Demography India
Vol. 18, (1989), pp. 171-176

Asha Pratinidhi, Aparna Shrotri, Usha Shah and Saraswati Garad

Effect Of Social Custom Of Migration for Delivery on Perinatal Mortality*

Introduction

IT is a socially accepted pattern to migrate to mother's place for delivery. During implementation of a community based rural project on Risk Approach Strategy it was observed that such a migration occurs in a sizeable number of population. It was, therefore, decided to study the effect of such migration on outcome of pregnancy.

Material and Method

The observations were made over a three year period from 1981 to 1983 in the area covered by Rural Health Training Centre (RHTC) Sirur of B J. Medical College, Pune. All pregnancies in the area were identified with the help of trained village health guides and followed throughoutperinatal period to note the outcome. Detailed information about causes of migration was collected for 1983 births.

The respondents were grouped as per their place of residence as follows:
R1 Resident women delivering in the village of their usual residence
R2 Resident women delivering in a different village of RHTC area other than their usual village of residence
RBO Resident women delivering out of RHTC area
NR Non-resident women delivering in RHTC area

Results

There were 5427 births recorded (Table 1) over a three year period from 1981 to 1983. Out of 4097 resident mothers *(R1 +R2 + RBO),* 1491 (36.4%) migrated from outside the village of their usual residence only for delivery. Out of these migrated mothers, 510 (34.2%) moved from one village to another village in the study area itself (R2).

* This study is a part of a larger study financially supported *by* World Health Organisation.

TABLE 1 : RESIDENCE AND PERINATAL MORTALITY RATE 1981-83.

Type of residence	*No.*	*Per cent*	*Perinatal deaths*	*P'erixatai mortality rate per 1000*
R1	2606	48.0	137	516
R2	510	9.4	21	41.2
RBO	581	18.1	21	21.4
NR	1330	24.5	50	37.6
Total	5427	100.0	229	42.2

Out of 1491 mothers who migrated, 85.5 per cent delivered in their mothers* place, 1.9 per cent in their in-laws' home and 12.6 per cent with some other relatives.

It was observed that 68.3 per cent mothers not migrating from their usual residence 'delivered in their in laws* home; 18 per cent in their mothers' place and 13.7 per cent in their own home or with some other relatives.

The perinatal mortality was lowest when the delivery took place at mother's home, followed by mother in law's place. The mortality was very high when delivery took place with some other relative to help or in own home without, any help in a nuclear family (Table 2).

It was observed that perinatal mortality rate among residents delivering in their usual village of residence (R1), was significantly higher than the migrated mothers (R1 + *RBO* + X^2= 1.2.84 ; P∠.01)

TABLE 2 : SUPPORTIVE CARE AND PERINATAL MORTALITY

Under care of	*Number*	*Per cent*	*Perinatal deaths*	*Perinatal Mortality rate per 1000*
Mother-in-law	609	34.1	22	36.1
Mother	944	52.8	20	21.2
Others*	234	13.1	21	89.7
Total no. of deliveries	1787	100.0	63	35.2

* Includes other relatives, no additional care due to delivery in nuclear family setting.

Detailed information about causes of migration as well as date, related to different variables was collected for 1983 births (Table 3). It was observed that the proportion of prirniparity and teenage pregnancies was significantly higher in migrating mothers, whereas proportion of lower socioeconomic status and illiteracy was significantly higher among mothers who did not migrate. The percentage of low birth weight as well as preterrn births was higher and mean birth weight and gestational period was lower for resident mothers

who delivered in their usual place of residence. For all risk factors the perinatal mortality in babies born to the migrated mothers was lower except for that of low birth weight. Occupation of mother or father did not affect the social custom of migration.

TABLE 3 : RESIDENTIAL STATUS, RISK FACTORS AND OUTCOME, 1983

Risk Factors	*Resident (n =867)*		*Migrated (n* = 925)	
	Proportion	*Perinata! mortality rate*	*Proportion*	*Perinatal mortality rate*
Prematurity ∠ 37 weeks .	5.5	304.3	3.7	187.5
LBW ∠2500	15.5*	70.8*	12.0	72.5
Incomplete or no immunization against Tetanus	17.6	71.9.	19.2	50.6
∠ 3 ANC visits	91.5	39.1	93.8	33.4
Illiterate mothers	63.9*	43.3	56.2	28.8
'Poor' socio-economic	13.3*	78.3	9.7	33.3
Primiparity	20.9*	60.8	40.6	50.5
Teenage	7.0*	49.2	12.4	34.8
	Mean	SD.	Mean	SD
Birth weight	2838.35	457.15	2853.0	409.15
Gastational period	39.26*	1.73	39.52	1.12

*Statistically significant.

Majority (98.8 and 98.9%) deliveries in resident and migratory population respectively were normal deliveries. Although home deliveries formed highest proportion among both the groups, more home deliveries occured in migrated population (Table 4). Use of local hospital was more among resident population. Private hospitals were chosen as place of delivery by 9.3 per cent migrated mothers as compared to only 1.7 per cent resident mothers.

Hospital deliveries included difficult cases referred after trial labour at home. which may explain the higher perinatal mortality observed in them.

