THE INFLUENCE OF PHYSICAL ENVIRONMENT AND MENTAL WORKLOAD ON NURSE FAILURE

(Study on Inpatient Installation of Level III Hospital Brawijaya Surabaya in 2022)

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ABSTRACT

The density of activities, an uncomfortable work environment, and a large number of patients are perceived by nurses as an increase in workload and fatigue. Worker fatigue causes a direct impact for example work accidents, and an indirect impact namely a decrease in work performance. This study aims to analyze the effect of the physical environment and mental workload on nurse fatigue at the Inpatient Installation of Level III Hospital Brawijaya Surabaya in 2022.

This type of research is an analytical observational cross-sectional approach. The number of samples consisted of 54 nurses. Measurement of mental workload using the NASA-TLX Method. Data were analyzed by univariate analysis and multiple linear regression.

The results of the study show that female nurses, nurses in early adulthood, and nurses with a working period of 5 years are dominant. Measurements of the physical environment in the Bougenville Room, Nusa Indah, and Orchid did not meet the requirements. Most of the nurses in the Inpatient Installation of Brawijaya Hospital Surabaya are in the category of high mental workload and moderate fatigue.

This study concludes that there is no effect of gender ($\rho_{value}=0.355$), age ($\rho_{value}=0.464$), and years of service ($\rho_{value}=0.349$) on nurse fatigue. Physical environment ($\rho_{value}=0.003$) and mental workload ($\rho_{value}=0.001$) have an effect on fatigue. The physical environment and mental workload affect nurse fatigue by 28.9%. It is recommended to the hospital maintain the quality of the physical environment such as cleaning the air conditioner, changing lights, and monitoring the physical environment in the hospital. Suggestions for nurses are to consume at least 2L of mineral water and take advantage of rest time.

Keywords   : *Physical environment, mental workload, fatigue*
Reference   : 20 Journals (2017-2022) and 5 Books (2013-2021)