



## Lived experience of mothers with preterm infants

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### Short Communication

#### Abstract

**BACKGROUND:** Mothers with premature neonates often encounter an uncontrollable level of stress. One of the strategies for self-control in these mothers is confronting with these conditions. The hope has essential role in confronting the stress in mothers having premature neonates. The purpose of this study is to explain lived experiences of mothers having premature neonates and design a scale for measuring it.

**METHODS:** The study was performed by qualitative research approach. 12 participants were selected by purposive sampling method. Data were gathered by the semi-structured method in Besat General Hospital, Tehran, Iran and were analyzed using the content analysis approach.

**RESULTS:** From qualitative data analysis, three essential terms including compatibility, suitability, self-esteem, summit and move-forward, and eagerness were resulted. In addition, the result of the qualitative section indicated that the mothers of premature neonates who participated in this study were adapted with the conditions and environment of the neonatal intensive care unit (NICU) ward.

**CONCLUSION:** This study indicated that the hope scale of mothers with premature neonates was resulted by 39 interviews and 3 subscales. In general, in addition to determining some factors related to hope and confronting with stress due to having premature neonate, this study showed that the mothers pertained some kind of hope. In this study, lived experiences of hope of mothers having premature neonates have been demonstrated by three terms: 1- hope compatibility and suitability; 2- hope self-esteem and summit; 3- hope forward movement and eagerness.

**KEYWORDS:** Psychometric Scale; Validity; Reliability; Hope Scale

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### Introduction

The birth of a preterm baby is an unexpected event and often stressful for parents.<sup>1</sup> The baby is usually separated from the mother immediately after birth and is hospitalized in a Neonatal Intensive Care Unit (NICU).<sup>2</sup> The physical separation of the baby, size and appearance of the preterm baby, change in parental role<sup>3</sup>, condition of infant, and tube feeding have been identified as sources of stress for mothers.<sup>4</sup>

Mothers are usually unprepared psychologically and physically<sup>5</sup> and this may lead to inability to identify their babies even though they had anticipated becoming mothers.<sup>6</sup> Furthermore, due to the prematurity of babies which makes them less active and almost incapable to give positive responses to maternal alerts, mothers may not have the urge to interact with them.<sup>7</sup> Breastfeeding promotes mother-infant interaction,<sup>8</sup> but it could be inhibited in the preterm baby due to inadequate sucking ability, separation between mother and baby, maternal perception of being inadequate, and maternal stress due to the infant's clinical condition.<sup>9</sup> These factors can

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deprive mothers of the joy of having a baby.<sup>10</sup> Given the studies, ensuring participation of mothers in the care and providing emotional support and adequate information are important in the experience of having a preterm baby.<sup>11</sup> A meta-synthesis of 12 qualitative studies on mothers' experiences indicated that being a mother of a preterm baby is a process which is attained through close relationship with the baby and healthcare staff.<sup>12</sup>

Several studies described the experiences of mothers with preterm babies in settings where mothers are not accommodated in the hospital premises but can have access to their babies.<sup>13</sup> There is a lack of information on the experiences of mothers in a hospital environment that serves as a mother and baby unit (MBU).<sup>14</sup> In this study, the MBU was a unit in the hospital where preterm and other sick babies were admitted. Adjacent to the MBU is an accommodation facility for the mothers to facilitate their access to the babies at scheduled intervals.<sup>15</sup> In this situation, mothers may be far away from their homes and require support systems to enable them go through the unexpected events. Understanding the experiences of mothers with preterm babies in this unique environment is a vital step to recognize their needs and address them effectively. Therefore, the aim of this study was to examine the lived experiences of mothers with preterm infants in 2017.

## Materials and Methods

This was a combined study in which content analysis was used as a type of qualitative research. The samples of this study were composed of parents of the patients admitted to the hospitals of Kurdistan University of Medical Sciences, Iran, who were selected using the purposive sampling method. The main method of data collection was interviewing and recording in the field. During the interview, non-verbal phrases, environment, and reactions of the participants

were recorded. In order to gain access to credible and real data, the researcher created a close and direct relationship with the participants. Through a deep, extensive, semi structured interview, the participants' experiences were collected and recorded and, as quickly as possible, were transcribed on paper, coded, and analyzed by content analysis method to provide feedback for subsequent interviews or the adequacy and saturation of the data. Data were collected through interviews with semi-structured questions. The research environment was a real area (natural environment) and there was access to samples in health care centers. Before conducting the interviews, the researcher identified the right people attending the research environment and after communicating with each individual, explained the method and objectives of the study to them and with their opinion and agreement, determined the time of the first interview session and conducted it. Then, in the next sessions, the interview was conducted by asking semi structured questions from the participants.

