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308 Lasani Town, Sargodha Road, Faisalabad - Pakistan
Mob: +92 300 3008585, Fax: +92 41 8815544
E-mail: editorpjn@gmail.com

Contextual Factors Influencing Newborn Care Amongst Rural Poor in Western Uttar Pradesh

Vani Sethi¹, Sushma Kashyap¹ and Siddharth Agarwal²

¹Lady Irwin College, University of Delhi, New Delhi-110001, India

²Environment Health Project-India, New Delhi, India

E-mail: vanisethi777@yahoo.com

Abstract: One out of every 16 newborn dies in rural poor communities of Uttar Pradesh. Survival of newborns is influenced much by care provided by the family. This qualitative study identifies factors influencing newborn care in rural poor socially backward communities of Agra. Interviews and group discussions were conducted with mothers and grandmothers of newborns belonging to low socioeconomic status and traditional birth attendants (TBAs). Aspects enquired were birth preparedness, intra and postpartum care. Available responses were semi quantified. Home deliveries were common and conducted mostly by mother-in-laws (MILs) or TBAs who felt incompetent to handle complicated labour. Birth preparedness was uncommon. Nearly all newborns were left wet and naked on the floor until the placenta was delivered and bathed immediately after birth. Very few birth attendants washed their hands with soap prior to delivery. Of these, none let their hands air dry after washing. An unsterilized cord tie and new blade dipped in hot water before use was used to tie and cut the cord. No application was applied on cord stump. Majority of newborns were neither initiated breast feeding timely nor were they exclusively breast-fed. Behavioural influencers included –i) MIL's advice, ii) traditional beliefs or iii) following a practice because it was the done thing in the community. Barriers that emerged were –i) fear that if traditions are not followed the baby may be harmed, ii) families did not perceive any disadvantage of their current practice, iii) relating neonatal death to fate and iv) low maternal self-efficacy in practicing recommended behaviours because the MIL took final decision regarding newborn care. There is a need to engage collective dialogue with MILs and TBAs and assert the positive role they can play in promoting context responsive newborn care.

Key words: Birth preparedness, delivery practices, newborn care, rural poor

Introduction

One out of every 16 newborn dies in rural poor communities of Uttar Pradesh (EHP, 2003). Survival of newborns is influenced much by care provided by the family before, during and after delivery (Brennan *et al.*, 2004), which in turn is influenced not only by mother's beliefs, but also perceptions of her immediate family (Jan and Becker, 1984; Fishbein and Azjein, 1975), which are context specific. This qualitative research studied factors influencing newborn care to identify barriers and context responsive options to promote optimal newborn care in resource constraint socially backward communities where behaviour change interventions are relevant.

Materials and Methods

The study was carried out in the month of March-April, 2004 in 'Ardaya' village, district Agra, Western Uttar Pradesh (India). Ten in-depth interviews were conducted with mothers of newborns; focus group discussions were conducted with pregnant women,

grandmothers of newborns and traditional birth attendants (TBAs). Only low socioeconomic status families according to National Family Health Survey -2 Standard of Living Index were selected (NFHS-2, 1998-99). Aspects of enquiry included - birth preparedness, intrapartum (following 5 delivery cleans) and postpartum care (provision of warmth and breast feeding). Available responses were free listed. Qualifiers used for semi quantifying information gathered were - almost all (>90%), majority (75-90%), most (50-75%), some (25-50%), few (<25%) (Dobe, 2002).

Results and Discussion

Current practices

Birth preparedness: Home deliveries were common and conducted either by the Mother in law (MIL) or TBA due to traditional factors, economic constraints and low physical and social access to health facilities. These birth attendants mentioned that they did not feel competent to handle cases like malpresentation,

excessive bleeding and convulsions. In such situations, they referred cases to private midwives residing 2-3 kms away as they were cost-effective and the community trusted them. These midwives were retired Auxiliary Nurse Midwives (ANM) /Lady Health Visitors or women who had acquired midwifery skills through experience with qualified private doctors. Nearly all mothers did not undertake antenatal checkups. Reasons reported included: i) added expenditure in seeking antenatal care from private/government doctors in fee, medicines and transport ii) infrequent visits by ANM, iii) belief that getting the womb examined by the TBA who belonged to a low caste community would result in a bad omen (death of the foetus, miscarriage) and iv) lack of perceived need having experienced no complications in previous deliveries without antenatal checkups. Most families did not save money to incur delivery related costs due to economic constraints or lack of perceived need. Consequently, in unforeseen emergencies due to delay in identifying the problem, and subsequent delay in making last minute arrangements for money and transport increased the risk of complications during birth. Some families purchased a blade after the mother started experiencing labour pains. This practice, according to them was pocket friendly and prevented umbilical sepsis, as advised by the TBA.

