

An Exploratory Study to Assess the Anxiety and Coping Level in Mothers of Neonates Admitted in Neonatal Intensive Care Unit With a View to Develop Information Booklet in Selected Hospitals of Bilaspur Chhattisgarh

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Abstract

The admission and hospitalization of an ill neonate can be extremely difficult for parents. Parents (especially mothers) of pre term neonates admitted to neonatal intensive care unit are at a high risk for experiencing symptoms of depression more significantly than mothers of term neonates[1]. The admission process into the intensive care unit can be very stressful. The environment, technology, appearance of the neonate and the feeling of a loss of the parental role contributes greatly to the amount of anxiety and stress found among parents in the neonatal intensive care unit. *Eichner et al,(2003) [2]*. The very criteria for admission to a PICU are frightening and can realistically prompt fear that their child could die or become severely disabled. When combined with worry about ongoing procedures and medical treatment, parental distress is common and understandable[3]. *Background of the study:* During the experience in neonatal intensive care unit, the investigator came across many mothers who were anxious enquiring about their newborn. The investigator therefore, felt the need to conduct this study on a larger scale. She found that mothers with hospitalized neonate suffers from anxiety and severity depends on condition of the baby so anxiety not only affects psychologically but physically also [5]. So the investigator decided to explore the level of anxiety and according to the need prepare the guidelines for coping (Booklet) for mothers with hospitalized neonate. Nurses working in neonatal intensive care unit can help these mothers to cope with the situation[6].

Key words: Anxiety; Coping Level; Neonates; Neonatal Intensive Care Unit; Information Booklet.

Need of the study

Researcher believes that having a neonate admitted into the unit is the first stressor that families experience from this point forward, we the medical professionals care for the neonate while the majority of families often have a limited role [4]. The environment of the neonatal intensive care unit is

full of staff, machines, and ill neonates. Because of this, the technological environment of the neonatal intensive care unit creates an intimidating atmosphere and mother's report that they often feel overwhelmed this is the most common stressor of families with neonates admitted is the physical appearance of the neonate, and the amount of communication between the parents and the medical staff [7]. mothers who are unfamiliar with the neonatal intensive care unit

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environment and how to care for the neonate become distraught, worried, and anxious.

Parents often might perceive that their neonate is in pain and do not understand the neonatal intensive care unit procedures[9]. The sights, sounds, and perceptions are stressful factors for parents. Many of the studies implemented a tour of the neonatal intensive care unit environment in order to reduce stress levels. By doing so, parents are exposed to the technologies, staff, and routines of the unit. Allowing parents to experience a tour and informational session of the unit decreases the worry and frustration they might feel during their neonate's hospitalization [10]. Hence, with the purpose to identify and compare the anxiety and coping methods of the mothers whose neonates are admitted to neonatal intensive care unit. Identifying the experience perceived as most anxious and coping methods used by parents can help the nurse in anticipating parental needs and formulation of policies and intervention. The researcher selected this topic for research.

Objectives are as follows

- 1 To assess the anxiety level of mothers whose neonates are admitted in neonatal intensive care unit.
- 2 To assess the coping level of mothers whose neonates are admitted in neonatal intensive care unit.
- 3 To find out the correlation between anxiety and coping level of mothers whose neonates are admitted in neonatal intensive care unit.
- 4 To find out the association between anxiety and coping level of mothers whose neonates are admitted in neonatal intensive care unit with selected demographic variable.
- 5 To provide information booklet regarding anxiety and coping for mothers whose neonates are admitted in neonatal intensive care unit.

Research Approach

The research approach selected for the study is exploratory as this study will explore the anxiety and coping level of mother's with hospitalized baby.

Research design

For present study non experimental exploratory design was adopted.

Variables

Independent variable

In the present study the variables under study are socio demographic variable, age of mother and baby, religion, family income, education, occupation, number of children, birth order, sex of baby, family income, length of stay in hospital.

Dependent variable

In the present study the dependent variables under study are level of anxiety of mothers and coping strategies.

Population

Mothers of neonates admitted in selected hospitals of Bilaspur.

Target population

The target population comprised of mothers of neonates admitted in neonatal intensive care unit in selected hospitals of Bilaspur.

Accessible population

The accessible population comprised of 100 mothers of neonates admitted in neonatal intensive care unit in selected hospitals of Bilaspur.

