Low Back Pain and Its Correlations with Poor Sleep Quality Among Healthcare Providers

Rayan Buhalim

Introduction
Low back pain is found to be the most common occupational and work-related musculoskeletal symptom worldwide. Its prevalence was found to be almost twice among healthcare providers (HCPs) than in other occupations. It is observed that the prevalence of poor sleep quality is higher in HCPs than the general population. To the best of our knowledge, this reciprocal relationship is still unresolved. Thus, this study aims to establish the relationship between low back pain and sleep quality among HCPs in Saudi Arabia.

Methodology
An anonymous cross-sectional questionnaire-based study was performed on HCPs in Saudi Arabia. The questionnaire consisted of three sections. The first section included the biographical data of the participants; the second included Oswestry Disability Index (ODI) and Nordic musculoskeletal questionnaire for low back pain; and the third section was the Pittsburgh Sleep Quality Index (PSQI). Informed consent from each participant and ethical approval were taken before the commencement of the study.

Result
Four hundred and forty-two respondents participated and completed the questionnaire. Nearly two-thirds of the respondents were male (62.7%) while the rest were female (37.3%). Most of the respondents were living in either the central (23.3%) or the northern (23.3%) regions. It was found that the correlation between global PSQI and ODI score was positively highly statistically significant ($r = 0.235; p < 0.001$). The correlation between ODI score and PSQI components including subjective sleep quality ($r = 0.229; p = 0.007$), habitual sleep efficiency ($r = 0.229; p < 0.01$), and daytime dysfunction were also positively highly statistically significant.

Conclusion
HCPs in Saudi Arabia with higher low back pain disability rating demonstrated poorer overall sleep quality and vice versa. However, further research is needed to investigate whether this relationship is dependent on each other in terms of causality.