

GOOD AND HARMFUL NEONATAL PRACTICES AMONG PREGNANT WOMEN IN PERIURBAN AREA OF ALIGARH

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DOI: 10.5455/ijmsph.2013.200320131

Received Date: 09.02.2013

Accepted Date: 20.03.2013

ABSTRACT

Background: Neonatal mortality in developing countries is one of the most important problems that need immediate attention in order to achieve Millennium Development Goals.

Aims & Objective: To assess the knowledge and practices of pregnant women regarding good and harmful neonatal practices.

Material and Methods: *Study Design:* A community based study. *Setting:* Field practice areas of Urban Health Training Center Department of Community Medicine, JNMCH, AMU Aligarh. *Participants:* 200 pregnant women. *Sampling:* Purposive sampling. *Study Period:* one year. *Statistical Analysis:* Data analysed with Epi Info version 3.5.1. Percentages, and Chi Square Test used.

Results: Initiation of breastfeeding within 1 hour was done only in 16% of babies. Colostrum was given by 41% mothers. 20% babies were exclusively breastfed. Witch craft in neonatal illness was noticed in 70% babies. Majority of babies (97%) were applied kajal in the eyes. Prolacteal feeds were given in 80% and pacifiers in 72.5% babies. All the home deliveries except one were conducted by untrained dais. Untrained Dai did not wash their hands with soap and water in 64.5% of home deliveries. Dark and ill-ventilated room for conducting the delivery was used in 82% deliveries. The cord was cut with a used blade, or any unsterile scissors, knife, or sickle, broken cup in 68.8% of deliveries. Application of ghee/ cow dung on the cord was done in 93.5% deliveries. 100% newborns were given bath soon after birth. Delivery room was not warm in 54.6% of deliveries.

Conclusion: It was concluded that harmful newborn care practices were common. This can be attributed largely to dais because most of deliveries were conducted at home. Some good practices were prevalent in the community like new blade, delivery in a warm room, practice of rooming-in.

KEY-WORDS: Colostrum; Exclusively Breastfeeding; Pacifiers; Prolacteal Feeds; Witch Craft

Introduction

Traditional neonatal health care practices can be defined as age-old family practices and belief about the care of newborn infants, which have evolved over generations. Often the intent is healthy but the consequences may be unbeneficial, inconsequential, or even harmful. Practices during the neonatal period are determined by elders in the household, primarily the mother-in-law, and reinforced by TBAs. Many practices have their roots in the traditional Indian system of medicine, especially Ayurveda.^[1]

It is difficult to summarize traditional health care practices that could be considered representative for the entire country. They vary with region, religion, caste, and tribe. There is limited

published literature and scientific research in this area.

The National Neonatal Forum^[2] of India recommended that healthy traditional practices be promoted and reinforced actively. Practices that do not adversely affect neonatal health should be ignored. However, harmful practices should be discouraged through informed counselling.

Some traditional practices reported in different studies^[3-6] from different parts of the country are clean and isolate place in the house for deliver, warming the delivery room, isolating the baby and the mother in room for six weeks, giving calorie-rich like sweets containing peanuts, jiggery, and ghee to lactating mothers, heating the room with 'angithee' or hot tawa, and breastfeeding as a norm in the majority of community. Withholding

certain nutritious foods like bananas, potatoes, eggs, and fish, not washing hand, delivery at home by unskilled birth attendant, conducting the delivery in dark and ill-ventilated room, cutting the cord with a used blade, or any unsterile scissors, knife, or sickle, broken cup. Application of ghee/beta nut/ cow dung on the cord. Bathing the baby soon after the birth. Discarding colostrums, given pre-lacteal feed. Delaying the initiation of breastfeeding by hour after birth linking to some specific event (appearance of star, arrival of a sister-in-law who clean the breast). Continuing use of water, tea, or "ghutti" to breastfeed babies. Using eye-line or "surma" or "kajal" on eyelashes to prevent "evil eye" Using "jhar-phoonk" for neonatal illness.

