



“ASSESS THE KNOWLEDGE REGARDING NEONATAL DANGER SIGNS AMONG MOTHERS ATTENDING PEDIATRIC DEPARTMENT”

Ms. Abitha Treesa Sunny, Ms. Akshaya Biju, Ms. Aneesha Mobin, Ms. Ansu Ann Biju, Mr. Anto Jacob, Ms. Ashny Thampan, Ms. Ashy S, Mrs. Siji T Jose ,Mrs. Tintu Sara Joy , Prof. Dr. Kiruba J C

MGM Muthoot College of Nursing, Kozhencherry Pathanamthitta (Dist), Kerala

ABSTRACT

Children are the most vital population in a society. A neonate is a baby who is 4 weeks old or younger. It is a time when changes are very rapid. Many critical events can occur in this period. Neonatal danger signs are signs that sick neonates show as stated by WHO, which includes not able to feed or stopped feeding well, convulsion, fast breathing, chest- indrawing, high temperature, very low temperature and signs of local infection such as umbilical redness or draining of pus. The danger sign is a sign which indicates potential hazard, obstacle or condition requiring special attention. Early detection of neonatal illness is an important step towards improving newborn survival. Health seeking behavior of mothers relies on their knowledge on neonatal danger signs. The objectives of the study were to assess the level of knowledge regarding neonatal danger signs among mothers and to find an association between the knowledge of neonatal danger signs among mothers and selected demographic variables. A quantitative non-experimental approach was used for the study. A sample of one hundred and fifty mothers was selected using convenience sampling. The knowledge on neonatal danger signs was assessed using a self structured questionnaire. The present study revealed that there was an average and poor level of knowledge among mothers regarding neonatal danger signs. The study reported that there was a significant association between the knowledge scores and demographic variables ($\chi^2=7.816$ and $\chi^2=5.991$ at $p<0.05$). The study concluded that awareness programs must be conducted for mothers, to promote right information and practice, for identifying and managing neonatal danger sign.

Keywords: Assess; knowledge; neonatal danger signs; mothers.

INTRODUCTION

BACKGROUND OF THE PROBLEM

Neonatal danger signs are signs that sick neonates show as stated by world health organization (WHO), which includes not able to feed or stopped feeding well, convulsion, fast breathing, chest in-drawing, high temperature, very low temperature and signs of local infection such as umbilical redness or draining of pus.¹ Child care is mostly the responsibility of mothers. Therefore, the mother's knowledge about child care influences the nature and quality of care that is given to the child. Several studies revealed that the mother's level of education has a positive impact on her knowledge and how she deals with child care issues.

STATEMENT OF THE PROBLEM

A study to assess the knowledge regarding neonatal danger signs among mothers attending pediatric department of selected hospital with a view to prepare information booklet.

OBJECTIVES

1. Assess the level of knowledge regarding neonatal danger signs among mothers.
2. Find an association between the knowledge of neonatal danger signs among mothers and selected demographic variables.

OPERATIONAL DEFINITIONS

1. **Assess:** In this study, it refers to an act of identifying knowledge of mothers on neonatal danger signs.
2. **Knowledge:** It refers to the mother's available information about neonatal danger signs measured by structured questionnaire.
3. **Neonatal danger signs:** In this study neonatal danger sign refers to the manifestations that occur during neonatal period which may endanger the life of the neonate such as poor feeding, dehydration, excessive

crying, vomiting, convulsion, sepsis, chest in-drawing, grunting, nasal flaring, bulged or depressed fontanelles and umbilical cord infection; assessment is done by giving self administered questionnaires.

4. **Mothers:** In this study, mothers refers to those who have children under 5 years of age.
5. **Pediatric departments:** It refers to the pediatric OPD's and in-patient pediatric ward.
6. **Information booklet:** In this study it refers to a small thin book with paper covers giving information regarding neonatal danger signs such as dehydration, poor feeding, excessive crying, vomiting, diarrhea, convulsion, sepsis, chest in-drawing, grunting, nasal flaring, bulged or depressed fontanelles and umbilical cord drainage.

ASSUMPTIONS

1. Mothers are aware about the neonatal danger signs that affect their neonates.
2. Increased knowledge about neonatal danger signs is the best way to improve the confidence of mother in taking care of their neonates.

RESEARCH APPROACH

The research approach used in the study was **Quantitative Research Approach**.

RESEARCH DESIGN

The research design used in the study was **Descriptive design**.