## Results

The hope scale was divided into two sub-scales. Based on the factor analysis performed, items 4 and 9 were eliminated due to their lack of inclusion in any of the factors. The items with the most factor loading were put under the category of that factor. After assigning the items to four factors, the factors were named based on the nature and size of the variables from which the extracted factors have had the highest share as well as based on the review of the vocabulary and terms, the implications of variables, the existing theories, and previous studies.<sup>5</sup> The first factor including 15 items which alone represented 14.86% of the total variance was named "Optimistic Thinking towards the Future" and the second factor representing 14.66% of the total variance was named "Pessimistic Thinking towards the Future", which had 7 items.

The correlation between the scores of "Hope Scale" and the Beck Depression Inventory (BDI), which was performed to assess the criterion validity of the scale, was  $r = 0.0$ , which was significant at the level of  $P < 0.01$ . When the evaluation of the criterion validity is performed in the short time interval between the implementation of the two instruments, the correlation of 40%-70% is usually acceptable.<sup>14</sup> The Cronbach's alpha coefficient, which was performed by analyzing the questionnaire, was 0.834. The correlation of all items, except 2 items, with total score of the scale was statistically significant, which was not omitted due to the importance of these items. The Cronbach's alpha coefficient of the first sub-scale (optimistic thinking towards the future) and the second sub-scale (pessimistic thinking towards the future) was calculated 0.795 and 0.721, respectively. The Pearson correlation coefficient between the scores obtained from the implementation of the Hope

Scale was 0.445, which indicated the moderate consistency of this scale (Table 1).

## Discussion

In this study, which was performed with the aim of examining the lived experience of mothers with preterm infants, the construct validity and the criterion validity of the scale, along with its internal consistency (IC) were studied. The findings on the factor analysis indicated that the structure of this scale was two dimensional. The criterion validity and the concurrent validity of the Hope Scale, examined by calculating the correlation coefficient between the hope scores of the subjects and their self-efficacy scores, showed that there was an acceptable correlation between these two concepts. In addition, there was a positive relationship between self-efficacy and hope in the performed research.<sup>7</sup> Moreover, studies have reported a positive and significant relationship between hope and self-efficacy.<sup>8</sup>

**Table 1. Factor analysis of lived experience of mothers with preterm infants**

| No | Statements  | Agent |       |
|----|---|-------|-------|
|    |   | 1     | 2     |
| 1  | Everything will get better.                         | 0.836 | 0.138 |
| 2  | I try to think better.                              | 0.835 | 0.153 |
| 3  | I believe that there is a chance for me too.        | 0.789 | 0.162 |
| 5  | Good events will happen.                            | 0.539 | 0.513 |
| 6  | Maybe there is a chance for me.                     | 0.322 | 0.504 |
| 8  | I force myself to try harder.                       | -     | 0.837 |
| 9  | I think of the chances that may come to me.         | -     | 0.771 |
| 10 | I am sure that my life will get better.             | 0.662 | 0.332 |
| 11 | There are still some good things to come across.    | 0.590 | 0.447 |
| 12 | I know I am doing right in life.                    | 0.536 | 0.449 |
| 26 | I do some things to get rid of bad thoughts.        | 0.661 | -     |
| 27 | I look at a problem from different aspects.         | 0.813 | -     |
| 28 | I can change my future.                             | 0.875 | -     |
| 29 | My self-confidence becomes more and more every day. | 0.660 | 0.317 |
| 30 | One day, I will find someone to love.               | 0.662 | -     |
| 31 | I do not worry about problems so much.              | 0.479 | -     |
| 32 | I do not feel sorry all my time.                    | 0.520 | 0.612 |
| 33 | I cannot solve the problems.                        | -     | 0.681 |
| 34 | Conditions will not get better for me.              | -     | 0.832 |
| 21 | I am pretty sure that I cannot solve the problems.  | 0.478 | -     |
| 50 | There is no light at the end of this path.          | 0.715 | -     |
| 51 | I am not optimistic that I will have a good life.   | 0.788 | -     |
| 52 | I will not be better than I am.                     | 0.799 | -     |
| 53 | I always see the bad side.                          | 0.725 | -     |

The results of this study showed that hope differed in different fields of study and this difference in hope scores was significant. Studies have shown that hope leads to higher scores, in other words, it is an important factor for goal-based behaviors such as getting a high grade in homework.<sup>6</sup>

The strength of this study is that it highlighted the nurse's role in providing appropriate care for the preterm infant. They also assist the mothers through this stressful, challenging experience by providing therapeutic and trusting relationship, providing emotional support with accurate information, and involving the parents in the care of the neonates.

### Conclusion

The findings of this study clearly suggest that admission of a premature baby is a stressful situation for the mother and family members. However, it was appreciating to note that the strong support from family members and health care professionals received by mothers is vital for the wellbeing of the mother and baby. The nurses supporting the parents and involving them in the care of the newborn contribute to reducing the stressful emotions experienced by the family.

### Conflict of Interests

Authors have no conflict of interests.

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