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Cross-Sectional Screening for Insomnia and Burnout in Nurses With and Without Shift Work

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Background: Sleep disorders and burnout can affect job performance (efficiency, productivity, task execution speed, patient supervision) and job satisfaction. The aim of the study was to investigate relationships between sleep quality and daytime sleepiness, burnout and job performance in nurses with and without shift-work.

Methods: A cross-sectional questionnaire study was conducted from March till May 2018 across 10 wards in one single Belgian hospital. Validated questionnaires were used to assess insomnia (Insomnia Severity Index, ISI), daytime sleepiness (Epworth Sleepiness Scale, ESS), shift work related sleep problems (Shift Work Sleep Questionnaire, BSWSQ), burnout (Maslach Burnout Inventory) and job performance (Job Performance Scale).

Results: Out of 226 eligible candidates, 175 nurses completed the questionnaires (response rate: 77.43%, female: n=149 (85.1%), age: range 20-65 years). The majority performed shift work in a rotation schedule (n = 119, 68 %), 45 (25.7%) nurses only did day shifts and 11 nurses (6.3%) exclusively performed nightshifts. Insomnia according to ISI criteria was detected in 38.3%. Almost half of the sample (n=84, 48%) had symptoms of daytime sleepiness (ESS > 10), whereas 9.1% (n=16) used sleep medication (according the PSQI item probing this dimension). Increased risk for burnout was observed in 32% (n=56) of the nurses; 16.6% (n=29) had a clinical burnout. Sleepiness was significantly correlated with burnout (r=0.31, p<0.01).

Discussion: A positive correlation between sleepiness and burnout was documented in nurses. Female gender and burnout were significantly associated with insomnia, while working a long cycle shift pattern and experiencing daytime dysfunction were significantly associated with burnout. A significant negative association was observed between patient-related burnout and job performance. Insomnia and sleep deprivation can negatively impact on patient safety, which can lead to increases in medical incidents and errors.

Conclusions: Specific characteristics of shift work can directly affect sleep characteristics and burnout and indirectly job performance in nurses which can have an important impact on patient safety.

Title:

Cross-Sectional Screening for Insomnia and Burnout in Nurses With and Without Shift Work

Keywords:

burnout, shift work and sleep disorders

References:

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Abstract Summary:

In our study, a positive correlation between sleepiness and burnout was documented in nurses. Not only is there an impact on job performance, there is also an impact on patient safety. In the presentation we give a brief overview of the results of the study with practical recommendations.

Content Outline:

1. Introduction

A. Sleep disorders and burnout can affect job performance and job satisfaction

2. Body

2.1 A cross-sectional questionnaire study in a Belgian hospital

2.2 Validated questionnaires were used:

- a. to assess insomnia (Insomnia Severity Index, ISI)
- b. to assess daytime sleepiness (Epworth Sleepiness Scale, ESS)
- c. to assess shift work related sleep problems (Shift Work Sleep Questionnaire, BSWSQ)
- d. to assess burnout (Maslach Burnout Inventory)
- e. to assess job performance (Job Performance Scale)

2.3 Results

- a. from 226 nurses, 175 completed the questionnaire (response rate 77.43%)
- b. insomnia according to ISI criteria was detected in 38.3%
- c. 9.1% uses sleep medication
- d. increased risk for burnout was observed in 32% of the nurses
- e. 16.6% had a clinical burnout
- f. sleepiness was significantly correlated with burnout ($r=0.31$, $p<0.01$)

2.4 Discussion

- a. a positive correlation between sleepiness and burnout was documented
- b. insomnia and sleep deprivation can negatively impact on patient safety

2.5 Conclusion

Specific characteristics of shift work can directly affect sleep characteristics and burnout and indirectly job performance in nurses which can have an important impact on patient safety.

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