Prevalence of Insomnia among Post Covid 19 Elderly Population

Annie Jerin Retna Raj, Kumaresan Abathsagayam[*], Surya Vishnuram, Prathap Suganthirababu, Vignesh Srinivasan, Vinodhkumar Ramalingam, Preethi Gokulan

Saveetha College of Physiotherapy, Saveetha Institute of Medical and Technical Sciences, Chennai, Tamilnadu, India.

Email: kumaresan.scpt@saveetha.com

Abstract

Introduction: Insomnia is defined as a persistent difficulty initiating or maintaining sleep, or by non-restorative sleep that causes daytime distress. Insomnia can lead to mental health issues such as depression and anxiousness, as well as an elevated risk long-term diseases or conditions like high blood pressure and heart disease. COVID -19 is a significant psychological stressor for patients. Patients are vulnerable to a variety of mental health issues even after they have recovered. **Aim and objectives**: The aim and objective of the study is to find out the prevalence of insomnia among post COVID- 19 elderly population. **Methodology**: This study is a survey. The study was conducted among 300 participants of post COVID 19 Elderly population. Based upon the inclusion and exclusion criteria participants were selected. The detailed procedure was explained to the participants and a written informed consent form was obtained. The insomnia severity Index scale was circulated among the participants and the obtained data was analyzed. **Result**: The values were statistically analyzed. This statistical analysis shows that in 1st wave 97 males and 73 females were affected and in 2nd wave 49 males and 71 females were affected. **Conclusion**: This article concluded that there is prevalence of insomnia among post COVID 19 elderly population.

Keywords

Introduction

COVID-19 is a novel coronavirus disease that was initially found in Wuhan, Hubei Province, in December 2019 and has since spread to other parts of China and then to many other nations (Ahn et al., 2019; Kannan et al., 2019). On March 11, 2020, the World Health Organization (WHO) proclaimed COVID-19 a pandemic. More than 15 million people have been infected with COVID-19 as of July 25, 2020, according to the WHO, and 635,173 people had died worldwide. COVID-19 has not only sparked international concern but has also sparked local concern (Xiang et al., 2020). People were also subjected to a tremendous deal of psychological stress because of

depression, anxiety, and psychotic symptoms were all recorded during the SARS outbreak, according to previous investigations (Xu et al., 2022; Torales et al., 2022; Huang et al., 2020; Shi et al., 2020; Shi et al., 2020; Maunder et al., 2003; Nickell et al., 2004; Wu et al., 2009). Among older persons and those with comorbidities like as hypertension, cardiovascular illness, diabetes, chronic lung disease, and chronic kidney disease, studies have indicated that this virus causes worse results and a greater mortality rate (Liu et al., 2021) Further-more, few COVID-19 patients died because of the infection exacerbating underlying comorbid health issues, rather than the illness itself.

In Italy and China, data stratification by age revealed a nearly identical case-fatality rate for adults aged 69. Individuals over the age of 70, particularly those over the age of 80, had a higher prevalence in Italy (Xu et al., 2020). In a study of 5700 COVID-19 patients in New York, the in-hospital death rate for adults aged 60–69, 70–79, 80–89, and >90 years was 15.8, 32.2, 54.3, and 52.3 percent, respectively (Mez et al., 2017). These disorders affect a large number of elderly Americans, putting them at a higher risk of infection. Infection with the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is linked to an elevated risk of long-term cognitive loss in the elderly. COVID-19 patients, especially those with severe cases, should be closely evaluated for cognitive loss after infection (Xu et al., 2020). COVID-19 was not only an international concern (Xiang et al., 2020) but also has caused a variety of mental health difficulties, particularly among confirmed patients, due to its quick onset, rapid transmission, high mortality, lack of effective therapies, and large-scale isolation measures. During their time in the hospital, they experienced both physical and psychological hardship (Wang et al., 2022).

In a Chinese pilot study, nearly half of the participants rated COVID-19's mental health impact as moderate or severe, and one-third felt anxiety symptoms (Shi et al., 2020). In this issue of Sleep Medicine, Lin and colleagues report on a timely study that examined the early effects of the COVID-19 outbreak on sleep and psychiatric conditions in a huge sample of adults (N = 5641) in China. The main results indicated greater incidence of clinically severe insomnia, as expected (20%) (Morin et al., 2021). We discovered that COVID-19 recovered patients had a low rate of depression and a high rate of insomnia based on the findings. We should pay more attention to their sleeping habits than to their mood (Wang et al., 2022).

Older age, female gender, and co morbid medical and psychiatric conditions are all associated with a higher prevalence of chronic insomnia. Around 40% of persons with insomnia also have a diagnosable psychiatric condition, the most common of which is depression (Roth et al., 2007). In the absence of a clear physical, mental, or substance-related reason, primary insomnia is described as difficulty falling asleep, sustaining sleep, or getting restful sleep, as well as markedly reduced daytime functioning. 40% of insomnia patients are thought to have a psychological disorder.

