

Correlation Between Shift Work Method and The Incidence of Metabolic Syndrome in Internal Medicine Ward's Nurses at Prof. dr. R. D. Kandou Hospital and Pancaran Kasih Hospital Manado

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OBJECTIVE: Metabolic syndrome is the symptoms of clinical manifestations and risk factors to various degenerative diseases. Work shift method could change the circadian rhythm of the body including the changing of function in endocrine system. This research was meant to perceive the correlation between work shift and the incidence of metabolic syndrome in nurses of internal medicine ward.

METHOD: This research was using a cross-sectional study with the analytic descriptive method. The samples were 38 nurses. The inclusion criteria is male nurse below 45 years old with the one year experience of work, no history of smoking and alcohol consumption and willingly participate. The shift work criteria is 3 shift with 8 hours work per shift for a day. According to IDF 2005 metabolic syndrome research data should be taken from these equipment such as centimeter, Riester Nova Ecoline® sphygmomanometer, blood plasma using Hexokinase, Enzymatic Homogenous, and Enzymatic Colorimetry examination.

RESULTS: This research was conducted to 38 samples. In the group of shift work, 16 persons (55.2%) experienced metabolic syndrome and 13 persons (44.8%) did not. While in the group of non-shift work, 2 persons (22.2%) experienced metabolic syndrome and 7 persons (77.8%) did not. According to bivariate analysis there is no correlation between shift work and the incidence of metabolic syndrome ($p = 0.130$).

CONCLUSION: Metabolic syndrome was found more in the group of shift work, but no significant differences, statistically. The systolic blood pressure was the most disturbed component of metabolic syndrome that was found in this research.