

# Depression and Anxiety among Elderly during COVID-19 Pandemic: A Literature Review

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## Abstract

The COVID-19 Pandemic is having an impact on many areas worldwide. The disease affects older people more frequently because of comorbid conditions and declining health as people age. The paranoia of getting infected could worsen not only physical health but also mental health. The psychological aspect of the elderly change as they age, and the prevalence of mental illness grew higher. But there have been studies that show the prevalence of mental illness has increased throughout the pandemic. Finding a comprehensive answer to this issue is a must while requires further investigation.

Keywords : Elderly, Mental Health, Depression, Anxiety, Pandemic, COVID-19

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## 1. Introduction

Between 2015 and 2050, it is predicted that the percentage of older adults worldwide would almost double, rising from 12% to 22% [1]. Numerous psychological, social, and environmental vulnerabilities are associated with aging. The incidence of numerous infections and a decline in all immune responses are both increased in frail older adults. Beginning in January 2020, a pandemic caused by the SARS-CoV-2 virus, often known as Coronavirus illness 2019 (COVID-19) affect the entire globe. Age and immune-compromised conditions have been closely linked to the severity and fatality of COVID-19, approximately 15% of the initial wave of deaths in China occurring in people over 60 [2]. It is without doubt that the emerging SARS-CoV-2 coronavirus pandemic is having a profound psychological impact on communities as it spreads quickly over the world [3]. Apathy and increasing depression symptoms were both found in several studies. Additionally, there is evidence of participants' heightened feelings of loneliness, anxiety, sadness, and insomnia [4,5].

It is well acknowledged that as people get older, their psychological aspects might change. Dementia and depression are the most prevalent mental and neurological disorders in this age range, according to the World Health Organization [1]. Depression can result in severe suffering and hinder daily functioning. Due to variations in multisectoral risk factors, the prevalence of depression in older persons varied greatly, ranging from 8.2% to 63.0% [6]. Another frequent mental illness among the elderly is anxiety, which can harm social functioning, lower quality of life and happiness, and even lead to suicide [7]. According to a prior study published in 2013, the prevalence of anxiety disorders worldwide was estimated to be 7.3%, with a range of 4.8% to 10.9% [8].

## 2. Eldelry and Mental Health

Elderly people go through various changes as they age, among them is a shift in their psychological health. Emotional and mental well-being are equally vital to physical well-being. The definition of mental health in the elderly, according to Touhy and Jett (2014), is a person who can accept himself as he ages, can maximize his strengths to make up for personal weaknesses, can maintain the most autonomy by mastering the environment, and can maintain good relationships with others [9]. Elderly occasionally went through changes in their lives that have an effect on their mental health, such as dealing with a significant illness or losing a loved one. Even though most people will adapt to these changes in their lives, some may feel sad, lonely, or isolated from others. When these feelings persist, they can lead to mental illnesses such as depression and anxiety [10].

The world's population is aging rapidly. The percentage of older population worldwide is predicted to nearly double from 12% to 22% between 2015 and 2050. Dementia and depression, which afflict roughly 5% and 7% of the world's senior population, respectively, are the most prevalent mental and neurological disorders in this age group. Around 3.8% of older adults have anxiety disorders, 1% have substance use issues, and almost a quarter of suicide deaths occur in people 60 and older [1]. In 2008, 20% of those 55 and older were thought to be struggling with a mental health issue [11]. There are between 1 to 18% lifetime and present prevalence rates of mental illnesses in senior persons, according to several studies using various study methods [12].

According to one study conducted in Iran, these disorders are more common in 60% amongst Iranian adults under the age of 60 [13]. Similar results were found by Cambridge University research, one in two people between the ages of 65 and 84 had dealt with a mental illness at some point in their lives. In the previous year, about one-third of the sample had a mental illness [14]. The most common mental problems among elderly persons are thought to be drug abuse, depression, and anxiety [15].

### 2.1 Depression in elderly

Studies show that, despite inevitable bodily changes, the majority of senior people are content with their lives, proving that depression is not a regular phenomenon in old age. Almost everyone has been unhappy, sad, or disappointed at some point in their life. Such fleeting emotions are typical. But if these emotions last for a long time and are experienced on a regular basis, it's possible that the person is depressed [9].

