# THE EFFECTS OF SHIFT WORK ON NURSES AND THEIR HEALTH

by Lyn Stewart

Based on the CLINICAL QUESTION: Nurses and shift work. How does this affect their health and the care of their patients and how can we make ourselves safer and healthier, personally and in the workplace?



### **Brief overview:**

The responsibility of shift work is an area that affects all health practitioners at one stage of their professional careers. This is the practice issue that bought about this clinical question; Nurses and shift work. How does this affect their health and the care of their patients and how can we make ourselves safer and healthier, personally and in the workplace? The resulting literature review covered issues with shift length, physical changes to the body due to the adverse effects of working shift work (Geiger-Brown & Lipscomb, 2009), reasons for staff resistance to shift changes and what was being done to help staff deal with the effects of shift work both on a professional level (Scott, Hoifmeiser, Rogness & Rogers, 2010) and also after they leave work to help regain a healthy amount of sleep to function on (Scott, 2008).

Just feeling tired? Or does shift work have a more long term physical and psychological toll on the shift worker?

The increased risks of myocardial infarct, Cardio vascular accidents, diabetes, high blood pressure and accidents and errors are also well documented with those that do not get enough sleep (Caruso, 2010).

The interruption to the circadian rhythm during nightshift is associated with both changes in metabolic and immune function. With cardio-vascular changes due to a sympathetic nerve response and the failure of blood pressure to return to its baseline reading after a shift. Also there being insufficient darkness to produce and absorb melatonin, which is a strong anti-inflammatory hormone (Gieger-Brown & Lipscomb, 2009).

The International Agency for cancer, which is a section of WHO (World Health Organisation) has also has classified shift work as a 'probable' carcinogen with suggestions that melatonin deficiency is responsible. Concentration and reaction times are also affected. Memory and motor skills are compromised (Gieger-Brown & Lipscomb, 2009).

Nurses general health is also said to be affected with poor health habits, related to poor sleep patterns. Resulting in higher numbers of staff smoking and also suffering from obesity (Caruso, 2013). Diseases that are exacerbated by lack of sleep also can include anxiety and mood disruptions, and gastrointestinal disturbances (Caruso, 2013).

### **Conclusion:**

The literature is conclusive; shift work is bad for your health. But as health professionals there are things we can do to mitigate the effects. We also need to take responsibility for our own health in a field that is stressful and tiring. These recommendations are as follows...

### Description of Recommendations.

Staff awareness of the effects of shift work is the place to start...

This leads to education in several areas, including team work and support in the workplace with frequent breaks and naps and regular coffee!

Acknowledgment of staff if they are feeling fatigued to communicate with their colleagues to provide back up with areas like double checking medication (Fedele, 2015).

Also offering support with sleep assessments and treatment from experts in sleep related issues. Encouragement to use public transport on the way home from shifts or consider carpooling with other shift workers (Caruso, 2013).

Sleep retraining which can include wearing dark glasses on the way home from night shift to help reduce the impact on the circadian rhythm that daylight brings.

Avoiding caffeine 5 hours before sleep

Earplugs to reduce outside noise disruptions.

A healthy diet. Low sugar or other stimulant intake.

A dark, quiet room for sleeping in (Scott, 2008).



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### **Summary of Rationale:**

One of the areas of concern for staff that work shift work is the effect that shift work has on their day to day health and wellbeing (Ball, Dall'Ora & Griffith, 2015). This effects not only their personal lives but their ability to function at work. The literature review this writer undertook supports this and a way to bring that message to staff in a condensed and easy to read format clearly indicates the need for a poster. It would outline the physical and psychological risks of shift work and also offer some simple strategies and recommendations on how to mitigate those effects. Nurses work shift work for a variety of reasons (Calkin, 2012) with these often being lifestyle or financially driven. A visual aide such as a poster which was engaging plus informative would also serve as a gentle reminder on a day to day basis on what nurses need to do to remain as healthy as possible.

### PICO/T Model Graph

### **Explanation:**

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Population: Nurses, shift work and care.	Shift work is a common denominator in nursing. This can effect nurses physically and personally. Also under the wider scope of safety; both in relation to self and their patients.
Exposure: Nurses who worked shift work.	We will be looking for articles that relate to shift work, with both the physical and emotional impact that this has on nurses and patients. Plus articles that relate to factors that can mitigate the effects of shift work.
Comparison / Control: Nurses that prefer extended shifts	Reasons why and rationale behind this.
Outcome: To raise awareness to staff of the effect shift work can have on them and their patients.	To help nurses be aware of the risks of shift work and to formulate actions that can help mitigate these risk factors.
Time: Ongoing (Moyer, 2008)	

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