

Home Delivery Practices in slums dwellers OF Aligarh (UP) India

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ABSTRACT: Neonatal survival is influenced much by care provided by the family before, during and after delivery, which in turn is influenced by mother's beliefs, and perceptions of her immediate family. To assess the knowledge and practices of pregnant women regarding delivery practices. A community based study. Field practices areas of Urban Health Training Center Department of Community Medicine, JNMCH, AMU Aligarh. 200 pregnant women. Purposive sampling method. Data analysed with Epi Info version 3.5.1. Percentages, and Chi Square Test used. Majority of pregnant women (90%) delivered at home. All the home deliveries (98.9%) except one were conducted by untrained dais. Untrained Dai washed their hands only in 35.5% of home deliveries. Clean surface was used in 18.0 % deliveries. The cord was cut with new blade in 31.2% of deliveries. Sterile cord tie was used in 9.3% deliveries. Nothing was applied on the cord of 6.5% deliveries.

It was concluded that there is a low percentage of institutional deliveries and very poor delivery practices in peri-urban area of Aligarh.

Keywords: umbilical cord, untrained dais, institutional deliveries

INTRODUCTION

Child birth is a physiological process which can become pathological due to the adoption of unhygienic condition of delivery practices and consequently affect the health and survival of the newborn. Good pre and postnatal care and trained assistance at the time of childbirth are thus very important to ensure child survival [Kulkarni et al., 2001]. In India, 56% births take place at home in the debilitating environment (Neonatal Mortality Rate 34.9%) [NFHS, 2006] . Most neonatal deaths occurs at home in low resource settings against a backdrop of poverty, unskilled home deliveries, poor living conditions, ignorance and poverty and large number of women in slums working outside the home, results in inadequate care during pregnancy and neglect of the newborn [Bhargava et al., 1991, Kumar er al., 2008].

Despite a plethora of health institutions, over 50% births amongst the urban poor continue to occur in home settings and under the supervision of untrained birth attendants. Traditional practices, lack of perceived need for antenatal care, fear of hospitals, attitude and rude behaviour of the hospital staff, and the cost of hospitalization are deterrents to accessing hospital care. Late recognition of complications and delay in seeking medical help are also responsible for increased maternal-neonatal mortality. Even in neonatal illness, private practitioners in the locality are the first preference for receiving health care [Agarwal et al., 2007].

The present study has been planned to identify healthy and unhealthy delivery practices in peri-urban area of Aligarh in reference to tetanus neonatorum and other diseases (neonatal sepsis) related to unhygienic condition of delivery and the principle of five cleans recommended under Child Survival Safe Motherhood (C.S.S.M.) national program [CSSM, 1992]. The present study was carried out to assess the knowledge and practices of pregnant women regarding delivery practices.

MATERIALS AND METHODS

The present community based study was conducted in the field practice area of the Urban Health Training Centre, Department of Community Medicine, Jawaharlal Nehru Medical College, Aligarh Muslim University, Aligarh, Uttar Pradesh. There were four slums under UHTC. Out of these 4 areas, 2 areas (Firdaus Nagar, Nagla Qila) were chosen for group A and the other 2 areas (Patwari ka Nagla, Shahanshabad) served as group B. Reason behind making two groups was to implement Behaviour Change Communication package later on. Approval for study was passed from the institutional board of study meeting. Purposive sampling i.e. nonrandom sampling to include subjects that serve the specific purpose was used. The study period was one year i.e. from September 2008 to August 2009.

Exclusion criteria were high-risk pregnant women, pregnant women who opted to deliver outside Aligarh. Ethical considerations were local cultural values and ideas, were respected. Confidentiality was assured. All pregnant women were approached individually and an informed consent was taken before collecting data. Proper management or referral was given to women who were found to have any health problem.

A house to house visit was made to get the information about pregnant women till 200 pregnant women were enrolled in the study. The data were collected by using pre-designed and pre-tested semi structured questionnaire. It included information regarding identification, socioeconomic status, delivery practices. Socioeconomic status was assessed using Modified Kuppuswami Scale. [Agarwal et al., 2007] Data entry and statistical analysis were carried out using software Epi Info version 3.5.1. P-value was calculated using chi-square test and difference was accepted significant at more than 95% (p-value <0.05).

RESULTS

83% pregnant women were in the age group of 15-30 years and 17% in the age group of 31-45 years. Most of the pregnant women (90%) were Muslim and rest of them belonged to Hindu community and 75% pregnant women were illiterate. Most of the pregnant women belonged to upper lower class according to Modified Kuppuswami Scale of socio-economic status (Table1).

The majority of pregnant women 91.5% delivered at home (Table 2). All the home deliveries except one were conducted by untrained dais. Untrained Dai washed their hands with soap and water only in 35.6% of home deliveries. Clean surface (clean sheet should be spread on the floor or clean part of home) was used in 18.5% deliveries. The cord was cut with a new blade in 31.2% of deliveries. Umbilical cord tied with clean and sterile (boiled) thread in 9.3% deliveries. Nothing (ghee, oil, cowdung and ointment) was applied on the cord of 6.5% deliveries (Table 3).

