DELIVERIES ON WHEELS (A STUDY OF 26 TAXICAB DELIVERIES)

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SUMMARY

A retrospective study of 26 deliveries that occured in taxicabs while in transit to hospital was undertaken to identify causes and obstetric problems. A majority of patients had full-term, uneventful pregnancies. Possible clinical errors such as discharging or turning away patients in early labour were identified in 19.2%. Most taxicab deliveries occured during the monsoons or at night, though 73.1% of cases had to travel less than 5 kms. and 80.8% were admitted to hospital within 30 mins. of delivery. There were perineal or paraurethral tears in 50%. the mean duration of the third stage was 19.8 mins. Birth weight was more than 2 Kgs. in 77% while perinatal mortality occured in 15.4%.

INTRODUCTION

Metropolitan India is generally believed to have public health systems and transport facilities that make obstetric care accessible to resident population. In the absence of a widely available ambulance service, the omnipresent taxicabs of Bombay are the prime mode of transportation used to ferry parturients to the city's public hospitals.

However unexpected delays due to clinical or patient errors, seasonal variations, strikes and bandhs disrupt this functional system leading to an occasional delivery in the backseat of a taxicab. Such an unattended delivery is at high risk for maternal trauma and sepsis and neonatal morbidity. This paper studies these taxi deliveries to identify causes, assess care and complications and suggest preventive measures.

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MATERIALS AND METHODS

Twenty six taxi deliveries took place in a total of 11,556 deliveries at the Wadia Maternity Hospital over a 12 month period (1st April 1989 to 31st March 1990), an incidence of 0.2%. This being a retrospective study, details of antenatal and postnatal obstetric records were reviewed as also variations in the time of delivery to look for obvious patterns.

RESULTS AND ANALYSIS

Details of patients:

The mean age was 25 years. a majority of

cases (69.2%) had a parity of one, only 3 cases having a past history of abortion or preterm delivery. Though our hospital has many paying patients, all the taxi deliveries occured in free ward patients suggesting a lower socioeconomic status.

Antenatal care and details of present pregnancy:

Seven subject (26.9%) were unregistered as compared to 6% of overall deliveries in our hospital. Antenatal followup in registered cases was below the hospital average, 10 cases (52.6%) having fewer than 3 antenatal visits.

Possible clinical errors contributing to taxi delivery may have occured in 3 cases admitted in the last month, that were discharged as having been in false labour and 2 cases sent back from the receiving room in early labour, one patient delivering in a taxi 2 hrs. later.

Variations in the timing of delivery:

The four monsoonal months accounted for 73.1% taxicab deliveries. Ten taxi deliveries (38.5%) took place over weekends and 12 deliveries (46.2%) at night between 11 p.m and 7 a.m suggesting delay in decision making or in acquiring transport. Table II shows that most cases (73.1%) resided within a 5 kms. radius from our hospital and 80.8% were admitted within 30 mins. of taxicab delivery.

Details of delivery and hospitalization:

All the taxi deliveries occured in the sitting position, every baby delivering head first. Only 6 cases (23.1%) had preterm deliveries including one twin delivery, the rest having completed 37 weeks of gestation.

On arrival at hospital the receiving room staff clamped and cut the umblical cord in the taxi, shifted the patient to the labour ward on a stretcher where in almost every case an already seperated placenta was immediately delivered. Seventy seven percent of newborns weighed over 2 kgs., a majority had an Apgar score of 7 or more on admission. The mean duration of the third stage was 19.5 mins.

The postpartum stay was generally uneventful with systemic antibiotic therapy in 77%, the mean hospital stay being 5.5 days.

Maternal and perinatal outcome:

Second degree perineal tears or parauretheral tears occured in 50% cases and were immediately repaired. One case had a retained placenta requiring manual removal and curretage.

