



## DOES THIS LOOK ALL TOO FAMILIAR?

*“What impact has tertiary hospital-based shift work have on nurses’ sleep in the acute setting?”*

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### WHAT’S THE ISSUE?

Shift work is a requirement of nursing and is necessary to provide optimal care around the clock, especially in the acute setting (Lin, Liao, Chen & Fan, 2014). However working shift patterns can have an impact on nurses’ health outcomes. Irregular shift work has been shown to disrupt nurses’ sleep patterns, resulting in ‘Shift Work Disorder’, a misalignment of sleep with the circadian rhythm. This has been associated with difficulty in falling asleep, arousals during sleep and premature awakenings, all decreasing the quantity and quality of sleep (Colten & Altevogt, 2006). This specifically affects nurses working evening and night shifts, especially those that rotate their shifts (Chan, 2008).

### WHAT ARE THE IMPLICATIONS?

- Sleep deprivation causes fatigue, chronic fatigue and insomnia (Lin et al., 2014).
- A decrease in job performance and an increase risk for adverse patient outcomes (Caruso, 2014).
- An increase in work related illnesses and injuries lead to more absentee days and an increase in risk for chronic diseases (Caruso, 2014).
- A decrease in the nurses’ quality of life and increases the chance of developing mental illnesses such as anxiety and depression (Colten & Altevogt, 2006).
- The increased risk of weight gain, which affects nurses physically and mentally (Chan, 2008).

### WHAT ACTION CAN BE TAKEN?

#### Employers

- Reduce effects by utilising rostering techniques – self-scheduling, clockwise rotation and ensure adequate rest days in between the change in shifts (Lin et al., 2014).
- Increase staff support – especially for female nurses and utilise ‘pool’ nurses to prevent overtime (Caruso, 2014).
- Provide a health promoting work place to encourage a healthy lifestyle (Lin et al., 2014).
- 24/7 gym facilities on the premises to encourage physical activity before and after shifts (Chan, 2008).
- Policies on unhealthy food – remove the snack boxes and fizzy drinks and replace with healthier options.

#### Employees

- Take planned naps before shifts.
- Optimal sleep environment free from interruptions e.g. a dark quiet room free from technology (Lin et al., 2014).
- Plan your meals and snacks to minimise bad choices.
- Exercise regularly, get fresh air and sunlight, take the stairs and walk around the block during lunchtime.

### CONCLUSION

There is a vast range of evidence that suggests tertiary hospital-based shift work impacts on nurses’ health outcomes in the acute setting. There is strong evidence to suggest that nurses are effected by the disruption in sleep patterns which causes insomnia, fatigue and sleep deprivation. This leads to fatigue, chronic fatigue and mental illness which takes its toll on the nurse physically, mentally and emotionally. These outcomes have implications on practice, especially within the New Zealand nursing context.

#### References

- Caruso, C. C. (2014). Negative impacts of shiftwork and long work hours. *Rehabilitation Nursing*, 39(1), 16-25.
- Chan, M. F. (2008). Factors associated with perceived sleep quality of nurses working on rotating shifts. *Journal of Clinical Nursing*, 18(1), 285-293.
- Colten, H. R., & Altevogt, B. M. (2006). Sleep disorders and sleep deprivation an unmet public health problem. Washington, DC, National Academies.
- Lin, S. H., Liao, W.C., Chen, M. Y., & Fan, J. Y. (2014). The impact of shift work on nurses’ job stress, sleep quality and self-perceived health status. *Journal of Nursing Management*, 22(1), 604-612.



## PECOT Model

PECOT Category	Information Relating to Question	Explanation
Population	Tertiary hospital-based Nurses that work in acute settings.	Tertiary hospital-based nurses make up the majority that work shift work. Tertiary level hospitals provide a high level of care and facilities. The acute setting is where I am interested in working so wanted to investigate the outcomes.
Exposure (Intervention)	Nurses who work 8hr day, evening and night shifts in the acute setting.	These are the nurses that will be used due to the demanding nature of irregular shift patterns in the acute setting.
Comparison/Control	Nurses who work regular day shifts between 0700hrs and 1800hrs.	These nurses will be used as the comparison due to their regular shift patterns.
Outcome	Nurse sleep patterns and the effect of it.	We want to know what the impact on sleep is of nurses who perform shift work to be able to identify the best practice for managing shift work to minimise harm to nurse's health outcomes.
Time	Over the period of the literature	Literature used within the last ten years will be examined.

## Summary

Visual learning is a style in which information is associated with images and can be presented in the format of a poster (Mayer & Massa, 2003). Posters allow the publisher to present information in a way that has been proven effective in assisting nursing students to solidify and synthesize new knowledge (Sorenson & Boland, 1991). It also allows the publisher to present their work in an artistic manner which reflects them as a person. Presenting vital information in a poster format during a public forum, allows the publisher to showcase their work to a large audience. It can also provide a base for discussions around the topic in which develops the student's communication skills, and provides opportunities for peer learning.

I chose to present my work in a poster format due to the above reasons. My topic effects many nurses at all levels, in which a poster that could be showcased in the cafeteria, would reach a large audience. The information conveyed in the poster could benefit many nurses and by presenting it in an artistic manner it is easy and quick to read during their scheduled breaks.

As a student having performed shift work myself, I was exposed to the detrimental effects of irregular shift work patterns. This made me realise I needed to manage and prevent the effects to enable a healthy work-life balance with future employment and I hope by sharing the information in a poster it may benefit others.

## References

- Mayer, R. E., & Massa, L. J. (2003). Three facets of visual and verbal learners: cognitive ability, cognitive style, and learning preference. *Journal of Educational Psychology*, 95(4), 833.
- Sorenson, E. S., & Boland, D. (1991). Use of the poster session in teaching research critique to undergraduate nursing students. *Journal of Nursing Education*, 30(7), 333-334.