Depression in the elderly mostly affects those who have cognitive impairment and chronic medical conditions, causes agony, family disturbance, and incapacity, worsens by the prognosis of many medical conditions, and raises mortality. The health of frontostriatal pathways, the amygdala, and the hippocampus are compromised by age- and disease-related processes, such as arteriosclerosis and inflammatory, endocrine, and immunological changes, which can enhance vulnerability to depression [16].

There are two categories of causes that can contribute to the development of depression: external and internal influences. Pressure and stress brought on by the living environment, as well as those connected to biological processes. In terms of the molecular reasons of depression, these patients exhibit a decreased level of specific chemicals known as neurotransmitters. The brain contains neurotransmitters, which are used for intercellular communication. Serotonin and noradrenaline are the two chemicals whose absence is directly linked to depression (organic depression) [17].

Depression can result in severe suffering and hinder daily functioning. Unipolar depression, which accounts for 5.7% of YLDs (Years of healthy life lost due to disability) among people over 60, is said to affect 7% of the total older population [18].

Major depression is estimated to affect less than 1% to roughly 5% of elderly residents of the community, although it rises to 13.5% of those who require home healthcare and 11.5% of elderly hospital patients [19]. According to a review by Barua et al., the median prevalence rate of depressive disorders in the aged population worldwide was found to be 10.3%, with a QR range of 4.7% to 16.0% [20]. Due to variations in research regions, attitudes toward mental health problems and stigma, levels of primary public health services, and screening methods, the prevalence of depression in older individuals ranged substantially, from 8.2% to 63.0% [6].

## 2.2 Anxiety in elderly

Anxiety is a frequent mental illness that affects elderly people and can harm their social functioning, lower their quality of life and level of happiness, and even lead to suicide [7]. Although anxiety disorders are not thought to be a typical part of aging, other changes that the elderly frequently go through (such as chronic illness, cognitive decline, and emotional loss) can have an impact on the emergence of anxiety symptoms and disorders [9]. Shortness of breath, tachycardia, and excessive sweating are a few examples of the physical symptoms that can accompany an unpleasant and irrational feeling of fear known as anxiety. If it is justified, anxiety is a typical human reaction and a component of the fear response. When it is chronic, excessive, and interferes with bodily functioning, it becomes an issue [17].

As per previous studies, older individuals' rates of anxiety and its symptoms ranged from 1.2% to 15% and 15% to 52.3%, respectively [21]. The prevalence of anxiety disorders varies widely around the globe, and it was estimated that the current rate was 7.3%, with a range of 4.8% to 10.9% [8,22].

A larger risk of physical issues and illnesses may make it more difficult to diagnose an anxiety condition, since measuring anxiety in older age groups is connected with more hurdles than in younger age groups. Furthermore, it has been shown that older persons frequently disguise their anxiety as physical symptoms or downplay it in different ways when asked directly about it [23]. For a variety of reasons, elderly people with anxiety disorders frequently go untreated. The symptoms that the elderly experience are often not acknowledged or recognized, and they frequently link their symptoms to physical health issues. Some older persons could also choose not to receive therapy because they believe their long history of having anxiety symptoms is typical [9].

## 3. Mental Health and Pandemic

The COVID-19 pandemic is caused by a new coronavirus that causes a respiratory problems after infection people with severe acute respiratory syndrome by coronavirus 2 (SARS-CoV-2). Age and immunocompromised conditions are directly correlated with the severity and mortality of COVID-19, with older people presenting for the great majority of cases [24]. Numerous public health organizations, institutes, and stakeholders emphasized the importance of promoting older individuals' physical and mental health shortly after the COVID-19 outbreak [25].

