



# Staff opinions regarding the Newborn Individualized Developmental Care and Assessment Program (NIDCAP)

Sylvia M. van der Pal<sup>a,\*</sup>, Celeste M. Maguire<sup>a</sup>, Saskia Le Cessie<sup>b</sup>,  
Sylvia Veen<sup>a</sup>, Jan Maarten Wit<sup>a</sup>, Frans J. Walther<sup>a</sup>, Jeanet Bruil<sup>c</sup>

<sup>a</sup> Department of Pediatrics, Leiden University Medical Center, The Netherlands

<sup>b</sup> Department of Medical Statistics, Leiden University Medical Center, The Netherlands

<sup>c</sup> TNO-Quality of Life, The Netherlands

## KEYWORDS

Developmental care;  
NIDCAP;  
Staff opinion;  
Theory of planned  
behavior

**Abstract** This study explored the opinions of (para)medical and nursing staff in two Dutch Neonatal Intensive Care Units (NICU's). A questionnaire was used that measured: a) the perceived impact of NIDCAP on several NICU conditions, b) attitudes, subjective norm, perceived behavioral control, knowledge and abilities of using the NIDCAP method (based on the Theory of Planned Behavior) and c) training interest, requirements, information sources and the relevance of the NIDCAP method for different groups of NICU patients. Respondents were positive about NIDCAP and felt that using NIDCAP is fulfilling and leads to improvement of the infant's development, health and well-being. However, NIDCAP was also thought to be time-consuming and might worsen job conditions. The nursing staff, compared to the medical staff, had a more positive attitude ( $p = .004$ ), higher perceived behavioral control ( $p = .004$ ) and perceived a more positive impact of NIDCAP on NICU conditions ( $p = .008$ ).

© 2007 Elsevier Ireland Ltd. All rights reserved.

## 1. Introduction

The Newborn Individualized Developmental Care and Assessment Program (NIDCAP) is being introduced used in Neonatal Intensive Care Units (NICU's) as a more individualized and family-based way of care-giving. Studies have shown that NIDCAP results in positive outcomes such as improved short-term medical outcomes [1–4], better behavioral performance as measured with the Assessment of Preterm Infant Behavior (APIB) [1,2,5–7], improved cognitive developmen-

tal outcome [2,3,5,8], a positive impact on behavior [9], reduced hospital charges [3], less parental stress [1] and improved brain function and altered brain structure [5]. Reviews that report on these NIDCAP studies call for more trials with large samples sizes to study the long-term effect of NIDCAP in multiple settings [10,11].

The NIDCAP observational tool is based on the Synactive Theory of Development. The preterm infant's behavior is observed along four channels of communication, being: autonomic, motor, state organization and attention-interaction. The infant's efforts at self-regulation and interaction are observed through approach and avoidance behaviors and the infant's efforts and individual goals and recommendations for care-giving are discussed with parents and other caregivers [8,12–14]. An example of an individual recommendation is to give time-outs when the infant shows

\* Corresponding author. Neonatal Center, Leiden University Medical Center, J6-S, Albinusdreef 2, 2333 ZA Leiden, The Netherlands. Tel.: +31 071 526 2909; fax: +31 071 524 8199.

E-mail address: [sylvia.vanderpal@tno.nl](mailto:sylvia.vanderpal@tno.nl) (S.M. van der Pal).

individual signs of stress or fatigue. The NICU environment and care are also critically reviewed to meet the infant's developmental needs. Examples of basic recommendations are: reduced light, sound and activity levels in the NICU, for example by using incubator covers, and support of positioning, for example by using standardized nests.

Implementing NIDCAP in a NICU is very intensive and asks for changes in the NICU environment, care, expertise and attitudes. In the context of the positive outcomes shown in the studies on the effect of NIDCAP, staff may, in return for their effort, experience positive results in the infants and their parents. Als and Gilkerson [14] stated that because NIDCAP is process-guided and relationship-based and not procedure-based, it can be difficult to implement NIDCAP in a NICU, which focuses on medical protocols and care-giving routines. Furthermore, NIDCAP is system-orientated and implemented in an existing organisational structure, social system, and nursing and medical culture which can influence the success of the implementation [14]. When promoting the use of NIDCAP at a NICU, variables predicting the behavior and intention to use NIDCAP are of importance. In the Theory of Planned Behavior (TOPB) [15,16], Ajzen states that intention predicts behavior and intention is thought to be influenced by the individual's attitude towards the behavior, the subjective norm held by important people in their surroundings and how they perceive their control, knowledge and abilities with regards to the behavior.

