

Knowledge, attitude and practices on the care of the newborn in postnatal mothers delivering at a tertiary care centre in Nepal

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Abstract

Introduction: Neonatal mortality rate per thousand live births in Nepal is 24.2, and the majority of neonates die during the early neonatal period.

Objective: To determine the knowledge, attitudes and practices of mothers regarding care of the newborn after delivery at a tertiary teaching hospital in Nepal.

Method: A cross-sectional study employing both quantitative and qualitative study approaches was conducted in the Maternal and Child Health (MCH) unit of a tertiary hospital in East Nepal for a period of three months. Using a convenient sampling technique 65 postpartum mothers admitted in MCH unit were enrolled in the study. Structured interview questionnaires were used to collect data. Data was analysed using descriptive statistics by SPSS 20.

Results: Sixty five mothers who delivered at the tertiary care centre were interviewed. Age of mothers ranged from 16 to 40 years, 63% were primipara and 18.4% were illiterate. Whilst 95% of mothers knew about immunisation, few had acquired knowledge regarding cord care, signs of illness in newborn and newborn feeding during antenatal checkups. Maternal knowledge about newborn danger signs was low. Breast feeding practice as observed by interviewer was not satisfactory. Maternal knowledge on newborn hygiene care was unsatisfactory.

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Conclusion: Maternal knowledge, attitudes and practices regarding care of the newborn after delivery at the tertiary teaching hospital in Nepal requires improvement.

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(Key words: Knowledge, attitude, practice, mothers, newborn)

Introduction

Developing countries, like Nepal, face a lot of health challenges as the majority of people are uneducated, poor and less health conscious. As a result, the health status indicators of Nepal still lag far behind those of developed countries. Neonatal mortality rate per thousand live births in Nepal is 24.2 and the majority of neonates die during the early neonatal period¹. There are numerous unscientific and unhygienic health practices and social taboos in child rearing that makes the newborn extremely vulnerable. This study was conducted in order to determine the contemporary knowledge, attitude and practice of newborn rearing so as to intervene and educate caregivers in future for proper newborn care.

Objective

To determine knowledge, attitudes and practices of mothers and caregivers regarding care of the newborn after delivery at a tertiary teaching hospital in Nepal.

Method

A cross-sectional explorative study, employing both quantitative and qualitative study approaches, was conducted in the Maternal and Child Health (MCH) unit of B.P. Koirala Institute of Health Sciences (BPKIHS), a tertiary hospital in eastern Nepal, from December 2014 to February 2015, using a convenient sampling technique. Non-randomly 65 postpartum mothers admitted in the MCH unit were enrolled in this study. Structured interview questionnaires were used to collect data. Questionnaires along with demographic data included data from the entire targeted domain, i.e. Knowledge, Attitude and Practice of Newborn Care. Approval to conduct the study was taken from the Institutional Ethical Review Board, and participants were briefed about the study in order to gain their informed consent. Data were analyzed using descriptive statistics by SPSS 20.

Results

Sixty five mothers who delivered at BPKIHS were interviewed. Ages of mothers ranged from 16 to 40 years, 44.6% between 20 to 25 years. Primipara was 63.0% and 18.4% were illiterate. Of literate mothers only 29.3% were job holders. Although 95.3% of mothers knew about need for antenatal checkups (ANCs), the recommended total of at least four ANCs was achieved only by 63%. Knowledge gained by mothers during ANCs is depicted in Table 1.

Table 1: Knowledge acquired by mothers during antenatal check-ups (n=65)

Knowledge	No. (%)
Personal hygiene	56 (86.2)
Maternal nutrition	59 (90.8)
Infant nutrition	10 (15.4)
Cord care	01 (01.5)
Hospital delivery	45 (69.2)
Immunization	62 (95.0)
Breast feeding	29 (44.6)
Signs of neonatal illness	05 (07.7)
Family planning	34 (52.3)

Whilst 95% of mothers knew about immunisation, only a small percentage of mothers had acquired knowledge regarding cord care, signs of illness in newborn, and newborn feeding during ANCs. Knowledge about newborn danger signs by mothers is shown in Table 2:

Table 2: Maternal knowledge about newborn danger signs (n=65)

Danger signs	No. (%)
Lethargy	29 (44.6)
Abdominal distension	08 (12.3)
Hyperthermia	48 (73.9)
Hypothermia	07 (10.8)
Eye infection	07 (10.8)
Cord infection	14 (21.5)
Convulsion	19 (29.2)
Vomiting	40 (61.5)
Diarrhoea	14 (21.5)
Rashes	08 (12.3)
Jaundice	45 (69.2)

Due to cultural practice only 64.6% of mothers wrapped their neonates with new clothes while the

remainder used old clothes. Only 61.5% of mothers breast fed their baby within 30 minutes; 30.7% of mothers initiated formula feeding at first thinking there was inadequacy of breast secretion and only later switched over to breast feeding. Breast feeding practice as observed by interviewer was not satisfactory (Table 3).

