

Section: Emergency Nursing

Benson relaxation technique to overcome rest and sleep problems in patient with chronic kidney disease in the Intensive Care Unit

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Abstract

Chronic Kidney Disease (CKD) is a progressive condition characterized by gradual damage to kidney structures, resulting in a decline in renal function over time. As kidney function deteriorates, patients often require renal replacement therapy such as haemodialysis. In addition to physical complications, CKD patients frequently experience disturbances in sleep patterns, which can negatively impact their overall health and quality of life. One non-pharmacological intervention that may help address sleep disturbances in CKD patients is the Benson relaxation technique. Benson therapy is a relaxation method that incorporates the patient's belief system to foster an internal environment conducive to healing and well-being. It works by reducing physical tension and promoting a state of calm, thereby improving sleep quality. The technique is simple to perform, does not require extensive time, and is free from side effects, making it suitable for routine use in clinical settings. The goal of implementing Benson therapy in CKD patients is to alleviate sleep disturbances and enhance rest quality. In this case, the intervention was applied over a three-day period. Following the implementation, an evaluation was conducted, which showed that Benson therapy effectively improved the patient's sleep pattern. These findings suggest that Benson relaxation is a beneficial and safe complementary therapy for managing sleep disturbances in individuals with CKD.

Keywords: Benson relaxation technique, chronic kidney disease, complementary therapy, intensive care unit, sleep problems

Introduction

Patients with Chronic Kidney Disease (CKD) often suffer from profound disturbances in their normal sleep-wake cycle, a common and debilitating comorbidity (Maung et al., 2016). These sleep problems stem from the physiological effects of uraemia, electrolyte imbalances, restless legs syndrome, and the psychological burden of chronic illness (Davydov et al., 2023; Turek et al., 2012). When CKD patients require admission to the Intensive Care Unit (ICU), their sleep and rest difficulties are dramatically exacerbated by the hostile ICU environment. Continuous noise from monitors, frequent necessary staff interventions, constant bright lighting, and the severity of their critical illness fragment and severely curtail restorative sleep. Lack of adequate rest in the ICU is not merely an inconvenience; it can significantly contribute to delirium, immune dysfunction, and a prolonged recovery trajectory (Medrzycka-Dabrowska et al., 2018). Poor sleep quality also hampers the body's ability to repair tissue and manage pain, negatively impacting overall prognosis (Haack et al., 2020; Afolalu et al., 2018). Addressing these severe rest and sleep problems is therefore a vital, yet often overlooked, component of holistic critical care for this specific patient population. Effective, non-pharmacological interventions are urgently required to mitigate the unique sleep disruption faced by CKD patients in the ICU setting.

The Benson Relaxation Technique (BRT), based on the principle of eliciting the body's natural "relaxation response," offers a promising, non-pharmacological solution to address sleep and rest deficits (Golchoubi et al., 2024). BRT involves focusing the mind on a repetitive word or phrase while passively disregarding intrusive thoughts, effectively interrupting the stress-anxiety-wakefulness cycle (Solehati & Rustina, 2015; Saifan et al., 2021). Practicing BRT activates the parasympathetic nervous system, leading to a measurable decrease in heart rate, respiratory rate, and oxygen consumption. This shift to a relaxed state is essential because the constant sensory input in the ICU keeps patients in a chronic state of sympathetic arousal, making rest impossible. Unlike sedative medications, which can prolong mechanical ventilation or lead to drug dependence, BRT promotes natural rest without compromising neurological or respiratory function (Mohebbi et al., 2024; Reig-Ferrer et al., 2014). This technique empowers the patient by giving them an active role in their self-management, countering the helplessness often felt in the ICU. BRT's simplicity and lack of specialized equipment make it highly adaptable for use within the confines of a complex critical care environment. Therefore, BRT presents a safe, cost-effective method to encourage physiological and mental calmness conducive to sleep in critically ill patients.

Despite the clear theoretical basis supporting BRT for managing stress, rest, and sleep, specific evidence detailing its effect on the highly complex CKD patient within the ICU setting is sparse. Case studies are invaluable in critical care research, as they allow for the detailed exploration of a complex intervention's impact on a unique, severely ill individual. By focusing on a patient suffering from CKD-related and ICU-induced sleep disturbances, this study can meticulously track objective and subjective sleep parameters. Objective data, such as heart rate variability or the number of nocturnal awakenings recorded by monitors, can be correlated with the patient's self-reported sleep quality (e.g., using a visual analogue scale). The documentation will highlight the challenges of administering a cognitive intervention to a critically ill patient and the necessary protocol adaptations. The primary aim of this case study is thus to evaluate the feasibility and clinical impact of the Benson Relaxation Technique in improving rest and sleep quality for a patient diagnosed with chronic kidney disease admitted to the ICU. The findings will provide crucial preliminary data to support larger randomized controlled trials designed to optimize sleep health in the critical care setting.

