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REVIEW ARTICLE

The Concomitant Relationship Shared by Sleep Disturbances and Type 2 Diabetes: Developing Telemedicine as a Viable Treatment Option

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Abstract

Individually, sleep disturbances and type 2 diabetes pose pervasive challenges to health. In addition, the negative symptomology associated with each condition is exacerbated further when presenting concomitantly. This relationship formulates a destructive loop wherein those with diabetes experience decreased sleep quality, which, in turn, worsens a wide range of health threats experienced by those with diabetes, including obesity and glucose intolerance. Because major lifestyle changes and daily care are needed to effectively manage both diabetes and sleep disturbances, an efficient and timely modality of treatment is essential. Advanced technology incorporating telemedicine and telehealth has the potential to enhance treatment by delivering accepted standard of care, medical monitoring, and education quickly and seamlessly—even in rural locations. This type of intervention has the added potential benefit of fostering patient empowerment.

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Abbreviations: (BMI) body mass index, (CPAP) continuous positive airway pressure, (EHR) electronic health record, (OSA) obstructive sleep apnea, (PSG) polysomnography, (SD) sleep disorder

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