



Impact of COVID-19 on mental health and emotional well-being of older adults

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Abstract

Older adults faced unique challenges in the pandemic due to their increased vulnerability to coronavirus disease 2019 (COVID-19) and its complications. Pandemic-related restrictions such as physical distancing, stay-at-home orders, lock-down, and mandatory face cover affected older adults in unique ways. Additionally, older adults experienced psychosocial concerns related to discrimination based on ageism and emotional distress from exposure to conflicting messages in the media. They experienced several forms of loss and associated grief and survivor guilt. Pandemic added to their loneliness and social isolation. Furthermore, older adults experienced the fear and anxiety related to COVID and the fear of contracting the disease and dying from it. Pandemic experience included events potential to generate the desire and capability for suicide. Several studies report varying symptoms such as loneliness, anxiety, and depression among older adults during the pandemic. However, during the initial months of the pandemic, there were reports on coping and resilience among this population. The impact of COVID-19 on older adults' mental health may have long-term implications. This narrative review examines the impact of COVID-19 on older adults' mental health and psychosocial wellbeing. Additionally, the review highlights various factors that affected their psychosocial wellbeing during the COVID-19 pandemic.

Key Words: COVID-19; Pandemic; Older adults; Geriatrics; Mental health; Psychosocial wellbeing

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Core Tip: Coronavirus disease 2019 (COVID-19) disproportionately affected older adults. Several studies report varying symptoms such as loneliness, anxiety, and depression among older adults during the pandemic. However, during the initial months of the pandemic, there were reports on coping and resilience among this population. Implications of COVID-19 on older adults' mental health can have long-lasting consequences. This review focuses on several factors that impacted older adults' psychosocial wellbeing during the pandemic.

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INTRODUCTION

Coronavirus disease 2019 (COVID-19) has a disparate effect on older adults due to their increased risk for developing severe disease and poor disease outcomes[1]. Stay-at-home orders, lock-down, and mandatory face-covering created unique challenges for older adults. The impact of COVID and COVID-related restrictions can have long-lasting effects on older adults' mental health and wellbeing. During the pandemic's initial months, healthcare professionals from several countries expressed their concern over the pandemic's potential mental health effects and alerted the global community[2-5]. Over a year into the pandemic, it may be beneficial to review the pandemic's psychosocial impact on the older adult population. This narrative review focuses on the pandemic's impact on older adults' psychosocial wellbeing and highlights various elements that influenced the pandemic's impact on older adults' mental health.

PANDEMIC AND MENTAL HEALTH

Several studies globally explored the pandemic's effect on older adults' mental health (Table 1). During the initial weeks of the pandemic, Klaiber *et al*[6] examined emotional wellbeing and reactivity to COVID-19 stressors among adults living in the United States and Canada and noted that older adults reported better emotional wellbeing and less reactivity to stressors with similar exposure to COVID-19 stressors as young adults. Similarly, van Tilburg *et al*[7] reported stable mental health and wellbeing despite increased loneliness among the older adults in Netherland. A large study among Spanish adults also reported that older adults had lower depression, anxiety, and post-traumatic stress in the early weeks of the pandemic than young adults[8]. However, this Spanish study[8] had a low representation of older adults.

In June 2020, the Centers for Disease Control and Prevention[9] reported the findings of a survey conducted among adults in the United States where the prevalence of depressive symptoms, anxiety and trauma-related stress, suicidal ideations, and substance abuse to cope up with the pandemic related stress was low among older adults as compared to other age groups. This survey's follow-up in September 2020 also supported the lower prevalence of mental health concerns among older adults than young adults[10]. However, in a longitudinal study, Krendl and Perry[11] reported an increase in depressive symptoms and loneliness among older adults living in the United States. Studies from some other countries also reported similar results, as noted below.

In a longitudinal study among community-dwelling older adults in Japan, Fujita *et al*[12] compared the participant's mental health before and during the pandemic. They reported worsening depressive symptoms and apathy among the participants. Additionally, participants 65 years to 75 years of age reported worse symptoms[12]. In Hong Kong, Wong *et al*[13] explored the level of loneliness, anxiety, depression, and insomnia among an established cohort of older adults with multiple chronic medical conditions. Compared to pre-COVID data, these participants reported increased loneliness, anxiety, depression, and insomnia[13]. In Greece, a cross-sectional survey[14] among older adults conducted in the early period of the pandemic noted moderate to severe depressive and anxiety symptoms in 80% of the participants. A similar study from Turkey[15] also reported depressive symptoms (37.5%) and anxiety (29.8%) among the participants.

