

Review of Various Tools Available to Assess Sleep Quality

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ABSTRACT

Sleep quality is a crucial clinical concept since people frequently report poor sleep quality and its impact on daily functioning. Poor sleep quality is a common sign of various medical and sleep disorders. Objective measures of sleep quality, such as polysomnography, are costly, time-consuming, and unsuitable for epidemiology and research studies, making them inaccessible to many practitioners. However, a number of self-report questionnaires have been developed. This review focusses on the psychometric qualities, concept validity, and factorial structure of sleep quality questionnaires. It compares and discusses their measuring features. This narrative review covered a total of 20 articles. Article were searched from PubMed(12), Scopus(4), PEDro(2), Cochrane library(2). Twenty papers were examined, comprising eight reviews, two experimental studies, three observational studies, five cross-sectional studies, and two surveys. An evaluation of 20 studies that used Polysomnography (PSG), Electroencephalogram (EEG)-based methods, actigraphy, clinician observation, and patient-

reported questionnaires was performed. Key findings include the need for standardised criteria for scoring PSG in patient, who commonly have aberrant brain wave patterns. The quantity, sample size, and duration of existing research limit the ability to provide meaningful recommendations for EEG-based measurements and actigraphy. Clinicians should use the Sleep Observation Tool to monitor sleep, and the Richards Campbell Sleep Questionnaire to measure patients' views of sleep quality. To assess the success of programmes to prevent sleep loss, sleep assessment instruments must be trustworthy and valid. There has been significant progress in creating, testing, and applying these techniques in the people. We advocate doing large, multicentre intervention studies to assess many components of sleep and provide additional information on the instruments' reliability, validity, feasibility, and sensitivity. In addition, we support the development of new technologies to improve the functionality and precision of existing tools.

Keywords: Electroencephalogram, Polysomnography, Sleep disorder.