

## Comparison of Mothers and Nurses Opinions on Quality of Nursing Care Provided to Parents with Hospitalized Premature Newborn in NICU

<sup>1</sup>Masumeh Akbarbegloo, <sup>2</sup>Leila Valizadeh and <sup>2</sup>Vahid Zamanzadeh

<sup>1</sup>Khoy Faculty of Nursing and Health, Orumieh University of Medical Sciences, Khoy, Iran

<sup>2</sup>Faculty of Nursing and Midwifery, Tabriz University of Medical Sciences, Tabriz, Iran

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**Abstract:** Current study conducted to compare mothers and nurses opinions on quality of nursing care provided to parents with hospitalized premature newborn in NICU. The birth of a premature baby can be an extreme shock for parents. Nurses are in a unique role to help parents as they provide care not only to the premature baby but also providing supportive care to the stressed parents. A comparative descriptive design was used. The study population consisted of all mothers with hospitalized premature newborn in NICU (n = 300) and all nurses (n = 32) in three teaching hospital (NICU) in Tabriz city (Iran) year 2010. Data were collected by NPST questionnaire validity of scale was determined by content validity with cooperation of ten faculty members of Nursing-Midwifery School of Tabriz and validity of translation assessed by one English language expert. Reliability of scale was evaluated with Cronbach's alpha (mothers = 0.9 and nurses = 0.96). MannWitney test showed that there have been significant differences between four dimension of nursing support from viewpoint of nurses and mothers. The most important area per nurses opinions were quality of care and emotional dimensions and per mother's opinions were quality of care and informational-communicational dimensions. The results of this study, confirmed that mothers need more emotional supports than they received and nurses and mothers opinions toward quality of nursing care provided to parents with hospitalized premature newborn in NICU are different. Considering results of this study, suggestion is for promotion of family centered care in neonatal intensive care units especially about emotional nursing interventions.

**Key words:** Premature newborns, nursing support, mother, neonatal intensive care unit, Iran

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### INTRODUCTION

The birth of premature infants can be an extreme shock for parents (Miles *et al.*, 1992; Shields-Poe and Pinelli, 1997; Nystrom and Axelsson, 2002). According to statistics 12% of infants are born prematurely (Byers *et al.*, 2006). Premature born, prone infants in extended rang of dangerous and problems (Kenner and Lott, 2007). So, hospitalization of premature newborn is inevitable most of the time. Family members may feel a lack of emotional support and disturbed relationship between mother and infant. Also, the mothers of premature infants felt less confident about parenting their child because they must cope with an infant who has more difficulties to care due to prematurity and associated illnesses (Mok and Leung, 2006).

Budin established the importance of parents in relation to the premature newborn in 1907. Almost a century later, supporting parents in their essential role remain a complex issue for nurses and is becoming

increasingly so as parent and their expectations are rapidly changing (Boxwell, 2000). Nurses have an important role in helping parents as they provide care and professional support to the infants. Professional supports include supportive interventions such as teaching, role modeling, encouragement, counseling and problem solving. Professional support may lead to improved health outcomes as well (Hutti, 2004).

Overall, the main focus of nursing assessments and interventions for caring family with premature newborn is evaluation the family to cope with situations, providing emotional support, parent-infant attachment, relationship with the infant, preparing parent for discharging and following up at home (Blackburn and Lowen, 1985).

Family support whereas others have called family-centered care. The difference is one of the terminologies alone (Boxwell, 2000). The purpose of family-centered care is preservation of the family union, make powerful to accept leader role and support of the family in stressful

situations (Wong, 1999). Family-centered care emphasizes a shift from the family as passive recipient to the family as active participant in their care (Boxwell, 2000).

Although, researches about the professional supports for parents with premature infants are available in another country. For example, Maguire *et al.* (2007) assessed the effect of short time educational interventions in knowledge of parents about premature newborn behavior and self esteem of parents.