Deliveries by relatives, trained traditional birth attendants and doctors were higher in migrated mothers whereas proportion of nurses conducting deliveries in the resident population was more (Table 5).

TABLE 4 : RESIDENCE, PLACE OF DELIVERY AND PERINATAL MORTALITY

Placed of Delivery	*Resident*		*Migrated*	
	Proportion	*Perinatal Mortality Rate*	*Proportion*	*Perinatal Mortality rate*
Home	62.17	24.1	72.11	25.49
Local Hospi-tal/Health Centre	33.68	47.9	17.51	30.86
Private Hospital	1.73	66.7	9.30	58.14
Referral Hospital	2.42	190.5	1.08	400.0
Total	100.0	36.9	100.0	33.51

TABLE 5 : BIRTH ATTENDANT AND RESISTANCE

	Resident		*Migrated*	
	Proportion	*Perinatal mortality rate*	*Proportion*	*Perinatal mortality rate*
Self	1.4	0	0.4	0
Relative	44.1	28.8	55.9	23.2
VBA	4.7	48.8	3.9	0
TBA	1.5.	0	1.8	58.8
Trained CHW	5.7	0	5.5	39.2
Nurse	36.9	37.5	22.3	38.8
Doctor	3.9	88.2	9.0	85.4
Specialist	1.8	25.0	1.2,	90.9
Total	100.0	36.9	100.0	33.5

Reasons for Migration

Convenience and tradition were responsible for 61 per cent migrations (Table 6). Delivery before returning home after a visit to other place was associated with a high perinatal mortality as most of these untimely deliveries resulted in preterm births.

Reasons for Non-migration

Out of 865 mothers delivering in the village of their usual residence in 1983,283 (32.7 per cent) were multiparous and did not migrate as tradition is restricted to migration for first delivery only (Table 7).

A high mortah'ty associated with deliveries before migration was due to prematurity.

TABLE 6 : REASONS FOR MIGRATION

Reasons	*Number*	*Per cent*	*Perinatal deaths*	*Perinatal mortality rate*
Tradition	330	35.9.1	10	30.30
Convenience	416	45.26	8	19.23
Availability of medical facility	55	5.98	1	18.18
Delivery before returning home	12	1.31	3	250.0
Superstition	2	0.22	0	-
Could not specify	104	11.32	9	86.54
Total	919*	100.0	31	33.73

There were 6 twin deliveries.

TABLE 7 : REASONS FOR NON-MIGRATION

Reasons	*Number*	*Per cent*	*Perinatal deaths*	*Perinatal mortality rate*
Tradition	283	32.72	2	7.07
Mother's home and husband's home in same village	221	25.55	7	31.67
Health facility available	98	11.33	9	91.84
Help was made available at residence	73	8.44	3	41.09
Problems at parents place	68	7.86	1	14.71
Delivery before migration	12	1.39	2	166.67
Superstition	4	0.46	-	-
Unknown	106	12.25	8	1 75.47
Total	865*	100.0	32	36.99

There were two twin deliveries.

Those resident as well as migrated mothers who chose place of delivery for the sake of availability of health facility did so due to presence of some risk factor or for sterilization operation. A high perinatal mortality in this group, therefore, was not surprising.

Discussion

Migration for delivery is a peculiarity observed in some states in India. It is observed in this study that in majority of women from State of Maharashtra this migration is for the sake of convenience or as a social custom. Traditionally first delivery takes place at mother's place. The pregnant mother gets the support from her own mother, mother-in-law or some other relative during pregnancy, delivery and post partum period. This care appears to be of crucial importance as indicated by the lower mortality observed in the group getting help from mother/mother- in-law (Table 2). Higher perinatal mortality observed among babies born to mothers who delivered in their own home without the advantage of presence of experienced elderly person is note-worthy. The perinatal mortality is lowest for the babies born to mothers migrating to their mothers' place for delivery.

Newly married girls may not be acquainted well with the 'in laws' and may feel shy of taking rest or consuming more food. Better nutrition, rest and care given by the mother, may be responsible for lower proportion of low birth weight and preterm babies observed in migrated mothers as 85.5 per cent of them delivered at their mothers'' place.

Although continuity of health care is disrupted due to migration as indicated by less proportion of women availing ANC care including immunization against tetanus, perinatal mortality in general (Table 1) and associated with risk factors in particular (Table 3) is less in migratory mothers. The social custom of migration to mothers' place for delivery appears to be beneficial as indicated by lowest perinatal mortality rate associated with it.

In order to keep continuity of health care in migrated mothers a simple 'Home Based Maternal Record' can be given to them. This card will remain with the mothers even after migration and will bridge the gap between the health providers at two places.

References

Shah, Kusum P., 1978, Surveillance card formarried women for better obstetrics performance./OK/TM/ *ofObstetrics and Gynaecology of India* 28: 1015-1020.

Kumar, V. and I. Walia, 1981, Pictorial maternal and neonatal record for use by illiterate traditional birth attendants, *International*'j*'ournal oj''Gynaecology and Obstetrics* **19:** 281-284.