

Doctor of Nursing Practice Project Implementing a Neonatal Abstinence Syndrome Toolkit to Improve Nurse Self-efficacy and Knowledge Maria Hughes MSN, MHA, RN, NEA-BC Project Advisor: Dr. Rebecca Hoffpauir



Background

- Neonatal Abstinence Syndrome (NAS) is a condition in which infants are exposed to opioids in utero that cause the infant to withdraw after delivery (Larson, 2019).
- Every nineteen minutes an infant is born with NAS (National Institutes of Health, 2021).
- 14-22% of women admit to using opioids during pregnancy (Centers of Disease Control, 2020).
- Nursing self-efficacy related to NAS improved with standardized nursing interventions (Indiana Department of Health, 2020).

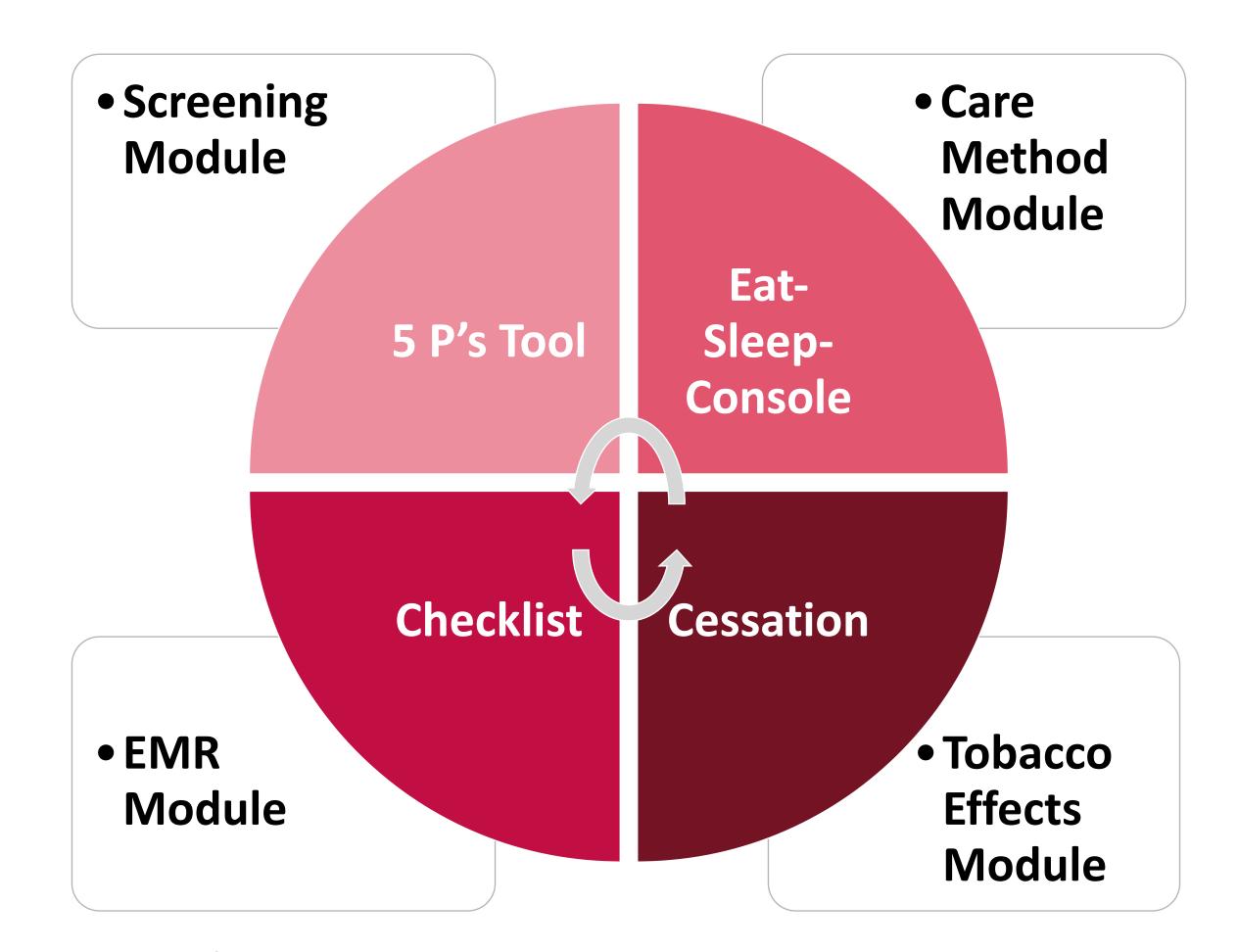
Purpose

• Develop a structured learning experience and a nursing intervention checklist in infant electronic medical record (EMR) for neonatal intensive care unit (NICU) nurses to promote evidence-based nursing interventions for NAS to improve nurses' self-efficacy and knowledge related to NAS care.

Method

- Level III nursery in Indiana, 38 NICU nurse participants
- Developed NAS nursing intervention training toolkit
- Administered 10 question survey: Assessment of Nursing Knowledge and Self-efficacy related to NAS (ANKS)
- •Questions 1-7 used a 7-point Likert scale to assess self-efficacy; Responses ranged from never (1) to always (7)
- Questions 8-10 were open-ended questions to assess increase in knowledge
- Checklist in (EMR) to reflect NAS nursing interventions

Toolkit Module Contents



Developed from the Indiana Perinatal Substance Use Practice Bundle (2022)

Results

ANKS Self-efficacy Questions 1-7 (7-point Likert Scale)	
Toolkit Implementation	Nurses' Self-efficacy
Pre- Toolkit	N = 38 $M = 5.77$ $SD = 0.42$
Post- Toolkit	N = 36 $M = 6.61$ $SD = 0.32$
t	.85
p	<.0001

Results

ANKS Knowledge Questions 8-10 (Open-ended)		
Question # (Total Possible)		Nurses' Knowledge Correct Responses(Percentage)
	Pre-Toolkit	
#8 (1)		31 (86%)
#9 (3)		30 (79%)
#10 (2)		23 (61%)
	Post-Toolkit	
#8 (1)		36 (100%) 14%
#9 (3)		35 (97%) 18%
#10 (2)		36(100%) 🚹 39%

Discussion

- Modified *t*-test results: standardized training significantly improved nurse self-efficacy.
 - •Open-ended knowledge questions reflected correct responses improved after toolkit training.
 - •Nursing self-efficacy promoted consistency in the use of nonpharmacological interventions and EMR documentation.

Conclusion

Standardized annual competency of NICU nurse NAS training promotes the use of non-pharmacological interventions and reflective nursing practice for optimal infant care.
 Recommendations for future study: To pursue exploration of psychosocial barriers between healthcare providers and parents of NAS infants.

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