Mok and Leung (2006) explore the supportive behaviors of nurses as experienced by mothers of premature infants in Hong Kong. Lee *et al.* (2006) examined mothers' perceptions of support from fathers over the 1st year after birth of a medically fragile infant. Bialoskurski *et al.* (2002) determined the relationship between maternal needs and priorities in a neonatal intensive care environment. However, most of these studies had done from viewpoint of parents. Care giving viewpoint was not considered. Therefore, the purpose of this study is comparison of parents and nurses opinions about the priorities and the amount of nursing support to the parent with premature infants in NICU.

## MATERIALS AND METHODS

This study was comparative descriptive. The study population consisted of all mothers with hospitalized premature newborn (n = 300) and nurses (n = 32) in NICUs of three teaching hospitals (Taleghani, Alzahra and Kodakan) in Tabriz city (Iran) during the 1st 6 months, year 2010. So, Census Sampling method was used. The criteria for selecting participants were mothers who had been premature newborn (gestational age <37 weeks) without abnormality that hospitalized in NICU at least for 1 week and including criteria for nurses were the nurses who worked at least once a week during 6 months of research implementation in those NICUs. Nurse Parent Support Tool (NPST) which had been developed by Margaret Miles *et al.* (1998) was used for data collection. After informing about the purpose of the study for mothers, the questionnaires were completed through individual interviewing with mothers and in the end of 6 months, NICU nurses completed the questionnaires.

The tool consists of 21 items classified into four sub scales: informational giving and communication support (nine items); emotional support (three items), esteem support (four items) and quality caregiving support (five items). The parents were asked to rate the NPST which addressed two aspects of each item on a Five-Point Likert scale. Initially the level of importance of nursing supports and then the amount of support they received from the nursing staff. The rating of the level of importance of

nursing support was from 1 not important to 5 very important. As for the amount of emotional support from the nurses, the range of scores were from 1 almost never to 5 almost always.

Validity of scale was determined by content validity with cooperation of ten faculty members of Nursing-Midwifery School of Tabriz city (Iran) and validity of translation assessed by one English language expert. Reliability of scale determined with participation of 30 mothers and 6 nurses that have been including criteria (Cronbach alpha was 0.9 for mothers and 0.96 for nurses). Data analysis was done with SPSS (Version 13.5).

## RESULTS

**Mothers' characteristics:** From 300 participated mothers 55.3% of them had first delivery and 62% caesarean section.

**Educational level of mothers:** Approximately 7% of mothers had completed college or obtained a bachelors degree, 34% high school diploma, 26% secondary school and 33% elementary school and illiterate. The mothers ages ranged from 15-41 years (mean = 25.57, SD = 5.6) and 98.3% of them have never NICU experienced.

**Infant characteristics:** Majority of them (64%) were first child in family, 61% of newborns were male, birth weight rang was 500-3500 g (mean weight = 1685, SD = 614), gestational age was between 20-36 weeks and range of the hospitalization period was 8-90 days (mean = 18 days).

**Nurses characteristics:** In current study participants had mean age 31 years, the mean of total working experience was 10 years and mean NICU working experience was 5 years, 68% of them were married and 32% were single. About 62% of married nurses had at least one child.

## DISCUSSION

In regards the value of family centered care in management of premature newborn health, this study has done to determine and compare mothers and nurses opinions about importance and amount of the provided nursing supports for parents with premature newborn in NICU. Nurse Parent Support Tool (NPST) which had been developed by Miles *et al.* (1992) was used for data collection.

Finding of this study showed the mothers priorities were quality of care and communicationalinformational support and for the nurses were quality of care and emotional support (Table 1). Similar to the study results,

Table 1: Means of the four domain of provided nursing supports from viewpoint of nurses and mothers

Supports	Mean of provided nursing support	
	Mother	Nurse
Communication-information	1.73	3.82
Emotional	2.10	3.54
Esteem	1.54	3.39
Quality care-giving	3.44	4.18

in Mok and Leung (2006) study all of mothers agreed that communicational and informational support had been more provided and an emotional support rated as less provided support.

It must be mention that parents in NICU want to participate in care activities and also want the staff to help them understand and anticipate the infants changing physical appearance and to provide honest and accurate information about the infants condition (Boxwell, 2000). So as James and Ashwill (2007) stated, preparing parents for hreatening situations such as preterm birth and explain them (what is happening and why) helps parents cope with the actual event and cause to have a realistic idea of the infants appearance and condition and begin bonding with their baby.

