Sigma's VIRTUAL 31st International Nursing Research Congress (Wednesday, 22 July - Friday, 24 July)

Analysis of the Influence of Sleep Quality and Physical Health on Occupational Burnout in Nurses

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Purpose:

The purpose of this study was to explore the correlates between the subjective sleep quality, physical and mental health and occupational burnout of the shift working nurses.

Methods:

For the cross-sectional investigation and research, stratified sampling was conducted, and data from a total of 90 shift nurses in a Taipei medical center were collected, aged 24 to 47. The period of acceptance was from January to April of 2019, and the conditions for receiving the case were more than one year of service and the evening shift. This study used structured questionnaire: basic demographic data, the Chinese version of the Pittsburgh Sleep Quality Index (CPSQI), the Chinese Health Questionnaire-12 (CHQ-12), Epworth sleepiness Scale—Taiwan form (ESS-T), and the Chinese version of the Occupational Burnout Inventory (OBI) questionnaire as a tool for assessment. SPSS 25.0 Cloud Suite Software for Statistics and Analysis.

Results:

Results of this study are the average subjective PSQI is 6.0 (SD=2.7). Poor sleep quality and health status were significantly related with the occupational burnout part and personal burnout. The worse the Chinese Health Questionnaire-12 (CHQ-12) is analyzed, the worse the personal burnout, work burnout and burnout of the service subjects are in the occupational burnout. The worse the Epworth sleepiness Scale—Taiwan form (ESS-T), the worse the occupational burnout part, personal burnout, and work burnout, which is significantly correlated. Through, ROC analysis, ESS of 9.5 and CHQ-12 of 2.5 could effectively predict severe personal burnout, and ESS of 6.5 and CHQ-12 of 1.5 could effectively predict severe occupational burnout. If CHQI-12 is controlled, ESS has a higher correlation with occupational burnout than PSQI. A stepwise regression analysis of CHQI-12 and ESS can account for 49% of the total variation in personal burnout.

Conclusion:

Epworth sleepiness Scale— Taiwan form (ESS-T) might serve as a simple and effective tool to identify shift nurses with severe work burnout problem. It is expected that effective interventions of promoting sleep quality can be delivered to solve the work burnout problem. A longitudinal and interventional study is recommended for follow-up research to improve nurses' sleep quality via tracing the changes of their holistic health.

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Abstract Summary:

Epworth sleepiness Scale— Taiwan form (ESS-T) might serve as a simple and effective tool to identify shift nurses with severe work burnout problem. It is expected that effective interventions of promoting sleep quality can be delivered to solve the work burnout problem.

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