

PROFILE OF MOTHERS OF LOW BIRTH WEIGHT BABIES

by

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SUMMARY

Incidence of low birth weight babies in the present study was 30.98%.

Majority of the mothers of low birth weight babies were primies (38.6%) and 30.73% were teenagers. 33.11% mothers of low birth weight babies were para III and above.

Overall only 14.6% patients were above 30 years of age. Obstetric complications as pre-eclampsia/eclampsia, twin pregnancy, premature labour etc. was present in 32.72%.

Medical complications as severe anaemia, heart disease, etc. occurred in 18.4% cases.

Neonatal death rate amongst these low birth weight babies was found very high i.e. 184 per 1000.

The high mortality/morbidity in the low birth weight babies heavily taxes the hospital resources and efforts to reduce incidence of low birth weight babies should become the aim of obstetric practice.

Introduction

The concept of prematurity is now replaced by low birth weight babies as recommended by W.H.O. A live born baby weighing upto 2500 gms is called a low birth weight baby. These babies account for high neonatal mortality and morbidity and pose number of problems for the mother and the neonatal pediatrician.

Birth weight depends on gestational age as well as on number of maternal factors like age, parity, multiple pregnancy, nutritional status of the mother, complications of pregnancy and medical disorders associated with pregnancy.

This study was done to find out various contributory factors besides low socio-economic condition to which most of our general hospital patients belong.

Material and Methods

A study of mothers who gave birth to live babies weighing less than 2500 gms was done from 1-1-82 to 31-12-84 with the above aim.

Observations

There were 5066 live births during the study period out of which 30.98% (1570) babies were of low birth weight.

Table I shows that 10.95% (172) of low birth weight babies were below 1500 gms but majority i.e. 58.2% (914) weighed more than 2000 gms.

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TABLE I
Distribution According to Weight Groups

Weight group	No. of babies	% of total No. of low birth weight babies	Percentage of total live births
Below 1500 gms.	172	10.95	3.39
1501 to 2000 gms.	484	30.82	9.55
2001 to 2499 gms.	914	58.21	18.04
Total	1570	100%	30.98

Table II—There were 1516 mothers who gave birth to 1570 low birth weight babies. In 1452 cases it was single baby. There were 118 live births amongst 64 cases of twin deliveries. 38.6% (586) mothers were primies and 33.11% (502) were para III or more.

TABLE II
Paritywise Distribution

Parity	No. of cases	Percentage
Primipara	586	38.60
Para I and II	428	28.23
Para III and above	502	33.11
	1516	100

* 64 cases had twin deliveries (Total 1570 babies).
54 x 2 alive 108
10 x 1 alive 10
1452 Mothers of singleton live births
64 Mothers of Twins one/both alive

Out of 1516 mothers 30.73% were teenagers and 14.61% (221) were above 30 years of age. Only 25% mothers of low birth weight babies belonged to age group 20 to 25 years though it is observed that majority of the obstetric cases belonged to this group.

Table III shows that some complication of present pregnancy or a bad obstetric

history was present in 32.72% (496) cases.

TABLE III
Agewise Distribution

Age group	Total No.	Percentage
Below 20 years	466	30.73
20 to 25 years	379	25.0
26 to 30 years	450	29.68
31 years and more	221	14.61
	1516	

* 64 cases of twin deliveries.

Pre-eclampsia/pregnancy induced hypertension was more common and occurred in 6.99% (106) cases. Twin delivery occurred in 4.22% (64) cases.

Common cause of low birth weight babies was premature labour which occurred in 12.96% (196) mothers.

Medical Complications as shown in Table IV were present in 18.4 (279) cases.

One or more medical and/or obstetric complications occurred in the same patient.

Out of 196 cases of premature labour, miscellaneous medical factors as diarrhoea, fever, assault, burns etc. were associated in 62 cases and were perhaps the causative factor for the premature labour that occurred.

