

## *Sleep quality, physical and psychological outcomes in nurses with low back pain from a tertiary hospital, South India*

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### *Abstract*

**Introduction:** Low back pain (LBP) affects 80% of the population globally. In India, prevalence of LBP among nurses is reported to be 66%.

**Methodology:** A descriptive cross-sectional study design was adopted to assess the sleep quality of nurses with low back pain in a tertiary care setting, South India and to determine the relationship of sleep quality with the physical and psychological parameters such as pain intensity, functional disability, anxiety, and depression. All the nurses willing to participate in the study, and available during the data collection period were screened for LBP. Among the nurses with LBP, 193 subjects were selected using systematic random sampling technique. Study was approved by the Institutional Review Board and informed written consent was obtained from the subjects.



Subjects were asked to complete the following questionnaires: Pittsburgh Sleep Quality Index (PSQI), Short-form McGill Pain Questionnaire (SFMP), Oswestry Low Back Pain Disability Questionnaire (ODI), Zung Self-rating Anxiety (ZSA) and Depression (ZSD) scales.

**Results:** Among 1284 nurses screened, 686 (53.4%) had LBP. Of the 193 nurses included in the study 68.4% of the nurses had good quality of sleep. Majority of the subjects had minimal disability (68.4%), moderate pain (81.3%), and normal anxiety (56.3%) and depression (91.7%) levels. There was a significant positive correlation between sleep quality and pain intensity ( $r=.355$ ,  $p<.01$ ), disability ( $r=.376$ ,  $p<.01$ ), anxiety ( $r=.297$ ,  $p<.01$ ), and depression ( $r=.233$ ,  $p<.001$ ).

**Conclusion:** Improving sleep quality will decrease the physical and psychological manifestations of patients with low back pain and hence improve the quality of life of nurses with LBP.

### *Biography:*

Nirmala M Emmanuel has completed her MSc Nursing at the age of 30 years from Christian Medical College (CMC), Vellore affiliated to Tamilnadu Dr. MGR Medical University. She is working as a Nurse Manager in the Surgical Nursing department of CMC, which is a multispeciality hospital with nearly 2500 beds. She also serves as a Professor at the College of Nursing, CMC, Vellore. Nursing is an integrated system of education and practice in the institution.

### *Speaker Publications:*

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