

7.04 What is the Impact of Telemedicine-Based Interventions on Adherence to Continuous Positive Airway Pressure (CPAP) Therapy in Adults with Obstructive Sleep Apnoea?

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Background: Obstructive Sleep Apnoea (OSA) is affecting about 4% of adults in middle age, leading to higher risk of developing cardiovascular diseases. Continuous Positive Airway Pressure (CPAP) is the effective treatment for OSA affected by non-adherence. Use of telemedicine to monitor adherence to CPAP therapy increased in recent years. **Methods:** PICO framework was used. CINAHL, MEDLINE and EMBASE databases were searched between October 2023 and January 2024 with 480 papers identified, 282 screened and 7 included in Systematic Review. Quality appraisal was performed with The Evidence-Based Librarian Critical Appraisal Checklist (EBL). Narrative analysis and meta-analysis were used. **Results:** Telemedicine (TM) and Usual Care (UC) groups achieved good adherence to CPAP therapy with no statistically significant difference. Both groups achieved reduction in daytime symptoms. Two studies analysed healthcare time and cost of delivery showing the cost effectiveness of telemedicine-based intervention. **Conclusions:** Telemedicine-based interventions with phone/videocall consultation and follow up is same effective as the traditional face-to-face consultation and follow up to establish good adherence to CPAP therapy in OSA patients. Patients who achieved satisfactory adherence to CPAP therapy showed reduction in daytime somnolence symptoms. The cost reduction is mainly related to room rental and transportation. **Disclosures: Conflicts of Interest:** The authors declare that they have no conflict of interest.