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Critical Study of Referrals in Obstetric Emergencies

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OBJECTIVES – To study pregnancy outcome in obstetric referrals from rural areas and to know social problems of these referrals. **METHODS** – One hundred and seventy women referred to our hospital during labor were analyzed. The medical and social factors affecting the outcome are studied. **RESULTS** – Eighty percent referrals were from rural areas and 80% were received in emergency hours. Of the referrals from rural areas 86% had not received antenatal care and 65.4% had to cover five or more kms to reach first health care unit. Twenty -five per cent had to cover >60 km for reaching the district hospital. Only 11% got an ambulance. Twenty two percent mothers and 43.4% fetuses were already in a compromised state on arrival. Seventynine percent had to borrow money for treatment. **CONCLUSION** – Because of greater distance to be traveled, lack of money, and lack of appropriate transport, the maternal and fetal conditions were already compromised when they reached the district hospital. The treatment at district hospital only saves major mishap like maternal death but fails to bring about any major impact on perinatal outcome.

Key words – obstetric referral, obstetric emergency, social problems

Introduction

The fundamental and necessary function of a health care system is to provide a sound referral system. It will ensure continuity of care and inspire confidence in consumers in the system. For a large majority of developing countries this aspect of health system remains very weak[1]. The health administration systems of developing countries are very inefficient in rural parts of the countries. These rural units lack skilled manpower, equipment and other facilities to handle obstetric emergencies. This results in many referrals to district hospitals. However, the referrals are not timely and this leads to a heavy neonatal loss and even high maternal mortality. The present article reviews cases of obstetric referrals from peripheral units to our hospital and studies factors responsible for poor obstetric outcome both medical and social. Bichile et al[2] studied obstetric problems in rural areas. They observed late referrals in cases of obstructed labor, abnormal presentations, toxemia and inadequate transport facilities to apex hospital . Shelat et al[3] in their study concluded that emergency cases were exposed to the highest risk of maternal and perinatal complications. The present study was undertaken to study obstetric outcome in obstetric emergencies referred to our hospital and to understand various problems these patients face during obstetric emergences.

Material and Methods

The study period was 8 months. The obstetric referrals bearing referral letters from urban or rural and government or private health units were included in the study. The records included detailed obstetric history, details about travel from home to the first health center, subsequent journey to this hospital, treatment received at various places, condition on arrival to this hospital and maternal and neonatal outcome.

Results

One hundred and seventy cases bearing referral letters were received by this hospital; 136(80%) were from rural places and 34(20%) from urban places. During this study period we had a total of 2079 obstetric admissions. The urban and rural referrals did not show difference in age, but rural referrals had poor antenatal booking and high incidence of grand multiparity.

The distances traveled by these women before reaching the first health unit were <5 km, in 34.6% of women. 38.9% had to travel upto 15 km, 26.5% more than 15 km. and 34% more than 60 km (Table I). The commonest conveyance was a jeep; only 11% traveled by ambulance (Table II). The time spent by patients between commencement of labor and reaching the first health unit is shown in Table III. It shows that majority of women from urban as well as rural referrals spent more than 6 hours at home after commencement of labor. It was observed that 91.20% women from urban referrals reached district hospital within one hour after referral but only 3.7% women from rural referral reached the district hospital within one hour after referral. 83.1% women from rural referrals took upto 4 hours to reach the district hospital after referral while 13.2% took more than 4 hours.

Maternal and fetal condition on arrival to our center is shown in Table IV. Table-V shows that very few had

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monetary savings for this medical emergency. There were three maternal deaths in referrals from rural places (22.05/1000 live births) and none in referrals from the urban places. The perinatal mortality for rural referrals was 253.3/1000 births as against 58.8/1000 for urban referrals.

Because of greater distance to be traveled, lack of money, and lack of appropriate transport, the maternal and fetal condition was already compromised at arrival to the district hospital. The treatment at the district hospital only saves major mishaps like maternal death but fails to bring about any major impact on perinatal outcome.

Table I – Referring health unit to district hospital distance

Distance in km	Rural (%)	Urban
<15	Nil	34 (100%)
15-60	102 (75%)	–
> 60	34 (25%)	

Table II – Mode of transport

Vehicle	Rural	Urban
Bus	20 (14.7%)	2 (5.9%)
Jeep	86 (63.2%)	11 (32.40%)
Ambulance	15 (11%)	–
Own vehicle	5 (3.7%)	3 (8%)
Auto-rickshaw	10 (7.4%)	16 (47%)
Walking	–	2 (5.9%)

Table III – Home to first health unit time

Time	Rural	Urban
<60 min	13 (9.6%)	3 (8.8%)
1-2 hours	20 (14.7%)	4 (11.8%)
2-6 hours	45 (33.1%)	9 (26.5%)
>6 hours	58 (42.6%)	18 (52.9%)

Table IV – Matenal and fetal condition on arrival at district hospital

	Maternal condition		Fetal condition		
	Compromised	Good	Good	Fetal distress	Fetal demise
Rural	30 (22%)	106 (78%)	77 (56.6%)	43 (31.6%)	16 (11.8%)
Urban	7 (20.58%)	27 (79.42%)	30 (88.2%)	2 (5.9%)	2 (5.9%)

Table V – Method of arranging money

Method	No. of cases %
Savings	36 (21%)
Borrowed from relatives	73 (43%)
Loan at 2% - 5% interest per month	58 (34%)
Sold valuables	3 (2%)

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