

Does Developmental Care Education Alter Nurses' Perceptions of Developmental Care Practices in Surgical Neonatal Intensive Care Units?

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DOI: 10.14434/do.v16i1.35773

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Background

Nurses' perceptions of developmental care (DC) practices have been researched globally for almost 30 years. Yet, little is known of nurse perceptions of DC in surgical NICUs. The stand-alone surgical NICU setting differs from general NICUs. Infants requiring surgery are often cared for by numerous treating teams, which may lead to a fragmented approach to care. They experience pain, stress, interrupted sleep and separation, with their family often required to travel or transfer between multiple facilities. This research on nurses' perceptions of developmental care was undertaken in two surgical NICUs, one with an embedded NIDCAP Training Centre (Site A: 23-bed unit), and one with an alternate unit-based model of developmental care education (Site B: 40-bed unit).

Aims

- To evaluate NICU nurses' perceptions and attitudes toward developmental care in surgical NICUs.
- To explore if the type of developmental care education program provided to nurses influences their perception of developmental care practices in surgical NICUs.

Methods

An electronic survey was distributed by email to 276 nurses permanently employed in a surgical NICU at two hospitals in two states of Australia. The survey was modified with permission from Family and Infant Neurodevelopmental Education (FINE) Level 2 site assessment document and consisted of 36 questions. Content validity was determined by two experienced neonatal nurses and a statistician. Descriptive statistics were used to examine trends in the responses. Data is reported as frequencies and percentages, Chi-square, and Fisher's Exact Test.

Results

One hundred and seventeen (n=117) nurses completed the survey exploring their personal perceptions of developmental care and its application in the surgical NICU. Response rates varied; 55% (Site A), and 30% (Site B) with a combined

response rate of 42%. Demographics differed between the sites for nurses' years of experience and post-graduate qualifications. The majority of nurses in each surgical NICU acknowledged the benefits of DC for infant sleep (>93%), improving caregiving (>88%), and reducing infant stress (>90%). The challenge to consistently apply DC practices and the effect on nurses' workload was similar across both units. The two units differed in the nurses' perceptions of medical staff collaboration with DC (18% vs. 45%) $p=0.006$, nurses' support of DC (47% vs 29%), access to DC education opportunities (55% vs 37%), the inclusion of DC education in organised study days (82% vs 68%), and the inclusion of DC in the orientation of newly employed nurses (81% vs 58%) $p=0.021$.

A greater proportion of nurses at the non-NIDCAP site indicated that communication with families was difficult depending on the parents' communication style (74% versus 51%) $p=0.028$ and was less likely to agree that their nursing peers offered support in the application of DC $p=0.039$. At both sites as nurses' levels of DC education increased, they were more likely to agree that DC education was not consistently applied ($p=0.032$) in the surgical NICU.

Relevance to NIDCAP

The introduction of NIDCAP in surgical NICUs has been a challenge due to the specific population of newborn infants. Various developmental care programs have been implemented as an alternate form of education in these units. These programs can support NIDCAP work through preparation and an understanding of developmental care principles by healthcare professionals. Collaboration between the healthcare team is paramount if NIDCAP is to be seen as a model of practice in surgical NICUs.

Conclusion:

The survey results suggest surgical NICU nurses have a high level of awareness of developmental care and its positive impacts. Despite differences between the units' developmental care education programs, nurses collectively recognised the value of developmental care in reducing stress for infants and supporting families.