

**The Impact of Sleep Deprivation among Nightshift Nurses**

Tirae Littles

Lakeview College of Nursing

Dr. Ariel Wright

October 20, 2022

## **The Impact of Sleep Deprivation among Nightshift Nurses**

### **Relationship between job satisfaction and sleep quality of female shift-working nurses: using shift type as a moderator variable**

In this article, Chang and Chang (2019) explored the association between sleep quality and job satisfaction, especially among female night-shift nurses. Nurses working during the night report a relatively higher dissatisfaction than those working during the day or evening shifts. The study revealed a close link between sleep quality, especially attributed to sleep restriction or deprivation, and job satisfaction.

#### **Key Points**

Sleep deprivation is one of the most frustrating experiences among female night-shift nurses. These nurses experience circadian disruptions because they often work irregular shifts, negatively affecting their biological clocks. The resulting psychological issues, which are relatively more prevalent among females, culminate in low or reduced job satisfaction.

#### **Assumptions**

The research behind the article is founded on the assumption that job satisfaction is closely related to psychological well-being, which is, in turn, dependent on the quality of sleep. Female nurses are presumably relatively more susceptible or volatile when handling psychological challenges than men. Ostensibly, the lack of or reduced job satisfaction hampers nurses' ability to deliver quality care.

#### **Deficit/Conclusion**

The study revealed a positive association or correlation between sleep quality and job satisfaction among female nurses. The relationship between the two variables depends on the type of shift, meaning that since night-shift nurses become accustomed to poor-quality sleep,

their satisfaction has less of a direct correlation with their sleep quality. Although exhibiting the limitation that it overlooked various other key factors, such as the nurses' healthcare statuses, this study is bound to shape the direction of future studies. Further inquiry focusing on these factors is necessary. Administrative managers must provide incentives and interventions to promote improved quality sleep for nurses and warrant higher job satisfaction.

### **Sleep health and predicted cognitive effectiveness of nurses working 12-hour shifts: An observational study**

In their research, James et al., (2020) sought to explore the sleep patterns and cognitive decline among nurses working night shifts, focusing on finding solutions to the growing concern of sleep restrictions among clinical staff members. Nurse practitioners working overnight are subject to and prone to the challenges facing night-shift workers in many other industries. Existing literature has sufficient evidence that clinical errors, accidents, and long-term undesirable health outcomes are directly attributed to shift-work sleep restriction and resulting fatigue among healthcare practitioners.

#### **Key Points**

Sleep restriction is a major challenge facing nurse practitioners, especially due to the demanding nature of their work and various other factors, including nurse shortage. Night-shift nurse practitioners experience a remarkably higher decline in sleep than day-time shift practitioners. Importantly, sleep restriction has adverse cognitive implications, often hampering the delivery of effective care.

#### **Assumptions**

The study assumes that sleep restriction and fatigue are common challenges throughout all industries, including healthcare facilities, embracing the round-the-clock operational

approach. In the clinical context, sleep deprivation and fatigue result in medical errors, accidents, and various other negative long-term health outcomes. A sure step towards finding the solution to sleep deprivation and associated challenges is to measure sleep patterns among nurses from a psychological perspective.

### **Deficit/Conclusion**

The study revealed that night-shift nurses have less sleeping time compared to their day-shift counterparts. Besides, the latter group reports higher sleep fragmentation resulting in latency and poor sleep efficiency. Nevertheless, the researchers note that healthcare facilities ought to develop and embrace new and advanced sleep-monitoring approaches, as these would facilitate easy assessments of possible implications of sleep deprivation on nurses' performance. These findings have possible implications that healthcare facilities might need to endeavor to establish various nurses' capacity to handle or withstand the pressure of working additional night-shift hours when deciding to assign them.

### **A quality improvement project to improve pediatric medical provider sleep and communication during night shifts**

In their article, Loew et al., (2018) explored the effectiveness of medical-specific communication interventions to help improve sleep among healthcare practitioners. The study behind the article was motivated by the need to address the sleep deprivation challenge among nurses and other clinical professionals. Researchers observed a significant improvement in communication between nurses and other care providers, although the standardization of communication did not have a remarkable impact on provider sleep.

**Key Points**

The night shift clinical staff is prone to sleep deprivation and related challenges due to paging activity, including fatigue. Interventions to aid streamlined medical-specific communication have proved effective in aiding improved sleep and communication in the clinical setting. Although these interventions enhance communication, they have limited or no evident positive impact on night-shift workers' sleep. Nurses may require a yet-to-be-determined page reduction threshold to report a notable increase in sleep.

**Assumptions**

The researchers assume that night-shift nurses depend on sanctioned sleep times for their well-being and sustained job performance. They resolved to test the impact of having a quality improvement intervention to enhance organizational paging practices, as this could positively affect providers' sleep. However, the findings did not approve this assumption, even as the interventions helped improve communication among the clinical staff.

**Deficit/Conclusion**

Standardizing paging communication yielded improved communication, with an insignificant impact on night-shift providers' sleep. The findings indicate that reviews and improvements in organizational paging practices are necessary to ensure enhanced sleep among night-shift care providers. However, the findings have limited generalizability due to the distinct nature of various inpatient units, even though the strategies used in the interventions could be transferable. Further research is necessary to determine the threshold that could help boost night-shift workers' sleep.

## References

- Chang, W. P., & Chang, Y. P. (2019). Relationship between job satisfaction and sleep quality of female shift-working nurses: using shift type as a moderator variable. *Industrial Health*, 57(6), 732-740. <https://doi.org/10.2486/indhealth.2018-0258>
- James, L., James, S. M., Wilson, M., Brown, N., Dotson, E. J., Edwards, C. D., & Butterfield, P. (2020). Sleep health and predicted cognitive effectiveness of nurses working 12-hour shifts: An observational study. *International Journal of Nursing Studies*, 112. 103667. <https://doi.org/10.1016/j.ijnurstu.2020.103667>
- Loew, M., Niel, K., Burlison, J. D., Russell, K. M., Karol, S. E., Talleur, A. C., ... & Crabtree, V. M. (2018). A quality improvement project to improve pediatric medical provider sleep and communication during night shifts. *International Journal for Quality in Health Care*, 31(8), 633–638. <https://doi.org/10.1093/intqhc/mzy221>

