Survey of Neonatal Intensive Care Unit Nurses' Use of the mamaRoo® as a NonpharmacologicTreatment

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Background

- Increase of perinatally substance exposed infants in NICU population resulting in potential for withdrawal.[1]
- Recommendation for non-pharmacologic treatments for neonatal abstinence syndrome.[2-7]
- mamaRoo® used as intervention to soothe infants and marketed to the public as an intervention for neonatal withdrawal syndrome.[8]
- Lack of recommendations for use as a nursing intervention.

Purpose

The purpose of this descriptive survey study was to identify the variable practices of neonatal nurses in the implementation of the mamaRoo®, in relation to reason for use, settings, timing and response of the infant, with a special focus on infants with perinatal substance exposure.

Methods

The design of the study was a descriptive, exploratory survey study of a convenience sample of neonatal nurses in a tertiary care level 3 Neonatal Intensive Care Unit to gather their self-disclosed practices when using the mamaRoo®. The study protocol was approved for protection of human rights by an Institutional Review Board.

The mamaRoo® bounces and sways, and replicates five unique motions labeled Car Ride, Ocean Wave, Rock-A-Bye, Tree Swing, and Kangaroo. The seat also reclines to any position along its axis, from recline for napping to upright for play. It can make a variety of sounds also including such tones as crickets and ocean waves.[8]

Average cost: $200.00

Results

- A total of 66 neonatal nurses (52%) participated in the study and completed the survey.
- The three most reported reasons for the nurses to implement the mamaRoo® were the state of the infant (83%), the lack of persons to hold the infant (50%), and the diagnosis of neonatal abstinence syndrome (33%).
- Time range of leaving the infant in the mamaRoo® ranged from 15 minutes to 360 minutes. (Figure 1)
- Analysis of how nurses determined which motion and sound settings to use include the following categories: trial and error; prior settings; personal preferences; personal patterns; assumptions; and random. (Figure 2)
- Categories of persons using the mamaRoo®. (Figure 3)
- Instructions given by nurses on the use of the mamaRoo®. (Figure 4)

Figure 1

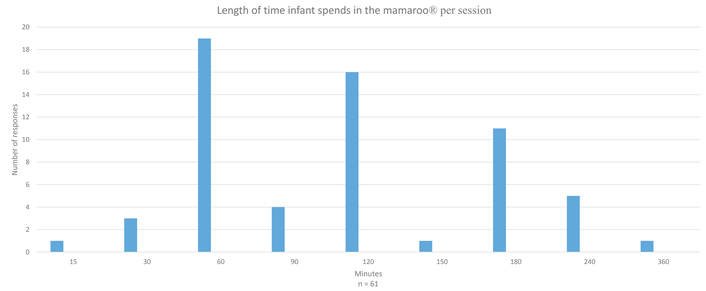


Figure 2

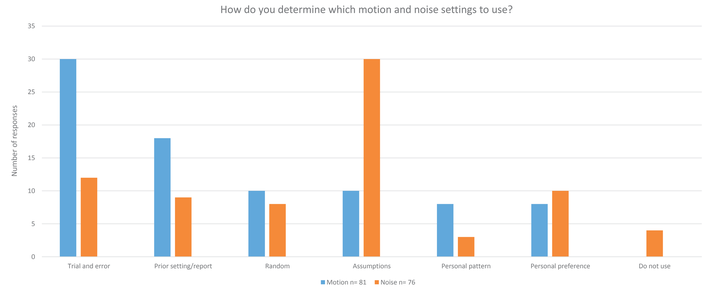


Figure 3

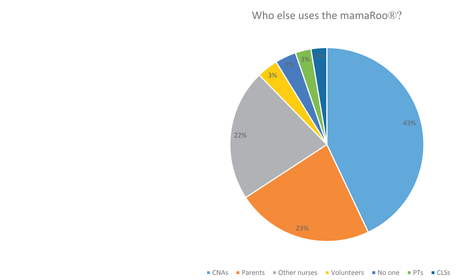
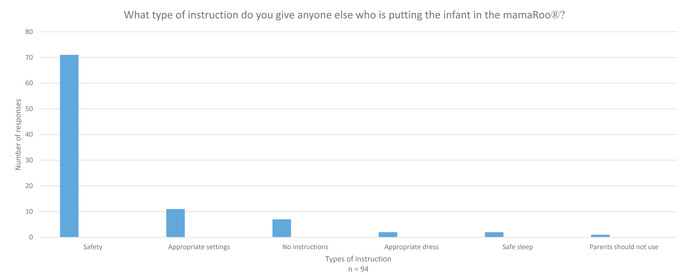


Figure 4



Implications for Practice

There is a paucity of evidence and protocol for the use of the mamaRoo® as a nursing intervention strategy. As non-pharmacologic treatments for neonatal withdrawal syndrome evolve, nurses will need guidelines as to safe and effective methods and strategies. In addition, nurses have responsibility to inform families of therapeutic measures and need guidelines to instruct families on appropriate use and safety of the mamaRoo®.

Implications for Research

The results of this study demonstrates the variability of practices by neonatal nurses in the use of the mamaRoo®. Further research is needed as to the responses of infants with the use of this intervention. Research is needed as to the variable settings and infant response, in addition to guidelines for timing, parent education and possibly weaning infants from this intervention.

References

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