While analyzing emotional wellbeing and reactivity to COVID-19 stressors among adults living in the United States and Canada during the early stages of the pandemic, Klaiber et al. found that older adults reported better emotional health and less reactivity to stressors despite having similar exposure to COVID-19 stressors as young adults [26]. However, Fujita et al. evaluated the participant's mental health before and during the pandemic in a longitudinal study among older individuals in Japan who live in the community and noted that the subjects' indifference and increased depression symptoms. Furthermore, participants between the ages of 65 and 75 reported worse symptoms [4]. An investigation into the prevalence of loneliness, anxiety, depression, and sleeplessness among an established cohort of older adults with numerous

chronic medical conditions was also conducted in Hong Kong. Compared to pre-COVID data, these participants reported increased loneliness, anxiety, depression, and insomnia [5].

In a recent study of 775 adults in the United States, an alarming 55% acknowledged that COVID-19 had a negative impact on their mental health, and 71% expressed concern about the potential harm that isolation could do to Americans' mental health [3]. According a research by Gaeta and Brygdes, just over half of the respondents (50.1%) said the COVID-19 pandemic epidemic had increased their feelings of loneliness [27].

The COVID-19 pandemic limitations, such as social distancing, school closures, border closures, travel bans, and extensive lockdowns that have prevented millions of fatalities, are closely related to these findings [28]. Although loneliness can be an unforeseen, detrimental consequence of physical distance in the older adult population despite its benefit of delaying the spread of SARS-CoV2, physical distance does not always correlate to social isolation. Social isolation can have an adverse effect on older individuals' mental health, raising feelings of vulnerability, loneliness, stress, and irritability as well as being an independent risk factor for depression, anxiety disorders, suicide, and the exacerbation of pre-existing psychiatric symptoms [24]. Those psychiatric changes can also activate the sympathetic nervous system, which results in hypertension, inflammation, and elevated levels of the stress hormones. In the population of older adults, social isolation is linked to higher mortality, lower quality of life, and higher chances of premature death, stroke, and dementia [29].

#### **4. Risk Factors of Geriatric Mental Illness during The Pandemic**

##### **4.1 Demographics**

During the COVID-19 epidemic, sex affects how depression and anxiety manifest [28]. It is widely known that women are more prone than men to experience unipolar depressive episodes and other forms of depression. Additionally, Koma et al. found that those aged 65 to 74 had greater rates of anxiety and depression (26%) than those aged 80 and over (19%) [30]. In a similar manner, Vahia et al. (2020) found that women were more likely than men to experience anxiety, PTSD, and depressive symptoms [31]. Additionally to sex and age group, race had a large impact. In comparison to those who are black (26%), white (23%), and Asian (17%), older Hispanic adults reported the highest rates of anxiety and depression (33%) [28].

##### **4.2 Socioeconomic status**

Women experienced loneliness more frequently, and it was linked to older age, less education, and less money [32]. Higher levels of depression and anxiety, as well as lower levels of education, are all significantly linked to a worse future quality of life, with depression having the largest relative relevance and anxiety coming in second, according to a study by Riberio et al. (2020) [33]. Likewise, older adults who reported losing their jobs during the pandemic or those of a household member experienced higher rates of sadness or anxiety (34%) compared to those who were unaffected by job loss (21%) [28].

##### **4.3 Pre-existing medical conditions**

According to a study done in Poland in 2021, there is a direct link between the degree of loneliness and the frequency of depressive symptoms as well as the presence of several chronic illnesses (endocrinological disorders, kidney disease, and mental disorders) [34]. A research by Röhr et al. (2020) found that 36.9% of the patients felt in risk during the COVID-19 pandemic because of their underlying medical issues [35]. As key risk factors for patients with COVID-19, medical comorbidities such as hypertension, diabetes, chronic

obstructive pulmonary disease, cardiovascular disease, and cerebrovascular diseases also put older people at risk for developing mental illness during the pandemic [28]. In contrast, Qi et al. (2021) discovered that there is no connection between respondents' levels of stress and their pre-existing mental health disorders, such as depression, anxiety, or bipolar disorder [36].

## 5. Conclusions

The pandemic is affecting mental health condition in elderly by increasing the prevalence of mental illness. There are various reasons that contributes in the issues, but mostly is originates from the restriction to prevent virus transmission.

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