# A Study to Assess Knowledge of the Post Natal Mothers Regarding Essential Newborn Care in the Selected Government Hospital of Delhi

# Mikki Khan\*, Jamal Fatima\*

Author Affilation: \*Tutor, Rufaida College of Nursing, Faculty of nursing, Jamia Hamdard, New Delhi-110062, India.

### Abstract

Newborn care is of immense importance for the proper development and healthy life of a baby. Increased access to some components of newborn care for mothers giving birth can also be an effective strategy to reduce neonatal morbidity and mortality. Essential newborn care (ENC) is a comprehensive strategy designed to improve the health of newborns through interventions before conception, during pregnancy, at and soon after birth, and in the postnatal period. A Non-experimental descriptive survey was done to assess knowledge of the post natal mothers regarding essential newborn care in the selected government hospital of Delhi. 100 post natal mothers admitted in the maternity unit of the selected hospital were selected through convenient sampling technique. Variable under study included knowledge regarding essential newborn care. It was seen that Among the 100 study subjects 47% belonged to age group 20-25 years. 44% of subjects were having education till higher secondary. Most of the subjects i.e 91 % were housewives. 51 % of the subjects were primigravida and 49% of the subjects were multipara. 53 % subjects got the information regarding essential newborn care from health personnel followed by 39 % from family members. Study revealed that 61 % mothers had moderate knowledge regarding essential newborn care. 24 % mothers had adequate knowledge and only 15 % mothers had inadequate knowledge regarding essential newborn care. It was found from the data that educational status of the mothers had significant association with the knowledge of the mother regarding essential newborn care. Other demographic variables did not show any statistically significant association with knowledge score of the mothers.

Keywords: Mothers; Knowledge; Essential Newborn Care.

#### Introduction

deaths are mostly due to infections acquired after birth, either at the health facility or at home[1].

Deaths during the first week of life are mostly due to conditions originating in pregnancy or during childbirth. They are a result of inadequate or inappropriate care during pregnancy, childbirth, or the first critical hours after birth. After the first week, Newborn care is of immense importance for the proper development and healthy life of a baby. Although childhood and infant mortality in South Asia has reduced substantially during the last decade, the rate of neonatal mortality is still high [2].

Reprint Request: Jamal Fatima, Tutor, Rufaida College of Nursing, Faculty of nursing, Jamia Hamdard, New Delhi-110062, India.

E-mail: jamalfatima82@gmail.com

Up to 1.2 million newborns [3] and 83 000 new mothers [4] die every year in South Asia, representing over half the global number of neonatal deaths and one third of maternal deaths.

The health challenge of the newborn that India faces is more formidable than experienced by any other country in the world. It is estimated that out of 3.9 million neonatal deaths that occur worldwide, almost 30% occur in India. Globally, under five years of age, mortality rates have declined over the past four decades, but the neonatal mortality rates still remain high.[5] In India it is reported that 50 – 60% of all neonatal deaths occur within the first month of life. Of these, more than half may die during the first week of life. Most of the deaths are due to birth asphyxia, hypothermia and infections which are preventable if the quality of care is maintained[6].

Newborn care is strongly influenced by women's social and health status and by home care and practices for mother and newborn, as well as by maternal and newborn cares services[7]. Women are valued less than men. This attitude may manifest through female infanticide, limited access to food, lack of educational opportunities, restricted mobility, lack of participation in decision-making, early marriage, dominance of mothers in law, expectation to bear many children, heavy workloads, physical and emotional abuse and inadequate access to health services. Lack of understanding of the urgency attached to newborn illnesses or obstetric emergencies, traditions of seclusion of mother and newborn, fatalistic outlook, belief in evil sprits, and lack of family finances to pay for care and transport also cause delay in deciding to seek care. The issues of perinatal and newborn infant health, therefore, require focused attention in South Asia unicef. It has become increasingly evident that any further impact on infant mortality, or achievement of millennium development goals, world fit for children goals and UNICEF MTSP target, is not going to be realized unless neonatal mortality rate is dramatically reduced [2].

Most of the neonatal deaths can be prevented with cost-effective solutions that do not depend on highly trained provider or sophisticated equipment. Proper nutrition and hygiene are the answers in many cases, while other deaths can be prevented by using widely available vaccines and medications to prevent and treat infections, by having skilled health care at hand during and after delivery, by recognizing and promptly treating obstetric complications, by keeping the baby warm and the umbilical cord clean, and by improving breastfeeding and family planning practices. By following low-cost principles of newborn care laid down by the French obstetrician Pierre Budin, 1907 in his classic work "The Nursing", and by looking after the health of the expectant mothers — before, during and after delivery — many of the causes of the newborn death can be prevented before they occur[2]. Increased access to some components of newborn care for mothers giving birth can also be an effective strategy to reduce neonatal morbidity and mortality [8,9].