Three of the 4 perinatal deaths weighed less than 1.5 kgs. (a macerated stillbirth and neonatal deaths of the premature twins). The single fresh stillbirth weighing 2.2 kgs. was born to an unregistered patient admitted 50 mins. after delivery and may have been preventable.

DISCUSSION

Unlike most of India's rural communities where logistics for transport and communication are virtually nonexistant, Bombay has a widespread transport system that makes medical care accessible to most of it's population. This was a study of the times when the system failed, causing a small though significant number of parturients to deliver in taxicabs.

Since most patients had normal past and present obstetric profiles and fullterm pregnancies, prediction of these cases was not possible. The patients had a lower socioeconomic status which correlated with the lack of or noncompliance with antenatal care. This also explains the reliance on taxicabs with no alternative mode of private transportation available.

The actual causes of taxi delivery appear to be multifactorial. Since many cases resided within a reasonable distance, delay in making a decision to go to hospital till labour was well established was a factor. An analysis of timing suggested that daily, weekly and seasonal variations in availability of transport played a role. Clinical misjudgement in sending back multiparous patients who may be in the latent phase of

labour from the receiving room or discharging indoor patients diagnosed to have come in false labour, without counselling or instructions could lead to hesitancy in returning to hospital unless convinced about established labour for fear of being ridiculed or turned away once more.

In view of these observations the following measures may prevent these mishaps. Since 19.2% patients had to travel more than 10 kms. to hospital, it is recommended that facilities in the vicinity be utilised for obstetric care. Printed guidelines on the antenatal case paper regarding indications for reporting to hospital to avoid delays in decision making. In view of problem in availability of transport at night and during the monsoons, hospitals must follow a more liberal admission policy depending on time and distance travelled by the patient.

While many cases had perineal injuries and there was a stillbirth that was probably preventable, there were no serious third stage complications such as postpartum haemorrhage the consequences of which could have been dreadful. Even so, an unattended delivery in a taxicab remains potentially dangerous and a traumatic and humiliating experience for our patients that we will continue to encounter occasionally till better systems for transporting parturients to hospital evolve.

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TABLE - I

Details of 26 subjects and antenatal care

Mean age (Range)		25.04 yrs. (21-35)
Obstetric status (%)	Para 1	18 (69.2)
	Para 2	5 (19.2)
	Para 3	3 (11.6)
Unregistered cases (%)	7 (26.9)	
Number of antenatal visits (%)		
Fewer than 3 visits		10 (52.6)
4 to 6 visits		5 (26.3)
7 visits or more		4 (21.1)
Possible errors in antenatal care		
Indoor patient discharged		3
Sent back in early labour		2

TABLE - II

Distance travelled and delivery-admission interval

Distance, residence-hospital (%)	
Less than 2 kms.	8 (30.8)
2 to 5 kms.	11 (42.3)
6 to 10 kms.	2 (7.7)
More than 10 kms.	5 (19.2)
Time interval, Taxi delivery-admission (%)	
Within 10 mins.	9 (34.6)
11 to 30 mins.	12 (46.2)
Over 30 mins.	5 (19.2)

TABLE - III

Maternal and perinatal outcome in taxi deliveries

Maternal outcome	
Mean duration of the 3rd Stage (Range)	19.8 mins. (5-55)
Maternal morbidity (%)	
Perineal tear	11 (42.3)
Paraurethral tear	3 (11.6)
Retained placenta	1 (3.8)
Mean hospitalization (Range)	5.5 days (3-20)
Perinatal outcome	
Birth weight (%)	
Less than 1.5 kgs.	3 (11.6)
1.6 to 2 kgs.	4 (15.4)
2.1 to 3 kgs.	17 (65.4)
More than 3 kgs.	3 (11.6)
Perinatal mortality (Birth weight)	
Macerated stillbirth (1 kg.)	1 (3.8)
Fresh stillbirth (2.2) kgs.	1 (3.8)
Neonatal death (1.4 & 1.3 Kgs.)	2 (7.6)