INTEGRATIVE LITERATURE REVIEW

UNCERTAINTIES OF NEWBORN'S PARENTS IN INTENSIVE THERAPY UNITS
INCERTEZAS DOS PAIS DE RECÉM-NASCIDOS INTERNADOS EM UNIDADES DE TERAPIA INTENSIVA

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ABSTRACT

Objective: to investigate actions for the reduction of uncertainties experienced by parents of newborns hospitalized in Intensive Care Units. Method: integrative review, with search of scientific production between 2012 and 2016, in the Medline, Journal Storage and Capes Periodical Portals, with descriptors controlled in English and Portuguese. Also, four articles have been added from the manual search on Google Achademics. Content analysis was carried out in a categorical and thematic manner, from the identification of the sense nuclei of the ten selected articles. Results: three categories were identified: contributors to uncertainty; interventions by the health team that helped reduce uncertainty; coping strategies adopted by parents. Conclusion: the literature showed that the uncertainty is a feeling experienced by all parents, being influenced mainly by the parents’ cognitive capacity, familiarity with the fact, congruence of the facts and the structure of social support. Actions that help reduce the uncertainties of parents become essential, since the inadequacy of this new condition can aggravate the health of the parents and, consequently, the infant.

Descriptors: Uncertainty; Theory of Nursing; Adaptation; Neonatal Intensive Care Unit; Parents.

RESUMO

Objetivo: investigar ações para a redução de incertezas vivenciadas por pais de recém-nascidos internados em Unidades de Terapia Intensiva. Método: revisão integrativa, com busca de produção científica entre 2012 e 2016, nas bases de dados Medline, Journal Storage e no Portal de Periódicos da Capes, com os descritores controlados em inglês e português. Também, foram acrescentados quatro artigos a partir da busca manual no Google Achademics. A análise de conteúdo foi realizada de forma categorial e temática, a partir da identificação dos núcleos de sentido dos dez artigos selecionados. Resultados: identificaram-se três categorias: contribuintes da incerteza; intervenções da equipe de saúde que auxiliaram na redução da incerteza; estratégias de enfrentamento adotadas pelos pais. Conclusão: a literatura evidenciou que a incerteza é um sentimento vivenciado por todos os pais, sendo influenciada, principalmente, pela capacidade cognitiva dos pais, familiaridade com o fato, congruência dos fatos e a estrutura de apoio social. Ações que auxiliam na redução das incertezas dos pais tornam-se imprescindíveis, pois a inadaptação a essa nova condição pode agravar a saúde dos pais e, consequentemente, do infante. Descritores: Incerteza; Teoria de Enfermagem; Adaptação; Unidade de Terapia Intensiva Neonatal; Pais.
INTRODUCTION

The birth of a child entails changes in the family structure, which are linked to social, economic, physical, behavioral and emotional aspects. During gestation, positive feelings such as joy, expectation and anxiety are idealized by the parents for the arrival of the new family member. On the other hand, the hospitalization of the newborn in a Neonatal Intensive Care Unit (NICU) causes a strong family impact, generating, in the parents, high levels of uncertainties translated as impotence, sadness, loneliness and pain,\(^2\)\(^3\)

These stressful feelings and situations trigger physiological responses that negatively affect the quality of life of the family members, and therefore interventions are important in the attempt to reduce them.\(^4\)\(^5\) In this context, nurses need to include, in their care plan actions based on models of theories, which aim to minimize the uncertainties experienced by the parents of newborns hospitalized in the NICU.

Among the several theories already constructed in the area of Nursing, we highlight the Theory of Uncertainty in Disease, by nurse Merle Helaine Mishel, published in 1988. She states that, after the emergence of uncertainty, in situations in which the person fails to structure adequately, in cases of illness, the coping mechanisms that lead to adaptation arise. What differentiates one situation from another, are the interventions of professionals in an attempt to minimize uncertainties, improving the process of coping and adaptation and, therefore, the quality of life of those who experience the disease process.\(^6\) When professionals of health intervene in the uncertainties, the objective is not to eliminate them, but, to initiate a process of deconstruction of the reality that the individual possesses and the creation of a new vision and perspective of life, in which new values are established.\(^7\)

OBJECTIVE

- To investigate the actions to reduce uncertainties experienced by parents of newborns hospitalized in Intensive Care Units.

METHOD

Integrative review on parents’ uncertainty reduction strategies, with the guiding question: “What actions are proposed to the health team to reduce the uncertainties experienced by the parents of newborns admitted to the NICU?”

Uncertainties of newborn’s parents in intensive...
After these phases were carried out, the evaluation, interpretation and synthesis of the studies were carried out, using thematic categorical analysis from the identification of the sense nuclei.