Setting

The investigator felt that Chhattisgarh Institute of Medical Science Hospital Bilaspur Chhattisgarh is suitable for conduction of the study.

The rational for selecting the setting were:

- Familiarity with setting.
- Availability of sample subject.
- Feasibility of conducting the study.
- Easy access to subject.
- Co- operation and administrative approval for conducting the study.
- Economy of time.
- Geographical proximity and ethical clearance.

Sample

The sample for the present study is comprised of 100 mothers of neonates admitted in neonatal

intensive care unit in selected hospitals of Bilaspur Chhattisgarh.

Sampling Technique

Non-probability purposive Sampling Technique

Sample criteria

Inclusion criteria

The inclusion criteria of the present study were as follows:

1. Mothers with normal and caesarian delivery whose babies are admitted in neonatal intensive care unit.
2. Mothers who are willing to participate.
3. Mothers those who are present at the time of data collection.
4. Mothers who are able to understand Hindi

Exclusion criteria

The Exclusion criteria of the present study were as follows:

1. Mothers with normal and caesarian delivery whose babies are not admitted in neonatal intensive care unit.
2. Mothers who are not willing to participate.
3. Mothers those who are not present at the time of data collection

Description of tool

The modified standardized tool was used for data collection composed of three parts.

Section – A . Socio-demographic Data – This section consist of items which deals with socio- demographic variables of the subject like age of mother and baby, religion, family income, education, occupation, number of children, birth order, sex of baby, family income, length of stay in hospital, type of admission.

Section – B : Divided in two parts:

Part I . Anxiety Reaction Data – This part contains 24 items for assessment questions regarding mother's anxiety. To assess the anxiety of mothers four point rating scale was used. The total number of items was 24.

Part II. Coping strategy data – Modified standardized tool was used to assess coping level of mothers. Tool consist of 20 items to assess the coping level of mothers. Four point rating scale was used.

Criterion Measures

The modified standardized tool was used for assessment of anxiety and coping strategy.

The score of anxiety is categorized as:

No anxiety: Less than 24 (less than 25%)

Mild anxiety: 25 – 48 (26% - 50%)

Moderate anxiety: 49 – 72 (51% - 75%)

Severe anxiety: 73 – 96 (76% - 100%)

The score of coping is categorized as –

Mild coping: 0 – 20 (0% - 33.33%)

Average coping: 21 – 40 (35% - 66.66%)

Good coping: 41 – 60 (68% - 100%)

Ethical Consideration

Following steps were identified with regard to ethical consideration for the present study-

- Research problem and objectives were approved by research committee.
- Due permission from authorities was sought out and obtained.
- Informed written consent was taken from the participants.
- Explanation was given regarding the study.
- Confidentiality and anonymity was ensured.
- Freedom was given to withdraw from study anytime.

Data Analysis and Interpretation

The analysis of data is organized and presented under the following headings.

Section I

Distribution of subjects according to socio-demographic variable mothers and neonates.

Section II – Part I, Part II

Part I: To assess the anxiety levels of mothers whose neonates are admitted in neonatal intensive care unit by using frequency & percentage.

Part II: To assess the coping levels of mothers whose neonates are admitted in neonatal intensive care unit by using frequency and percentage.

Section III

To find out the coefficient of correlation between anxiety and coping levels of mothers whose neonates are admitted in neonatal intensive care unit.

Section IV - Part I, Part II

Part I: To find out the association between anxiety levels of mothers whose neonates are admitted in

Table 1: Distribution of subjects according to levels of anxiety of mothers whose neonates are admitted in neonatal intensive care unit.

