

## REVIEW OF OVER FIVE THOUSAND CONSECUTIVE DELIVERIES WITH SPECIAL REFERENCE TO MATERNAL AND FOETAL (PERINATAL) MORTALITY

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At the time of completion of ten years' work, on 22nd September 1962, a study was made of foetal and infant mortality, (still-births and neo-natal deaths), and of maternal mortality.

During this period there were 2995 deliveries. Among them there was only one maternal death. She was the 2963rd delivery case, a grand-multipara (XVth para) who was very obese. She had a normal delivery but the placenta needed manual removal, which was done under general anaesthesia. There was not much postpartum haemorrhage, but she went into a condition of shock and circulatory collapse from which she did not recover in spite of all the necessary measures taken by the anaesthetist.

Perinatal mortality in the first 302 cases, before ante-natal care was properly organised with the requisite co-operation from the patients, worked out at a scale of 62 per thousand. Of these the still-births worked out as 42 per thousand and neonatal deaths as 20 per thousand. All cases where the infant died before the mother's discharge from the Nursing Home were included in the figure of "Neo-natal" mortality. We keep delivery cases in the Nursing Home for ten days after normal delivery but after operative delivery, or when any postpartum operation is needed, they stay longer. Very rarely

does any case go away before the period of 10 days postpartum.

After the first 302 cases, when, with the requisite patient co-operation, antenatal care had been effectively established, there were 2693 deliveries till 22nd September 1962. In these deliveries the figure of perinatal mortality rate works out to 32 per thousand, including cases of stillbirths and of deaths of babies after birth till the date of discharge of the mother from the Nursing Home. The still-births worked out as 19 per thousand and deaths of babies born alive but who died before the mothers were discharged from the Nursing Home, as 13 per thousand.

The marked contrast between the figures of perinatal mortality among the 302 deliveries before antenatal care could be made really effective by securing patient co-operation through an understanding of the important role of such care, and the cases delivered after such patient co-operation had been secured, establishes the need and enormous importance of organising good antenatal care through an understanding and effective co-operation of the patients, and of their husbands and of mothers-in law, on whose approval the patient's co-operation so often entirely depended.

A more detailed study of perinatal mortality figures has been made in 2398 deliveries between 29th June 1962 and the end of November 1969. There is an overlapping of 87 cases in the two series.

In this series of 2398 deliveries there was no maternal death. Of the deliveries there were 13 "twins" deliveries, making the number of babies born 2411. There were 85 perinatal deaths among the 2411 babies, which works out at 35 per thousand. Of these there were 37 stillbirths, and 48 neonatal deaths. So the scale works out, approximately at 15 per thousand neonatal death, and 20 per thousand stillbirths.

In cases where the babies were stillborn, the type of deliveries were as follows:

(i) Cephalic presentation (natural delivery)	..	..	..	26
(ii) Breech deliveries	..	..	..	2
(iii) Twin deliveries, (2 deliveries)	..	..	..	3
(iv) Caesarean sections	..	..	..	2
(v) Impacted shoulder (decapitation)	..	..	..	1
(vi) Failed forceps (craniotomy)	..	..	..	1
(vii) Ruptured uterus (hysterectomy)	..	..	..	2
Total	..	..	..	37

There were 5 cases of anencephaly, three being definitely premature, weighing less than 3½ pounds, and two not premature.

Of the two cases of stillbirths, where delivery took place 15 days or more after the estimated date, only one had weight above the normal range suggestive of true postmaturity. The other case showed normal length and circumference of the head of the foetus.

Sex of babies with perinatal deaths were as shown below:

	Male	Female	Total
1. Stillborn ..	21	16	37
2. Neonatal deaths	36	12	48
Total ..	57	28	85

Weights of the babies in cases of neonatal deaths were as follows:

Under 3½ pounds	..	..	15
From 3½ pounds to 5½ pounds	..	..	18
From 5½ pounds to 7½ pounds	..	..	13
Over 7½ pounds	..	..	2
Total ..	..	..	48

The only two where death (neonatal) occurred in babies weighing over 7½ pounds were in the same patient in her 7th and 8th deliveries. When the baby delivered was 10 pounds in weight, the mother was very uncertain about the date of her last menstrual period and due to marked obesity the size of the baby could not be correctly assessed by palpation.

In the series of 2398 consecutive deliveries there were 85 Caesarean Sections (3.54%), with 2 stillbirths and two neonatal deaths, and there were 34 forceps deliveries with no stillbirths and 4 neonatal deaths.

*Summary*

A study of over five thousand consecutive deliveries in Maharani Shantadevi Nursing Home, Baroda, shows a perinatal mortality rate of about 32 to 35 per thousand after the first 302 cases and there was only one maternal death.