COVID-related stress and the resulting emotional distress can be explained based on Neuman's systems model, where each client is considered a unique system[16]. Several lines of intrapersonal, interpersonal, and extrapersonal stressors act on the environment of the client system and affect its stability. Each individual has an imaginary 'central core' to survive the effect of such stressors[17]. Several imaginary 'lines of defense' protect the 'central core.' The individual's wellness and adaptation serve as the 'inner line of defense,' whereas the flexible 'outer line of defense' responds to each stressor.

Table 1 Studies exploring the impact of pandemic on mental health

Ref.	Title of the study	Type of study	Sample size and country	Outcomes
Klaiber <i>et al</i> [6], 2021	The Ups and Downs of Daily Life During COVID-19: Age Differences in Affect, Stress, and Positive Events	Short term longitudinal study	<i>n</i> = 776, Canada and the United States	Older adults showed better emotional well-being and less reactivity to COVID-related stressors
van Tilburg <i>et al</i> [7], 2020	Loneliness and mental health during the COVID-19 pandemic: A study among Dutch older adults	Longitudinal study	<i>n</i> = 1679, The Netherlands	Increased loneliness in older adults. However, mental health remained roughly stable
González-Sanguino <i>et al</i> [8], 2020	Mental health consequences during the initial stage of the 2020 Coronavirus pandemic (COVID-19) in Spain	Cross-sectional study	<i>n</i> = 3480, Spain	Older age group was negatively related to depression, anxiety and post traumatic stress disorder
Czeisler <i>et al</i> [9], 2020	Mental Health, Substance Use, and Suicidal Ideation During the COVID-19 Pandemic - United States June 24-30, 2020	Representative panel surveys	<i>n</i> = 5470, United States	Prevalence of mental health symptoms 15.1% in older adults and 74.9% in young adults
Czeisler <i>et al</i> [10], 2021	Follow-up Survey of US Adult Reports of Mental Health, Substance Use, and Suicidal Ideation During the COVID-19 Pandemic, September 2020	Representative panel surveys	<i>n</i> = 5285, United States	Mental health symptoms were less prevalent among older adults than in younger adults
Krendl and Perry [11], 2021	The Impact of Sheltering in Place During the COVID-19 Pandemic on Older Adults' Social and Mental Well-Being	Longitudinal study	<i>n</i> = 93, United States	Older adults reported increased depressive symptoms over sheltering in-place period
Fujita <i>et al</i> [12], 2021	Mental Health Status of the Older Adults in Japan During the COVID-19 Pandemic	Longitudinal study	<i>n</i> = 519, Japan	Community-dwelling older adults had worsening of mood. Worse symptoms in adults 65-75 yr of age
Wong <i>et al</i> [13], 2020	Impact of COVID-19 on loneliness, mental health, and health service utilization: a prospective cohort study of older adults with multimorbidity in primary care	Longitudinal study	<i>n</i> = 583, Hong Kong	A pre-existing cohort of older adults reported significant worsening of loneliness, anxiety, and insomnia, after the onset of the pandemic
Parlapani <i>et al</i> [14], 2020	Intolerance of Uncertainty and Loneliness in Older Adults During the COVID-19 Pandemic	Cross-sectional study	<i>n</i> = 103, Greece	Moderate to severe depressive symptoms (81.6%) anxiety (84.5%), disrupted sleep (37.9%)
Cigiloglu <i>et al</i> [15], 2021	How have older adults reacted to coronavirus disease 2019?	Cross-sectional study	<i>n</i> = 104, Turkey	37.5% reported depressive symptoms and 29.8% reported anxiety; Worse symptoms in those with age ≥ 85 yr

COVID-19: Coronavirus disease 2019.