There were poor level of breastfeeding practices and unhygienic delivery practices among pregnant women in periurban area of Aligarh, Uttar Pradesh India. So the present study was carried out to assess the knowledge and practices of pregnant women regarding good and harmful neonatal 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. The subjects included in the study were residents of four registered areas of the urban health training center. The area is basically a peri-urban area situated on the outskirts of the city. Urban Health Training Centre caters a total population of 11199 at the start of the study. There were four slums i.e. Firdaus Nagar, Nagla Qila, Patwari ka Nagla, and Shahanshabad 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. Two hundred pregnant women as observed from

the previous records were chosen for the study. The study was carried out from one year i.e. from September 2008 to August 2009 which included the development of study tools, collection of data, analysis, tabulation of findings, and interpretation of results.

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 (purposive sampling). The data were collected by using pre-designed and pre-tested semi structured questionnaire. It included information regarding identification, socioeconomic status, delivery and breastfeeding practices. Socioeconomic status was assessed using Modified Kuppusswami Scale.^[7] 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

Most of pregnant women (83%) were in the age group of 15-30 years and rest 17% in the age group of 31-45 years ($\chi^2=1.3$, p-value->0.05). Mostly pregnant women (90%) were Muslim and rest of them belonged to Hindu community ($\chi^2=13.08$, p-value-<0.05). 75% of pregnant women were illiterate ($\chi^2=0.97$, p-value->0.05). Education of husbands of pregnant women was also low i.e. 54% illiterate ($\chi^2=3.70$, p-value>0.05). Majority of the families (64.5 %) were nuclear. 99% pregnant women were housewives. 48.5% pregnant women were belonged to upper lower class according to Modified Kuppusswami Scale of socio-economic status (Table1).

Good Neonatal Practices

Initiation of breastfeeding within 1 hour was done only in 16% of babies. Colostrum was given by 41% mothers. 20% babies were exclusively breastfed. 14.5 % mothers had induced burping most of the time in their babies after breastfeeding (Table 2).

Table-1: Demographic Profile of Pregnant Women

Variables	Group A N=100	Group B N=100	χ ² , p-value-
Age			
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: Good Neonatal Practices

Variables	Group A N=100	Group B N=100	χ ² , p-value-
Breastfeeding initiation within 1 hr	17	15	1.49, >0.05
Colostrum given	39	43	0.33, >0.05
Exclusive Breastfeeding	19	21	0.13, >0.05
Burping most if the time	16	13	0.36, >0.05

Harmful Neonatal Practices

Witch craft in neonatal illness was noticed in 70% babies. Majority of babies (97%) were applied kajal in the eyes. Prelacteal feeds were given in 80% and pacifiers in 72.5% babies (Table 3). The majority of pregnant women 91.5% delivered at home (χ² = 0.06, p-value >0.05). All the home deliveries except one were conducted by untrained dais. Untrained Dai did not wash their hands with soap and water in 64.5% of home

deliveries. Dark and ill-ventilated room for conducting the delivery was used in 82% deliveries. The cord was cut with a used blade, or any unsterile scissors, knife, or sickle, broken cup in 68.8% of deliveries. Application of ghee/ cow dung on the cord was done in 93.5% deliveries. 100% newborns were given bath soon after birth. Vigorous removal of vernix caseosa after birth was practiced by 29% of dais. Delivery room was not warm in 54.6% of deliveries (Table 4).

Table-3: Harmful Neonatal Care practices

Variables	Group A N=100	Group B N=100	χ ² , p-value-
Witch craft used for neonatal illness	72	68	0.38, > 0.05
Application of kajal on eyelashes to prevent "evileye"	96	98	0.68, >0.05
Prelacteal feeds given	81	79	0.12, >0.05
Pacifiers given	75	70	0.62, >0.05

Table-4: Harmful Neonatal Care practices

Delivery practices	Group A n=92	Group B n=91	χ ² , p-value
Delivery conducted by untrained dai	91 (98.9)	91 (100.0)	
Not washing hands	60 (65.2)	58 (63.7)	0.04, >0.05
Dark and ill-ventilated room	77 (83.7)	73 (80.2)	1.5, >0.05
Cutting the cord with a used blade, or any unsterile scissors, knife, or sickle, broken cup	66 (71.7)	60 (65.9)	0.72, >0.05
Application of ghee/ cow dung on the cord	87 (94.6)	84 (92.3)	0.38, >0.05
Bathing the baby soon after the birth	92 (100.0)	91 (100.0)	
delivery room not warm	53 (57.6)	47 (51.6)	0.65, >0.05
Vigorous removal of vernix caseosa	29 (31.5)	24 (26.4)	0.59, >0.05

