Sleep quality and morningness-eveningness of shift nurses.

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AIM AND OBJECTIVE: The aim of the study was to analyse, while controlling for identified covariates, the effects of morningness-eveningness on sleep quality for shift nurses. BACKGROUND: Shift nurses had greater difficulty falling asleep or staying asleep, thus resulting in higher rates of retiring from hospital. Existing research has addressed the effects of manpower demand and personal preferences on shift assignment; however, the concept of endogenous rhythms is rarely considered. METHODS: This analysis included 137 nurses between the ages of 21-58. Nurses completed the Horne and Ostberg questionnaire to assess morningness-eveningness and the Pittsburgh Sleep Quality Index (PSQI) questionnaire to measure self-reported sleep quality over the last month. The 18-point Chinese version had a Cronbach's reliability coefficient of 0.79 overall and 0.86 respectively. This study analysed correlates of sleep quality by comparing the groups with better or worse sleep quality according to the median of PSQI. Univariate and multivariate analyses were used for the risk factors of worse sleep quality. RESULTS: The result showed that the strongest predictor of sleep quality was morningness-eveningness not the shift schedule or shift pattern for nurses under controlling the variable of age. Greater age and longer years employed in nursing significantly decreased the risk of worse sleep quality. The confounding age factor was properly controlled; evening types working on changing shifts had higher risk of poor sleep quality compared to morning types. CONCLUSIONS: Morningness-eveningness was the strongest predictor of sleep quality under controlling the variable of age in shift nurses. IMPLICATIONS FOR CLINICAL PRACTICE: Our results suggested that determining if nurses were attributed to morning or evening types is an important sleep issue before deciding the shift assignment.