STUDY OF PRETERM BABIES ROOMED IN WITH THEIR MOTHERS

by

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In a developing country like ours where the birth rate is high, the rate of premature births is also very high. The burden of looking after a very large number of premature babies poses a problem. To develop special premature wards as in the west is very costly. It requires a large number of trained staff which is difficult to obtain. Incubators are expensive, difficult to maintain and frequently go out of order. In order to overcome these difficulties, we have tried keeping mothers of premature babies in a separate room with their babies (rooming in).

Material and Methods

This is a prospective study of live born premature babies born at L.T.M.G. Hospital, Sion over a period of 15 months from January 1979 to March 1980.

Group I babies less than 30 weeks gestation and weighing less than 1200 Gms, were kept in the premature unit. Since our premature unit has only 7 beds and admits babies born outside as well, we could keep only 89 babies in this unit. These babies were looked after by the nursing staff and are not considered in this study.

Group II Babies weighing more than 1200 Gms and gestation more than 30 weeks were kept in a separate room with their mothers. There was the facility of a wash basin and overhead lamps to heat these babies if required. They were mainly looked after by mothers. Frequent observation by medical and nursing staff and the training of individual mothers was easy when they were grouped together in one room. At the same time the chance of infection was much less than keeping them in a general post partum ward.

Group III were those babies who were not having sucking or swallowing reflex or when they were sick or babies less than 1200 Gms and less than 30 weeks maturity and could not get admission in premature unit, they were kept in a 7 bedded nursery attached to the general post partum ward. Those babies were looked after by their mothers as well as nursing staff. When these babies were good enough for the mothers to take care of, they were transferred to their mothers (rooming in). This is a study of babies of Group II and III.

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Results

Table I illustrates the rate of live born Preterm babies. Table II reveals that 7% of these 592 preterm babies were lost. Majority of our mothers were primis. Special efforts had to be made to get these mothers to breast feed and to handle their babies. The mortality rate did not differ in this group significantly. Majority of our mothers belonged to the age group 21 to 30 years. The mortality was 3 to 9% in babies of mothers less than 30 years of age, but it rose to 27.5% for 18 mothers in 31 to 35 years age group. The neonatal mortality was again 10% in babies of mothers above 35 years of age.

Table III shows that the mortality was highest in babies less than 1000 gms. It was more in the weight group above 2000 gms compared to those between 1751-2000 gms because of the associated maternal conditions.

Abnormal delivery was encountered in 130 cases (22%). The mortality was highest (39%) in as twins. This is because among the 23 twin deliveries we lost 3 pairs of twins less than 30 weeks gestation. The high mortality (18.5%) in L.S.C.S. babies was because of a large number of mothers transfered from peripheral hospitals. The mortality in 52 cases of preterm breech was 7.4%.

Table IV shows the major complications encountered in these babies. Asphyxia was the commonest problem but only 7% of these babies were lost. This is because these were cases of mild to moderate asphyxia who after initial

TABLE I
Incidence of Preterm Babies

Total No. of deliveries	Total No. of preterm babies		Total P.U.	No. in	Total No.	Inward	I.P.C.O.	
	No.	%	No.	%	No.	%	No.	%
6606	800	11|9%	119	14.8%	592	74%	89	11.1%

TABLE II
Parity/Mortality

Parity	No.	%	Expired	%
1	280	47.9	19	8.8
2	144	24.3	14	9.7
3	120	22.2	8	6.7
4	37	6.2	1	2.7
5	11	1.95	—	—
Total	592		42 (7.1%)	

TABLE III
Weight/Mortality

Weight in gms.	No.	%	Mortality	%
Less 1000	5	0.84	4	80
1001-1250	40	6.75	9	22.5
1251-1500	168	28.5	14	8.3
1501-1750	153	25.8	9	5.9
1751-2000	201	33.9	5	2.4
More 2000	24	4.05	1	4.1
	592		42	

TABLE IV
Complications in Baby/Mortality

Complications	No.	%	Mortality	%
Asphyxia	102	41.6	7	6.8
Hyperbilirubinemia	89	33.17	3	3.3
Sepsis	31	12.6	19	61.3
Aspiration	5	2.03	1	20
Cong. Malformations	6	2.43	4	66
DIC	3	2.21	2	66
Hypothermia	6	2.43	2	33
RDS	4	1.62	4	100
Total	246		42	

resuscitation, could be transferred to their mothers or in the nursery. Cases of severe asphyxia needing intubation, respirator care etc. were transfered to the intensive paediatric care unit (IPCU) and are not included in these preterm babies. Bilirubin more than 12 mgms% was encountered in 38% and 20 babies required exchange transfusion. Infection occurred in 12.6% and the mortality in this group was 66%. Out of the 42 babies lost, 19 (48%) were in the group of infection. Congenital malformations, respiratory distress syndrom (RDS) hypothermia and D.G.C. were encountered in a few cases.

The follow-up of these roomed in babies was lower (17%) than those from the premature units (33%). This may be because mothers of babies from premature units felt the necessity for the frequent medical examination.

Table V shows that the continuation of breast feeding at follow-up at 3 months interval is much better in rooned in babies. It was only 20% among the babies followed-up from the premature unit and 74% in the babies who were initially kept in the nursery and were then 'roomed in' with their mothers. But the continuation of breast feeding was 93% in mothers roomed in with babies from the begining.

TABLE V
Breast Feeding on Three Month Follow-up

	Babies in		Babies in Nursery		Babies with	
	PU No.	%	No.	%	Mothers Roomed in No.	%
Breast fed	6	20	26	74		93

Summary

In conclusion rooming in of preterm low birth weight bobies weighing more than 1200 gms. with gestation more than 30 weeks is a practical solution for the better care of these babies in our country.

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