TABLE IV
Complication of Pregnancy in Mothers of L.B. of babies (Total 1516)

Type of Complication	No.	% of total No. of mothers (1516)
(A) Obstetric Complications:		
1. Pre-eclampsia/Eclampsia/P.I.H.	106	6.99
2. A.P.H. (Pl. previa/Acc. Hem.)	38	2.50
3. Twin Pregnancy	64	4.22
4. Hydramnios	32	2.11
5. I.U.G.R.	34	2.24
6. Bad Obst. History/Incomp. os	26	1.75
7. Premature labour	196	12.26
Total	496	32.72
(B) Medical Complications:		
1. Severe anaemia	36	2.3
2. Moderate anaemia	58	3.82
3. Heart disease	16	1.05
4. Pulm. T.B./Resp. disease	38	2.5
5. Jaundice	21	1.38
6. Urinary Tract infection	28	1.84
7. Venereal disease	9	0.59
8. Prolapse uterus	5	0.33
9. Rh. Negative Mother/Rh +ve baby	4	2.26
10. Epilepsy	2	0.13
11. Miscellaneous (Burns, Trauma, Fever, Diarrhoea)	62	0.08
Total	279	18.40

Some maternal diseases/pregnancy complications occurred in the same patient.

Other common findings in cases of premature labour was severe anaemia in 21 cases and jaundice in 9 cases.

Table V shows mode of delivery in the

TABLE VI
Type of Labour

Type of labour	No.	Percentage
L.S.C.S.	148	9.76
Forceps	38	2.50
I.P.V.	7	0.46
Twins	53	3.49
Breech	64	4.22
Face	8	0.52
Spont. vertex delivery	1198	79.02
Total	1516	100

mothers studied. Caesarean section was needed for various reasons as placenta previa, eclampsia/pre-eclampsia, cord prolapse etc. in 9.76% (148 cases). Out of these 11 patients had twin pregnancy.

Table VI shows a significant correlation between neonatal deaths and birth weight.

It ranges from 42 per 1000 in weight group. 2000 gms to 2499 gms to as high as 918 per 1000 in babies weighing less than 1500 gms. 52.11% (790) patients were emergency admission and 47.89% (726) were booked cases/routine admissions in antenatal wards for some pregnancy complication.

TABLE VII
Neonatal Deaths

Weight groups	Total No. of babies born alive	No. of neonatal deaths	Percentage
Below 1500 gms.	172	158	91.86
1501-2000 gms.	484	90	18.59
2001-2499 gms.	914	42	4.59
Total	1570	290	18.44

184 per 1000 live births.

Discussion

In the present study, 38.6% mother of the low birth weight babies were primis and 30.73% were teenagers.

Also 33.11% mothers were para III or more. Overall 14.6% patients were above the age of 30 years. Obstetric complications as pre-eclampsia/eclampsia, A.P.H., twins, premature labour, etc. occurred in 32.72% or almost 1/3 cases.

Medical complications as severe anaemia, jaundice, heart disease, etc. were present in 18.4% cases.

However, in majority of the cases no causative factor was found except that almost all patients belonged to low socio-economic group. Majority i.e., 58.21% babies were in the weight group above 2001 gms but 10.95% babies weighed less than 1500 gms. Neonatal mortality was very high in the later group. 9.76% mothers were delivered by caesarean section because of complications as A.P.H., eclampsia, severe toxemia, etc.

Premature labour occurred in 12.26% mothers and incidence of breech delivery was 4.22%.

The maternal complications as mentioned above are causative factors for low birth weight babies and also contribute to neonatal deaths due to respiratory complications in the newborn. It is seen that 52.11% cases were emergency admissions and a fair number were admitted in the antenatal ward because of some pregnancy complications.

High-risk factors as obstetric/medical complications during pregnancy can be detected and treated early if women avail medical advice early.

This is possible if facilities for careful antenatal supervision are made available in the community health centres, besides big institutions. The services of a neonatal pediatrician are of immense value.

The social workers should help to increase awareness amongst the community for necessary help to the pregnant woman and for medical consultation for the mother and newborn and to promote family welfare.

Thus a teamwork by obstetrician, pediatrician and social workers can help to decrease the number of low birth weight babies being born.