# Poor Sleep Quality among Hemodialysis Patients in Sri Lanka: A Pittsburgh Sleep Quality Index Analysis

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Sleep quality is a common and a highly disregarded medical concern among hemodialysis patients that can pose negative impacts on physical and psychological quality of life. This study intended to evaluate the prevalence of poor sleep quality and its component domains among patients receiving hemodialysis. A cross-sectional study was conducted at three hemodialysis centers in Anuradhapura and Polonnaruwa districts of Sri Lanka, including a random sample of 310 maintenance hemodialysis patients. The Pittsburgh Sleep Quality Index (PSQI) was used to assess the sleep quality of patients, which includes seven components: subjective sleep quality, sleep latency, sleep duration, habitual sleep efficiency, sleep disturbances, use of sleeping medication, and daytime dysfunction. The study population presented a mean age ± SD of 56.04 ± 11.12 years and a predominance of male individuals: 77.1% (n=239). A significant majority of 83.3% exhibited poor sleep quality. More than half of the population (61.5%, n=184) reported long sleep latency, taking > 30 minutes to fall asleep, indicating signs of insomnia. A majority of 38.8% (n=116) of the patients only have a sleep duration of < 5 hours and do not receive the adequate rest required for them. A significant proportion of 39.8% (n=119) of the participants reported low sleep efficiency of <65% due to several sleep disturbances, including waking up in the middle of the night or early in the morning, taking too long to fall asleep, breathing difficulties, feeling too hot, and physical pains. More than half of the population (60.5%) suffer from moderate to severe levels of such sleep disturbances. Due to inadequate rest and sleep, a significant proportion of the participants (37.1%) reported daytime sleepiness and dysfunction. However, a clear majority of the study sample (89.6%) were not taking any sleeping medication. The study disclosed a striking prevalence of poor sleep quality in the population. Long sleep latency, less sleep duration, and subpar sleep efficiency due to multiple sleep disturbances were identified as significant issues in the population. These findings highlight the need for routine sleep assessment and targeted interventions in hemodialysis care.

**Keywords:** sleep quality, hemodialysis, Pittsburgh Sleep Quality Index, sleep latency, sleep efficiency

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