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The Effects of Circular Working Hours on Nutrition and Sleeping of Nursing Staff

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Department of Nursing, Technological Educational Institute of Western Greece, Patras, Greece It is a fact that in today's developed societies the demands for work at night are rising. The number of workers employed in night shifts is large, reaching up to 4% of all workers [1].

Men and women react very differently to the challenge of working many hours and circular working hours. For example, women eat more fat and high-sugar snacks, doing less exercise, drinking more coffee, and if they are smokers, they smoke more than their male counterparts [2]. In contrast to men, long working hours and do not have a negative effect on their physical exercise, drinking caffeine and how much they smoke [2].

Leonard (1996) [3] reports that lunch is not consumed by 25% of night shift workers while 16% of workers drink more coffee and 13% smoke more at night shift. Bjorvatn, et al. [4] found that short sleep duration was associated with elevated BMI and increased prevalence of obesity.

The working environment threatens the nurses health according to a study conducted in Greece and especially night shift seems to affect the duration and quality of sleep. The researchers found that only 8.9% of respondents provided satisfactory hours of sleep. This may be due to the stress experienced by nurses in their work and the increased obligations they may have as parents and husbands [5].

Sleep disturbances are a serious problem for nurses, while insomnia and fatigue as a result of sleep disorders can have devastating effects on nursing's professional performance and quality of life, threatening their mental health. According to DSM-IV, the sleep disturbance due to shift work is defined by the presence of excessive drowsiness and/or insomnia for at least one month in combination with shift work. Therefore, shift workers can be distinguished in three categories: those who do not have any symptoms, those who show symptoms without meeting the diagnostic criteria of the disorder and those suffering from the disorder DSM-IV-TR [6].

Moreover, studies have correlated sleep disorders with obesity and increased diabetes prevalence depending on years of shift work [7,8].

Another study found that circular workers often experience peptic ulcer and gastrointestinal symptoms, such as constipation and diarrhea. Both metabolic disorders and gastrointestinal symptoms are due to meals at unusual hours and gastric secretions in the middle of the night that disrupt the normal rate of enzyme activity and increased coffee and alcohol consumption in this class of workers [9].

Also, a large sample study (n = 6000) correlates the excessive drowsiness with increased incidence of myocardial infarction and heart failure, increased mortality and mortality due to cardiovascular disease [10]. Chronic lack of sleep has been associated with low levels of iron in the body, which in turn is responsible for other sleep disorders, such as restless legs syndrome [11].

Finally, circular workers are more likely to be involved in a work accident than workers on stable working shifts. Specifically, studies have found that the possibility of self-injuring from health professionals with a needle, is twice as high as a night shift compared to the morning shift, while road accidents are more common when returning home after a night shift [12].

In conclusion, nurses and doctors are prone to accidents, mistakes and omissions.

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Fatigue is physical, mental, and psychological. The lack of sleep, as well as the proper nutrition, can lead to exhaustion, anxiety and nervousness in the performance of tasks, reduced perceptions and responses, wrong diagnosis, mistakes involving both incorrect dose or medication, and cuts from the misuse of consumable health material [13].

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