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Social relational quality and ethical climate as the predictors of sleep quality in employees of the operating room: a hierarchical linear regression analysis

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Abstract

Introduction Sleep quality is a crucial aspect that can affect the health, job performance, and safety outcomes of operating room employees. However, the social and work-environmental factors that predict sleep quality remain unclear. This study aimed to determine the role of social relational quality and ethical climate as the predictors of sleep quality in employees of the operating room using hierarchical linear regression analysis.

Methods This cross-sectional and multi-center study was conducted on 232 operating room employees. Data were collected using the social relational quality scale, Hospital Ethical Climate Survey, and Pittsburgh Sleep Quality Index. Pearson's correlation coefficient, ANOVA, t-test, and hierarchical multiple linear regression were used to analyze the data.

Results The mean scores of social relational quality and standardized ethical climate were 54.80(SD = 6.35) and 3.40(SD = 0.68) in the operating room employees. The mean score of sleep quality was 6.70(SD = 3.66) which was in the poor range. The last step of regression analysis showed that profession (β=-0.22, $p = .02$) and social relational quality (β=-0.20, $p = .03$) had a significant proportion of the variance of sleep quality. Based on the model, work experience, profession, social relational quality, and ethical climate accounted for 15% of the changes in sleep quality in the operating room employees.

Discussion This study indicated that more than half of the operating room employees reported poor sleep quality. Moreover, profession and social relational quality were the predictors of sleep quality. Conducting interventions to improve social relational quality might enhance the sleep quality of operating room employees.

Keywords Operating rooms, Sleep quality, Ethics, Professional, Communication

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population, limiting the extent to which these findings can be applied to deferent organizational and demographic contexts. Therefore, the study should acknowledge its limitation and recommend future research with a larger and more diverse sample to strengthen the reliability and generalizability of the results.

Conclusion

In summary, poor sleep quality among operating room employees was influenced by work experience, profession, social relational quality, and ethical climate. Addressing these factors through targeted interventions could improve overall well-being. Furthermore, given that poor sleep quality affects a majority of operating room employees; interventions must address key predictors like social relational quality and profession-specific stressors. Therefore, improving family intimacy, family commitment, and friendships may be effective in improving the quality of sleep. Healthcare institutions should consider implementing strategies that improve the employees' social relational quality and sleep quality. Strengthening workplace relationships, fostering a supportive environment by friends and family, and promoting work-life balance may help reduce sleep disturbances. Further studies should explore how organizational policies, work culture, and ethical climate influence the employees' sleep patterns. Longitudinal research can help determine whether changes in workplace dynamics lead to long-term improvements in sleep quality.

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Authors' contributions

MR, NP, AA, MS participated in conceptualization of this study. AA participated in management of the data collection. MR, AA and MS conducted the management of the data analysis. All authors participated in writing and approving the original draft of the manuscript.

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Data availability

The data of this study will be available by email to Masoume Rambod.

Declarations

Ethics approval and consent to participate

Research Ethics Committees of Schools of Nursing and Midwifery, Management and Medical Information Science-Shiraz University of Medical Sciences (IR.SUMS.NUMIMG.REC.1402.130, approval date: 2024-01-06) approved this study. The study was conducted based on the Declaration of Helsinki. The questionnaires were completed anonymously by the operating room employees. The written consent form to participate in this study was obtained from the operating room employees. All of them signed the consent form. It was approved that this consent was informed.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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