



Evaluation of the association between drug use and sleep quality in shift workers vs daytime workers

  10.56238/thebestiimulti2022-002

Magda Rosado

Lucinda Carvalho

André Coelho

1 INTRODUCTION

Sleep is a physiological process and a fundamental biological function for human survival¹. Disturbances in its quality can trigger significant changes in the quality of life of the individual². The quality of sleep can be influenced by several factors, such as: previous medical conditions, the consumption of medications and/or stimulant substances, working hours, among others³. The use of medication to alleviate sleep disorders caused by working hours is common; however, if abused and unsupervised, it can trigger new pathological conditions⁴. On the other hand, when prescribing medications for several pathologies, it is common to neglect their adverse effects on sleep⁴.

2 OBJECTIVE

Determinar a associação entre o consumo de medicamentos e a qualidade do sono em trabalhadores por turnos vs trabalhadores diurnos.

3 METHODOLOGY

A cross-sectional study of quantitative nature was conducted. The target population was shift and daytime workers, including individuals aged ≥ 18 years and with professional activity ≥ 6 months. The sample was by convenience. Three questionnaires were applied: Epworth Sleepiness Scale, Pittsburgh Sleep Quality Index, and a sociodemographic and medication consumption questionnaire. They were made available online, through a link that was disseminated by the "snowball" method, after agreement with a document informing of participation in the study. Statistical treatment was performed with SPSS software in addition to Microsoft Excel. This study was approved by the Ethics Committee of the Escola Superior de Tecnologia da Saúde de



4 DEVELOPMENT

The sample consisted of 296 participants, of which 124 (41.89%) had daytime working hours and 172 (58.11%) had shift work. Of the participants, 130 (43.92%) belonged to the health care sector, 116 (39.19%) to industry, and 50 (16.89%) to other sectors. After a bivariate analysis, poor sleep quality was associated with the presence of sleep disorders ($p < 0.001$), the type of work shift ($p < 0.001$), and the use of sleep medication ($p < 0.001$), among other variables. Although shift workers had worse sleep quality they did not have a higher consumption of medication with direct action on the central nervous system or with proven effects on sleep. There was no association between medication consumption and sleep quality. When adjusting the different variables that individually were associated with poor sleep quality, through a logistic regression model, none showed an increased risk of poor sleep quality.

5 CONCLUDING REMARKS

Sleep quality is such a complex issue that its analysis should be multifactorial and not restricted to a simple association between a single variable and sleep quality. Although there are several factors that influence it negatively, when adjusted, they did not reveal statistical significance of an increased risk of this.



REFERENCES

1. Mukherjee S, Patel SR, Kales SN, Ayas NT, Strohl KP, Gozal D, et al. An Official American Thoracic Society Statement: The Importance of Healthy Sleep. Recommendations and Future Priorities. *Am J Respir Crit Care Med*. 15 de Junho de 2015;191(12):1450–8.
2. Müller MR, Guimarães SS. Impacto dos transtornos do sono sobre o funcionamento diário e a qualidade de vida. *Estud Psicol Camp*. Dezembro de 2007;24(4):519–28.
3. Rocha MCP da, Martino MMFD. Stress and sleep quality of nurses working different hospital shifts. *Rev Esc Enferm USP*. Junho de 2010;44(2):280.

Chang W-P, Peng Y-X. Meta-analysis of differences in sleep quality based on actigraphs between day and night shift workers and the moderating effect of age. *J Occup Health*. 2021;63(1):e12262.