Compassionate Care of the Opioid Addicted Mother and her infant with Neonatal Abstinence Syndrome: Nurses Making an Impact

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An examination of how the implementation of a substance abuse educational inservice improved neonatal intensive care unit nurses’ perspectives towards opioid addicted mothers and decreased the length of stay for infants hospitalized for intrauterine exposure to maternal opioids.

Introduction

The number of infants experiencing withdrawal as a result of intrauterine exposure to maternal use or abuse of opioids continues to increase. (Patrick et al., 2012)

Withdrawal of infants exposed to intrauterine drugs, specifically opiates, has become a worldwide epidemic with one infant born every hour showing signs of withdrawal. (Patrick et al., 2012)

This rampant issue has greatly impacted nursing care and overall health care practices and costs.

Over a three year time period the number of infants admitted to the neonatal intensive care unit (NICU) for intrauterine exposure to maternal opioids, diagnosed as neonatal abstinence syndrome (NAS), at the quality improvement project site has continued to increase. (ProHealthCare, 2012, 2013, 2014)

Current Trends

Length of stay (LOS) for infants at project site 18.5 days:

2.5 days greater than the 2012 national average.

(Patrick et al., 2012)
Background

- Research suggests nurses’ perspectives towards opioid addicted mothers can impact the bonding between the mother and her newborn.
- Increased training and education of nurses related to substance abuse has been found to improve nurses’ knowledge and enhance mother-infant bonding.

(Nurse, McHugh, & Gordon, 1995; French et al., 1998; Gerace, Hughes, & Spunt, 1995)

It has long been established NICU nurses tend to have negative perspectives toward pregnant women who use illicit substances, can be judgmental, and are lacking in knowledge regarding substance abuse.

Adversarial nurses’ perspectives have been shown to be a barrier in the promotion of effective maternal-infant bonding.

(Fraser, Barnes, Biggs & Kain, 2007; Gerace, Hughes, & Spunt, 1995; Marquise, Welsh, Passmore, & Cline, 2012; Rampf, 2005; Selick & Redding, 1998)

Studies have established rooming-in and increased time spent between the opioid addicted mother and her infant has decreased the length of stay for infants with neonatal abstinence syndrome.

(Abrahams et al., 2010; Hodgson & Abrahams, 2012; Saki, Lee, Hannam, & Greenough, 2010)

Opioid addicted mothers who spend additional time with their infants are better equipped to understand the specific care their infant requires.

(Casper & Arbour, 2013; Hill, 2013; Murphy-Oiken, Brownlee, Montelpare, & Gerlach, 2010)

Numerous benchmarks, position, and policy statements calling for an educational and compassionate based approach in the care of the opioid addicted mother and her infant with NAS have recently been published.

Benchmarks & Policy Statements:

- **VON (2014):** To create a culture of compassion, understanding, & healing for the mother-infant dyad affected by NAS
- **NQF (2012):** Patient, family, & caregiver experiences are to be related to quality & safety improvements
- **NENBG (2006):** Staff are to be trained & supported to promote a non-judgmental attitude towards care & to raise awareness of this population
- **IOM (2001):** Patient centered & equitable care for all
- **PHC Mission Statement (n.d.):** To respond with excellent service, respect, & compassion

(Institute of Medicine [IOM], 2001; National Quality Forum [NQF], 2012; North East Neonatal Benchmarking Group [NENBG], 2006; ProHealth Care [PHC], n.d.; Vermont Oxford Network [VON], 2014)
American Nurses Association Policy Statement:
Nurses in maternal child services may not be fully educated in the needs of patients with substance abuse problems and the special needs of infants experiencing NAS.
Nurses are encouraged to seek educational programs offering additional training in mental health and drug addiction fields. (American Nurses Association [ANA], 2011)

The American Nurses Association Code of Ethics:
The nurse establishes relationships and delivers nursing services with respect for human needs and values, and without prejudice.
An individual's lifestyle, value system, and religious beliefs should be considered when planning health care with and for each patient.
Such consideration does not suggest the nurse necessarily agrees with or condones certain individual choices, but that the nurse respects the patient as a person. (ANA, 2001)

The Quality Improvement Project Question:
Would the implementation of a substance abuse educational inservice improve the knowledge and perspectives of NICU nurses towards opioid addicted mothers and decrease the length of stay for infants with neonatal abstinence syndrome?

Project Purpose & Goals
➢ To improve NICU nurses’ knowledge and perspectives towards opioid addicted mothers following a substance abuse educational program.
➢ To decrease the length of stay of infants with NAS after the presentation of an educational inservice on substance abuse.
➢ To assist in benchmark attainment and decrease financial expenditures related to the care of infants with NAS.

Methods:
Approval, Setting, & Participants
➢ Project approval was granted from the Institutional Review Board (IRB) of the project site.
➢ The project was conducted in a 25 bed level III NICU of a community based Midwestern hospital.
➢ Project participants were a convenience sample of 20 NICU RNs ranging in age from 25-65 years, with the majority of their experience centering on populations specific to neonates.

Methods:
Design & Implementation
➢ Focus groups were held to determine neonatal nurses’ perspectives on substance abuse knowledge and current care practices.
➢ Focus group data was compiled and utilized to tailor a substance abuse educational inservice for neonatal intensive care unit nursing staff.
Methods: Implementation Tools

Tools utilized to measure NICU nurses’ perspectives towards substance abuse and parenting were the Attitudes to Drug Use and Parenting Survey (ADUPS), and the Substance Abuse Attitude Survey (SAAS).

