



Articles

Nursing Perceptions of Clinical Research in the Neonatal Intensive Care Unit[☆]

Lauren C. Reynolds OTD, OTR/L^{a,b,*}, Tara Crapnell BS^a, Cori Zarem BS^a, Laura Madlinger BS^a,
Lisa Tiltges BS^a, Karen Lukas BSN^b, Roberta G. Pineda PhD, OTR/L^{a,b}

^a Program in Occupational Therapy, Washington University School of Medicine, St. Louis, MO

^b Department of Pediatrics, Washington University School of Medicine, St. Louis, MO

ARTICLE INFO

Keywords:

Clinical research
Neonatal
Nursing
NICU
Premature infant

ABSTRACT

The purpose of the study is to determine perceptions of clinical research in the NICU. This is a survey study. Nurses (n = 68) employed in a level III NICU in the Midwestern United States were included. The main outcome variable is the cross-sectional analysis of responses to a survey exploring perceptions of clinical research. Ninety-seven percent of nurses (n = 66) agree that clinical research is important for improving care, while 57% (n = 39) report that it affects their day positively. Thirty-seven percent reported excellent communication between clinical and research teams. In addition, 27% (n = 18) of nurses reported research presents complications for families, and 79% (n = 54) reported that it is acceptable to cease a research protocol for infant benefit. Years of practice and whether nurses read research affected various responses. Clinical research is imperative to inform best practice, and nurses are an integral part of care. Therefore, it is essential to better define strategies to bridge the gap between clinical and research teams.

© 2013 Elsevier Inc. All rights reserved.

Prematurity is a significant public health concern, as 12.3% of infants are born early each year in the United States.¹ Recent advances in medical care have increased the rate of survival and lowered the age of viability.² However, preterm infants often necessitate care from the neonatal intensive care unit (NICU). Many infants are hospitalized for long durations with complicated medical conditions.³

The NICU is a complex environment in which preterm infants rely on various medical equipment or therapies to survive. Standard of care for medically fragile infants may include the use of advanced respiratory support, pharmacological interventions, and use of various behavioral strategies to manage pain, promote parent participation in the NICU and improve developmental outcomes.⁴ Although research has informed many current therapies in the NICU,^{5–7} many approaches to care and medical interventions, such as use of the single patient room, lack evidence to support their safety and efficacy.⁸ Therefore, it is important to conduct ongoing clinical research in the NICU to investigate the effects of different strategies and determine best practice for promoting optimal health and development of the high risk infant. However, research in this fast paced, delicate environment can be a challenge.

Parents, who must sign informed consent to enroll their infant in clinical research in the NICU, are often experiencing a range of

emotions following the birth of a preterm infant. Many times they are consumed with concern about the medical status of the infant, can be overwhelmed with how to achieve a parenting role in the NICU, and the mother may be experiencing medical complications herself.⁹ Neonatal nurses may function as the primary caregiver for premature infants during the first few months of life and are an important liaison between the medical team and parents.¹⁰ NICU nurses spend up to 85% of their day providing direct care to infants.¹¹ In addition to providing services directly to their patients, nurses are also caring for parents, educating about infant medical status, breastfeeding, and how to engage in parenting in the NICU environment. As the primary day-to-day contact with parents in the NICU, the neonatal nurse is an integral part of the medical team and may influence decisions made by the other medical professionals, as well as parents' decisions regarding the infant (i.e., care practices, participation in clinical research). Therefore, their interpretations of clinical evidence, as well as their perceptions about ongoing research in the NICU, are important to understand. However, to our knowledge, there are a limited number of studies investigating nursing perceptions about research. This study aims to explore neonatal nurses' perceptions about clinical research in the NICU.

Methods

This survey study was approved by the Human Research Protection Office (HRPO) at Washington University in St. Louis. A link to a survey was emailed to 250 neonatal nurses working in a 70-bed level III NICU in the Midwestern United States. In this academic setting, research is prevalent, as there are typically 10 or more clinical studies being conducted in the NICU simultaneously. The survey was

[☆] Funding: There are no conflicts of interest. This project was supported by the National Institute of Health (ROI HD 057098), the Doris Duke Foundation, and the Washington University Intellectual and Developmental Disabilities Research Center (NIH/NICHD P30 HD062171).

* Address correspondence to Lauren C. Reynolds, OTD, OTR/L, Washington University School of Medicine, Program in Occupational Therapy and Department of Pediatrics, Campus Box 8116, 660S. Euclid Avenue, St. Louis, MO 63110. Tel.: +1 314 286 1304.