Intrapartum care: Home deliveries were conducted in squatting position on a 'kaccha' floor in all cases. The delivery surface was not cleaned prior to delivery in all families, due to lack of perceived need. They mentioned "the delivery surface gets so dirty during delivery". In most cases, the person conducting the delivery did not wash her hands with soap prior to delivery and of the very few who did so, none let their hands air dry after washing. Reasons cited were "the baby is delivered in many cases on its own, we don't touch the birth path, so cleaning hands is not required, no soap was provided by the family, there was so much panic at the time of delivery for the family to forget and/or the birth attendant to demand soap". The TBA tied and cut the cord. In instances when the TBA was called/arrived after the delivery or until the placenta was delivered the newborn was laid wet and uncovered on the floor, increasing the risk of neonatal hypothermia, which is known to account for almost 13% of neonatal deaths in rural communities (Bang *et al.*, 2001). An unsterilized but new cotton thread was used to tie the cord in most families. Nearly all families used a new blade (already sterilized while packaging) for cutting the cord but it was dipped in hot

water before use. The MIL and TBA advised that "Using a new cotton thread and dipping the new blade in hot water before using removed the poison of blade and prevented umbilical sepsis". Though this practice was carried out with a good intention, it could possibly increase the newborn's susceptibility to sepsis, which is a known cause of 52% of neonatal deaths in a rural community (Bang *et al.*, 2001). A positive practice of leaving the cord stump clean with no applicant was also practiced because it was the 'done thing' in the community. An earlier study on delivery practices amongst 120 rural women recently delivered in Aligarh district, U.P. showed that only 3.1% and 57% deliveries were conducted on a clean surface and clean cord-cutting instrument respectively (Nandan and Misra, 1996).

Postpartum care: Newborns were bathed immediately after birth irrespective of season to remove the *vernix* and for 'shudhi'. Reasons for this practice was: i) belief that if the *vernix* is not removed the newborn would get boils and ii) they did not witness any cases of newborn dying after bathing and felt that if they did not so the newborn could possibly be harmed. Most newborns were bathed with soap and few with mud and lukewarm water. A few traditional yet positive methods of keeping the newborn warm included: i) burning smoke free cowdung cakes, ii) keeping cotton pieces under the head and on the chest of the baby and iii) wrapping the baby with cloth previously warmed on a 'chulla' and continuing to do so till the mother feels that the baby is warm. These positive practices were promoted by MILs and TBAs.

The timing of initiation of breast feeding (BF) varied as per prevailing traditional beliefs. Few families initiated BF within 2-3 hours of delivery as the baby was born after sunset. According to them their local tradition emphasized that if BF was initiated upon seeing the twinkling stars ('taraon ki chhaon mein') the baby does not forget suckling and suckles adequately subsequently. Others initiated BF 2-10 days after delivery on the day of the 'Nahan'. Nahan is a religious ceremony when the mother is bathed for the first time after delivery on a holy day according to the Hindu Religious calendar. They believed that milk flows down the breast after the 'Nahan'. Prelacteals like jaggery and tea were fed to ease the passage of the meconium. Water was fed to quench the thirst of the newborn in all families. Even after initiation of breast feeding, unboiled water was fed daily by most. Reasons for doing so included: i) newborn crying when the mother was away from home and ii) a local

belief reinforced by MILs that newborn's thirst could never be satisfied with breast milk alone. 'Ghutti' (herbal mixture sold for regularizing bowels) and tea were fed as bowl cleaners. Decision making for newborn care was the MIL's domain. She was regarded as a custodian of traditions and her advice was sought, respected and followed at all times.

Barriers to appropriate newborn care: Key barriers that emerged included: i) fear that if traditions are not followed the baby may be harmed, ii) Mothers did not perceive any disadvantage or harm of their current practices to the baby as according to them their babies were active and suckling adequately. iii) The mother-newborn dyad is isolated for the first 10 days after delivery. Thereafter, the mother resumes household chores, care of the domestic animals and working in the agricultural fields especially during harvest season. Consequently, even though she realizes that newborn care is important, she gets little time/energy to focus on this crucial task, d) mothers did not have the power of taking final decisions in newborn care leading to low self-efficacy in practicing recommended behaviours and e) nearly all families believed that appropriate newborn care required economic affluence, and newborn survival depended on fate.

Possible options: In the present study MILs and TBAs played a significant role in newborn care as also suggested by other studies (Prakash *et al.*, 1994) Hence, for stimulating the need for positive change there is a need to dialogue with MILs and TBAs and assert the positive role they can play in promoting context responsive newborn care. Studies by Aubel and Sihalathavong, (2001) have clearly demonstrated that involving grandmothers as community mobilizers resulted in positive changes in nutritional practices (Aubel and Sihalathavong, 2001). There is also a need to identify resource poor families practicing positive newborn care behaviours and with active and healthy babies as against families who witnessed death of their newborns and did not practice recommended behaviours, to enable the community to relate the pros and cons of newborn care practices to newborn survival and assert the vital role a family can play neonatal survival. A positive deviance study using the approach as suggested above is currently being implemented in rural Pakistan focusing on positive behaviours already being practiced by a few resource constraint families to form neighbourhood support groups for promoting behaviour change for better

newborn care (Marsh *et al.*, 2002).

Conclusion: Newborn care is sub-optimal in rural communities of Agra. For promoting optimal newborn care, there is a need to engage collective dialogue on context appropriate newborn care issues with elder members of the community involved in newborn care.

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Address for correspondence: Ms. Vani Sethi, PhD Fellow, Lady Irwin College, University of Delhi, H-31, Rajouri, Garden, New – Delhi - 27, INDIA. Telefax: 91-011-5453357