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## Sleep and Wellbeing at Phoenix Children's Hospital

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# THE OCCUPATION OF SLEEP: PROMOTING HEALTH AND WELL-BEING OF HOSPITAL SHIFT WORKERS

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## LITERATURE REVIEW

*Hospital shift workers are found to have...*

### Higher risk of chronic disease<sup>1, 2, 3, 4, 5, 6, 7</sup>

- Cardiovascular disease
- Metabolic disease
- Depression
- Cognitive dysfunction
- Injury & Errors
- Reproductive changes
- Breast cancer

### Low ratings of well-being<sup>8, 9, 10,</sup>

- Low ratings of quality of life
- Low sleep quality and quantity
- Psychosocial dysfunction, difficulty maintaining relationships
- Marginalization from workplace events and resources

### Circadian rhythm dysfunction<sup>11, 12, 13,</sup>

- Night shift schedule interferes with necessary environmental cues (light, noise, habits, and meals)
- Rotating schedules cause more dysfunction than fixed schedules
- Lifestyle irregularity disrupts sleep

## METHODS

### *A multi-layered needs assessment*

#### Met with Interdisciplinary Representatives

- Leaders from Night Shift Nursing Council
- Wellness Ambassadors: Interdisciplinary representatives who promote wellness
- Informal conversations with Human Resources personnel and other departmental leaders

#### Reviewed 2018 Employee Satisfaction and Attrition Data

- Identified relationship between satisfaction and high turnover rate of new nurses
- Was generated through survey by a third-party organization and provided to researcher
- Not reportable due to confidentiality

#### Interviewed Night Shift Employees

Met with interdisciplinary night shift employees at wellness events and in context during the night shift to perform a semi-structured interview (3 – 10 minutes) regarding their experience of sleep and well-being.

- Nurse, Physician, Other
- Full Time, Part Time, or Per Diem
- Fixed, Rotating/As needed, PRN
- Age Groups (20 – 30, 31 – 40, or 40+)

Tell me about your experience working the night shift.

Why do you work the night shift?

How does working the night shift affect your well-being?

What can be done to improve your experience?

## DATA ANALYSIS & RESULTS

- ⚠ High turnover rates of new graduate nurses were associated with unmet needs of night shift nurses.
- 🌙 Employees who prefer the night shift had a better experience than those who were required who work nights or because it was the only job available.
- 😞 Mid-career nurses between 31 – 40 years reported the lowest rates of satisfaction.
- 🍴 Participants made frequent requests for increased access to wellness services, healthy food options in cafeteria, and consistent breaks.
- 👥 Insufficient staffing was a barrier employee health and well-being.

## INTERVENTIONS

### *Lifestyle Balance Model<sup>15</sup>*

#### ✓ Taught Night Shift Training Program

- The author provided an interactive presentation to physician fellows, nurses, new employees, and Human Resources.
- The program educated participants about sleep hygiene, and incorporated the Lifestyle Balance Model<sup>15</sup> to promote balance between sleep and well-being.
- The author taught 6 classes over the course of the 16-week project.

#### ✓ Created Employee Well-Being space

- The well-being space included a mediation/relaxation room, exercise classes, and fitness equipment.
- The wellness department made the space available 24-hrs a day to support night shift workers.

## CONCLUSION

The dynamic, reciprocal relationship between sleep and well-being emerged as the guiding philosophy behind this project. Lack of access to existing wellness programs for night shift workers indicated the need for multi-level interventions. Though not implemented during the 16-week period, the author made several recommendations for future implementation. To address frequent requests for healthy food access, the author recommended modification of cafeteria services to include longer hours, fresh foods, and smaller quantities. The hospital has not adopted these recommendations due to logistical and political barriers within the organization. The author also recommended modification of scheduling practices to better support circadian rhythm function. Key leaders supported the recommendation, though adoption was challenged by stratification of scheduling practices across departments and unique departmental needs. This project has potential for replication at other hospitals or formalized into a research study by future students.

