

TEENAGE PREGNANCY—A HEALTH HAZARD

By

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SUMMARY

Analysis of 822 deliveries of women below 20 years of age (teenage age) was carried out. These patients were studied throughout their antenatal, intranatal and postnatal periods. Medical and obstetric complications were noted. These results were compared to the outcome of pregnancies occurring to women in their early twenties. The incidences of unmarried pregnancies, unregistered patients and primipara was more in the study group. The incidence of cephalopelvic disproportion and anaemia was also high. There was no increase in the incidence of operative deliveries in the teenage group. The prime indications for forceps and caesarean section in the study group was prolonged IInd stage of labour and cephalopelvic disproportion respectively.

Introduction

Teenage pregnancy is on the rise today all over the world and more so in the developing countries like India, as early marriage and early pregnancy are the accepted cultural norms of our society. Reports from the literature from Western Countries indicate that the incidence of maternal complications is higher for teenage pregnancies than for pregnancies occurring in women who are in their early twenties. There is evidence that offsprings of teenage mothers are at a greater risk. Several studies document lower birth weight and higher perinatal mortality rates for this age group. This study attempts to evaluate the health

hazards related to teenage pregnancy in Indian women.

Material and Methods

This is analysis of 822 deliveries of women below 20 years of age (teenage group) carried out at Nowrosjee Wadia Maternity Hospital. These patients were studied throughout their Antenatal, Intranatal and Postnatal periods. Medical and obstetric complications were noted. These results were compared to the outcome of pregnancies occurring to women in their early twenties. Special attention was paid to postpartum contraception.

Results and Analysis

The data collected was analysed as follows:

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The incidence of teenage pregnancies which went to term was 6.13%. Ninety per cent of the patients in our study were between 18-19 years of age. It is interesting to note that out-of-wedlock pregnancies constituted only a small fraction of the cases in our study, (0.86% study group and 0.03% control) in sharp contrast to western data. Yet the incidence of unmarried pregnancy is much more in the teenage group, the "P" value being significant at 0.02. The incidence of primiparae was more in the teenage group, (62.77% study group, 50.20% control). A small but significant number of teenage mothers were multiparous indicating thereby the early age of marriage in our country. Raising the age of marriage, would significantly reduce the load of teenage pregnancy. The "p" value for primipara in teenage mothers was significant at 0.05. Awareness of antenatal registration and regular antenatal care was found to be totally absent in 13.2% of the cases. Herein lies the role of social Obstetrics and Mass education programmes to stress the urgent and vital need for antenatal care. Anaemia was the commonest medical disorder complicating pregnancy in both the groups. The incidence of Anaemia was higher in the teenage group, (60.46% study group; 50% control group) probably due to lack of adequate antenatal care. Pre-eclampsia was also predominant. Both these disorders have common predisposing factors like lack of adequate antenatal care, low socio-economic status and malnutrition.

Table I shows clearly the higher incidence of CPD in the teenage group. The pelvic architecture is not as yet completely formed and mature enough for term delivery. Therefore CPD is the commonest problem encountered during

labour, the "P" value being significant at 0.05.

TABLE I
Obstetric Complications

Type	Teenage %	Early twenties %
Cephalo-pelvic disproportion	23.10	4.9
Placenta previa	0.12	0.4
Postdatism	9.25	12.6
Breech	2.92	2.1
Transverse lie	0.12	0.2

There was no increase in the incidence of operative deliveries in the teenage group as seen in Table II. Only 12% of the cases required operative interference. This calls for a great deal of decision making on the part of the attending obstetrician who must take into account not only the physical but also the psychological trauma that goes with each operative delivery. Being her first experience of labour and delivery, the teenage mother is totally lost and unaware of what is expected of her. By the time the second stage is reached, she is too exhausted to bear down effectively. Hence the higher incidence of forceps deliveries for prolonged second stage in the teenage group, the "P" value being significant at 0.01 (Table III).