Case Description

During the initial nursing assessment conducted at the Emergency Room of Tidar Regional Hospital, Magelang City, a 58-year-old male patient was admitted with complaints of generalized weakness, nausea, vomiting, loss of appetite, and difficulty sleeping. The patient, a married Javanese Muslim with a junior high school education, works as a farmer and resides in Magelang City. He was brought to the hospital by his family after experiencing these symptoms since the previous night. Upon arrival, the patient appeared lethargic and was unable to rest comfortably. His family reported that he had refused food and had not slept well, prompting them to seek medical attention. The assessment included both subjective and objective data collection through direct interviews and physical observation. Subjectively, the patient expressed feeling weak, having reduced appetite, and difficulty sleeping. He reported that he had not eaten properly and felt increasingly fatigued. Objectively, the nursing team observed signs of physical decline, including noticeable weight loss and poor nutritional intake, with the patient consuming only 2–3 spoonfuls of food per meal. Vital signs were recorded as follows: blood pressure at 105/75 mmHg, pulse rate at 61 beats per minute, body temperature at 36.2°C, respiratory rate at 22 breaths per minute, and oxygen saturation at 98%. The patient's overall appearance was weak, with diminished energy and poor sleep quality. These findings suggest a need for comprehensive nursing care focused on improving nutritional status, sleep patterns, and overall physical condition. Further diagnostic evaluation and collaborative medical management are essential to determine the underlying cause and guide appropriate interventions.

Discussion

The successful application of the BRT in this case study provides compelling evidence for its utility as a supportive, non-pharmacological strategy to mitigate severe rest and sleep problems in the challenging ICU environment. Following the consistent implementation of BRT, the patient demonstrated improvements in both objective and subjective measures of sleep quality, despite the pervasive noise and frequent interruptions characteristic of the ICU. Objectively, a reduction in the number of nocturnal awakenings and an increased duration of uninterrupted sleep were observed, suggesting a measurable shift in the patient's sleep architecture. This positive response is physiologically attributed to BRT's capacity to induce the relaxation response, effectively suppressing the sympathetic hyperarousal caused by critical illness and the ICU setting (Harorani et al., 2020). By activating the parasympathetic nervous system, the patient's heart rate and respiratory rate decreased, creating a tranquil state conducive to rest (Benson et al., 1975; Benson et al., 1974). This finding is particularly significant for CKD patients, as their underlying uremic state often compounds existing sleep disturbances like restless legs syndrome. Therefore, BRT directly addressed the dual burden of physiological and environmental stress contributing to the patient's sleep deficit. The sustained improvement validates BRT as a safe and practical intervention for managing rest deficits in this complex clinical population.

The clinical value of integrating BRT into the management of this critically ill CKD patient extends beyond mere sleep improvement, contributing to overall physiological stability and psychological resilience. Improved rest and sleep are fundamentally critical for immune function, wound healing, and cognitive function, all of which are frequently impaired in ICU patients. By aiding in restorative sleep, BRT likely supported the patient's metabolic recovery and reduced the risk of complications such as ICU-related delirium, a common consequence of fragmented sleep. Furthermore, providing the patient with a self-management tool fostered a sense of autonomy and control in an environment where they often feel powerless, positively impacting their psychological state. Unlike sedatives, which may depress respiration or prolong ventilation, BRT offered a pathway to natural, drug-free rest, aligning perfectly with goals for early mobilization and reduced pharmacological burden. The ease with which the technique was taught and integrated into the patient's routine highlights its high feasibility, even for individuals facing severe illness and requiring continuous monitoring. This case thus demonstrates that empowering patients with effective non-pharmacological methods can be a powerful lever for enhancing recovery in critical care.

Despite the encouraging outcome documented in this single case, the results must be interpreted cautiously, and a clear direction for future research is necessary to confirm BRT's broad clinical utility. As a case study, the observed effect may have been influenced by factors unique to the individual, such as a strong motivation to comply

with the technique or concurrent improvements in the underlying critical illness. Therefore, the findings are currently limited in their generalizability to all CKD patients within the ICU setting. Future studies should focus on conducting Randomized Controlled Trials (RCTs) to compare BRT against a sham intervention or standard sleep-hygiene protocols across a larger and more diverse population of critically ill patients. These larger trials must utilize objective sleep monitoring tools, such as polysomnography or actigraphy, to provide definitive quantitative data beyond the patient's self-report. Researchers should also assess the impact of BRT on hard clinical outcomes, including the duration of mechanical ventilation, length of ICU stay, and incidence of delirium. This successful case provides strong preliminary data advocating for the inclusion of the Benson Relaxation Technique as a standard component of multi-modal, patient-centered care aimed at improving sleep health in the demanding ICU environment.

Conclusion

The application of the Benson relaxation technique in patients with CKD admitted to the ICU has shown promising results in addressing rest and sleep disturbances. In this case study, the intervention was implemented over a three-day period and demonstrated a positive impact on the patient's sleep quality. The technique, which involves eliciting a relaxation response through focused breathing and repetition of calming phrases, helped reduce physical tension and anxiety, thereby promoting a more restful state. The patient exhibited signs of improved sleep, including reduced restlessness, longer sleep duration, and enhanced comfort during nighttime hours. These findings suggest that Benson relaxation is a safe, simple, and effective non-pharmacological intervention for managing sleep problems in critically ill CKD patients. For future research, it is recommended to conduct larger-scale studies using randomized controlled trial designs to validate the effectiveness of Benson relaxation across diverse ICU populations. Comparative studies between Benson relaxation and other non-pharmacological sleep interventions, such as guided imagery or progressive muscle relaxation, could provide insights into relative efficacy. Additionally, exploring the physiological mechanisms underlying improved sleep—such as changes in cortisol levels, heart rate variability, or melatonin secretion—would strengthen the evidence base. Qualitative research capturing patient experiences and nurse perspectives could further inform implementation strategies. Finally, integrating Benson relaxation into ICU nursing protocols and evaluating its impact on patient outcomes, staff workload, and overall care quality would support its broader adoption in critical care settings.

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