DISCUSSION

In the present study institutional deliveries were lower when compared to NFHS-3 India (40.7%). A study from Gadchiroli [Bang et al.,2001], India revealed that large number of women (94%) gave birth at home. Findings of the present study were in conformity with the study conducted in Nepal, revealed that 94% of women gave birth at home[10] A cross-sectional study was undertaken in South 24 Parganas district, West Bengal to study the delivery practices and revealed 89.36 % were home deliveries [Sengupta et al.,2005]. A cross-sectional descriptive study was conducted in an urban slum of Aligarh, reported that the majority of women (67%) preferred to have delivery at home [Khan et al.,2009].

During present study only one birth was assisted by a trained birth attendant, when compared to NFHS-3 India where birth was assisted by a doctor/nurse/ANM/others health personals was 48.3% of deliveries.

In a study on delivery practices in west UP [Nandan and Mishra 1996], only 3.1% deliveries washing of floor was done, in 43% deliveries the cord cutting instrument was not sterilized. Blade was the commonest (90.8%) cord cutting instrument. The difference in result may be due large sample size. Another community based survey was conducted in urban slum of Delhi [Rahi et al.,2006]. It was revealed that unsterile threads were used in 71.7% of home deliveries. Nothing was applied to the cord in 63% of home deliveries. Findings were higher from the present study due only 82 mothers of newborn in the study area were interviewed. A cross-sectional descriptive study from an urban slum revealed that umbilical cord was cut by a new blade in 59.9% of the cases but by traditional objects such as the edge of a broken cup in 40.1% of the cases [Sengupta et al.,2005]. Similar study from Birbhum district of West Bengal, India [Dasgupta et al., 2006], 68.6% home deliveries were conducted on floor without any clean covering sheet. Though a clean instrument was used to cut the cord in 86.78% of home deliveries, a clean cord tie was used in only 24.89% cases. In 36.36% home deliveries, something was applied on

the cord stump findings were higher from the present study. In a cross-sectional, retrospective study to determine home based neonatal care practices in Makwanpur district, Nepal [Osrin et al.,2002]. Only half of attendant had washed their hands. The umbilical cord was cut with a razor blade in 56% births, although in only 33% could the blade is reliably described as clean. The umbilical stump was usually left undressed (73%). The most common application was oil (18%). In a study on maternal and newborn care practices among the urban poor in Indore found that Clean cloth/washed sun dried polythene was laid on the delivery surface in 46% homes. 61.4% birth attendants washed their hands with soap and water prior to delivery, Nearly all families (96.6%) used a new blade for cutting the cord, an unsterilized yet new cotton thread was used to tie the cord in nearly all families. The cord stump was left clean with no applicant in 50% of families [Agarwal et al., 2007]. Delivery practices were better in Indore than peri-urban area of Aligarh.

CONCLUSION

It was concluded that there was a low percentage of institutional deliveries and very poor delivery practices in peri-urban area of Aligarh. There is a need to increase coverage of deliveries attended by skilled health personnel and supported by obstetric and neonatal emergency care. Doctors and staff of the centre should be involved in the educational sessions along with the elderly females; mother-in-laws, dais and reproductive age group women and efforts should be made to address the harmful socio-cultural beliefs and practices prevalent in the community. Behaviour Change Communication (BCC) package intervention can be applied through health workers in the community to improve neonatal care that can decrease the morbidity and mortality among infants. There should be regular training session for interns, junior residents and paramedical staff of Institutions.

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Table1. Demographic profile of pregnant women

Variables	Group B N=100	Group A N=100	χ^2 , p-value-
Age group			
15-30	86	80	1.3, >0.05
31-45	14	20	
Religion			
Hindu	02	17	13.08, <0.05
Muslim	98	83	
Education of pregnant women			
Illiterate	78	72	0.97, >0.05
Up to high school	16	20	
Above high school	06	08	
Education of husband			
Illiterate	59	49	3.70, >0.05
Up to high school	37	41	
Above high school	04	10	
Occupation of husband			
Unemployed	58	55	0.59, >0.05
Semiskilled	25	24	
Skilled	09	12	
Clerical/shop	08	09	
Type of family			
Nuclear	67	62	0.54, >0.05
Joint	33	38	
Social class			
Upper	00	02	5.79, >0.05
Upper middle	14	16	
Lower middle	30	35	
Upper lower	51	46	
Lower	05	01	

Table 2. Place of delivery during last pregnancy

Place of delivery	Group B N=100	Group A N=100	χ^2 p-value
Home	92	91	0.06, >0.05
Institutional	08	09	

Table 3. Delivery practices at home in last delivery

Delivery practices		Group B (n=92)	Group A(n=91)	χ^2 p-value
Delivery conducted by	Trained Dai	01 (1.1)	00 (0.0)	
	Untrained Dai	91 (98.9)	91 (100.0)	
Clean hands	Yes	32 (34.8)	33 (36.3)	0.04, >0.05
	No	60 (65.2)	58 (63.7)	
Clean surface	Yes	15 (16.3)	18 (19.8)	1.5, >0.05
	No	77 (83.7)	73 (80.2)	
Clean instrument	Yes	26 (28.3)	31 (34.1)	0.72, >0.05
	No	66 (71.7)	60 (65.9)	
Sterile cord tie	Yes	08 (8.7)	09 (9.9)	.007, >0.05
	No	84 (91.3)	82 (90.1)	
No application of cord	Yes	05 (5.4)	07 (7.7)	0.38, >0.05
	No	87 (94.6)	84 (92.3)	

Figures in parentheses are percentages

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