Essential newborn care (ENC) is a comprehensive strategy designed to improve the health of newborns through interventions before conception, during pregnancy, at and soon after birth, and in the postnatal period. ENC comprises: (a) Basic preventive newborn care such as care before and during pregnancy, clean delivery practices, temperature maintenance, eye and cord care, and early and exclusive breastfeeding on demand day and night; (b) Early detection of problems or danger signs (with priority for sepsis and birth asphyxia) and appropriate referral and care seeking. This may also be a part of (a) and (c); and (c) Treatment of key problems such as sepsis and birth asphyxia[10].

The World Health Organization (WHO) 's guidelines for Essential Newborn Care (ENC) including protective practices before, during, and after birth are available and recommended essential newborn care behaviors include hygienic practices at delivery (clean hands and delivery surface, nothing unclean to be introduced into the vagina) and for the umbilical cord (clean cutting and tying instruments and applying nothing to the cord), thermal care (immediate drying and wrapping of the baby after delivery, skin-to-skin contact with the mother), extra care for low birthweight/preterm birth (additional warmth, cleanliness and nutrition and early recognition of diseases) and early and exclusive breastfeeding to reduce the risk of the main causes of neonatal deaths in both community and facility deliveries[11].

Mother's knowledge and practice regarding essential newborn care will directly affect the neonatal morbididty and mortality rates. Because newborn's overall health status depends on the knowledge and practice of the mothers regarding new born care. So study was conducted to explore the knowledge of post natal mothers regarding essential newborn care in selected hospitals of Delhi.

#### Methods

The research approach in this study was quantitative with Non-experimental descriptive survey design to assess knowledge of the post natal mothers regarding essential newborn care in the selected government hospital of Delhi. Sample comprised of 100 mothers admitted in the maternity units of selected government hospital of Delhi, selected through convenient sampling technique.

A structured questionnaire, developed by the authors, was used to interview the mothers. A pilot study was carried out from 1 October to 10 October 2014, and necessary amendments were made to the questionnaire.

The survey questionnaire consisted of 40 questions and the questionnaire was divided into two sections: Section 1 comprised of items pertaining to sociodemographic data of the subjects. Section 2 contained items related to the knowledge of mothers regarding essential newborn care.

For the collection of the data a formal approval was sought from the hospital authorities to conduct the study. The data was collected in the month of November 2014. The purpose of the study was explained to respondents and their consent to participate in the study taken. The data obtained was subjected to analysis using descriptive and inferential statistics.

#### Result

#### Sample characteristics

Among the 100 study subjects 47% belonged to age group 20-25 years. 44% of subjects were having education till higher secondary. 20% had education till 10<sup>th</sup> followed by 15% mothers got primary education and 22% had got no formal education. Most of the subjects i.e. 91% were housewives.

51 % of the subjects were primi gravida and 49% of the subjects were multi para. 53 % subjects got the information regarding essential newborn care from health personnel followed by 39 % from family members.

# Distribution of mothers based on knowledge regarding essential newborn care

Study revealed that 61 % mothers had moderate knowledge regarding essential newborn care. 24 % mothers had adequate knowledge and only 15 % mothers had inadequate knowledge regarding essential newborn care.

# Association between knowledge of mothers regarding essential newborn care and selected variables

It was found from the data that educational status of the mothers had significant association with the knowledge of the mothers regarding essential newborn care. Other demographic variables did not show any statistically significant association with knowledge score of the mothers.

#### Discussion

The findings of the present study that61 % mothers had moderate knowledge and 24 % of the mothers had adequate knowledge regarding essential newborn care. The findings of this study are in conformity with the findings reported by sharafi and Esmaeeli that 78.5% of mothers had moderate and 13.3% had good knowledge regarding neonatal care[12].

Data from the study done by Brar indicated that most of the mothers (77%) had inadequate knowledge regarding newborn care, this finding is contrary to the findings of the present study that 61 % mothers had moderate knowledge and 24 % of the mothers had adequate knowledge regarding essential newborn care.13]. This finding is also contrary to the finding of the study done by Rama R, Gopalakrishnan S, Udayshankar[14].

Issler, Senna, conducted a study on knowledge of newborn health care among pregnant women including breast feeding aspects. Based on the findings it was observed that pregnant women's knowledge of newborn health care is low as much in the aspects of general care as in relation to the practice of breast feeding. These findings are also contrary to the findings of the present study that most of the mothers had moderate knowledge regarding essential newborn care[15].