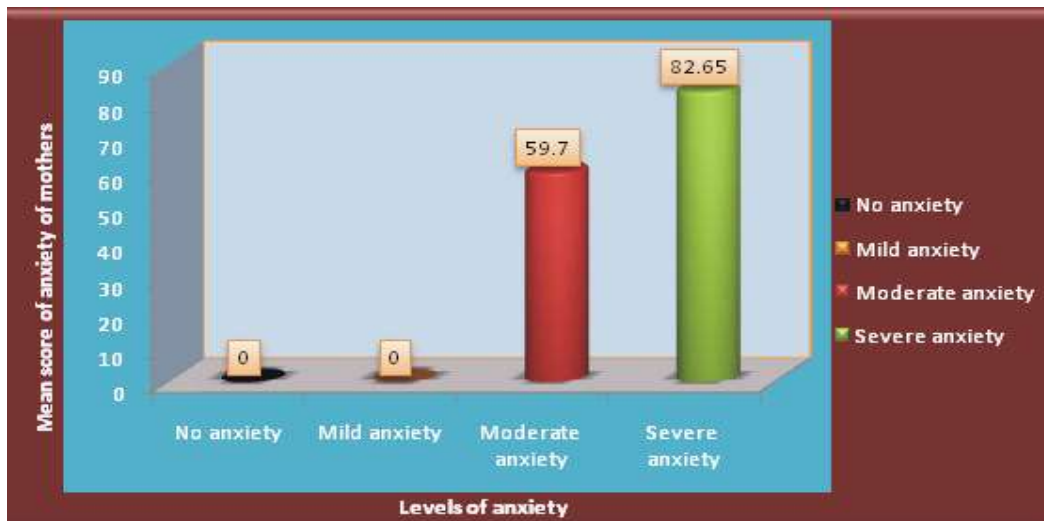
Sn.	Level Of Anxiety	Frequency (n)	Mean	Mean%	SD
1	No Anxiety	----	----	----	----
2	Mild Anxiety	----	----	----	----
3	Moderate Anxiety	27	59.7	62.18	0.511
4	Severe Anxiety	73	82.65	137.75	0.452

neonatal intensive care unit with selected demographic variables.

Part II : To find out the association between coping levels of mothers whose neonates are admitted in neonatal intensive care unit with selected demographic variables.

Table 1 and fig. 1 shows that the levels of anxiety in mothers of hospitalized neonate. (27%) of mothers had moderate anxiety mean score was found (59.7), mean % was (62.18%) and the standard deviation was found to be (0.511). The maximum (73%) of mothers had severe anxiety, mean score was 82.65,

Fig. 1: Cylindrical diagram showing distribution of subjects according to levels of anxiety of mothers whose neonates are admitted in neonatal intensive care unit.



mean% was found (137.75%) and the standard deviation was found to be (0.452).

So it can be concluded that, maximum mothers of neonates admitted in neonatal intensive care unit had severe anxiety.

Table 2: Distribution of subjects according to levels of coping of mothers whose neonates are admitted in neonatal intensive care unit.

Sn.	Level Of Coping	Frequency (n)	Mean	Mean%	SD
1	Mild Coping	52	40	66.66	15.37
2	Moderate Coping	28	23.81	39.68	2.98
3	Good Coping	20	15.88	26.46	1.73

Table 2 and Fig. 2 reveals that frequency and percentage of mother’s according to levels of coping with hospitalized neonate. (52%) of mothers had mild coping, mean was (40), mean% was (66.66%), standard deviation was (15.37). (28%) of mothers had moderate coping in that mean were (23.81) mean%

Fig. 2: Bar diagram showing distribution of subjects according to levels of coping of mothers whose neonates are admitted in neonatal intensive care unit.

