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**A systematic review on the influence of noise on patients' sleep in the Intensive Care Units**

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Noise level in the Intensive Care Units (ICU) often ranges far above the recommended standards. Patients in the ICUs are usually critically ill, making them more susceptible to the unfavorable environment in the hospital. Several objective and subjective methods have been used for the sleep measurement in previous intensive care studies, which showed that the sleep of ICU patients is remarkably and extraordinarily disrupted. While a number of factors may affect sleep in the ICUs, many earlier studies reported that noise is one of the most common causes for disturbed nocturnal sleep among ICU patients, although some other studies also suggested that noise in the hospital environment is not the most frequent cause of patients' awakenings. Moreover, patients would become accustomed to noise accompanied with their hospital stay. In this paper, a systematic review is given to the influence of noise on patients' sleep in the ICUs, and some strategies to improve the sleep quality are also discussed.