- The Attitudes Towards Drug Use and Parenting Survey (ADUPS) is a 20-question survey specific to drug use in parenting and utilized the SAAS as a developmental template.
- The ADUPS survey contains specific statements regarding substance abuse to be answered via agree, uncertain, or disagree.
- The Substance Abuse Attitude Survey (SAAS) is based on personal opinions and experiences of healthcare workers to measure attitudes regarding general substance abuse, uses more statements than the ADUPS, and employs the answer choices of agree or disagree (Adams, 1999; Chappel, Veach, & Krog, 1985).

Methods: Implementation

- Surveys regarding attitudes towards substance abuse and parenting were distributed prior to and immediately following the substance abuse inservice.
- Surveys were again distributed and collected at six months following the substance abuse inservice to measure changes in perspectives over time.
- Length of stay data was collected on infants admitted to the neonatal intensive care unit for treatment of opioid withdrawal for 12 months prior to and 6 months following the substance abuse educational inservice.

Methods: Data Analysis

- Pre and post intervention surveys were analyzed to measure changes in perspectives following the substance abuse educational inservice.
- Post intervention surveys were again distributed at six months to measure changes in perspectives over time.
- Length of stay for infants with NAS was tracked for 12 months prior to and six months following the intervention.

The Intervention – Part 1:

A series of literature-based statements made by nurses expressing their feelings and frustrations regarding care of opioid addicted mothers and their infants with neonatal abstinence syndrome was presented to staff attending the presentation.

- The Nurses’ Perspectives:
  - “You put the bottle near his mouth, and he makes desperate sounds, but he won’t suck. You can’t get him calm enough to suck.”
  - “Something has to hurt for them to scream like they do.”
  - “I feel frustrated and burned out caring for these infants and their mothers.”
The Nurses’ Perspectives:

“The mothers all have that same personality, whether they are prescription drug addicted, or cocaine addicted, they all have exactly that same.....They walk in defensive.
If you're nice to them to try to break that defensiveness, then they try to use you.”

“We are trained as NICU nurses, not full-term drug addicted baby nurses....you know, that's not what we signed up for.”

The Intervention - Part 2:

- A presentation was given on the neurophysiology of addiction and the changes that occur in the brain as a result of opioid addiction.
- Statistics were presented on the difficulty of recovery from opioid addiction along with a discussion of relapse rates (hypertension, diabetes).
- The difficulty of a full recovery from opioid addiction was also discussed (1-2 years).

The Mothers’ Perspectives:

“It takes everything away from you. It takes your kids away. It’s taken so much away from me that I don’t know how I still relapse...how I still give it a chance. I guess I'm still working on it. Like I said, we lose family, we lose everything, even the clothes on our backs sometimes. We lose everything and we still fall. You know, like, why relapse? Nothing good comes out of it.”

The Intervention – Part 3:

A series of literature-based statements made by opioid addicted mothers expressing their feelings and frustrations regarding being addicted to opioids and having their infant in the NICU was presented to the staff attending the presentation.

The Mothers’ Perspectives:

“I would like to tell the nurses to take it easy on the mother. You know, after being addicted, I realized that this is really a disease. There are some who abuse, but if you're using while you're pregnant, you have a problem; a big problem....and you need help.
You obviously don't care about yourself, about anything, except the drug. Make it a little bit easier on that mother if she's showing initiative...if she's taking the time to be there. She loves her child, you can see it and you can feel it. You don't know what her circumstances are. You don't know what her life has been. You don't know what she was feeling when she was pregnant...if she was feeling stressed, if she was poor. Whatever the reason she was using while she was pregnant...you just don't know. So try to make it easier for her.”
Results

- Neonatal nurses showed overall improvement on post intervention surveys towards substance abuse immediately following the substance abuse inservice.

- Neonatal nurses continued to show improvement on post intervention surveys towards substance abuse at six months following the substance abuse inservice.

Results: Most dramatic changes demonstrated:

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<td>60%</td>
<td>73%</td>
<td>↑ 23%</td>
</tr>
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Results: Length of Stay

Length of stay for infants admitted to the NICU for NAS treatment decreased by 2.2 days following the substance abuse inservice.

Results: Benchmarks & Policy Statements

NICU Nurses’ improved knowledge and perspectives were more in alignment with Benchmarks and Policy Statements.

Results: Financial Impact

Although not part of the project, the financial impact of decreasing the length of stay by 2.2 days over a six month period resulted in substantial cost savings.

Conclusion & Practice Implications as Evidenced by Program Results:

- Nurses have the ability to positively impact the bonding of the opioid addicted mother and her infant.

- Nurses can positively influence the length of stay for infants with NAS.

- Nurses desire to expand their knowledge base regarding the topic of substance abuse.
**Future Recommendations**

- For outcomes to remain sustainable, additional knowledge would be beneficial utilizing the substance abuse educational inservice as the foundation for further knowledge building.

- Ongoing provision of research and literature to the NICU staff regarding substance abuse would be useful to complement existing knowledge, as would supplementary inservices on substance abuse.

**Questions?**

**References**


**References**


**References**


References


• ProHealth Care. (2013). Aggregate data of NICU infant length of stay [Data file and spreadsheet]. Waukesha, Wisconsin: ProHealth Care NICU.

• ProHealth Care [PHC]. (2014). Aggregate data of NICU infant length of stay [Data file and spreadsheet]. Waukesha, Wisconsin: ProHealth Care NICU.
