Implementing a foundational neonatal neuro-developmental education program: one centre's experience

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Key words

Neuroprotective care, neurodevelopmental education, developmental care, training, foundational education program

Background

Inconsistency in the application of neuro-developmentally supportive practices continue to be reported in the literature with implementation described as sporadic, variable from setting to setting as well as from one professional to the next¹. Foundational education is recognised as a core component supporting the provision of care², yet clinicians frequently do not receive adequate training to differentiate the nuances of infant behavioural communication nor implement practice change associated with neuroprotective care³. A gap continues to exist between high level specialist neuro-developmental care training and the capacity for this training to be offered in all neonatal settings. Foundational training programs offer an opportunity to train a broad population and establish a framework for specialisation.

Objectives

- 1. Identify the value for NIDCAP Training Centres in facilitating foundational developmental care education programs
- 2. Consider how foundational education programs can help support practice change

Approach

In 2017 a centre in Australia implemented a foundational neurodevelopmental care program designed and delivered by NIDCAP Certified Professionals. The program is presented as an interactive 1 ½ day workshop. Six essential themes are explored in the program which embraces a relationship based approach to care. The themes include:

- **Development:** understanding growth and development (foetal and infant) and the influence of experience on development
- **Observation:** identifying the importance in clinical practice of seeing and responding to the baby
- **Family:** recognising family participation is essential for the successful implementation of neuroprotective care
- **Reflection:** to increase self-knowledge and learning through experience
- **Systems:** understanding the strengths and challenges in the environments they work
- **Evidence:** promotion of best available evidence to support neuroprotective care

Since its commencement in February 66 neonatal unit staff (refer to figure one) have attended the program. Feedback from the program has been overwhelmingly supportive with expansion of the program in June 2017 to other states in Australia and to New Zealand. Program attendees were surveyed and asked to identify their level of confidence on a five point likert scale in delivering individualised developmentally supportive care prior to and immediately post completion of the training. Forty eight (72%) of the sixty six attendees completed the survey. Nurses indicated the

overall lowest level of confidence in delivering developmentally supportive care prior to undertaking the program 3.5/5 (average confidence level). Fifty two (52%) per cent of respondents indicated a one point increase in confidence after completing the program, with twelve (12%) per cent identifying a two point increase and thirty three (33%) per cent not identifying an effect on their confidence levels.

The overall program was rated as very good by 81% of respondents with the remaining 18% rating the program as good. Eighty one per cent of respondents identified they were likely to implement components from the program in their clinical practice or work environment and 100% found the program content relevant to their profession and role in the neonatal unit.

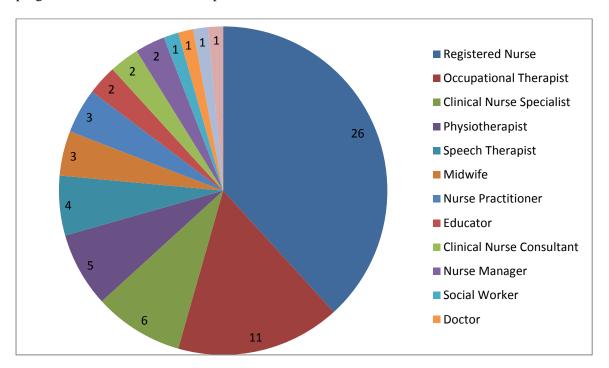


Figure One: Outlines program attendance numbers for professional groups

Following the completion of the program participants are enrolled in a Graduate Group and forwarded a newsletter each month and journal articles to promote ongoing engagement. A follow up survey was circulated to program graduates three months after the program completion to explore translation of program concepts to clinical practice and clinician/unit based promotion of practice change. Two units in the follow up survey identified at the completion of the program they had implemented unit based developmental care working parties (Paediatric intensive care and Paediatric Cardiac Unit) to address practice inconsistencies and promote evidence based practice. A speech therapy department reviewed positioning of infants during procedures and incorporated supportive positioning techniques identified in the program. Respondents identified 'I personally have noticed a significant change in my daily nursing practice already', "I see babies in way I hadn't noticed before' and 'this should be a program all staff in neonatal units attend'. Results of both surveys will be reported in this paper.

Comprehensive Summary

The implementation of a robust foundational neurodevelopmental education program was found to reinvigorate staff interest in developmentally supportive practice, dispel myths and link evidence to clinical care, promote NIDCAP, raise the profile of a training centre and its staff whilst providing financial revenue to support the maintenance of the centre.

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