PARENTS PERCEPTIONS OF STRESSORS IN THE NEONATAL INTENSIVE CARE UNIT IN ONE HOSPITAL IN RWANDA

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Purpose

• The purpose of this study was to describe and analyse parental perception of stress that resulted from having their infant admitted to an NICU in Kigali, Rwanda
Background

• Having a newborn infant hospitalised in the neonatal intensive care unit (NICU) is an unexpected and stressful event for a family.

• A number of potential stressors to which family members may be exposed have been identified specifically:
  – the complexity of the physical environment of an NICU,
  – the infant’s physical appearance and behaviour,
  – staff and parent interaction, and
  – adjustments in the parents’ role

• No studies about these issues have been conducted in Rwanda.
Method

• A quantitative survey was used to describe and analyse parents’ perceptions of stress when they had an infant admitted to an NICU.

• The Parental Stress Scale: Neonatal Intensive Care Unit (PSS: NICU) Miles (1993) was used to measure the level of stress that those parents experienced.
Method

• Scale scores were calculated by averaging those stress responses for the items on each scale and for the total scale.

• Independent samples Kruskall Wallis and Mann Whitney U tests were used to examine the association between the characteristics of the parents/infants and the three general stress constructs of the PSS: NICU instrument; i.e. infant appearance and behaviour, sights and sounds in the NICU, and adjustment in parental role.
Results

• The results indicated that parents experienced stress from having their infants cared for in an NICU.
• The most stressful events were the appearance and behaviour of the baby with a mean score of 4.02 while the subscale items related to sights and sounds were found to be the least significant source of stress for parents with a mean score of 2.51.
• In addition, the current study found that parents’ age, educational level, occupation and infant birth weight were associated with parental stress
# Overall Stress Level Constructs

<table>
<thead>
<tr>
<th>Subscale (n=98)</th>
<th>Mean (sd) [95% CI]</th>
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</thead>
<tbody>
<tr>
<td>Baby looks and behaves</td>
<td>4.0 (sd 0.4), [95% CI 3.9-4.1]</td>
</tr>
<tr>
<td>Alteration in parental role</td>
<td>2.9 (sd 0.6), [95% CI 2.8-3.0]</td>
</tr>
<tr>
<td>Sights and Sounds</td>
<td>2.8 (sd 0.7), [95% CI 2.6-2.9]</td>
</tr>
<tr>
<td>Total scale score average</td>
<td>3.4 (sd 0.4), [95% CI 3.4-3.5]</td>
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</tbody>
</table>
Discussion

• The two situations that parents described as stressful are the baby’s appearance and behaviour, and the sights and sounds of the ICU.

• A baby’s appearance is very stressful; this finding concurs with the findings of a previous study that has identified the physical appearance of an infant admitted to a NICU as the most significant source of stress for parents (Busse 2013).
Discussion

• On the other hand, Gooding (2011) is convinced that parents experience a small degree of stress as a result of how their babies look and behave.

• The differences that occur in findings may be explained by the fact that each NICU has its unique context.

• There may also be culturally significant differences between other contexts and this population of Rwandan parents.
Discussion

• In terms of the experiences of stress in relation to the sights and sounds in a NICU, similar results are noted by Singer et al. (2010). This study states that sights, sounds, and the general environment of the NICU often cause stress and panic in the parents.

• The main challenge faced by parents is the perceptions of the parental role adjustments.
Discussion

• Gooding (2011) agrees that the subscale in which parents reported their greatest stress is the parent-infant relationship.

• Gooding’s finding is consistent with results of another study conducted by Zahra et al. (2014) which found that adjustments in the parental role were the most stressful aspect of having an infant in a NICU.
Discussion

• Communication with staff is another challenge for parents. Parents believe that the importance of communication cannot be overemphasised, since stress is caused by poor explanations, not enough explanations, and using too many words.

The effect of the educational level on the amount of stress that parents with an infant in a NICU experience has been explained in literature.
Discussion

• Gooding (2011) argues that parents with a high school education and Bachelor’s degrees have higher stress frequency levels than parents who have not completed high school. These findings are consistent with the findings of this study.
Discussion

• Given the scarcity of research in this area, this issue needs to be addressed further in order to explore the impact of educational level on the stress that parents with infants admitted to a NICU experience, especially in the cultural context of Rwanda.

• The findings of this study are consistent with the findings of a study conducted by Lefkowitz (2010) which indicates that parents with low birth weight infants experience higher levels of stress than the ones with full term infants admitted to a NICU.
Recommendations

1. The sources of stress for parents with an infant admitted to a NICU have been identified.
2. It is important for health professionals who practise in a NICU to be aware of these sources of stress in order to reduce them where possible.
3. In-service education for nurses and physicians who work in a NICU can be implemented.
4. The educational curriculum of nurses and physicians should also be interrogated in respect of these issues.
5. In future studies, it may be appropriate to validate the usefulness of these components for Rwandan parents.
6. Further research using a qualitative approach could provide more detailed information about parental stress.
Conclusion

• The study established a range of factors responsible for parental stress when a baby is cared for in NICU.

• Identification of these factors could enable health professionals from a hospital in Kigali, Rwanda, to facilitate parents’ adjustment and coping.

• A number of recommendations have been made to different levels of health facilities in order to handle this issue.
References


