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The Efficacy of Planned Intervention on Maternal Stress in Malaysia's Neonatal Intensive Care Unit

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**Purpose:**

This study aims to determine maternal stress level and its relationship with maternal and infant characteristics as perceived by mothers whose premature infants were admitted to NICU and to investigate the effects of planned nursing intervention in reducing mothers stress in NICU.

**Methods:**

The study consisted of three phases at different periods of time in one setting. Phase 1: A survey on 180 mothers completing a set of questionnaire to identify the problems faced by mothers. The questionnaire used in this study consisted of two sections. Section one comprises demographic characteristics of both mother and infant. Section two consists of the revised Parental Stress Scale: Neonatal Intensive Care Unit (PSS; NICU) to measure maternal stress by Miles, Funk, and Carlson (1993), and has been widely used worldwide and validated. This questionnaire consists of 26 items with three NICU conditions: 1) sights and sounds - 5 items; 2) infant behaviour and appearance - 14 items; and 3) parental role alteration - 7 items. The original versions of the PSS: NICU was translated using forward and backward translation and the content validated of PSS: NICU was conducted by a panel of experts. No changes were made to the questionnaires after the validation.

Phase 2 was a nursing intervention development phase; the intervention was constructed based on the phase 1 findings, reviewed related literature and expert panel discussion. These planned nursing intervention consisted of a simple ward orientation, two meetings to deliver a psychological support, information booklet and two follow-ups (SMS/WhatsApp and telephone calls).

The final phase is an intervention phase: A total of 216 mothers were consecutively allocated to intervention and control groups. Each group comprised of 108 mothers. The mothers in both groups received questionnaire concerning maternal stress during their first visit to NICU (within 48 hours of admission). A planned nursing intervention, coupled with the existing nursing care was implemented for ten days according to a ready set schedule on mothers in the intervention group. After a month of gap period, the control group continued to receive existing practice nursing care which consisted of breastfeeding support, hand washing and attending to the parents whenever approached by the mothers or fathers ad hoc. Mothers of both groups were again given the questionnaire on maternal stress after 14 days of admission.

**Results:**

Phase 1 reported that, 56.5% of mothers had high levels of stress and the most common NICU stressor among mothers was parental role alteration and the lowest was sights and sounds. The stress experienced by these mothers was found to be not associated with the maternal and infant...
In phase 3, for the intervention group, the difference between the mean total score of maternal stress and parental role and relationship subscale decreased significantly, as compared to the control group (p=0.04; p=0.01).

Conclusion:

The stress experienced by these mothers was found to be not associated with the maternal and infant characteristics. A well planned nursing intervention for mothers with premature infants admitted to NICU can provide informational and emotional support for mothers that could significantly reduce maternal stress.

Title:
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Keywords:
Maternal stress, Neonatal intensive care unit and nursing intervention

References:


Erdem, Y. (2010). Anxiety levels of mothers whose infants have been cared for in unit level-I of a neonatal intensive care unit in Turkey. Journal of clinical nursing, 19(11-12), 1738-1747.


Abstract Summary:
This study aims to determine maternal stress level and its relationship with maternal and infant characteristics as perceived by mothers whose premature infants were admitted to NICU and to investigate the effects of planned nursing intervention in reducing mothers stress in NICU.

Content Outline:
1. Introduction
2. Aims of the study
3. Method
4. Results
5. Conclusion

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