Furthermore, results showed there was significant difference between four domains of provided nursing support from the viewpoint of mothers and nurses (Table 2).

Dockter *et al.* (1988) compare family members and nurses perceptions when a relative was hospitalized in an Intensive Care Unit (ICU). Results showed both family member and nurses agreed that the greatest needs of family were in the categories of participation/information and emotional. Disagreement however, occurred only on one item that represented the anxiety category. More nurses believed that families were comfortable expressing their feelings but thought families were uncomfortable asking questions. However, meeting patient and family member's needs would increase satisfaction.

As shown in Table 3, most important nursing support from the viewpoint of mothers in the study were communicational-informational and quality of care support and from the viewpoint of nurses were quality of care and emotional support.

Mok and Leung (2006)'s study showed that all of the mothers rated all nursing support items in NPST as important and communication-information support was more important for them. Also, Bialoskurski *et al.* (2002) showed the need for accurate infant related information was a priority for 93% of them. Good communication practices with professionals were also valued. According to Jackson *et al.* (2006) the importance of support was rated higher than perceived reality support. Also, from the viewpoint of mothers, nurse's knowledge was important as well.

Table 2: Difference of the four domain of provided nursing supports from viewpoint of nurses and mothers

Provided nursing support	Mean rank	MannWitney test
<b>Communication-information</b>		
Mother	151.62	p<0.001
Nurse	306.02	-
<b>Emotional</b>		
Mother	150.60	p<0.001
Nurse	315.03	-
<b>Esteem</b>		
Mother	151.15	p<0.001
Nurse	310.41	-
<b>Quality care-giving</b>		
Mother	154.04	p<0.001
Nurse	283.28	-

Table 3: Means of the four domain of importance nursing supports from viewpoint of nurses and mothers

Supports	Mean of importance nursing support	
	Mother	Nurse
Communication-information	3.65	3.86
Emotional	3.75	3.71
Esteem	3.23	3.56
Quality care-giving	3.71	4.15

Table 4: Difference of the four domain of importance nursing supports from viewpoint of nurses and mothers

Provided nursing support	Mean rank	MannWitney test
<b>Communication-information</b>		
Mother	163.40	p = 0.046
Nurse	197.97	-
<b>Emotional</b>		
Mother	163.95	p = 0.137
Nurse	190.38	-
<b>Esteem</b>		
Mother	160.89	p = 0.001
Nurse	219.06	-
<b>Quality care-giving</b>		
Mother	157.82	p = 0.001
Nurse	247.92	-

Seideman *et al.* (1997) study revealed for parents informing about their child's progress, good physical technical care and information/communication support were the most helpful in coping with their child's hospitalization (Seideman *et al.*, 1997). Boxwell (2000) states that neonatal nurses are generally focused on the technical components of clinical care. He adds that few nurses come to neonatology to care for parents; their reasons for working in the area are usually about caring for sick infants and working with intensive technology. Griffin *et al.* (1998) describes nurses as directing their energies towards their patients' physical needs. She notes that physical care may temporarily take priority over the family's needs.

Although, according to results of the study, quality of care and informational-communicational nursing supports were important but unfortunately, nurses mentioned emotional support had less priority and low importance. In the study there was significant difference between the mothers and nurses opinions (Table 4).

Maxwell *et al.* (2007) compared nurse and family perception about needs of family members of critically ill patients and results showed significant difference between nurses and family opinion. Bruce and Ritchie (1997) assessed perception of nurses about family centered care activities.

They noticed, all of the items are important and necessary in family centered care. However, they are not considered enough to action. Another study showed difference between the viewpoint of parents and nurses about importance of educational interventions (Drake, 1995).

### CONCLUSION

The results of this study, confirmed that mothers need more emotional supports than they received and nurses and mothers opinions toward quality of nursing care provided to parents with hospitalized premature newborn in NICU are different.

### RECOMMENDATIONS

Considering results of this study, suggestion is for promotion of family centered care in neonatal intensive care units, especially about emotional nursing interventions.

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