TABLE II
Operative Deliveries

Type of delivery	Teenage %	Early twenties %
Spontaneous vaginal	87.90	86.50
Forceps	4.98	3.58
Vacuum	0.60	0.82
Caesarean section	3.61	7.00
Assisted breech	2.91	2.10

TABLE III
Indications for Forceps Delivery

Indication	Outlet forceps		Low midcavity forceps	
	Teenage	E. Twenties	Teenage	E. Twenties
Prolonged second stage	64.20	53.69	92.30	53.32
Fetal distress	17.90	34.30	7.70	44.33
Prophylactic	17.90	12.01	—	2.45

As stated above, since the pelvic architecture is not completely developed and because of the short stature, cephalopelvic disproportion remains the commonest indication for caesarean section, in the teenage group. "P" value significant at 0.05. A breech presentation in a primigravida is an indication for caesarean section in modern obstetrics. However, because of inadequate antenatal care, these patients could not be posted for elective caesarean section and hence emergency caesarean section had to be done (Table IV).

TABLE IV
Indications for Caesarean Sections

Indication	Teenage %	Early twenties %
Elective CS		
CPD	13.70	8.40
Placenta previa	—	0.86
Postdatism with fetal distress	16.00	28.65
Emergency CS		
CPD	44.00	36.00
Breech	16.00	12.55
Prolonged second stage with fetal distress	12.00	13.20
Deep transverse arrest	08.00	06.15
Transverse lie	04.00	03.85

Table V clearly shows that the incidence of low birth weight babies is higher in the teenage group. "P" value being

significant at 0.05. Low socioeconomic status, inadequate antenatal care and malnutrition are common causes predisposing to the delivery of low birth weight babies.

TABLE V
Birth Weight Distribution

Birth weight	Teenage %	Early twenties %
Less than 1.5 kg	5.12	2.84
1.5 to 2.5 kg	41.37	28.69
2.5 kg and above	53.44	68.47

Though the incidence of still birth and neonatal deaths in the teenage group was higher "P" value significant at 0.05. The overall perinatal outcome in this study was good as reflected by the low incidence of perinatal deaths (Table VI).

TABLE VI
Perinatal Outcome

Perinatal outcome	Teenage %	Early twenties %
Still births	2.17	1.78
Neonatal deaths	6.75	1.90
Congenital anomalies	0.24	0.86

Post partum contraception

It is interesting to note that most of the teenagers desire not more than three

children. Fifty three per cent of the teenagers accepted different methods of post partum contraception. Sterilization was accepted by 3% of the teenagers after completing their desired family size.

Discussion

There is substantial evidence to suggest that early child-bearing is on the increase everywhere and that it presents a serious problem in many countries. 10-15% of all births in the world involve teenage mothers. The incidence in our study was 6.13%.

Emphasis on delaying the onset of child-bearing beyond 20 years of age should be an important element of population control programmes.

Perinatal mortality rate for teenage pregnancies was significantly higher than the corresponding rate for women in their early twenties.

The question is whether the teenagers are inherently a high-risk group due to biological and/or psychological factors or whether social demographic factors including perinatal care are the most important determinants of the poorer outcome of such pregnancies.

TABLE I
Incidence of teenage pregnancies in the study group

Age Group	No. of Pregnancies	Percentage
15-19	10	6.13
20-24	150	93.87
Total	160	100.00

TABLE II
Perinatal mortality rate in teenage pregnancies

Age Group	No. of Pregnancies	No. of Stillbirths	Perinatal Mortality Rate (%)
15-19	10	2	20.00
20-24	150	10	6.67
Total	160	12	7.50

It is interesting to note that the incidence of teenage pregnancies in the study group was 6.13%.

TABLE III
Perinatal mortality rate in women in their early twenties

Age Group	No. of Pregnancies	No. of Stillbirths	Perinatal Mortality Rate (%)
20-24	150	10	6.67

TABLE IV
Perinatal mortality rate in women in their early twenties (continued)

Age Group	No. of Pregnancies	No. of Stillbirths	Perinatal Mortality Rate (%)
25-29	100	5	5.00
30-34	50	2	4.00
Total	200	17	8.50

It is clearly seen that the perinatal mortality rate in teenage pregnancies is significantly higher than the corresponding rate for women in their early twenties.