E-mail address: reynoldl@psychiatry.wustl.edu (L.C. Reynolds).

developed by the Washington University Neonatal Research group, using an online survey generator, Survey Monkey. The survey contained 10 closed-ended questions aimed at determining neonatal nurses' perceptions about clinical research in the NICU (refer to Fig 1 for a complete list of questions and Fig 2 for participant responses). Response choices for each of the questions on the survey included: Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, and Strongly Disagree. In addition, free responses were collected for question #10 of the survey (see Fig 3). The survey was open for completion over a 3 month period from November 2011 to January 2012. Completion of the voluntary survey implied consent.

SPSS Software (Version 20) was used for all analyses. Descriptive statistics were used to explore neonatal nursing responses to questions about clinical research in the NICU. Percentages of participants' responses to each of the questions were reported, and chi-square analyses were used to determine differences in responses among those with more experience and those that regularly read clinical evidence compared to those who do not. Free responses from question 10 were also reported.

Results

Out of the 250 nurses who received the survey, 33% ($n = 68$) of the neonatal nurses in the NICU completed the survey. Forty-four percent ($n = 30$) of respondents had over 20 years of experience in their profession.

See Fig 3 for survey questions and histograms demonstrating how NICU staff responded. Ninety-seven percent ($n = 66$) of respondents agreed and strongly agreed that incorporating new research into the NICU is critical for improving care. However, only 57% ($n = 39$) indicated that research impacts their day in a positive manner, with 58% ($n = 39$) of the respondents reporting that research complicates their work environment. Thirty-seven percent ($n = 25$) of respondents agreed that they read current research literature. Thirty-seven percent ($n = 25$) of respondents agreed that excellent communication exists between clinical staff and researchers. When asked about the impact of clinical research on the infant and family, 27% ($n = 18$) of respondents agreed that it complicates the environment for the families. Seventy-nine percent ($n = 54$) agreed that they would cease a research protocol at any point for the benefit of the infant.

There was a difference in response between participants who did or did not regularly read research and whether research in the NICU complicates the environment for the families, χ^2 (16, $n = 67$) =

28.18, $P < .05$, whether research findings contribute to improving clinical care to a greater extent than every day experiences, χ^2 (12, $n = 67$) = 29.96, $P < .01$, and whether research in the NICU impacts the staff work day in a positive manner, χ^2 (12, $n = 68$) = 35.54, $P < .01$. Years of nursing experience impacted responses on whether research within the NICU complicated the neonatal care environment for staff, χ^2 (12, $n = 68$) = 35.54, $P < .01$.

Free responses ($n = 8$) regarding clinical research in the NICU were both favorable and unfavorable. Responses were generally positive about the importance of clinical research ($n = 3$), while there were negative comments regarding impact on family and communication between research and clinical staff ($n = 7$).

Discussion

In this study, the survey completed by neonatal nurses allowed for exploration into perceptions about clinical research in the NICU setting. Key findings are that neonatal nurses identified that clinical research is important for improving care in the NICU. However, fewer respondents agree that research affects their day in a positive manner. The majority of the neonatal staff in our study did not agree that communication was excellent between clinical and research teams. In addition, many of the nurses surveyed agreed that research complicates the NICU environment for families or staff, and that they would cease a research protocol, or provide care in a manner not directed by their research protocol, for the benefit of the infant.

Neonatal nurses recognize the importance of clinical research in the NICU, which has allowed for successful advanced medical interventions, including the use of surfactant and continuous positive airway pressure.¹² However, nurses are responsible for many facets of care in the NICU¹⁰ and research may at times be viewed as another obstacle in providing efficient care. Free responses from the survey such as "Although research complicates the NICU environment, it is a necessary for the advancement of developmentally appropriate care for the preterm and term infant" demonstrate that nurses do appear to value research, despite the challenges it poses.

Nurses often function as the 'protector' in the NICU¹⁰ aiming to prevent additional stress to the infant and families. This was reflected in the free responses, with comments such as "I am appalled at the way new mothers are bombarded by the research staff" and "With so many studies going on, families are often confused and sometimes mislead regarding typical standard of care and what type of care/treatments their infant is receiving". Addressing families to obtain informed consent is a necessary process associated with research;

1. How many years of experience do you have as a nurse?
2. Incorporating new research into care in the NICU is critical to improving care.
3. In our NICU, there is excellent communication between the research and clinical teams.
4. Research within our NICU complicates the neonatal care unit environment for families.
5. Research within our NICU complicates the neonatal care environment for staff.
6. Research findings contribute to improving clinical care to a greater extent than everyday experience.
7. I regularly read research with new findings that are relevant to NICU practice.
8. Research impacts my work day in a positive manner.
9. If an infant is enrolled in a study, I would cease the protocol for the benefit of the infant.
10. Other comments regarding clinical research in the NICU? (Open-ended responses)

Fig 1. Survey questions.

Download English Version:

<https://daneshyari.com/en/article/2671243>

Download Persian Version:

<https://daneshyari.com/article/2671243>

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