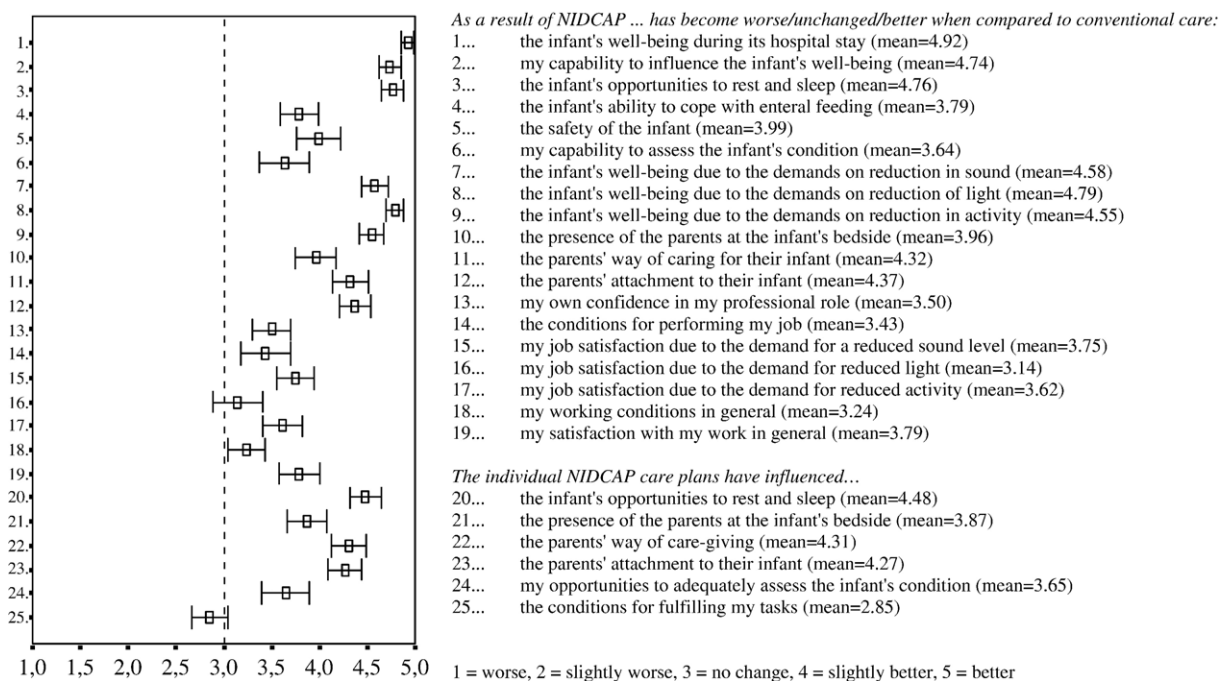
A study that evaluated the implementation of NIDCAP in a Swedish setting, examined staff opinions and concluded that NIDCAP was well received by nursing staff, neonatologists and parents [17,18]. Staff indicated improvements in their ability to assess the infant, the infant's well-being and the opportunities for and quality of parental attachment. This study mainly focused on the impact of NIDCAP on several NICU conditions.

The current study aims to explore nursing and (para) medical staff's opinions concerning the use of NIDCAP in a Dutch NICU at two locations, which could lead to recommendations for future NIDCAP implementation strategies. This study furthermore aims to explore the determinants influencing the intention to use the NIDCAP method in the NICU.

## 2. Methods

### 2.1. NIDCAP implementation and subjects

The implementation process of the NIDCAP in a Dutch Neonatal Intensive Care Unit (NICU) at two locations (the Leiden University Medical Center (LUMC) in Leiden and the Juliana Children's Hospital in the Hague) was carried out through a 4 year two-phased randomized controlled trial and was done in steps for research purposes. During the first two years (phase 1), basic developmental care was implemented by using standardized incubator covers to decrease light, sound and activity levels and nesting for positional support. During the last 2 years (phase 2), official NIDCAP observations and guidance were implemented under the supervision of a NIDCAP certified psychologist and 5 certified nurses. In addition, clinical NIDCAP lessons were given for nurses who were assigned to take care of the infants receiving NIDCAP care in the randomized controlled trial. After 4 years of implementation a questionnaire concerning the implementation of NIDCAP was sent to the home addresses of the (para)medical and nursing staff of the two NICU's. The questionnaires were not numbered to guarantee anonymity of the respondents. As a result it was not possible to track which staff members did not return the questionnaire. General reminder notes were distributed in both NICU's to remind personnel to return the questionnaire.



**Figure 1** Change in NICU conditions as a result of NIDCAP (95% confidence interval of mean) for respondents working  $\geq 4$  years at NICU ( $N=71-77$ ).

Download English Version:

<https://daneshyari.com/en/article/3918315>

Download Persian Version:

<https://daneshyari.com/article/3918315>

[Daneshyari.com](https://daneshyari.com)