Sleep Quality and Work Performance Among Shift Work Critical Care Nurses: A Cross-Sectional Study

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ABSTRACT

Background: Sufficient sleep quality empowers a well-balanced immunity, and supports work performance and work safety. Sleep quality is particularly important in the population of nurses.

Objectives: To determine the association between nursing shift work in intensive care units and sleep quality and work performance.

Setting: Salmaniya Medical Center (SMC), Bahrain.

Design: Survey using the Pittsburgh Sleep Quality Index (PSQI) and Nurse Work Function Questionnaire (NWFQ).

Methods: The study was performed from 1st February 2021 to 30th April 2021. PSQI and NWFQ were used in a cross-sectional survey in random sample of 200 nurses working in five intensive care units in SMC. For data analysis, descriptive statistics, t-tests, ANOVA, Pearson's correlation, and stepwise regression were used.

Results: One hundred seventy-eight (89%) reported poor sleep quality, with a mean (SD) of 13.6 (\pm 4.9); it was significantly associated with nurse performance level. One-hundred forty-five (72.5%) nurses were females; 159 (79.5%) were over 31; 157 (78.5%) were married, and 142 (71%) had a bachelor's degree. Their age ranged from 24 to 65 years old. One hundred eighty-eight (94%) were staff nurses; 178 (89%) were shift workers; 164 (82%) worked three-night shifts. One hundred forty-eight (74%) had worked for more than six years. The following were found to be significant predictors of nurse work performance: Sleep latency, subjective sleep quality, daytime dysfunction, sleep disturbances, habitual sleep efficiency, sleep duration, and use of sleeping medication, shift work, Female nurses and having children, nurses' educational level, and nurses' job designation.

Conclusion: Poor sleep quality might lead to decreased nursing work performance.

Keywords: Sleep quality, Work performance, Critical care nursing, Shift work schedule

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