

NEONATAL NURSE PRACTITIONER
SHIFT LENGTH PERCEPTION: A
QUANTITATIVE AND QUALITATIVE
STUDY

Tracey R. Bell DNP,APRN, NNP-BC, C-ELBW, CNEcl, CHSE
Jacqueline Hoffman DNP,APRN, NNP-BC
Meredith L. Farmer DNP,APRN, NNP-BC

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DISCLOSURE

- The authors received a grant from the Florida Association of Neonatal Nurse Practitioner for this research study.
- Jacqui Hoffman is a member-at-large with FANNP
- Tracey R. Bell and Meredith L. Farmer are both members-at-large for the of the National Association of Neonatal-Advanced Practice Council

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OBJECTIVES

- Identify the background and rationale for studying shift lengths
- Describe the grant objectives and study design
- Discuss the quantitative findings on perception and outcomes



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BACKGROUND


- Research addressing sleep deprivation, fatigue and safety is based on evidence from aviation, long-haul truck drivers and other disciplines in healthcare
- Being awake for at least 15 hours is the same as someone with a blood alcohol level (BAC) of 0.05%; awake at least 24 hours BAC 0.10% (CDC, 2017)
- Fatigue affects communication during handoffs
- No evidence regarding NNPs
 - Few NNPs get guaranteed protected downtime during prolonged shifts

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WORKFORCE SURVEY

- NNP Work Shifts
 - 24-hour shifts - 41%
 - Rotating shifts -37%
 - Day shift - 16%
- 24-Hour Shift Preference - 39%
- Overtime Worked - 63% of NNPs
- No protected downtime - More than 77%

WORKFORCE SURVEY



NNP WORK AND SHIFT PREFERENCE

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STUDY PURPOSE

- Address gaps in knowledge on challenges faced by NNPs in relation to shift length and fatigue and how this affects their clinical practice
- 3 aims
 - Describe the overall state of knowledge regarding national organization recommendations for NNPs working in Levels 2-4 NICUs
 - Evaluate NNPs' perceptions of prolonged shifts including shift fatigue experiences
 - Describe recommendations from practicing NNPs on methods to ensure patients and personal safety

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METHODS

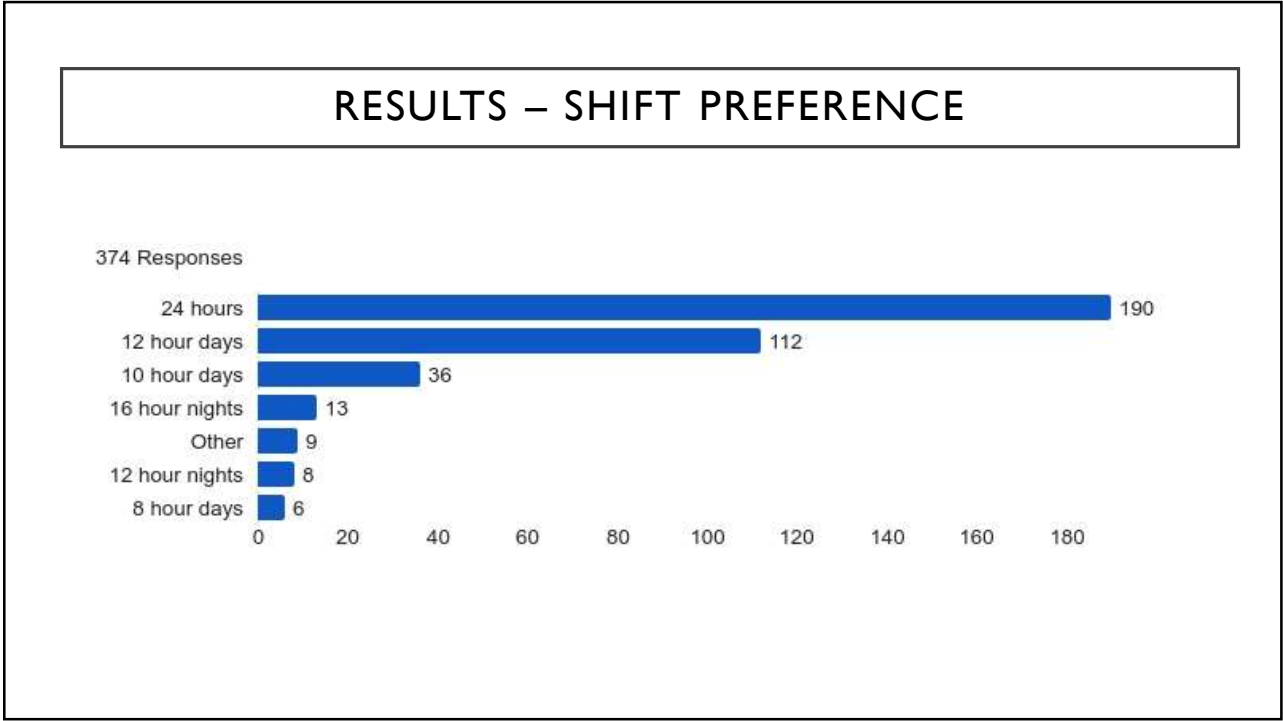
- IRB Approval – University of Pittsburgh
- Mixed method, cross-sectional design
- Recruitment: Convenience sample of all NCC board certified NNPs
 - Postcard mailed with QR code
 - QR code also posted on various national neonatal social media sites
- Survey administered via Qualtrics
 - Quantitative questions
 - Closed-ended questions to collect numerical data for demographic and practice data
 - Qualitative questions
 - Open-ended questions to explore perceptions of shift length and fatigue