POPULATION

Mothers of under five children.

SAMPLE AND SAMPLING TECHNIQUE

Sample size: 150 mothers of children less than 5 years

Sampling technique: Convenience Sampling Technique

DESCRIPTION OF THE TOOL

Section A consisted of items in demographic variables including age of mother, age of child, occupation of father, occupation of mother, education of mother and place of residence.

Section B consisted of 35 questions related to neonatal danger signs.

CONTENT VALIDITY

Content validity refers to the degree to which the items of an instrument adequately represent the universe of content for the concept being measured.⁵⁵

To establish content validity, the tool along with objectives, hypothesis, operational definitions and criteria checklist were submitted to five experts from nursing education (child health department, obstetrics and gynecology department, medical surgical department, community health department, and mental health department).

Suggestions and recommendations given by experts were accepted and necessary modifications were done. The research tool was finalized according to the expert's opinion.

DATA COLLECTION PROCESS

The data was collected from Muthoot Health Care Pvt Ltd, Kozhencherry.

After obtaining a formal permission from the concerned authority of the hospital, pediatric wards and pediatric outpatient department were used for the data collection.

The study was conducted with 150 mothers admitted in the ward or who came in the outpatient department at the selected hospital who are between 20-40 years. The purpose of the study was explained. Data was collected using questionnaire and that was translated from English to Malayalam. Written informed consent from the participants was secured and obtained after the researcher introduced and explained the need of the study. The confidentiality of the information was maintained. Demographic variables along with questionnaires were administered by the investigator. The subjects were co-operative during the study.

PLAN FOR DATA ANALYSIS

Data analysis is planned based on the objectives of the study. After collection of data, data will be organized, tabulated and summarized by preparing master data sheet and by using descriptive and inferential statistics manually using MS Excel, 2007 version. Frequency and percentage were used to define baseline data and knowledge scores. As the knowledge were in the ordinal data non parametric test were adopted. For the association of the knowledge scores with demographic variables, Chi-square test was computed.

FINDINGS OF THE STUDY

Data analysis is condensed under the following headings:

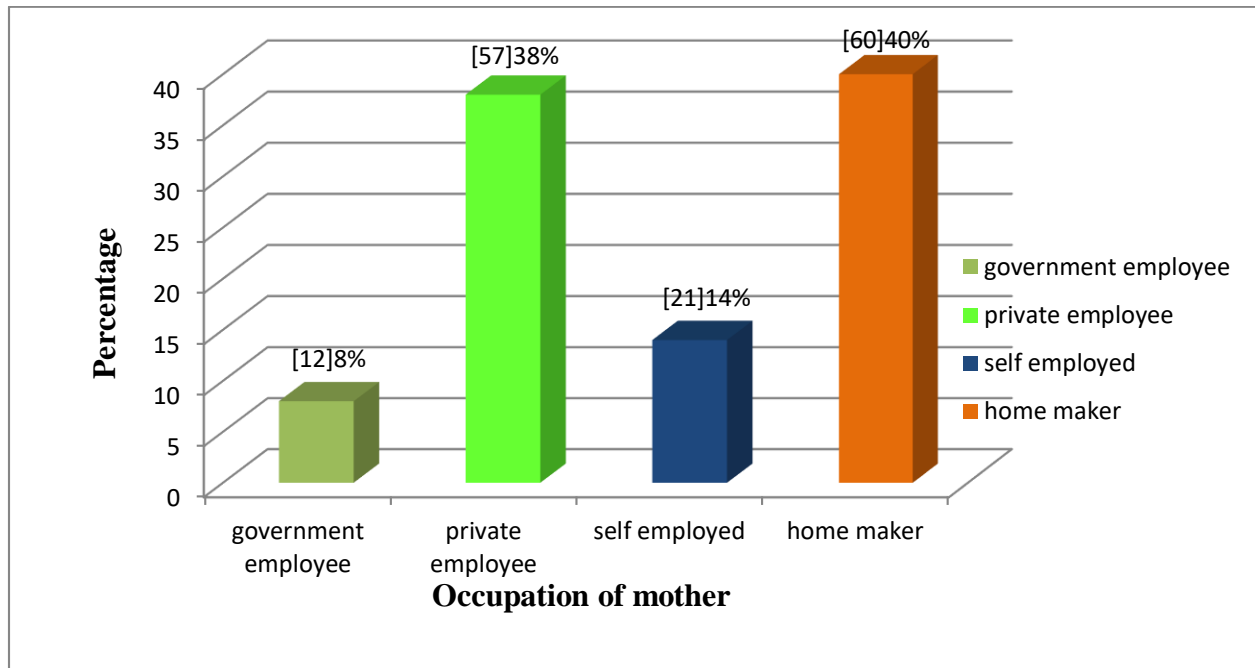
Section 1: Description of demographic variables.