Table 3: Appropriate breast feeding practice as observed by interviewer (n=65)

Feeding Practice	No. (%)
Comfortable breast feeding position	58 (89.2)
Supporting neonate	50 (76.9)
Attachment to breast	34 (52.3)
Burping post-feeding	27 (41.5)

Seventy seven percent of mothers fed on demand or at least 8 times a day. Of the 65 mothers, 31 avoided some type of food when a newborn developed jaundice. The percentages of different food items avoided by the mother is demonstrated in Figure 1.



Figure 1: Percentages of food items avoided by mother

Only 52.3% of mother preferred to exclusively breast feed for 6 months while remaining planned for early weaning. Keeping newborn hygiene clean is one of the cornerstones to prevent newborn illness, the assessment done on mother regarding hygiene practices is demonstrated in Table 4.

Table 4: Maternal knowledge on newborn hygiene care

Hygiene Practice	No. (%)
A. Hand washing	
Before breast feeding	13 (20.0)
After diaper care	28 (43.1)
B. Clean the cord with	
Warm water and cotton	07 (10.8)
Oil	19 (29.2)
Nothing	39 (60.0)
C. Keep new born clean by	
Oil massage	30 (46.2)
Sponge bath	40 (61.5)
Whole bath	08 (12.3)
Eye care of newborn	05 (07.7)

When newborn becomes sick, 21.5% preferred traditional methods of healing; 41.5% exposed newborn to coal or firewood for keeping warm.

Discussion

It is a well-known fact that the knowledge of newborn rearing, attitude towards newborn care and socio-cultural practice has directly been related to morbidity and mortality of neonates. The major limitation to improve neonatal health status is literacy of care givers, early age at delivery and easy access to health facilities. While 18.4% of mothers in our study were illiterate, only 63% recommended antenatal checkups. Better knowledge on neonatal practice was found in older educated women with good socio-economic status and those living in cities^{2,3}. Majority of the mothers were unaware of the general danger signs of newborn; over 50% of the mothers just considered fever, vomiting and jaundice as sign of sickness. Fever and excessive crying was considered to be a general danger sign in a similar study⁴. Majority of care givers in African countries also do not know about signs and symptoms of sepsis, its causes and management^{5,6}.

The attitude towards immunization in our study was satisfactory, as about 95% of mother were concerned about immunizing the child to prevent different communicable diseases. In other studies, a few concerns regarding development of fever post immunization, use of local herbs as a substitute and cultural practice against immunization have been mentioned, but majority of them had a good attitude for vaccination^{7,8}. Maintaining good hygiene is an important factor to prevent neonatal infection. We found many cultural practices like wrapping newborn with old clothes, using firewood and coal for keeping baby warm, applying oil to umbilical cord, which can result in neonatal sepsis. Similarly, many mothers did not wash hands after diaper care or knew about eye care. Few other studies also quoted the ignorance of caregivers towards hygienic practices in area of umbilical cord care, thermal care and vaccine preventable disease. There are practices like instillation of oil in nostrils, application of mustard oil over umbilicus, and poor hand washing practices^{9,10}.

In our study we found major lagging in proper breast feeding technique like supporting neonate (77%), attachment to the breast(52%) and burping after feeding(41.5%). Approximately 60% of mother initiated breast feeding within thirty minutes and about 20% of mother did not give adequate feeding. There is cultural practice of abstinence of different food items during neonatal jaundice, which in turn

may decrease the calorie intake of mother and affect milk production. About half of mother has planned for exclusive breast feeding for six months. This can have direct impact on risk of diarrhoeal and respiratory illness. A quarter of them believe in cultural ways of treating jaundice and illness and result is often they present very late at health care, increasing avoidable neonatal mortality and morbidity. Similar studies found that knowledge of exclusive breast feeding was present in about 35-40% and knowledge regarding techniques like proper position of the baby and burping practices was found in 35% and 78.2% respectively^{11,12}. Community based study conducted in Sudan indicated that 54.2% of mothers initiated breastfeeding after one hour from delivery and 39.7% of them initiated breastfeeding during from two hours to 24 hours¹³. Another study from Iran found that 14% mothers go for traditional remedies and 32% mothers discontinued feeding their icteric offspring with coloured foods and colostrum¹⁴.

In our study we found that practice of mothers in newborn are still lagging in some aspects like recognizing sick newborn, managing jaundice, feeding practices and hygiene care. All this practices have direct impact on neonatal health status. These lacunae are because of deep rooted cultural and traditional beliefs among care givers and ignorance. Hence to overcome this problem increasing overall educational status of mothers, providing proper health education to them regarding care of newborn, running baby friendly clinics and discouraging the unhealthy traditional beliefs are very important.

Conclusion

Maternal knowledge, attitudes and practices regarding care of the newborn after delivery at the tertiary teaching hospital in Nepal is unsatisfactory

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