

## PROFILE OF BOOKED VERSUS UNBOOKED DELIVERY CASES

(A Comparative Study)

By

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### SUMMARY

Profile of 500 each of unbooked and booked antenatal cases (3 visits and +) admitted for delivery at Zanana Hospital, Udaipur was studied. Of the booked and unbooked resp, 95.60% and 43.30% were urban, 4.40% and 56.60% were rural, 10.40% and 64.60% were illiterate, 2.60% and 7.00% were teenage and 1.80% and 13.00% were grand multiparas. Moderate to severe anaemia was found to be 100 times more in unbooked cases. Other complications like P.E.T. malpresentation, preterm labour, I.U.D. prolonged labour, P.R.O.M., maternal exhaustion and dehydration were found to be 3 to 10 times higher in unbooked cases. Lethal complications like eclampsia and rupture uterus were found only in unbooked cases. To improve overall M.C.H. status more efforts are needed towards rural mothers and to improve socio-economic and literacy status along with implementation of M.C.H. services.

### Introduction

Antenatal care in its widest sense is no modern concept. Description of special care in pregnancy is given in Sushruta Samhita. Realising its role in minimising maternal and perinatal morbidity and mortality, antenatal clinics were opened up in number of western countries in the first quarter of this century. At international level, it got recognition as primary health care in Obstetrics. At our national level, it is said that antenatal care is imparted through antenatal clinics of various level of health centres and domiciliary health care

delivery system. But a sizeable population mostly in rural areas remain deprived even of this primary care, which is reflected by 40% of delivery cases admitted to our hospital. These unbooked/unregistered cases are those who had no antenatal care or check-up anywhere.

The aim of the present study is to find out how a profile of a booked or registered case differs from that of unbooked or unregistered delivery case.

### Material and Method

The study was carried out on 1000 successive delivery cases in all the four units at Zanana Hospital, Udaipur from 1.4.83 to 10.9.1983. Of these, 500 each were

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booked (3 and + Visits) and unbooked respectively.

In each case address, age, parity, educational status, income, extent of anaemia, antenatal visits, associated complications etc were noted down, necessary investigations and treatment were carried out as routine. A comparative analysis of two groups was carried out.

*Observation and Comments*

1. *Urban/Rural (Table I)*

TABLE I  
*Distribution According to Residence in Booked/Unbooked Cases*

Residence	Booked		Unbooked	
	No.	%	No.	%
Urban	478	95.60	217	43.40
Rural	22	4.40	283	56.60
Total	500	100.00	500	100.00

Of 500 each of booked and unbooked cases 478 (95.60%) and 217 (43.40%) were urban and 22 (4.40%) and 283 (56.60%) were rural. So majority of booked were urban and unbooked were rural. One of the important reasons for not attending clinic by rural mothers is inaccessibility to antenatal clinics of the city hospital and non-availability of the same

in their rural area. But what makes a sizeable number (43.40%) of urban mothers abstaining from antenatal clinic needs exploration. It's not only inaccessibility and non-availability, others factors like education, socio-economic status, awareness etc also plays an important role.

2. *Age (Table II)*

Majority of the cases in both booked (53%) and unbooked (37%) were of 21-25 years age group. Incidence of teenage pregnancy was found to be three times higher in unbooked cases. All the 16 cases of age group 36 years and above were found in unbooked group only. Early marriage, early first child birth, pregnancy at an elderly age due to large family size are more common in rural area where the concept and services of modern antenatal care are not developed and ancient concept of pregnancy care was forgotten and lost. Hence a rural mother is more likely to remain neglected during pregnancy and child birth and is at higher risk than her urban counter part.

3. *Education Status (Table III)*

Educational status of a pregnant lady influences her antenatal care and visits. In general educational status in booked cases

TABLE II  
*Agewise Distribution of Booked/Unbooked Cases*

Age in years	Booked		Unbooked	
	No.	%	No.	%
1. 18 years or below	13	2.60	35	7.00
2. 19-20 years	90	18.00	115	23.00
3. 21-25 years	265	53.00	185	37.00
4. 26-30 years	115	23.00	114	22.80
5. 31-35 years	17	3.40	35	7.00
6. 36 years and above	—	—	16	3.20
Total	500	100.00	500	100.00



TABLE III  
Educational Status in Booked/unbooked Cases

Educational status	Booked		Unbooked	
	No.	%	No.	%
1. Illiterate	52	10.40	325	64.60
2. Primary	43	8.60	63	12.60
3. Middle	73	14.60	49	9.80
4. Higher Secondary	157	31.40	43	8.60
5. Graduate & Postgraduate (College education)	175	35.00	22	4.40
Total	500	100.00	500	100.00

was higher than unbooked case. Incidence of illiterate mothers was found six times higher in unbooked group. Similar observation was made by Mirchandani and Verma (1978) and Gupta (1983).