Depression is the most frequent of these psychiatric diseases, and insomnia is a symptom of both. Estimated prevalence of insomnia in the United States varies from 3.9% to 27.3% and increases with age, reaching 30% to 48% in older adults (McElroy et al., 2021). Adult patients older than the age of 65.6 accounted for more than 80% of all deaths due to COVID 19 (Shahid et al., 2020). Therefore, they are more prone to insomnia.

Methodology

This prevalence study was conducted at Saveetha Medical Hospital. The survey was conducted among the post-COVID-19 elderly population. This was carried out using an insomnia severity index questionnaire. The study was started in February 2022. Thedemographic details like Name and age gender were collected. People above 60 years of age were selected from both genders. The selected person tested positive forCOVID-19 and completed 2 weeks of the recovery period. Participants with cognitive decline, uncooperative people, and elderly people with critical psychological problems were excluded. The detailed procedure has been explained and informed concern is obtained from the participants. All the participants were asked to fill outthe insomnia severity index questionnaire. In the first wave, 97 males and 73 femaleswere present and in the second wave 49 males and 71 females were present. The values are tabulated and statistically analyzed.

Table 1: Participants in 1ˢᵗ and 2ⁿᵈ wave

Wave	Gender	Total Number
1ˢᵀ Wave	Male	97
	Female	73
2ⁿᵈ Wave	Male	49
	Female	71

Table 2: Tabulated mean values of insomnia classification

Waves	Gender	No Clinically Significant Insomnia	Sub Threshold Insomnia	Clinical Insomnia (Moderate)	Clinical Insomnia (Severe)
1ˢᵗ wave	Male	4.285	10.26	17.93	24.933
	Female	2.375	11	17.97	25.58
2ⁿᵈ wave	Male	3.5	10.77	18.8	23.85
	Female	3.5	10.76	18.84	24.2

Table 3: Tabulated percentage values for insomnia classification

Waves	Gender	No Clinically Significant Insomnia	Sub Threshold Insomnia	Clinical Insomnia (Moderate)	Clinical Insomnia (Severe)
1ˢᵗ Wave	Male	14.43%	30.92%	31.95%	22.68%
	Female	10.95%	9.5%	58.90%	16.43%
2ⁿᵈ Wave	Male	16.32%	18.36%	51.02%	14.28%
	Female	8.45%	29.57%	26.76%	35.21%

Results and Discussion

The values were statistically analyzed. This statistical analysis showed that in the 1st wave 97 males and 73 females were affected and in the 2nd wave 49 males and 71 females were affected. The mean value for males in the first wave for no clinically significant insomnia was 4.285, subthreshold insomnia was 10.26, clinical insomnia (moderate) was 17.93 and clinical insomnia (severe) was 24 and for females for no clinically significant insomnia was 2.375, subthreshold insomnia was 11, clinical insomnia (moderate) was 17.97and clinical insomnia (severe) was 25.58. The mean value for males in the second wave for no clinically significant insomnia was 3.5, subthreshold insomnia was 10.77, clinical insomnia (moderate) was 18.8 and clinical insomnia (severe) was 23.85 and for females for no clinically significant insomnia was 3.5, subthreshold insomnia was 10.76, clinical insomnia (moderate) was 18.84 and clinical insomnia (severe) was 24.2.

COVID-19 patients had a significant prevalence of insomnia (26.45 percent) two weeks after discharge, according to the findings of the on-site assessment, and hadrisk factors for developing insomnia (Xu et al., 2022). Many other similar research, have fund that individuals with pre-existing disorders and COVID-19 infection have the highest rates of depression and anxiety (Luo et al., 2020; Zhang et al., 2020; Wu et al., 2005). A comparable study found that 18% of 131 individuals experienced depressive symptoms one month following discharge (Lai et al., 2019). A recent mental health assessment of 1257 health care employees revealed a significant prevalence of mental health symptoms (above 70%), with sleeplessness accounting for 34% and depression accounting for 50.4 percent (Huang et al., 2020).

On the other hand, one in every five individuals suffered insomnia, implying that the public's psychological stress may be increased as the epidemic progresses (Tang et al., 2020; Xiang et al., 2020). As a result, the older patients were severely impacted both physically and mentally following the COVID-19 pandemic. According to recent research, COVID-19-infected people had a greater frequency of insomnia and depression as a result of social isolation, uncertainty, and health state (Yang et al., 2020). The perceived danger and worry of spreading the illness to others could be the source of insomnia and sadness. Furthermore, COVID-19's quick transmission, high mortality, and negative news may raise the likelihood of insomnia and depression worsen physical and mental impairment, and further damage patients'daily functions and cognitive capacity (Morin et al., 1993). Fei et al (2021) stated that COVID-19 infected patients after 2 weeks discharge showed 26.45% insomnia. The result of our study concluded that the percentage of males in 1st wave among post COVID-19 elderly population is 54.63% and 75.33% in females. The percentage of males in 2nd wave among post COVID-19 elderly population is 65.3% and 61.97% in females.

Conclusion

The study concluded that males were affected more than females in 1st wave and females were affected more than males in second wave. Insomnia severity index scalewas used which showed the results that the prevalence of insomnia is greater in post COVID 19 elderly population.

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