



Impact Of Neonates' Admission In Special Newborn Care Unit On Mothers' Stress Level And Coping Strategies

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Abstract

Hospitalization of neonate could be stressful to the mothers. The investigator aimed to assess the level of stress and coping strategies of mothers of neonates admitted in SNCU at BSMC & H, Bankura adopting descriptive survey design and non-probability convenience sampling to collect data from 110 mothers using standardized PSS:NICU scale and Brief Cope Inventory. Roy's Adaptation model served as conceptual framework for the study. The result revealed that most of the mothers (80%) had moderate level of stress and mothers showed maximum stress in parental role alterations sub category (mean score 32.27% & SD 4.06) whereas half of the mothers (50%) adopted moderate coping strategies and there was significant negative relationship ($r = -0.24$) existing between level of stress and adopted coping strategies of mothers at 0.05 level of significance. There was significant association found between level of stress and mother's participation in baby's care, neonate's age, sex, duration of SNCU admission and KMC given by mother and between adopted coping strategies and mother's age, educational qualification, mother's participation in baby's care, neonate's age and birth weight. The study findings can be implicated in nursing practice, nursing administration, nursing education and research. Non probability sampling limited the study from generalization. This study can be replicated in large sample size and comparative study between mother and father's stress and coping strategies can be done in future. It can be concluded that mother's participation in baby's care reduces mother's stress significantly as well as increases adopted coping strategies of mothers.

Keywords: Newborn, Maternal, Behaviour, KMC, special, care unit.

Background

Every year nearly one fifth of world's child birth takes place in India. According to UNICEF, nearly 3.5 million babies in India have premature birth, 1.7 million babies born with birth defects and one million newborns are discharged each year from special-new-born care units (SNCU).⁽³⁾ So according to this data it can be understood that every year a huge number of mothers may suffer from psychological stress due to alteration in family life. Coping of these stressful condition is a must to lead normal life.

The environment of Special newborn care unit serves as a significant source of stress for parents. Intensive care units are often burdened with loud sounds, unpleasant sights and procedures and health care professionals.⁽⁴⁾ These creates lots of stress to the mothers who mostly unexperienced regarding the SNCU environments.

Gurgani Shazia et al. conducted a study at Lalla Ded Hospital Srinagar to on 60 mothers which revealed that majority of mothers had major stress, some of the mothers had severe stress. Also, majority of the mothers had average coping, some of the mothers had good coping and none of them had low coping.⁽⁵⁾

Mesa M S et al. found majority of 70% mothers had moderate level of stress during their neonate's admission in NICU in a study conducted in Columbia.⁽⁶⁾

A study conducted by V. Shanmugam et al. at Bengaluru assessed the revealed that some of the mothers had mild stress, and very few of them had moderate stress and majority of them had severe stress and majority of mothers had moderate coping.⁽⁷⁾

From the above scenario it can be understood that this is a worldwide condition which needs much more attention specially in our country where a few studies have been done on this topic.

Method

Research Approach

To accomplish the objectives of the study, **Quantitative research approach** was adopted for the present study.

Research Design:

Keeping the objectives of the study in view, it was a **descriptive survey research design**.

Variables of study

• **Research Variable:**

- Level of stress among mothers.
- Coping strategies adopted by the mothers.

Research Setting: SNCU at BSMC&H, Bankura, West Bengal.

Sample

110 mothers of neonates admitted in SNCU, BSMC&H, Bankura, who had met the inclusion criteria.

Sampling technique: Non- probability convenience sampling technique.

Sample criteria:

Inclusion criteria:

- Mothers of inborn neonates admitted in SNCU.
- Mothers with no post-partum complication.
- Mothers who could communicate in Bengali.
- Mothers who were willing to participate.

Exclusion criteria:

- Mothers of neonates with congenital anomalies admitted in SNCU at BSMC&H, West Bengal.
- Mothers having acute illness.