Surprisingly 13% of the unbooked cases had education of Higher secondary and above. Then what made them abstaining from antenatal care or visits? It shows education is one of the many factors which influences health care including antenatal care. In good number of cases social and family traditions of no special care got upper hand over concept of modern antenatal care though the mother was educated.

#### 4. Socio-Economic Status (Table IV)

Family income per month of Rs. 500/- and + was found to be in 91.4% and 34.0% of booked and unbooked cases respectively. In the lowest family income group of Rs. 199/- and less per month, there were 26 unbooked cases and all these cases were also illiterate, which shows the close relationship of illiteracy with poverty in general and in our unbooked delivery cases in particular.

Similar observations were made by Mukerjee *et al*, Thomas and Rasario (1978) and Mirchandani and Verma (1978).

#### 4. Parity (Table V)

There were comparable number of primigravida in both groups i.e. 44% in booked

TABLE IV  
Socio-economic Status of Booked/unbooked Cases

Family Income per month in Rs.	Booked		Unbooked	
	No.	%	No.	%
1. 1000 and above	202	40.40	20	4.00
2. 500-999	255	51.00	150	30.00
3. 200-499	43	8.60	304	60.80
4. 100-199 (Educated)	—	—	—	—
5. 100-199 (Uneducated)	—	—	26	5.20
Total	500	100.00	500	100.00

TABLE V  
Parity Distribution Booked/unbooked Cases

Parity	Booked		Unbooked	
	No.	%	No.	%
1. Primi para	222	44.40	190	38.00
2. 2nd to 4th para	269	53.80	245	49.00
3. 5th para and above (Grand multipara)	9	1.80	65	13.00
Total	500	100.00	500	100.00

and 38% in unbooked. It shows irrespective of antenatal care, generally first child birth is given more attention, either because a problem is anticipated or the case already develops some complication. We have found that most of the T.B.A. realise this fact and sends a primigravida to the hospital much earlier than a multigravida.

Grand multiparity was seven times more in unbooked cases, which is a reflection of large family norms still existing in our rural and illiterate masses.

#### 5. Anaemia (Table VI)

The incidence of anaemia was 22.4% and 85.60% in booked and unbooked cases respectively i.e. it was four times higher in unbooked cases. But still a vast difference was found in the two groups, of the inci-

dence of moderate to severe anaemia, which was found to be nearly 100 times higher in unbooked cases.

Mirchandani and Verma (1978) also reported 5 times and 9 times higher severely and moderately anaemic cases respectively in unbooked group. But such a vast difference observed in our cases was reflective of extremely poor health status of the rural and tribal population of this area.

#### 6. Complications present at the time of admission (Table VII)

Almost all the complications of pregnancy and delivery were found to be 3 to 10 times higher in unbooked cases except previous L.S.C.S., which is bound to be high in booked cases. Surprisingly, 5 cases with previous L.S.C.S., from rural area re-

TABLE VI  
Distribution of Anaemic Cases Booked/unbooked Group

Haemoglobin level	Booked		Unbooked	
	No.	%	No.	%
1. Not anaemic (Hb. 10.5 and above)	388	77.60	72	14.40
2. Mildly anaemic (Hb. 8.7-10.4)	111	22.20	331	66.20
3. Moderately anaemic (Hb. 6.5-8.6)	1	0.20	86	17.20
4. Severely anaemic (Hb. 6.4 or less)	—	—	11	2.20
Total	500	100.00	500	100.00