**RESULTS**

The results are presented in a descriptive way and through flowcharts and tables with the purpose of capturing the evidence about Nursing actions in reducing the uncertainties experienced by the parents.

After the search, 111 articles were found. After the application of the inclusion and exclusion criteria, ten articles were selected, according to the steps described in Figure 1. The categorization of these results is presented in Figure 2. The synthesis of the topic addressed in each work is presented in Figure 3, which contains the information about the study's findings / conclusion relevant to the research.

From the analysis of these studies, three thematic categories were identified: contributing factors for the increase of uncertainty; interventions in nursing that helped reduce uncertainty; coping strategies adopted by parents.

**Records Identified by the search in the databases. (n = 111)**

**Additional records identified from Google Academics. (n = 4)**

**Records selected after observing the inclusion and exclusion criteria. (n=10)**

**Excluded (n=105)**

**Full-text articles assessed for eligibility. (n = 10)**

**Deleted full-text articles. (n= 0)**

**Studies included in quantitative synthesis. (n = 10)**

Figure 1. Flowchart of results Adapted from: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009).
<table>
<thead>
<tr>
<th>N</th>
<th>Author/Year</th>
<th>Title</th>
<th>Delimitation</th>
<th>Location/Language</th>
<th>Level of evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Paloma A et al, 2016.10</td>
<td>Factors influencing parental participation in neonatal pain alleviation.</td>
<td>Qualitative</td>
<td>Finland/English</td>
<td>Level VI</td>
</tr>
<tr>
<td>2</td>
<td>Castro et al, 2015.11</td>
<td>The first meeting of the father with the premature baby in the Neonatal Intensive Care Unit / The first meeting of the father with baby preterm in the Neonatal Intensive Care Unit</td>
<td>Qualitative</td>
<td>Rio de Janeiro (Brazil)/Spanish</td>
<td>Level VI</td>
</tr>
<tr>
<td>3</td>
<td>Garfield et al, 2014.12</td>
<td>Paternal and maternal concerns for their very low birth weight infants transitioning from the NICU to home</td>
<td>Qualitative</td>
<td>Chicago (USA)/English</td>
<td>Level VI</td>
</tr>
<tr>
<td>4</td>
<td>Granrud et al, 2014.13</td>
<td>Parents experiences of their premature infants transportation from a NICU hospital to the NICU at two local hospitals.</td>
<td>Qualitative</td>
<td>English</td>
<td>Level VI</td>
</tr>
<tr>
<td>5</td>
<td>Santos et al, 2013.14</td>
<td>Family changes resulting from the hospitalization of premature infants in intensive care: a study with puerperal women</td>
<td>Qualitative</td>
<td>Brazil/Portuguese</td>
<td>Level VI</td>
</tr>
<tr>
<td>6</td>
<td>Lasiuk et al, 2014.13</td>
<td>Unexpected: an interpretive description of parental traumas associated with preterm birth.</td>
<td>Descriptive / Qualitative Interpretive Study</td>
<td>Canada/English</td>
<td>Level VI</td>
</tr>
<tr>
<td>7</td>
<td>Rodrigues, Moreira, 2012.16</td>
<td>Becoming a father experiencing the hospitalization of the child in a neonatal intensive care unit.</td>
<td>Qualitative</td>
<td>São Paulo Brazil/Portuguese</td>
<td>Level VI</td>
</tr>
<tr>
<td>8</td>
<td>Bolívar LA, 2016.22</td>
<td>Uncertainty associated with parents of preterm infants hospitalized in neonatal intensive care units.</td>
<td>Quantitative</td>
<td>Cartagena (Colombia)/English</td>
<td>Level IV</td>
</tr>
<tr>
<td>9</td>
<td>Antunes et al, 2014.18</td>
<td>Newborn hospitalization in the neonatal unit: meaning for the mother</td>
<td>Transversal</td>
<td>Rio Grande do Sul (Brazil)/Portuguese</td>
<td>Level VI</td>
</tr>
<tr>
<td>10</td>
<td>Fernandes NGV et al, 2015.19</td>
<td>Parents experience during the hospitalization of the premature newborn.</td>
<td>Qualitative descriptive</td>
<td>Brazil/Portuguese</td>
<td>Level VI</td>
</tr>
</tbody>
</table>

Figure 2. Categorization of results
Uncertainties of newborn's parents in intensive care unit (NICU) - a qualitative study

MARQUES SFS, OLIVEIRA TMG DE, JESUS CAC DE ET AL.