With reference to age 29.33% mothers were in the age group of 18-24, 44.67% were in the age group of 25-32, 24.67% were in the age group of 33-40 and 1.33% were in the age group of 41-48. With reference to age of child, 16% were in the age group of 0-28 days, 47.34% were in the age group of 28 days to 12 months, 27.343% were in the age group of 1-3 years and 9.33% were in the age group of 3-5 years. With reference to educational status, 17.67% were Post-Graduate, 18.67% were higher secondary education, 0% were high school education, 1.33% were middle school education and 0.67% were primary school education. 8% of mothers were government employee, 38% were private employee, 14% were self employed and 40% were home maker. 20.67% of fathers were government employee, 34.67% were private employee, 36.66% were self employee and 8% were unskilled laborer. 19.33% of mothers were residing in urban areas, 27.33% were residing in semi-urban areas and 53.34% were residing in rural areas.

Section 2: Description of self structures questionnaire to assess knowledge of mothers regarding neonatal danger signs.

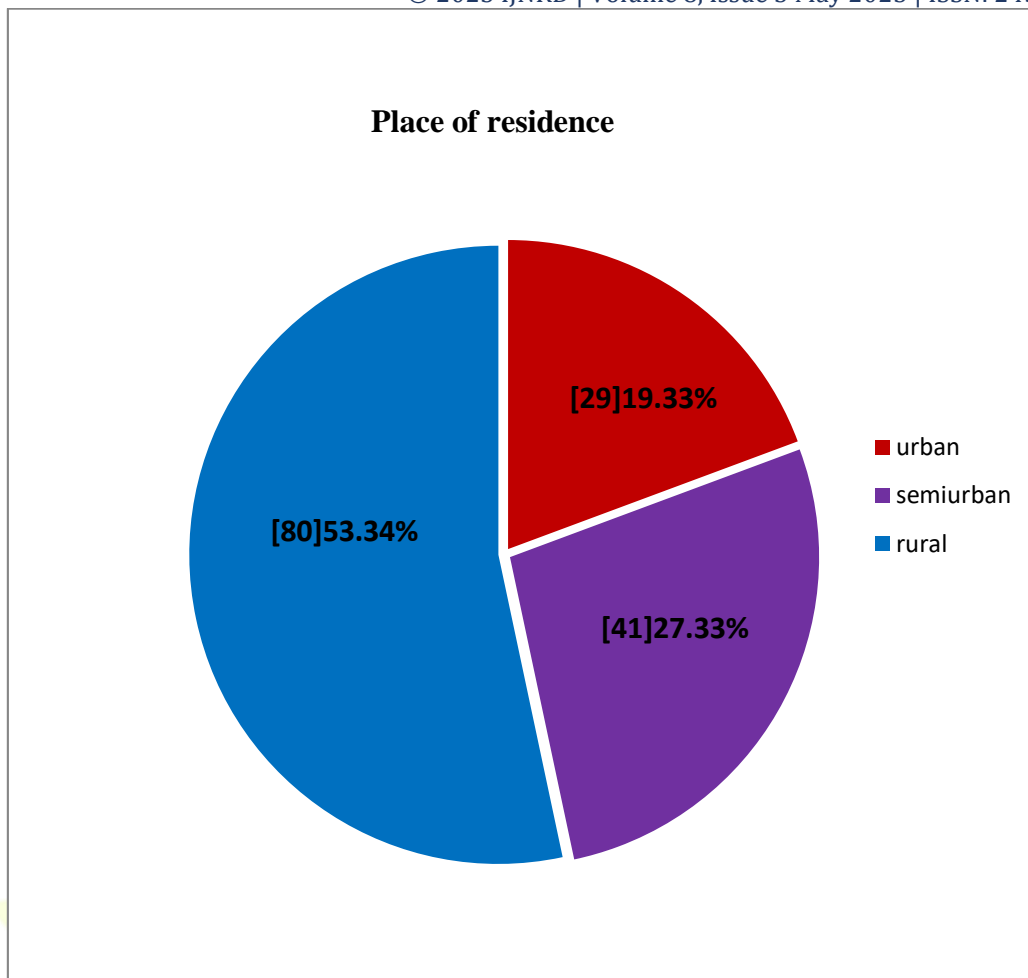
With reference to knowledge score, 26.67% of mothers were having average level of knowledge and 73.33% of mothers were having poor level of knowledge on neonatal danger signs. That majority (73.33%) of mothers of selected hospital had poor knowledge and (26.67%) had average knowledge on neonatal danger signs.