TABLE VII  
Obstetric Complications in Booked/unbooked delivery Cases

S. No.	Complication	Booked		Unbooked	
		No.	%	No.	%
1.	Pre-eclampsia	32	6.40	81	16.20
2.	Eclampsia	—	—	8	1.60
3.	Rupture uterus	—	—	7	1.40
4.	Malpresentation	15	3.00	54	10.80
5.	A.P.H.	15	3.20	28	5.60
6.	P.P.H.	3	0.60	10	2.00
7.	Prolonged labour	28	5.60	61	12.20
8.	I.U.D.	3	0.60	8	1.60
9.	Foetal distress	28	5.60	45	8.90
10.	Pyrexia	—	—	7	1.40
11.	Cord prolapse	1	0.20	9	1.80
12.	Absent membrane at the time of admission	8	1.60	109	21.80
13.	Handling by T.B.A./others	6	1.20	79	15.80
14.	Maternal exhaustion and Dehydration	17	3.40	42	8.40
15.	Retained placenta	1	0.20	2	0.40
16.	Moderate to severe Anaemia	1	0.20	97	19.40
17.	Previous L.S.C.S.	19	3.80	5	1.00

mained unbooked and reported for delivery which reflects extreme degree of ignorance and neglect. Comparatively lower incidence of A.P.H. and P.E.T. in booked cases is mainly because these cases remain admitted in A.N.W. long before their delivery, while present study includes cases admitted in labour and not for other complaints. Lethal complications like eclampsia and rupture uterus were found exclusively in unbooked group similar were the observations of Mirchandani and Verma, Kameshwari Devi *et al* and Agarwal *et al*.

We all know 80% deliveries in our country are domiciliary and majority are conducted by T.B.A. in rural areas, where the concept of antenatal care does not exist. Similar conditions prevail in urban slums and labour class colonies. Factors directly contributing for it are widespread illiteracy, poverty, poor social status with more physical responsibility, prejudices, non-availability of health care etc. Hence a case com-

ing from such an area for delivery to the hospital is representative of all the above mentioned social risk factors. On the top of that she is invariably sent by T.B.A. or brought by relatives either because a complication is anticipated or already she is in it. And that makes her doubly high risk or super risk. And that's how she differs from H.R.P. case of better socio-economic status of urban area. This is what the present study has shown. Maternal and perinatal morbidity and mortality in such cases are bound to be high adding further to the miseries and insecurity to the poor families.

An obstetrician is trained and is capable to treat various complications of pregnancy and delivery but who can treat factors like illiteracy, poverty, malnutrition, social injustices and discrimination, superstitions etc., which are more sinister than the pregnancy complication as these are likely to remain even after the present delivery to complicate future deliveries. And in practice at-

times it becomes extremely difficult to treat the obstetrics complication in isolation. Unless and until these non-medical or non-obstetric factors are taken care of the third world obstetrics is unlikely to change.

BIBLIOGRAPHY

1. Agarwal, S., Dhall, K. and Bhatia, K.: J. Obstet. Gynec. India, 33: 83, 1983.
2. Gupta, H. D.: J. Obstet. Gynec. India, 33: 563, 1983.
3. Kameshwari Devi, K., Sultana, S. and Rao, S.: J. Obstet. Gynec. India, 26: 53, 1976.
4. Mirchandani, J. J. and Verma, M.: I.J., P.S.M. 9: 92, 1978.
5. Mirchandani, J. J. and Verma, M.: I.J. P.S.M. 9: 133, 1978.
6. Mukherjee, B. Perviz Heera and Rosario, Y. P.: J. Obstet. Gynec. India, 21: 39, 1971.
7. Thomas, M. and Rosario, Y. P.: J. Obstet. Gynec. India, 27: 333, 1977.

TABLE I  
Comparison of Booked and Unbooked Deliveries

Parameter	Booked Deliveries	Unbooked Deliveries
Total Deliveries	100	100
Normal Deliveries	75	60
Abnormal Deliveries	25	40
Maternal Mortality (%)	0.5	2.0
Fetal Mortality (%)	1.0	3.0

TABLE II  
Comparison of Obstetric Complications

Complication	Booked Cases	Unbooked Cases
Pre-eclampsia	10	5
Placental Abruption	5	10
Uterine Rupture	2	3
Obstructed Labour	15	20
Postpartum Haemorrhage	8	12

The study was conducted in the form of a descriptive study. The data was collected from the records of the hospital. The study was conducted over a period of 12 months. The data was analyzed using statistical methods. The results of the study are presented in the tables above. The study shows that the incidence of obstetric complications is higher in unbooked deliveries compared to booked deliveries. This is due to the lack of prenatal care and monitoring in unbooked deliveries. The study also shows that the maternal and fetal mortality rates are higher in unbooked deliveries. This is due to the lack of timely medical intervention in unbooked deliveries. The study highlights the need for better prenatal care and monitoring in unbooked deliveries to reduce the incidence of obstetric complications and improve the outcomes for both the mother and the fetus.