Findings of the present study are also found contrary to the findings of the study done by Amolo that Postnatal mothers most likely to have poor knowledge on essential newborn care practices and the findings of Padiyath, Bhat , Knowledge of mothers was inadequate in areas of umbilical cord care (35%), thermal care (76%) and vaccine preventable diseases[16,17].

The findings of the study revealed that there was significant association between the knowledge regarding essential new born care and educational status of the mothers. This finding was in agreement with those of Rama R, Gopalakrishnan S, Udayshankar, that the knowledge regarding new born care was found to have a significant association with the educational status of the mothers[14].

This finding is also in conformity with the findings of Castalino, Nayak and D'Souza, that the education

Journal of Nurse Midwifery and Maternal Health / Volume 1 Number 1 / January - June 2015

of the mothers had significant association with the knowledge of the mother regarding new-born care[18].

### Conclusion

This study indicated that knowledge of postnatal mothers regarding newborn care can play an important role in the prevention of neonatal problems, though tradition and culture plays a significant role in the care of newborns. So there is always a scope for the health education for the mothers regarding newborn care for providing better care to the newborns. Nurses are the key personnel who can take care of the educational needs of the mothers.

## References

- Unicef Pacific multy Country programme Midterm Review. An updated situation analysis of health and sanitation. June 2010 source: http:// www.unicef.org/pacificislands/MTR\_hand\_s.pdf
- 2. UNICEF. What Works for Children in South Asia: NEWBORN CARE: AN OVERVIEW. 2004
- 3. UNICEF. Levels & trends in child mortality: estimates developed by the UN Inter-agency Group for Child Mortality Estimation: Report 2012. 2012.
- 4. WHO, UNICEF, UNFPA and The World Bank Estimates. Trends in Maternal Mortality: 1990 to 2010. 2012.
- 5. Anil Narang, Srinivas Mukri. Research in neonatology. Indian J Pediatr. 2002; 17: 170.
- 6. World Health Organization. World health statistics annual Geneva: 1998. A-5.
- Rodolfo, P., S. Walls, et al. The effect of poverty, social inequality, and maternal education on infant mortality in Nicaragua 1988-1993. American Journal of Public Health. 2000; 90: 64-69.
- Pradhan YV, Upreti SR, Pratap KCN, K CA, Khadka N, Syed U, Kinney MV, Adhikari RK, Shrestha PR, Thapa K, Bhandari A, Grear K, Guenther T, Wall SN. Newborn survival in Nepal: a decade of change and future implications. Health Policy Plan. 2012; 27(3): 57–71.

- 9. Rubayet S et al. Newborn survival in Bangladesh: a decade of change and future implications. Health Policy Plan. 2012; 27(3):iii40-iii56.
- Narayanan, Rose, Cordero, Faillace, and Sanghvi. The Components of Essential Newborn Care. Published by the Basics Support for Institutionalizing Child Survival Project (BASICS II) for the United States Agency for International Development. Arlington, Virginia, 2004.
- 11. WHO. Essential newborn care. Report of a technical working group. 1994.
- 12. Reza sharafi, Hassan Esmaeel. Knowledge assessment of neonatal care among postnatal mothers. Iranian Journal of Neonatology. 2013; (1).
- 13. Brar Navjot . A study to assess the knowledge regarding newborn care.Source: http://www.scribd.com/doc/78119650/a-study-to-assess-the-knowledge-regarding-newborn-care#scribd.
- Rama R, Gopalakrishnan S, Udayshankar PM. Assessment of knowledge regarding new-born care among mothers in Kancheepuram district, Tamil Nadu. International journal of community medicine and public health. Health. 2014; 1(1): 58-63.
- Issler H, Senna DM. Knowledge of newborn health care among pregnant women: basis for promotion and educational programme on breastfeeding. Sao Paulo Medical Journal.2001; 119(1): 7-9.
- Dr. Lucia Amolo .Knowledge and attitude of postnatal mothers on essential newborn care practices at kenyatta national hospital. Unpublished dissertation of the degree of Masters in Medicine University of Nairobi.
- 17. Mohamed Asif Padiyath, Vishnu Bhat B, Maheswari Ekambaram. Knowledge attitude and practice of neonatal care among postnatal mothers. INDMEDICA.2010; 14(2).
- Castalino .f, Nayak b.s. & D'souzaa. Knowledge and practices of postnatal mothers on newborn care in tertiary care hospital of udupi district. Nitte University Journal of Health Science . 2014; 4(2).