Figures in parentheses are percentages

Discussion

In the present study, initiation of breastfeeding within 1 hour was done in 16% of babies. Lower percentage initiation of breastfeeding within 1 hour was reported by other researcher Banapurmath^[8], Mandal^[9]. Higher rates of initiation of breastfeeding within 1 hour (63%, 57.9%) were presented by Osrine^[10] and Sreeramareddy^[11] respectively. Zodepy^[12] reported that 69.69% of the children received their first breastfeed after 24 hr of birth; however none of the children was breastfed within 2 hr of birth. This difference between two studies was due to different time period used for initiation of breastfeeding.

In the present study, colostrum was given by 41% mothers. Ganjoo^[13] reported that 57% of mothers believed colostrum to be unhygienic and did not give it to their infants and these findings are comparable to present study. In the present study 20% babies had been exclusively breastfed. Higher percentage of exclusive breastfeeding was reported (72.2% and 60.5%) by Kulkarni^[11] and Subba^[14].

In the present community based study, pre-lacteal feed was given by 80 % of mothers or family members. Higher percentage (100%) of prelacteal feed was reported by Banapurmath.^[8] Lower percentage of practicing prelacteal feed was reported by Singhanial^[15] 51.7 %.

Pacifiers were given to babies in 72.5 % cases. Other researcher from Brazil Ledo Alves da Cunha^[16] reported that 60% of the children were using pacifier by the 1st month. Children using pacifier were 1.9 more likely to have stopped exclusive breastfeeding by the 6th month compared to non-users. Their findings were lower than the present study.

In a study on delivery practices in west UP^[17], only in 43% deliveries the cord cutting instrument was not sterilized. The difference in result may be due large sample size. Similarly, ICMR task force national collaborative study^[18] on identification of high risk families revealed that only water was used for hand washing before deliveries in 18.6%. In 47.6% the umbilical cord was cut by unsterilized cutting instrument in 23.8% of urban birth. Less than 2% used sterilized instrument for cutting the cord. Another community based survey was conducted in urban slum of Delhi.^[19] It was revealed that 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. In a cross-sectional, retrospective study to determine home based neonatal care practices in Makwanpur district, Nepal.^[10] Only half of attendant had washed their hands. The umbilical cord was cut with a razor blade in 56% births.

Conclusion

Harmful newborn care practices were common. This can be attributed largely to dais because most of deliveries were conducted at home and harmful practices were observed most often in these cases. There is an urgent need to educate mothers and train health care providers including ANM, ASHA and CMC workers etc. on newborn and early neonatal care.

Practice of application of kajal was common because they had deep rooted beliefs that it would beautify and clear the eyes. Moreover as most of the time application of kajal had no adverse consequences therefore they did not want to leave these practices.

Some good practices were prevalent in the community like new blade which was usually available in the local shops, wiping of baby dry after birth, delivery in a warm room, covering of head and feet of baby, practice of rooming-in and checking the temperature of baby after birth. Most of these practices are not costly and could be done using home available things. The practice of withholding the breast after birth, discarding valuable colostrum, and giving prelacteal feeds to the newborn needs to be urgently addressed through programs and breastfeeding interventions that infiltrate to the urban slums across the country.

Mothers should receive information regarding proper infant feeding practices during the antenatal period, the immediate postnatal period. It should be ensured that mothers understand the rationale of the practices that are being advised so that good feeding practices are sustained. Mothers need to be told that commercial weaning foods do not confer any advantages over less expensive supplements.

ACKNOWLEDGMENT

I would like to express my profound gratitude to all the participants for their co-operation and for their immense faith they reposed in me.

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Cite this article as: Khan MH, Khalique N, Khan R, Ahmad A. Good and harmful neonatal practices among pregnant women in periurban area of Aligarh. *Int J Med Sci Public Health* 2013; 2:553-557.

Source of Support: Nil

Conflict of interest: None declared