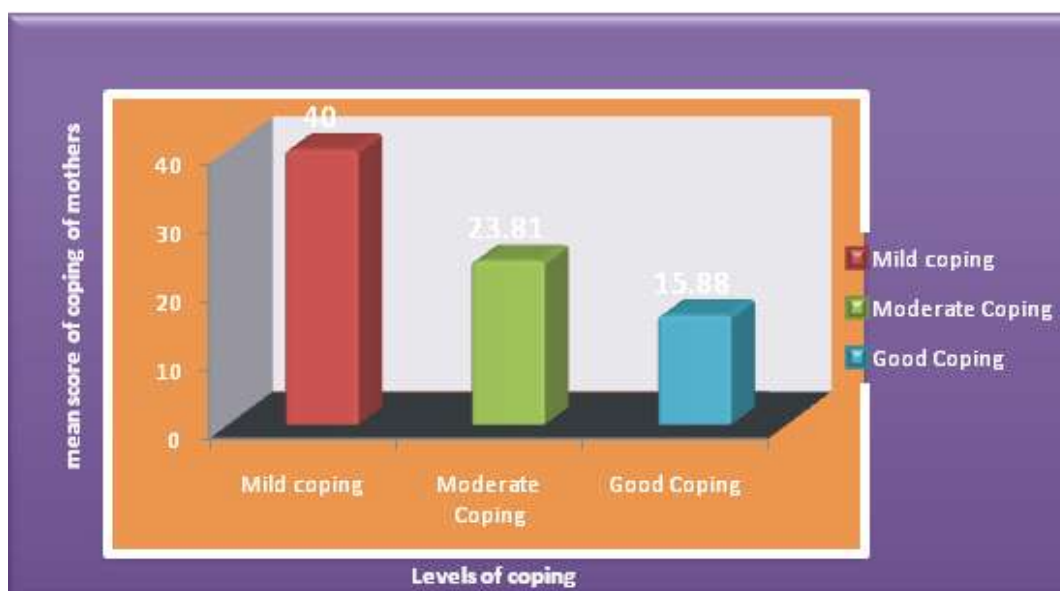


Table 3: Coefficient of Correlation between Anxiety and Coping levels of mothers

Areas	Mean	SD	Correlation coefficient of anxiety and coping levels
Anxiety	76.46	11.08	r = 0.08
Coping	23.25	10.28	

was (39.68%) and standard deviation was (2.98). And minimum (20%) of mothers had good coping in that mean was (15.88), mean% (26.46%) was (standard deviation was (1.73).

Hence, it is concluded that maximum mothers with hospitalized neonate had mild coping.

Table 3 and fig. 3 revealed that the overall mean of anxiety was (76.46), standard deviation was (11.08). And for coping of mothers overall mean was (23.25) and standard deviation was (10.28). Correlation is computed by Karl Pearson coefficient of correlation

(r = 0.08), there is mild positive correlation between anxiety and coping, it shows that when anxiety increases, coping also increases.

Table 4 and 5 depicts association of anxiety of mother’s with selected demographic variables age of mother and baby, religion, family income, education, occupation, number of children, birth order, sex of baby, family income, length of stay in hospital. Association is computed by applying ‘chi square test’.

Fig. 3: Scattered diagram showing the relationship.

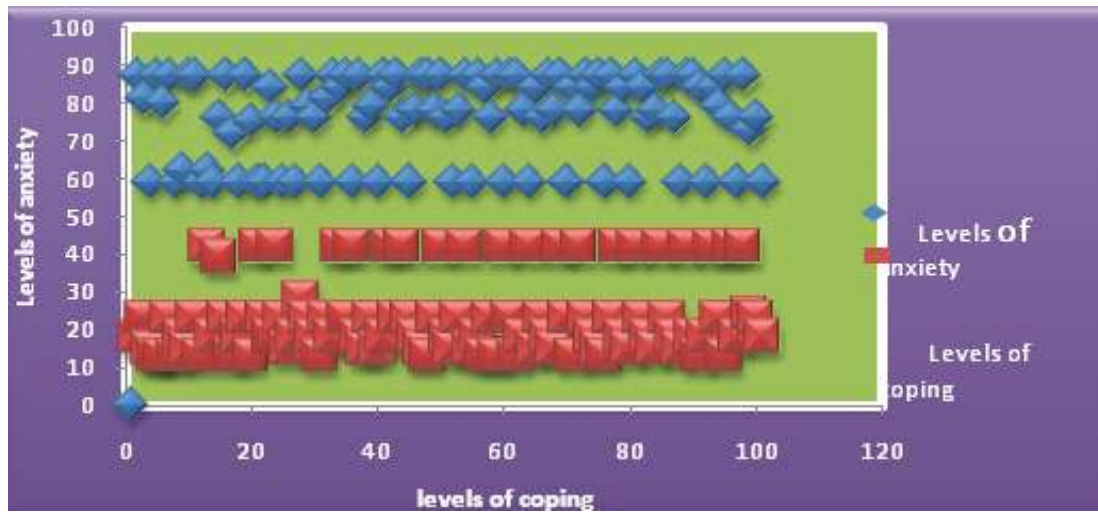


Table 4: Association between anxiety levels of mothers with selected demographic variables.

Demographic Variable	DF	Chi Square Value	Table Value	Significance
1. Age of mother in year	4	1.46	9.49	P>0.05 NS
2. Family income	3	0.57	7.82	P>0.05 NS
3. Marriage Status	1	0.63	3.84	P>0.05 NS
4. Mothers Education	3	0.97	7.82	P>0.05 NS
5. Mothers Occupation	3	2.12	7.82	P>0.05 NS
6. Religion	4	1.39	9.49	p>0.05 NS
7. Number of children's	3	0.63	7.82	P>0.05 NS
8. Length of stay in hospital	3	0.76	7.82	P>0.05 NS
PART II				
9. Age of the neonate	2	7.88	7.82	P<0.05 SIGNIFICANT
10. Sex	1	0.25	3.84	P>0.05 NS
11. Birth Order	3	0.64	7.82	P>0.05 NS

NS = Non Significant
S = Significant

Table 5: Association between coping levels of mothers with selected demographic variables.

