

The association between noise, work stress and coping with sleep quality among cable manufacturing workers

ABSTRACT

Poor sleep quality has been found previously to cause various negative outcome among workers. There are many factors which may influence sleep quality which include noise and work stress. This is the first study aims to explore the association between three factors; noise, work stress and coping strategies and sleep quality among manufacturing workers. This study employed cross-sectional study design involving 140 cable manufacturing workers who were recruited via simple random sampling. The Malay-version Stress Overload Scale (SOS) was used to measure stress overload. Coping strategies was assessed via Coping Strategy Indicator (CSI) and sleep quality was estimated by using Pittsburgh Sleep Quality Index (PSQI). All respondents were male and most of them were Malay, married and working as machine operator. Results showed that at least 50% of the subject were exposed to the noise level of more than 86.83 dB (A). Majority of respondents (89.3%) had poor sleep quality and experienced low level of stress (77.9%). Higher level of all components of work stress ($r = 0.18-0.22$) and higher level of being avoidance as a coping strategy ($r = 0.26$) were found to be significantly correlated with poorer sleep quality. However, noise was not found to be a significant factor of sleep quality. The present findings suggested that work stress and coping were the dominant determinants for sleep quality which helps in prioritizing intervention strategies to improve sleep quality among respondents.

Keyword: Noise; Work stress; Coping; Sleep quality; Manufacturing workers