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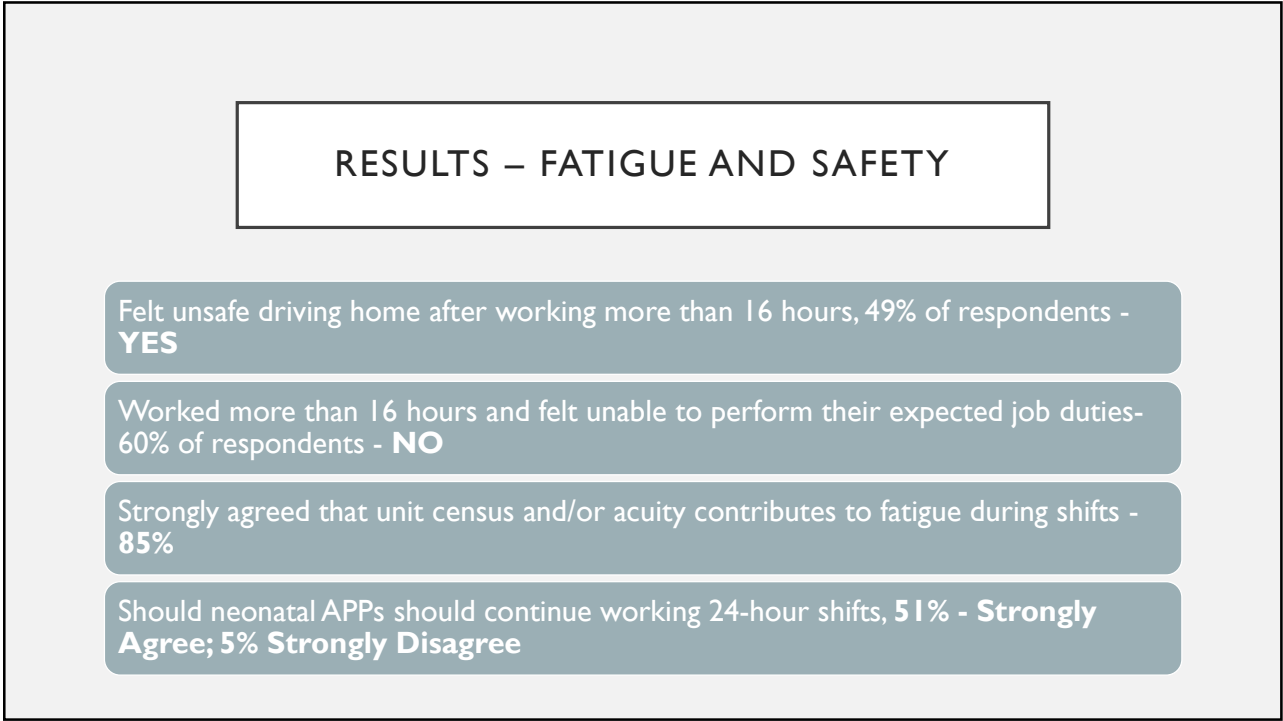
RESULTS -
DEMOGRAPHICS

AGE	
< 30 YEARS	N=8 (2.1%)
31-40 YEARS	N= 101 (27%)
41-50 YEARS	N= 133 (35.6%)
51-60 YEARS	N= 83 (22.2%)
61-70 YEARS	N= 43 (11.5%)
> 70 YEARS	N=6 (1.6%)
YEARS OF EXPERIENCE	
< 5 YEARS	N= 77 (20.6%)
5-10 YEARS	N= 88 (23.5%)
11-15 YEARS	N=66 (17.7%)
16-20 YEARS	N= 49 (13.1%)
> 20 YEARS	N= 94 (25.1%)
LEVEL OF NICU	
LEVEL I	N= 3 (1%)
LEVEL II	N=44 (12%)
LEVEL III	N=188 (50%)
LEVEL IV	N=132 (35%)
FACULTY	N=4 (1%)
OTHER	N= 3 (1%)

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DISCUSSION

- 73% participants aware of NANN shift length position statement
- Critical need for objective research
 - Survey participants favor 24-hour shifts
 - Perception of fatigue impacting driving
 - Perception of fatigue not affecting work ability
- Fatigue and safety multifactorial




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RECOMMENDATIONS

Analysis of correlations

Future research

Innovative staffing models/strategies

Sleep Hygiene education

- Work/Life Balance
- Mental Well Being

Advocacy

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