	No. of Subjects (n-100)	Percentage %
16 years	4	04.0%
17 years	5	05.0%
18 years	39	39.0%
19 years	52	52.0%

- The above table shows that 91% of subjects had completed 18 years.
- 5% of subjects had completed 17 years and 4% of subjects had completed 16 years of age.
- Mean age of my study was 18.4 ±1.06years.

Table 11: Distribution of adverse neonatal outcome:

Neonatal Complication	No. of Subjects (n-100)	General Population (n-7697)	P-Value
NICU admission	57(57%)	479(6.5%)	<0.05
Prematurity	45(45%)	441(5.7%)	<0.05
LBW	25(25%)	580(7.8%)	<0.05
IUFD	18(18%)	358(4.6%)	<0.05
IUGR	09(09%)	193(1.2%)	<0.05
Early neonatal death	07(07%)	105(1.9%)	<0.05

The above table shows that neonatal complication like NICU admission, LBW, prematurity, IUGR, early neonatal death were significantly higher in my subjects than general population.

Table-11b: Comparison of neonatal outcome of our study with another study

Neonatal complication:

Neonatal outcomes	Our study	R N Chaudhari et al (2007)	A K Sharma et al (2003)	IMR Goodnewardene et al (2005)
Low birth weight	25%	38.9%	57.1%	24.8%
IUFD	18%	05.9%	15.6%	09.2%
Early neonatal death	09%	05.8%	01.7%	06.3%

The above table shows that foetal complication like low birth weight and early neonatal death were comparable with other study while rate of IUFD was higher.

Table 12: Distribution of neonatal outcome according to maternal age:

Age	Live Birth	Still Birth	Total
16years	03	01	04
17years	04	01	05
18years	33	06	39
19years	42	10	52
Total	82	18	100

Degree of freedom-3, p value-<0.0001

The above table shows stillbirth rate was significantly higher in teenage deliveries, statistically it was significant (p value <0.0001).

Table-12b: Comparison of neonatal outcome between my study and general population

	Live Birth	Still Birth
My study (n-100)	82(82%)	18(18%)
General population (n-7697)	7339(95.4%)	358(4.6%)

The above table shows 82% of subjects were live born and 18% of subjects were still born in our study compared to general population where 95.4% of subjects live born and 4.6% were still born, statistically significant (p-value-<0.05)

Table 13: Distribution of subjects according to Birth weight and APGAR:

	No. of Subjects
Birth weight <2kg	39
>2kg	61
APGAR At 1min <5	12
>5	76
At 5min <5	09
>5	79

The above table shows that 39% of subjects had LBW which was because of pre maturity or IUGR

12 % of subjects had APGAR <5 at 1 minutes and out of this 12% subjects 9 % had remains APGAR <5 at 5 minutes those who required NICU care.

4. Discussion

The incidence of teenage pregnancy shows marked variation in developed and developing countries¹¹. As per DLHS¹² 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. Gujarat 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 girls⁷⁻⁹. Several perinatal complications like Still birth, NICU admissions, Prematurity, Low birth weight, Intra uterine fetal death, Intra uterine growth retardation, Early neonatal death, etc.

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 marriages 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.

Our study showed that neonatal complications like NICU admission, LBW, prematurity, IUGR, early neonatal death were significantly higher in our subjects than general population. While the fetal complications like low birth weight and early neonatal death were comparable to studies of R N Chaudhari et al (2007), A K Sharma et al (2003), IMR Goodnewardene et al (2005), the rate of IUFD was higher.

Also stillbirth rate is significantly higher in teenage deliveries which were statistically significant (p value <0.0001) and this is comparable from the following:

82% of subjects were live born and 18% of subjects were still born in our study compared to general population where 95.4% of subjects live born and 4.6% were still born, statistically significant (p-value < 0.05).

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.

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