Table 1: Synthesis of the theme addressed in the works

<table>
<thead>
<tr>
<th>Nº</th>
<th>Objective</th>
<th>Results/Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To describe parents' perceptions of the factors that influence their participation in pain relief in a NICU.</td>
<td>Health professionals should create an environment that supports the presence and participation of parents in relieving their baby's pain. The health team should be prepared to offer support and information, as well as establish good communication that will culminate in adaptation and reduction of anxieties and uncertainties. Many concerns could be resolved with improved information exchanges and guidance. Support for parents leads to decreased family stress, decreased levels of uncertainty, and improved care for the child. The analysis of qualitative content resulted in one theme: living in uncertainty about whether the baby will survive, and three categories: being estranged from the baby; fear that something will happen to the baby during transportation and experience the closeness to the baby. The results also revealed that the parents went through development transitions, situations and healthiness. It is paramount that health professionals understand the experiences of puerperal women and their families so that they can plan culturally flexible care that values family presence and diminishes negative feelings such as uncertainty. The reduction of uncertainties and adaptation to the new reality were directly influenced by the relationship with the professional team of the NICU. Good experiences contributed to the improvement of the adaptation and the negative ones increased the stress in the parents. Nursing plays a fundamental role as a facilitator, offering welcoming support in the difficult trajectory of the child's hospitalization. It is fundamental that professionals promote support to these families, restoring the parental competence compromised by the necessity of removal and promote the coping of the insecurities in the search for adaptation. It was concluded that the inclusion in the care plan of the valuation and intervention in the uncertainty in the parents and mothers of preterm newborns hospitalized in the NICU should be performed by the nurses. All the contributing elements of the uncertainties must be worked with the assistance of the Nursing team. Attentive, sensitive and individualized listening will enable the professional to attend to the needs of care for the mothers in their singularity, and these actions result in the decrease of the levels of uncertainty. The findings raise the importance of parental involvement in the care of their children and the importance of the role of the nurse in this preparation.</td>
</tr>
<tr>
<td>2</td>
<td>Describe the parents' first encounter with their children in the NICU and analyze the significance of this moment from the perspective of the parents.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Check the main concerns of parents with their low birth weight infants at home.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Describe how parents of premature infants experience transporting their baby from the neonatal intensive care unit of a university hospital (NICU-U) to a local hospital (NICU-L).</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Understand the maternal perception about the family changes resulting from the hospitalization of the premature newborn in the NICU and analyze the strategies for coping with these changes.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Understand the experience of preterm parents to inform the design of subsequent studies on the direct and indirect cost of the preterm.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Understand the experience of becoming a father by experiencing the hospitalization of the newborn child in the Neonatal Intensive Care Unit.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>To determine the factors associated with uncertainty in parents of premature infants admitted to the NICU.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Understand the meaning to the mother of the hospitalization of the newborn child in NICU.</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Identify the feelings experienced by the parents before the anticipated birth of a child; demonstrate the influence of hospitalization on adaptation to parenthood.</td>
<td></td>
</tr>
</tbody>
</table>

DISCUSSION

In the majority of studies, the population consisted of parents, aged between 19 and 48 years. Most of these were married; the level of schooling of the parents between the studies varied, and in one of the studies (8), most had an upper level. All the results showed that the parents had uncertainties that were related to the hospitalization of the newborn and the psychosocial consequences of this new situation. The level of schooling and the support of the spouse or other family member are factors that influence the
person's stimulus framework and may reduce or increase uncertainties.\(^{20,22}\) One of the studies showed a significant negative association between the low socioeconomic level, the fact of not having a spouse and the level of uncertainty (8).\(^{17}\)

In all studies, the sample consisted of parents of preterm newborns, demonstrating the researchers' great interest in understanding the emotional phenomena that are related not only to the newborn's hospitalization but, above all, to prematurity.

All studies used the qualitative approach and, except for one article, all had a level of evidence VI. This approach is fundamental when it is not intended to deepen the understanding of a phenomenon, not objectively representative and objectively measurable opinions in a group.\(^{21}\) Despite the importance of this type of design, it is observed the need for more production related to the theme with higher levels of evidence, in order to give more robustness to the scientific evidence.

The results analysis, based on the Mishel theory, led to the formulation of four categories: factors that contributed to the increase of uncertainty; Nursing interventions that helped reduce uncertainty; coping strategies adopted by parents; signs of uncertainty as a catalyst for adaptation.