Data collection tools and techniques

Table 1 Data collection tools and techniques

Tool No.	Variables measured	Tools	Techniques/methods
1.	Demographic variables	Semi Structured interview Schedule	Interviewing
2.	Level of stress among mothers	Opinionnaire (Standardized PSS: NICU Scale (Parental Stress Scale: NICU) by MS Miles (1993))	Interviewing
3.	Coping strategies adopted by the mothers	Opinionnaire (Standardized BRIEF COPE Inventory Scale by Charles S. Carver)	Interviewing

Validity and reliability-

The tool was validated by 5 experts from nursing fraternity and Content Validity Index was found to be 0.9 with 100 percent agreement in all areas except minor language modifications suggested by the validators on two items. Necessary modifications were made as per validators' suggestions.

Reliability was obtained by Cronbach's alpha and was found to be 0.8 which shows the internal consistency of the tool was reliable. Pre testing of the tool was done on 20 samples who were not included in the final data collection.

Ethical consideration-

Voluntary participation from the participants were obtained without any coercion. Informed consent was obtained from all the respondents. Formal institutional ethics committee permission was sought. Anonymity of the participants and confidentiality of the data were maintained. The study posed no harm to the participants. As per international standard or university standard ethical approval has been collected and preserved by the author. Institutional ethics committee approval was obtained from Bankura Sammilani medical college & Hospital dated 05.07.2021 with Ref no. BSMC/ACA:- 2146

DATA ANALYSIS

Descriptive and inferential statistics were used to analyze the data. The data were entered into Microsoft Office Excel 2007 spreadsheets and cross-checked for accuracy before data analysis. For descriptive analysis, frequency and proportion were used to present the distribution categorical variables. All quantitative variables were examined for normal probability distribution by skewness and kurtosis test before analysis.

Results

This section describes distribution of mothers of neonates admitted in SNCU according to their level of stress.

**Table 2 distribution of mothers according to their level of stress
n=110**

Level of stress	Frequency(f)	Percentage (%)
Not at all stressfull (≤ 37)	-	-
Slightly stressfull (38-74)	10	9.09

Moderately stressfull (75-111)	88	80
Stressfull to a significant extent (112-148)	12	10.91
Extremely stressfull (149-185)	-	-

Minimum score= 0, Maximum score= 185

The data depicted in table 2 shows that most of the mothers (88) 80% were in moderately stressfull condition, 10.91 % mothers (12) were in stressfull to a significant extent condition and 9.09% of mothers (10) showed slightly stressfull condition.

Table 3 Area wise categorization of level of stress of mothers

n = 110

Sub scale category	Mean score	Mean%	SD
Sights and Sounds	14.87	16.19	4.82
Infant's behaviour	27.75	30.19	5.96
Parental role alterations	29.65	32.27	4.06
Staff behaviour and communication	19.62	21.35	3.03

Data in Table 3 clarifies that mothers of neonates admitted in SNCU had demonstrated maximum stress in parental role alterations sub scale category (mean score 32.27% & SD 4.06). The study also revealed that half of the mothers (50%) adopted moderate coping strategies and the relationship between the stress and coping strategies adopted by mothers of neonates admitted in SNCU is negatively significant where r value computed is -0.24 and P value ($0.012 < 0.05$). In this study, the association between the level of stress is found to be significant with mother's participation in baby's care, neonate's age, sex, duration of SNCU admission and KMC given by mother. This study also revealed that there is significant association between adopted coping strategies and mother's age, educational qualification and mother's participation in baby's care, neonate's age and birth weight.

Conclusion

So, it can be concluded that with increasing level of stress, mothers' adopted coping strategies decreases and from the present study it can also be concluded that mother's participation in baby's care reduces mother's stress significantly as well as increases adopted coping strategies of mothers.

Acknowledgements:

Researcher incredibly grateful to her respected guide Prof. (Dr.) Alpanamayi Bera, Professor and acting principal, Govt. College of Nursing, Murshidabad Medical College and Hospital, Murshidabad for her expert guidance, and valuable and constructive suggestions which made this experience rich and rewarding.

Author contribution: The *author* confirms sole responsibility for the following: *study* conception and design, data collection, analysis and interpretation of results, and manuscript.

Funding Support: This is self-funded research.

Declaration of conflicting interests: There is no conflict of interest exist.

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