

OBSTETRICAL BEHAVIOUR AND PERINATAL MORTALITY OF TEENAGED MOTHERS IN URBAN POPULATION

by

(Sm.) ANIMA BISWAS (SENGUPTA),* M.B.,B.S., D.G.O., Ph.D. (Cal.),
F.R.C.O.G. (Lond.)

and

TAPAS KUMAR GOSWAMI,** M.B.,B.S. (Cal.)

Introduction

Labour at either extremes of a woman's reproductive life is considered by many to be fraught with additional hazards. That this is true in the elderly has been stated by numerous authors. But the younger mothers have received little attention. However, the curve of efficiency is correlated with age as well as parity, that is to say, after a certain age, conception and labour are less efficient whatever be the parity. Greenhill in Dr. Delee's text says "Labour in the young shows little variation from the usual. Labour is shorter, somewhat easier, and there is less haemorrhage. The pelvis is larger than one would expect".

The teenaged mothers attain reproductive maturity but their obstetrical behaviour is expected to be different from women who are older. The physical development remains incomplete, especially those in early teens. Different systems such as the endocrines, cardiovascular

and reproductive as also the pelvis do not attain full maturity. Psychologically too, they are far from mature. Hence, the general belief among physicians that the teen aged may not be able to adapt properly to the stress and strain of pregnancy, is not surprising. There are psychic as well as physical changes that must be borne in mind, specially in the case of unmarried teens. The effect of fear, guilt, apprehension of reproach, shame, the anticipation of an ordeal and many other mental impacts to which she may be subjected have to be managed, with far more grace and sympathetic understanding.

Methods and Material

It will be evident that the information presented from this study cannot be entirely applied to other locales because of the character and the social and economic status of our patients. The authors worked with this scheme in R. G. Kar Medical College and Hospitals in Calcutta from 1st September, 1978 to 31st August, 1979.

Total number of cases confined from 1st September, 1978 to 31st August, 1979 was 7853.

Here we find that the teen aged comprises about 1/5 of the total and is more than 1/3 of the 20-30 years age-group.

This Table clearly illustrates that the complications during pregnancy are lesser in the teens.

*Asst. Prof. Dept. of Obstetrics and Gynaecology, R. G. Kar Medical College Hospital, Calcutta.

**Ex. Senior House Surgeon, Dept. of Obst. and Gyne., R. G. Kar Medical College Hospital, Calcutta.

†(Paper presented at the XXIII All India Congress of Obstet. and Gynaecology held in Bangalore in December 1979).

Accepted for publication on 7-7-81.

TABLE I
Age Groups

Age group in years	No. of patients	Percentage
13-19	1579	20.1
20-30	5632	71.7
31	643	8.2

TABLE II
Complications During Pregnancy in Different Age Groups

	13-19 years	20-30 years	31 + years
1. Anaemia	33%	62.1%	71%
2. Abortion	3.3%	14.8%	3.6%
3. P.E.T.	0.62%	2.40%	0.35%
4. Eclampsia	0.41%	0.98%	0.70%
5. Jaundice	0.17%	0.63%	0.034%
6. APH	0.70%	4.5%	1.02%

The above Table shows that the duration of labour in the first and second stage is lesser in the teens but the third stage-duration is slightly more

TABLE III
Average Duration of Labour in Different Age Groups

	13-19 years	20-30 years	31 + years
1. First and Second stage	11 hours	11 hours 48 mins	10 hrs. 6 mins
2. Third stage	7.1 mins	5.3 mins	5 mins

Table IV shows that the complications of third stage of labour is far less in the teenaged.

Operative interference in teens is least except episiotomy which is done as a routine in the primigravida.

TABLE VI
Maternal Mortality Rate in Different Age Groups

13-19 years	1.53
20-30 years	5.03
31 + years	0.87

Here too, the adolescent mothers fare better.

TABLE IV
Complications of Third Stage

	13-19 yrs.	20-30 yrs.	31 + years
1. Retained placenta	0.16%	0.65%	0.17%
2. P.P.H.	0.02%	0.66%	0.20%

TABLE V
Operative Interference in Different Age Groups

	13-19 years	20-30 years	31 + years
1. Episiotomy	75%	41%	8%
2. Forceps	4.2%	12.9%	0.9%
3. Caesarean section	2.2%	12.2%	1.9%
4. Decapitation	0.04%	0.30%	0.01%
5. Evisceration	0.01%	0.03%	0.01%
6. Craniotomy	0.02%	0.08%	0.02%

TABLE VII
Average Birth Weight of Babies in Different Age Groups

Age	Weight
13-19 years	2 Kg. 100 gm.
20-30 years	2 Kg. 550 gm.
31 + years	2 Kg. 320 gm.

This Table shows that the babies of the teenaged mothers are premature by weight compared to the older mothers.

TABLE VIII
Perinatal Mortality Rate in Different Age Groups

Age	
13-19 years	11.46
20-30 years	22.41
31 + years	3.82

The perinatal mortality rate is less in the teens.

TABLE IX
Premature, Postmature, Malformed and Small for Date Babies in Different Age Groups

	13-19 yrs.	20-30 yrs.	31 + yrs.
1. Premature	15.3%	11.2%	9.7%
2. Postmature	0.8%	11.8%	9.4%
3. Small for date	0.011%	0.19%	0.12%
4. Anencephaly	0.04%	0.09%	0.02%
5. Hydrocephalous	0.11%	0.14%	0.011%

Here we see that the incidence of postmature and malformed and small for date babies is more in the elderly group, but prematurity is commoner in the teens.

Discussion

The above study was a critical analysis of the pattern of behaviour in teenaged and oldest mothers on a comparative

basis in different phases of pregnancy. Pregnancy in teenagers is a possibility as they attend puberty which is usually between 11 and 13 years in our country. During pregnancy, changes take place in most of the body systems and organs especially the cardiovascular system blood volume, cardiac output etc. are increased considerably. The respiratory system, vital capacity, oxygen consumption etc. are increased and moderate enlargement occurs in most of the endocrine glands. From these the authors find that the antepartum, intrapartum and postpartum complications were far less in the teenaged mothers in comparison to the older women. The Government of India has set 18 years as the minimum age for marriage in girls. So as to control the population and keep it within a reasonable limit. But we obstetricians find that the adolescent mothers face the hazards of pregnancy with greater ease. The younger mothers are more safe from the point of

view of maternal and perinatal mortality and morbidity.

Conclusion

That the adolescent mothers fare better in pregnancy in comparison to the older ones stands out well. Panick and unnecessary precaution will do more harm than good. Routine care and management as is

rendered to others with the ever watchful eye of vigilance is preferable and is all that is needed.

Acknowledgement

We are extremely grateful to Prof. Sreemanta Banerjee, Head of the Dept. of

Obst. & Gynec., R. G. Kar Medical College Hospital, Calcutta for his kind help and valuable suggestions in preparing this paper. We also express our heartfelt thanks to both the Principal and the Superintendent of R. G. Kar Medical College Hospitals for their permission in using hospital records.