

Healthcare Provider Role in Addressing Insomnia Post-Stroke

Gabriel Costa*

Department of Neurology, State University of Campinas, Sao Paulo, Brazil

Corresponding author: Gabriel Costa, Department of Neurology, State University of Campinas, Sao Paulo, Brazil, E-mail: costag@gmail.com

Received date: March 07, 2024, Manuscript No. IPJVES-24-19334; **Editor assigned date:** March 11, 2024, PreQC No. IPJVES-24-19334 (PQ);

Reviewed date: March 25, 2024, QC No. IPJVES-24-19334; **Revised date:** April 01, 2024, Manuscript No. IPJVES-24-19334 (R); **Published date:** April 08, 2024, DOI: 10.36648/2634-7156.9.2.188

Citation: Costa G (2024) Healthcare Provider Role in Addressing Insomnia Post-Stroke. J Vasc Endovasc Therapy Vol.9 No.2: 188.

Description

Stroke is a debilitating medical condition that occurs when there is a sudden disruption in the blood supply to the brain, leading to brain cell damage and potential long-term disability. Survivors of stroke often face a myriad of challenges during their recovery journey, including physical, cognitive, and emotional adjustments. One lesser-known but critical aspect of stroke recovery is its association with insomnia, a sleep disorder that significantly impacts sleep quality and duration. Understanding the relationship between stroke and insomnia can shed light on how sleep disturbances affect recovery and quality of life for stroke survivors. Insomnia, characterized by difficulty falling asleep, staying asleep, or waking up too early and not being able to return to sleep, is highly prevalent among stroke survivors. Research indicates that up to 70% of stroke survivors experience some form of sleep disturbance, including insomnia, particularly in the acute phase following a stroke. This prevalence underscores the significant impact of stroke on sleep patterns and highlights the need for effective management strategies.

Causes and mechanisms

The brain damage caused by stroke can disrupt the intricate networks responsible for regulating sleep-wake cycles and other essential biological rhythms [1]. Areas of the brain involved in controlling circadian rhythms, such as the hypothalamus, may be affected, leading to disturbances in sleep patterns. Additionally, physical impairments resulting from stroke, such as muscle weakness, spasticity, and pain, can contribute to discomfort and difficulty finding a comfortable sleeping position, further exacerbating insomnia [2]. Stroke survivors often experience heightened levels of anxiety, depression, and emotional stress, which can significantly impact sleep quality. Anxiety about health outcomes, recovery prospects, and future independence may lead to rumination and intrusive thoughts at night, making it challenging to relax and fall asleep. Depression, a common comorbidity among stroke survivors, is also linked to insomnia and can contribute to sleep disturbances [3].

Bidirectional relationship with stroke recovery

Poor sleep quality can adversely affect cognitive function, mood regulation, and physical health, all of which are vital

components of stroke rehabilitation. Sleep disturbances may impair concentration, memory, and decision-making abilities, hindering participation in rehabilitation therapies and delaying functional recovery [4]. Moreover, sleep deprivation can exacerbate stroke related symptoms, contributing to fatigue, irritability, and overall diminished quality of life. Conversely, the physical and cognitive impairments resulting from stroke can directly contribute to insomnia. Pain, discomfort, and cognitive deficits such as impaired attention and memory can disrupt sleep continuity and quality. Stroke survivors may experience sleep fragmentation due to frequent awakenings, nocturnal movement disorders, or the need for assistance with nighttime care, further perpetuating the cycle of sleep disturbances [5].

Managing insomnia in stroke survivors

Effective management of insomnia in stroke survivors often involves non-pharmacological approaches such as Cognitive Behavioral Therapy for Insomnia (CBT-I). CBT-I focuses on modifying maladaptive sleep habits and thought patterns, promoting relaxation techniques, and establishing a consistent sleep schedule [6]. These strategies aim to improve sleep hygiene and restore healthy sleep patterns without relying on medications.

Creating a comfortable and conducive sleep environment is essential for promoting restful sleep in stroke survivors [7]. This includes ensuring a quiet and dark bedroom environment, maintaining a comfortable room temperature, and using supportive bedding and pillows. Establishing a regular bedtime routine and minimizing exposure to stimulating activities before bedtime can also enhance sleep quality. Healthcare providers play a vital role in addressing insomnia in stroke survivors by conducting comprehensive assessments, identifying contributing factors, and developing individualized treatment plans [8]. They may collaborate with interdisciplinary teams to address both the physical and psychological aspects of insomnia, ensuring holistic care for stroke survivors. Providers may also consider the use of sleep aids or medications judiciously, taking into account potential interactions with stroke medications and individual health considerations.

Insomnia is a prevalent and impactful issue among stroke survivors, influencing their overall quality of life, functional recovery, and rehabilitation outcomes [9]. The complex interplay

between stroke and insomnia underscores the importance of early recognition and effective management of sleep disturbances in stroke rehabilitation. By addressing insomnia through comprehensive strategies and personalized interventions, healthcare providers can optimize recovery trajectories and improve the well-being of individuals affected by stroke [10]. Understanding the multifaceted relationship between stroke and insomnia is essential for enhancing patient outcomes and promoting holistic care for stroke survivors. By addressing sleep disturbances as part of stroke rehabilitation, healthcare providers can support individuals in achieving optimal recovery and improving their overall quality of life.

References

1. Hu CS, Tkebuchava T (2017) SEEDi1.0-3.0 strategies for major noncommunicable diseases in China. *J Integr Med* 15: 265-269.
2. Hu CS, Wu QH, Hu DY, Tkebuchava T (2017) Novel strategies halt cardiovascular, diabetes, and cancer strips. *Chronic Dis Transl Med* 3: 159-164.
3. Daley M, Morin CM, LeBlanc M (2009) The economic burden of insomnia: Direct and indirect costs for individuals with insomnia syndrome, insomnia symptoms, and good sleepers. *Sleep* 32: 55-64.
4. Dai M, Chen B, Wang X (2021) Icariin enhance mild hypothermia-induced neuroprotection via inhibiting the activation of NF- κ B in experimental ischemic stroke. *Metab Brain Dis* 36: 1779-1790.
5. Dumitrascu OM, Lamb J, Lyden PD (2016) Still cooling after all these years: Meta-analysis of pre-clinical trials of therapeutic hypothermia for acute ischemic stroke. *J Cereb Blood Flow Metab* 36: 1157-1164.
6. Krasny-Pacini A, Chevignard M, Evans J (2014) Goal Management Training for rehabilitation of executive functions: A systematic review of effectiveness in patients with acquired brain injury. *Disabil Rehabil* 36: 105-116.
7. Riemann D, Espie CA, Altena E (2023) The European insomnia guideline: An update on the diagnosis and treatment of insomnia 2023. *J Sleep Res* 32: 14035.
8. Comella A, Michail M (2021) Patients with aortic stenosis exhibit early improved endothelial function following transcatheter aortic valve replacement: The eFAST study. *Int J Cardiol* 332: 143-147.
9. Lummus S, Breeze R, Lucia MS (2014) Histopathologic features of intracranial vascular involvement in fibromuscular dysplasia, Ehlers–Danlos type IV, and neurofibromatosis I. *J Neuropathol Exp Neurol* 73: 916-932.
10. Roehrs T, Roth T (2019) Hyperarousal in insomnia: Pre-sleep and diurnal cortisol levels in response to chronic zolpidem treatment. *Sleep Med* 61: 52-56.