**Contributors to increased uncertainty**

Among the three central pillars of Merle H. Mishel's theory are the antecedents of uncertainty concerning events that trigger stressful and uncertain situations.\(^{4,20}\) Parents' cognitive ability, familiarity with fact, congruence of facts, and structure of social, psychological and educational support are factors that directly or indirectly influence uncertainty. This influence may occur positively or negatively.\(^{21}\)

Lack of knowledge about the child's health status, or the environment and equipment he or she is using, and the inability to care for the newborn are factors that create uncertainty and make it impossible for parents to actively participate in care with their children, such as participation during painful procedures and pain management.\(^{10,18}\) The parents / children version of the Theory of Uncertainties in Illness brings, as assumptions, the ambiguity and lack of clear information that are stimuli generating uncertainty. Ambiguity, characterized as lack of ability to perform a previously planned childcare activity, prevents parents from plotting both short- and long-term plans.\(^{22}\) In addition, cognitive ability, which directly influences the understanding of information was shown to be related, among other factors, to the level of parents' schooling, showing an inverse relationship with the level of uncertainty.\(^{17}\)

Unpredictability, also called by Mishel as probabilistic thinking, was a factor that increased the uncertainty of the parents, bringing, also, concern emerging from the unknown and lack of control.\(^{12,16,18}\) This situation is manifested, mainly, when there is clinical instability of the newborn, born, and mothers come to live with the uncertainty of life and the imminent risk of death, presenting feelings of sadness, anxiety and hopelessness.\(^{11,12,18,24,25}\)

The typology of symptoms, described as the milestone in perceiving to what degree the symptoms are perceivable and happening, also contributed to the increase of uncertainties. The findings show the traumatic nature and psychological suffering related to prematurity, leading to the prolonged experience of uncertainty in some parents.\(^{13}\)

- **Nursing interventions that helped reduce uncertainty**

Once the individual evaluates uncertainty as constituting a hazard or an opportunity, he attempts to adapt through different strategies. The health professional can act, stimulating this adaptation, from interventions that favor the reduction of the uncertainty evaluated as danger.

The facilitation of access to information is among the Nursing interventions that motivated parents to participate in the care of their child. In addition, the motivating posture of the nursing professional in relation to parental participation was a contributing factor in coping with the situation.\(^{10,24}\) The findings reinforce the role of nurses in the involvement of parents in care and preparation for discharge, by encouraging touch and participation in care, favoring the parent / child bonding and the development of parental competences.\(^{12,19}\)

Mothers also managed to have their uncertainties diminished as they gained confidence in the health professional, and this was only possible after dialogue and reception of mothers by professionals. It is at this stage that necessary guidance on the environment, routines, and health status of the infant should be provided.\(^{11,18,11,18}\) The acquisition of trust in caregivers, or authority with credibility, is fundamental in the process of managing uncertainties and can be obtained through attentive, sensitive and individualized listening.\(^{18,21,24}\) It is necessary for health
professionals to develop communication skills, respecting the ethical duty and transmitting adequate information to the parents, since this relationship will directly influence the improvement of the adaptation or increase of the stress if there are negative experiences.12,13,19

• Coping Strategies Adopted by Parents

Motivation for faith was one of the strategies that parents of newborns adopted in the midst of experiencing uncertainty. It is in faith that attempts are made to bolster and gather strength to remain in expectation of the child’s improvement.14,16,18 Other studies show that faith can generate comfort and safety for facing hospitalization in the Neonatal Intensive Care Unit, in addition to reduce suffering and anxiety in the face of the child’s illness.25-26

Family support also influenced the management of uncertainties, and sometimes the health professional is considered by the parents as a member of the family. With the newborn’s hospitalization, the puerpera is distant from her family environment, often needing the help of family members to care for other children. In addition, telephone calls and prayers received by family members strengthen this bond, reducing feelings of loneliness.14,19,27 Thus, the family experiences an internal movement to reorganize its daily routine, resulting from the demands generated by hospitalization, members in an attempt to maintain family unity, even in the face of physical distance, solidifying as a family group.28

One of the presuppositions of the theory and Mishel is that every situation of uncertainty leads to adaptation through its confrontation, bringing to the individual a new look at the situation and, consequently, a new perspective of life.24 The works raised bring this aspect of theory, as parents report that through distress and fear, they have learned from suffering and revised values, “ reframing” the experience they have experienced. Thus the dimension of everyday problems is seen in a new light.11-1,14,18

CONCLUSION

The literature evidenced that the uncertainty is present in the experience of all the parents who have newborns hospitalized in the NICU. In this way, it is necessary to value this problem and adopt actions in an attempt to minimize these uncertainties. When parents can not adapt to the new condition, health problems arise which, consequently, affect the health of the newborn. Thus, assisting in the management of these uncertainties becomes essential, but, the professional needs to familiarize himself with the theme and base his actions on a theory. The studies also showed that there is a great difficulty for the health team to intervene in the management of the uncertainties experienced by the parents, with a special role for the Nursing professional as manager and to reduce the uncertainties.

This work provides, the health professional with the knowledge of the uncertainties of the parents, as well as the coping actions developed by them and the health team based on an analysis in the light of the Theory of Uncertainties in Illness. It is necessary that, in the search for the implementation of these interventions, studies are carried out with the purpose of evaluating the effectiveness and effectiveness of actions directed to this management.

REFERENCES


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