Section 3: Association between knowledge on neonatal danger signs with demographic variables their occupation



Computed chi-square value for occupation of mother (9.379486) was greater than the table value ($\chi^2=7.816, p<0.05$). Hence the null hypothesis was accepted and it is concluded that there is significant association between knowledge scores of mothers of selected hospital with their occupation.

International Research Journal
IJNRD
 Research Through Innovation



Computed chi-square value for place of residence (6.199997) was greater than the table value ($\chi^2=5.991, p<0.05$). Hence the null hypothesis was accepted and it is concluded that there is significant association between knowledge scores of mothers of selected hospital with their place of residence.

NURSING IMPLICATIONS

The findings of the present study generate some implications to the health care delivery system. It has implications in nursing practice, nursing administration, nursing education and nursing research.

Nursing practice

1. Nurses can increase the knowledge regarding danger signs of neonates among mothers and it help them for early identification and treatment.
2. Greater understanding of neonatal danger signs may facilitate immediate and emergency health interventions.

3. Nurses should inform the mothers about danger signs and its management, in order to make a knowledgeable choice of alternatives.

4. Specific guidelines regarding neonatal danger signs should be implemented among the nurses.

5. Health education should be provided for the nurses in clinical area, for the early identification and management of danger signs.

Nursing administration

1. Nurse administrator can encourage the nursing personnel to use most effective learning practices.

2. Improve the knowledge level of staff nurses by conducting continuous nursing education programs

3. Clinical nurse should prepare effectiveness of learning practices to provide information to the public.

Nursing education

1. The nurses also can act as an educator by educating the mother.

2. Nurse educator should focus on the needs of patients, along with the practice sections, in order regarding the danger signs.

3. The knowledge level of student nurses, regarding the neonatal danger signs should be improved by conducting webinar, orientation programs, quiz competitions.

Nursing research

1. The nurse researcher can work towards developing a tool to measure various dimensions in terms of knowledge, attitude and practice towards early identification and treatment of neonatal danger signs.

2. There is a need for research in this area so that the strategies for educating nurses regarding various aspects of prevention of neonatal dangers.

Conclusion of the study

The findings of the study concluded that mother have poor and average knowledge regarding neonatal danger signs.

It was found that there is lack of knowledge for the mothers regarding neonatal danger signs. Information booklet would help the mothers to improve their knowledge on neonatal danger signs. Thus mothers should be encouraged to enhance their knowledge on prevention and management of neonatal danger signs.

REFERENCES

1. Nigussie T, Yosef T, May 2020 , knowledge of neonatal danger signs and it's associated factors among mothers attending child vaccination Centre, International journal of pediatrics,2020(3):1- 6.
2. Bayih WA, Birhan MB, etal 15 April 2020 Determinants of maternal knowledge of neonatal danger signs among Post Natal mothers post Natal mothers Visiting neonatal intensive care unit, BMC pregnancy and childbirth, Article number 218(2020).
3. Guta A etal, International journal women's Health 2020, knowledge of neonatal danger signs and associated factors among mothers of <6months old, National library of Medicine, 2020 July 24, 12: 539-548.
4. Nigatu SG, Worku AG etal, BMC Research Notes and level of Mother's knowledge about neonatal danger signs and associated factors. Article number:309 (2015) published on 19 July 2015.
5. World Health Organization (2006). Handbook IMCI Integrated management of childhood illness. World Health Organization.
6. Diriba K, Degefa N etal, Biomed Research International Research Article, knowledge about neonatal danger signs and associated factors among mothers attending Immunization centre. volume 2019.
7. Dongre AR etal, Indian Journal of Pediatrics 2009, July Awareness and health care seeking for Newborn danger signs among mothers. National library of medicine, April 16 2009.
8. Kibaru EG, Otara AM, BMC Research Notes 9, knowledge of neonatal danger signs among mothers attending well baby clinics. Article number:48 (2016), 25 October 2016.
9. Nigussie T, Yosef T May 2020 knowledge of neonatal danger signs among mothers attending child vaccination Centre, International journal of Pediatrics,2020 (4)2-7.
10. World Health Organization (2007). Handbook IMCI Integrated management of childhood illness. World Health Organization.
11. Guta A etal, International Journal of Women's Health 2020, Knowledge of neonatal danger signs and associated factors among mothers of <6 months old, National Library of Medicine,2020 July 20, 15: 229-234.
12. Bayih WA, Birhan MB, etal 20 july 2020, Determinants of maternal knowledge of neonatal danger signs among post natal mothers visiting neonatal intensive care unit, BMC Pregnancy and Childbirth, Article number: 200(2020)

