# **OBESITY IN SHIFT WORKING NURSES:**

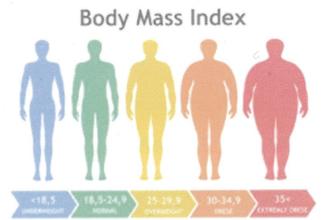
Is there a higher prevalence of obesity in nurses working shift work than nurses working traditional nine to five hours?

## **INTRODUCTION**

Obesity can be defined as abnormal or exorbitant fat accumulation and is classified by a BMI of 30 or higher and can be a major health risk for many chronic conditions such as cardiovascular disease, diabetes and hypertension to name a few (World Health Organisation, 2018). Determinants of an unhealthy

weight can include but is not limited to; unhealthy diet high in fats and sugars, a lack of physical exercise and irregular and inefficient sleep (Ministry of

Health, 2017).



(Downing, 2018)

Promoting a healthy, balanced lifestyle is a crucial part of a nurse's role, however nurses' working shift work experience a lack or regular and efficient sleep which can influence their exercise and eating dietary habits hence leading to obesity.

## LITERATURE REVIEW

From the literature review I have conducted I have found research suggesting that nurses working shift work rather than traditional hours are more likely to be obese. This is most likely due to changes in their sleep, stress, eating and exercise habits that nurses working traditional nine to five hours aren't experiencing to the same extent (Turner & Zhao, 2008).

The disruption of nurses daily routines can consequently result in an unhealthy diet compromising of high energy dense foods that are high in fat and simple sugars and lacking nutrients and vitamins (Craft & Gordon, 2015). Sleep patterns are also interrupted due to working shift work, poor sleep contributes to obesity as changes in circadian rhythm affects the metabolism of food and nutrients in the body (Atkinson, Fullick, Grindey, Maclaren & Waterhouse, 2008; Owens, 2017).

Nurses are exposed to a variety of scenarios with many of these putting large amounts of stress and pressure on the staff. Weight gain can be seen in stressed individuals due to a change in eating patterns and a higher level of cortisol present. Cortisol is a steroid hormone produced by the adrenal glands which can lead to fluid retention and weight gain (Harris, Nagy & Vardaxis, 2014).

### RECOMMENDATIONS

I have developed two recommendations to address the high prevalence of obesity in nurses working shift work, both involving health promotion as the key approach in both. These recommendations are;

- Providing health education and promotion around resting and recovering post shift.
- Encourage physical activity for nurses outside of the work place.

My rationale for these recommendations are that nurses work in a high stress and physically demanding job environment, which can influence how they spend their leisure time. Promoting a healthy balance where nurses have ways to rest and destress after shift, as well as incorporating a good amount of physical activity means nurses are at a lesser risk of health complications, and workplace injuries due to lower weight.

## CONCLUSION

Obesity is an ongoing health issue in New Zealand's population of which nurses and health professionals are trying to address. However, literature suggests there is a higher prevalence of obesity in nurses who work shift work. This presentation has outlined some of the contributing factors to shift working nurses experiencing weight gain, and some possible interventions and strategies to improve awareness and the health of shift working nurses.

### **REFERENCES:**

- Atkinson, G., Fullick, S., Grindey, C., Maclaren, D., & Waterhouse, J. (2008). Exercise, energy balance and the shift worker. *Sports Medicine*, *38*(8), 671-685. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2784228/
- Craft, J. A., & Gordon, C. J. (2015). *Understanding pathophysiology* (2nd ed.). Australia: Mosby Elsevier.
- Downing, S. (2018, April 4). *BMI ranges* [Image]. Retrieved from https://coach.nine.com.au/2018/04/04/13/07/what-is-bmi
- Harris, P., Nagy, S., & Vardaxis, N. (2014). Mosby's dictionary of medicine, nursing & health professionals (3rd ed.). Australia: Elsevier.
- Owens, B. (2017). The impact of shift work on nurse's quality of sleep. *ABNF Journal*, 28(3), 59-63. Retrieved from http://
  web.a.ebscohost.com.op.idm.oclc.org/ehost/detail/detail?
  vid=0&sid=a30a0b6e-de27-4389-8445-91edd31aa618%
  40sessionmgr4010&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%
  3d#db=ccm&AN=125076515
- Turner, C., & Zhao, I. (2008). The impact of shift work on people's daily habits and adverse health outcomes. *Australian Journal of Advanced Nursing*, 25(3), 8-22. Retrieved from http://web.a.ebscohost.com.op.idm.oclc.org/ehost/pdfviewer/pdfviewer?vid=1&sid=09bbc3b6-61f2-41c2-9fbf-04cbdfcb6785%40sessionmgr4006
- World Health Organisation. (2018). Obesity. Retrieved from http://www.who.int/topics/obesity/en/

### **Presentation Rationale:**

An academic poster is used to convey an intended message in a visual display. Although limited information can be displayed on a poster, it can be used to spark further interest and discussion in the subject (Ilic & Rowe, 2009). I have decided to use a poster to display my presentation as it is largely self-explanatory and introduces the topic to an audience but can further be discussed at a more in-depth level with interested individuals. My poster allows the health issue of obesity to be discussed in relation to how it can be experienced by nurses working shift work, as well as recommendations on how to approach this health issue. Obesity is a large catalyst to other health complications such as cardiovascular disease, diabetes and hypertension which all place a large burden on our health system (Craft & Gordon, 2015). Nurses are advocates and driving forces in the health of our population, therefore the health of our nurses is crucial.

#### PECOT:

PECOT category:	Information relating to	Explanation:
	question:	
Population	Registered nurses who work	Shift work is defined as
	shift work hours.	working a shift that takes
		place outside of traditional
		nine to five hours (Harris,
		Nagy & Vardaxis, 2014).
Exposure/ intervention	Nurses that work shift work	Obesity being defined as
	and are classified as obese.	having a body mass index of
		over 30 (World Health
		Organisation, 2018).
Comparison	Nurses working shift work	To see whether obesity is
	versus nurses not working	more prevalent in nurses
	shift work (traditional nine	working shift work rather
	to five hours).	than traditional hours.
Outcome	To see whether there is a	To be able to address why it
	correlation between nurses	is a health issue and look at
	working shift work and	possible solutions for this.
	obesity.	,
Time	Time is not relevant in this	Time is not relevant in this
	situation.	situation.

### References:

Craft, J. A., & Gordon, C. J. (2015). Understanding pathophysiology (2nd ed.). Australia: Mosby Elsevier.

Harris, P., Nagy, S., & Vardaxis, N. (2014). Mosby's dictionary of medicine, nursing & health professionals (3rd ed.). Australia: Elsevier.

Ilic, D., & Rowe, N. (2009). Innovating professional knowledge transfer: from academic poster to 'media poster'. *Medical Education*, 43(5), 496. Retrieved from http://dx.doi.org.op.idm.oclc.org/10.1111/j.1365-2923.2009.03338.x

Schneider, Z., & Whitehead, D. (2013). Nursing and midwifery research methods and appraisal for evidence-based practice (4th ed.).