Demographic Variable	DF	Chi Square Value	Table Value	Significance
1. Age	8	5.49	15.51	P>0.05 NS
2. Family income	6	3.63	12.59	P>0.05 NS
3. Marriage Status	1	4.6	3.84	P<0.05 Significant
4. Mothers Education	6	3.69	12.59	P>0.05 NS
5. Mothers Occupation	6	4.94	12.59	P>0.05 NS
6. Religion	8	5.39	15.51	p>0.05 NS
7. Number of children's	6	3.79	12.59	P>0.05 NS
8. Length of stay in hospital	6	3.31	12.59	P>0.05 NS
PART II				
9. Age of the neonate	4	3.5	9.49	P>0.05 NS
10. Sex	2	0.36	5.99	P>0.05 NS
11. Birth Order	6	3.79	12.59	P>0.05 NS

NS = Non Significant
S = Significant

The Association between level of anxiety and age of neonate was found to be significant at 0.05 level of significance. χ^2 value computed at 0.05 level of significance with degree of freedom 2, the table value is 7.82. The calculated ($\chi = 7.88$) is greater than the table value. So it implies that there is significant association between age of neonate and level of anxiety.

The association between level of coping and marital status of mother was found to be significant at 0.05 level of significance. Chi-square value computed at 0.05 level of significance with degree of freedom 1, the table value is 3.84. The calculated ($\chi^2 = 4.6$) is higher than the table value. So it implies that there is significant association between marital status and level of coping.

Conclusion

After the detailed analysis, this study leads to following conclusion:

The maximum (73%) of mothers had severe anxiety, mean score was 82.65. Maximum (52%) of mothers had mild coping, mean was (40). There was statistical mild positive correlation between anxiety and coping levels in mothers and the coefficient correlation was found ($r=0.08$) the overall mean of anxiety score was (76.46), and for coping of mothers overall mean was (23.25).

Findings revealed that there was significant association between level of anxiety and age of neonate. The ($\chi^2 = 7.88$) computed at 0.05 level of significance at degree of freedom 2.

Findings revealed that there was significant association between level of coping and marital status of mother. The ($\chi^2 = 4.6$) computed at 0.05 level of significance at degree of freedom 1.

Implication

Implication for present study in nursing practice

- Nurses must be sensitive to the feelings of both the parents specially mothers and the neonates in NICU. Staffs in the NICU should be sensitive to the psychosocial needs of parents. They need clear understanding regarding the impact of increased parental anxiety on parents and children.

- Counseling session may be conducted by the nurses working in communities to provide counseling service and education to public on anxiety and coping.

Implication of present study in nursing administration

- In order to ensure highly individualized care to the baby and the family nurse administrator should provide recommended nurse baby ratio in neonatal intensive care unit.
- Nurse administrators must take initiatives to introduce primary nursing in neonatal intensive care unit. This will allow fostering of communication link between mother and baby. It provides stability of care for the baby and family.

Implication of present study in nursing education

- Teaching methods and strategies are the part of existing nursing curriculum. The students need to learn them in assessing planning implementing and evaluating health education in various settings.
- The nursing personnel's working in various settings needs to be updated with the ability to conduct health education program. This includes assessing the learning need, planning, conducting and evaluating client teaching in various settings.

Implication of present study in nursing research

- The goal of any research study is to eventually provide new information which allows for further theory development. Although more empirical information is needed before this will possible, several implications for clinical research can be made.
- The study has a great implication on the need of nursing research area on anxiety and coping level of mothers to discover the appropriate effective coping strategies of mothers of hospitalized neonate may be conducted on evaluating the effect of educational program on anxiety and coping levels of mothers of neonates admitted in NICU.

Recommendation

- The study need to be replicated in large sample in different settings for making broader generalizations.

- A study may be attempted on mothers of rural and urban areas who will elicit the anxiety and coping levels in different perspectives.
- A comparative study can be done to evaluate the effectiveness of anxiety management on rural and urban mothers.
- A comparative study can be done to evaluate the effectiveness of anxiety management on working and non-working mothers.

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