

## A CLINICAL STUDY OF STILL BIRTHS

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According to the Manual of International List of Death 1940, a still birth is defined as "any child which issued birth from its mother after the 25th week of pregnancy and which did not, at any time after being completely expelled from its mother, breathe or show any other sign of life." WHO (1950) classifies foetal death as early, intermediate and late foetal loss occurring before 20 weeks, between 20 to 28 weeks and after 28 weeks of gestation respectively. The term still birth is synonymous with late foetal loss.

Jaipur which is the biggest women's hospital in the State of Rajasthan.

The total number of deliveries conducted in this hospital during the year 1979 was 8,251, out of which there were 540 still borns giving a still birth rate of 65.4/1000. Women admitted in this hospital include both booked and emergency cases which includes cases referred late in labour from areas around the city and other districts. Retrospective data show that still birth rate in 1977 and 1978 was 57.28/1000 and 70.1/1000 deliveries respectively.

The present study was taken up to find out the incidence and clinical causes of still births in the State Zenana Hospital,

### Observations

Table I shows relation of still birth with

**TABLE I**  
*Still Births in Relation to Age and Parity*

Age in years	Primipara			Multipara		
	Total Births	Still Births	Percentage	Total Births	Still Births	Percentage
Below 17	493	43	8.7%	—	—	—
17 to 20	283	21	7.4%	90	8	8.9%
21 to 25	1041	56	5.5%	1643	108	6.6%
26 to 30	689	37	5.4%	2267	122	5.4%
31 to 35	58	8	13.8%	943	92	9.8%
36 to 40	—	—	—	647	37	5.7%
Above 40	—	—	—	97	8	8.2%
<b>Total (All Ages)</b>	<b>2564</b>	<b>165</b>	<b>6.4%</b>	<b>5687</b>	<b>375</b>	<b>6.6%</b>

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the age and parity of mother. It was seen that maximum still births were encountered below 21 and above 30 years of age in primigravida, while in multi-

gravida maximum still births were encountered below 25 and above 30 years of age. However, the total still births in the primigravida and multigravida were same (6.4 per cent).

Table II shows that still births in

TABLE II  
Still Births in Relation to Single or Multiple Births

	Total Births	Still Births	Percentage
Single	8137	522	6.4%
Multiple	228 (114 pairs)	18	7.8%

multiple pregnancy were found to be 7.8 per cent as compared to single births (6.4 per cent).

Table III shows still births analysed in

TABLE III  
Still Births in Relation to Presentation

Presentation	Total Births	Still Births	Percentage
Vertex	7837	358	4.5%
Breech	264	112	42.4%
Transverse	109	53	48.6%
Compound	30	14	46.6%
Face and Brow	11	3	27.3%
Total	8251	540	6.5%

relation to the mode of presentation. Highest still births were encountered in transverse (48.6 per cent) and compound presentations (48.6 per cent). This was followed by breech presentation (42.4 per cent). Vertex presentation had the lowest still births (4.5 per cent).

Table IV shows the relation of still births to the weight of the foetus. In the present series, lowest still births were seen in the weight group of 2001 to 2500 gms. (3.0 per cent). Still births in foetus

TABLE IV  
Still Births in Relation to the Weight of the Foetus

Weight in Grams	Total births	Still births	Percentage
Below 1000	121	18	14.9%
1001-1500	242	93	38.0%
1501-2000	821	95	11.5%
2001-2500	3522	107	3.0%
2501-3000	3121	179	5.7%
3001-3500	383	27	7.0%
Above 3500	41	21	51.0%
Total	8251	540	6.5%

weighing less than 2000 gms. accounted for 63 per cent of the total foetal loss, while still births above 3500 gms. accounted for 51 per cent of loss. In the weight group of 2001 to 3500 gms. which constituted the maximum number of deliveries (7,026) the still births were only 4.4 per cent of the total deliveries, and the total foetal loss was 15.7 per cent.

Major clinical congenital malformations which were found in still born children have been enlisted in Table V. Post

TABLE V  
Major Congenital Malformations Encountered in Still Born Children

Congenital Malformations	Number
Anencephaly	5
Hydrocephalous	2
Exomphalos	3
Sacrococcygeal teratoma	1
Cyclopia	1
Bilateral talipes equino varus	4
Cleft palate with cleft lip (Bilateral)	2
Total	18

mortem studies would have enlightened this prospect to a large extent. Since it is not routinely done in this institution,

mainly due to parental refusal, hence apparent abnormalities only have been mentioned.

#### Discussion

The hospital concerned admits all neglected and abnormal cases from the surrounding areas where the gospel of preventive as well as antenatal pediatrics has not yet reached. Cases having given trial labours in various centres (private as well as Government) are also sent over here. Most of the patients are unbooked and are admitted because of compulsion. The hospital small as it is in comparison to the large population it serves, is not well equipped and the services rendered are far from the best which are desired. Hence the still birth rate of 65.4/1000 is much more than found in advanced countries. According to Taylor (1969) still birth in advanced countries was 15/1000 in the year 1959 to 1963. While Nair and Neir (1965) reported still birth rate as 63.65/1000. Sainaba *et al* (1972) found still birth rate as 50.6/1000 births. On the other hand, Dutta (1979) encountered a still birth rate of 105/1000.

The variation of still births in relation to the months of the year is not significant. The period 21 to 30 years is the period of maximum fertility, hence maximum number of deliveries occur during this period (1730 cases). The still birth rate during this period is low (5.5 per cent), while above and below this, it is high.

The still birth rate does not show any difference in primipara and multipara. Though it has been found that in both these groups the still birth rate rises as the age increases (Table I). Similar results have been encountered by Sainaba *et al* (1972) and Dutta (1979).

Multiple births because of their association with prematurity malpresentation,

hydramnios, accidental hemorrhage, toxæmia and asphyxia lead to increased foetal loss. A two fold increase in the still birth rate has been found by Dutta (1979). In the present series still borns in multiple pregnancy were 7.8 per cent.

The foetal risk in malpresentation is well established. Dutta (1979) encountered similar results. In the series of Sainaba *et al* (1972) breech presentation showed highest foetal loss.

Low birth weight is a well known cause of early neonatal deaths and still births. In this series, 63 per cent of foetal loss was found in foetus with birth weight less than 2000 gms. as compared to 44 per cent by Sainaba *et al* (1972). Crosse (1961) shows 42 per cent still births in premature births. Rama Rao (1970) found 57.6 per cent still births in foetus weighing less than 2.5 kgms. while Dutta (1979) encountered 67 per cent still births in foetus less than 5 lbs.

#### Summary

An analysis of 540 still births has been made. Factors related to high still birth rate of 65/1000 have been discussed. Foetal loss has been found greater in the age groups below 21 and above 30 years. An increase in still births has been encountered in multiple pregnancy. A ten fold increase in still births was observed in various malpresentations. Low birth weight (less than 2000 gms.) has been responsible for a major percentage of still births. Lowest still births were encountered in the weight group of 2001 to 3500 gms.

#### Conclusions

Since the major factors involved are the maternal health, age, presentation, multiple pregnancy and low birth weight hence proper family planning advice for age of marriage, proper spacing of children,

routine antenatal check-ups, health care during pregnancy and proper intranatal care would help to prevent foetal loss to a large extent.

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