13. Welay FT, Kassa NA et al, BMC Research notes 12, knowledge of neonatal danger signs and associated factors among mothers who gave birth during last 4 months, Article number: 651(2019).
14. Dongree AR et al, Indian Journal of Pediatrics, 2009, July Awareness and Health care seeking for Newborn danger signs among mothers, National Library of Medicine, May 14 2009.
15. Bulto GA, Fekene DB et al, BMC Research notes 12, knowledge of neonatal danger signs, care seeking practice and associated factors among postpartum mothers, Article number: 549 (2019), Published on 28 August 2019.
16. Welay FT, Kassa NA et al BMC Research notes 15, knowledge of neonatal danger signs and associated factors among mothers who gave birth during last four months. Article number: 551 (2019).
17. Mersha A, Assefa N et al Research Gate, mothers level of knowledge on neonatal danger signs and its predictors, American Journal of Nursing Science (65): 425-436 October 2017.
18. Kebede AA,etal dovepress, mothers knowledge on neonatal danger signs and health seeking practices and associated factors, Research and Reports in neonatology, volume10, 11 August 2020,47-58.
19. Welay FT, Kassa NA et al BMC Research notes 12, knowledge of neonatal danger signs among mothers who gave birth during last four months, Article number: 219,2019.
20. Kaur H, Joshi P et al, International Journal of Health Science and Research 2019 a descriptive study to assess knowledge regarding danger signs of neonatal illness among mothers, Volume:9, page number: 120-125.
- 21.Suresh K Sharma .Nursing research and statistics ,Ist edition . Noida :Reed Elsevier India (p) Limited, publishers:2011, P :35-45.
- 22.Bhuttan Zulfiqar, Darmstadt Gary, Hasan Babar et al, A community based study for improving perinatal and neonatal health outcomes in developing countries, American academy of Pediatrics, 2005, P: 57-61.
- 23.Nina Ray, Knowledge of parents regarding management of asthma in their children, Nightingale nursing times, Vol :15, 2019, P: 9-11.
- 24.Minu Sharma, Gurpreet Kaur, Jyothi Shukla, A study to assess the knowledge of under five children's mothers regarding six killer diseases and dangers, Nursing education and research, Vol : 8, 2018, P: 160-161
- 25.Patel Swathi, Patel Megha, Patel Shital et al, A descriptive study to assess the knowledge of mothers regarding home management of selected common illnesses in under five children at Gujarath with a view to develop health education, International journal of advances in nursing management, vol 17, 2019, P:23-27.
- 26.Sangrulkar Sonali M S, Knowledge and practice of mothers regarding URTI of under five, international journal of advances in nursing management, vol :6, 2018, P:39-42.
- 27.Radhakrishnan T, Thankappan K R, R S Vasan, et al, Socioeconomic and demographic factors associated with birth weight: A community based study in Kerala, Indian pediatrics (2019), P: 310-312.
- 28.Alfayyad Isamme, Riaz Muhammed, Nofal Abdullab, et al,Mothers and care givers knowledge on the experience of neonatal danger signs: A cross sectional survey in Saudi Arabia,Journal of biomed research international (2019) p:1-12

29.Nursat Kharbboo, Khan Raffy Muhammed, Waseem Zaiya, Siddiqui Musthafa Omes ,et al, Neonatal danger signs and health care seeking behavior: A cross sectional study in Karachi among pregnant females.(2020) P:44-79.

30.Roney Emma, Morgan Christopher, Gatungs Daniel ,et al, Men's and women's knowledge on danger signs relevant to post natal and antenatal care seeking: A cross sectional study from Bungama country, Kenya. Journal of biomed research international (2018) P: 1-13.