The 'line of resistance' determines the individual's response to the stressors. In Neuman's system model, the environment constitutes internal and external factors that influence the client or are influenced by the client. If the lines of defense and the line of resistance are strong enough to keep the stressors away from the core, the stressors will not impact the individual. Additionally, the individual's perception of the stressors as beneficial strengthens the core stability, whereas the opposite perception weakens the core stability [16]. The individual's immediate life circumstances impact the flexible outer line of defense. During the pandemic, older adults faced several life circumstances, potential stressors that affected the core's stability.

CONTRIBUTORS OF EMOTIONAL DISTRESS

Several elements such as culture, socio-economic status, prior mental illness, and poor access to care may determine the pandemic's impact on older adults' mental health and resilience. Physical distancing, stay-at-home mandates, anxiety about contracting Corona viral disease, and fear of death from complications of the disease may have created unique challenges for older adults. Whitehead and Torossian [18] explored the older adults' pandemic experience and assessed their 'stresses and joys.' An online survey of 825 United States adults aged 60 and above [18] reported confinement and restrictions from the lockdown, isolation, and loneliness from physical distancing and concern for others as the participants' everyday stressors during the pandemic.

Physical distancing and lock-down

In an attempt to contain the virus, government authorities and public health professionals advocated for non-essential service shutdowns, travel bans, and mandatory stay-at-home orders. Physical distancing mandates urged people to avoid or limit face-to-face interactions, group events, travel, and visiting

places of worship, shopping places, and healthcare facilities. Most of the services were closed for in-person activities. Such restrictions affected older adults, especially those with limited technology access or technology skills.

Activity restrictions

During the pandemic, concerns related to the difficulty in performing everyday activities, wearing face cover, inability to leave home for the job or voluntary activities, inability to attend religious and social activities such as entertainment and sports events, canceled healthcare visits, and the inability to go to stores and select merchandise were contributing to stress[19]. Older adults with solid religious affiliations reported unmet spiritual needs leading to social isolation and sadness[2]. Moreover, physical distancing led to stress factors such as helplessness, concerns related to dependency and timely help, and worry about the pandemic and future[19].

Bereavement and grief

During the pandemic, the global community suffered COVID-related death and loss of life from other causes. Unlike regular times, many of these people died alone. Several of them did not receive the usual religious rights and social rituals. Many people could not see their loved ones and say final goodbyes. Survivor guilt can contribute to intense grief. In the normal process, people adapt to grief gradually without additional effort. However, in situations with unresolved grief, which happens when something about the loss is troubling for the bereaved person, the stalled grief can give rise to prolonged grief disorder[20]. Death during the pandemic has characteristics such as the sudden and unexpected event in the absence of familiar people, which can precipitate grief that is difficult to resolve.

Ageism and stereotyping

As the pandemic emerged, discussion on older adults increased risk for contracting the disease, developing severe illness and complications, and poor disease outcomes dominated in healthcare, media, and public discussions. The concept of high vulnerability might have created anxiety and fear among older adults. As Previtali *et al*[21] argued, generalizing older adults' increased risk based on their chronological age was probably an expression of ageism, which was unfair. During the pandemic's initial months, the media highlighted fatality among older adults while giving a relatively minor focus on fatality in other age groups. Older adults' heightened COVID fears might have contributed to higher social isolation and basic needs dependency. Stereotyping older adults based on their age is unfair as several factors determine their overall health status. During the initial months of the pandemic, there was a shortage of resources and associated fear about 'triaging' and rationing the care, which might have created anxiety and worsened older adults' emotional discomfort. Emotional trauma from COVID positive status and isolation and fear of dying alone might have aggravated emotional discomfort among older adults who tested positive for COVID.

Effect of social media

There was an 'infodemic' related to the pandemic. Social media and communication outlets contributed to the fear and anxiety by spreading conflicting information. Social media expressions such as "Boomer Remover," a trending hashtag on Twitter in March 2020 was potentially hurtful to older adults. During the pandemic, Jimenez-Sotomayor *et al*[22] analyzed the tweets related to COVID-19 and older adults and found that 21.1% of the tweets communicated the notion that older adults' lives were less valuable. Gao *et al*[23] identified a positive association between social media exposure and mental health concerns in Chinese citizens. Though this study included adults in general, not just older adults, the results may have implications on older adults who access social media.

Data related to older adults' mental health implications mainly included the experience of community-dwelling participants who had web or telephone access and physical and cognitive ability to respond to the surveys. Long-term care facilities, assisted living facilities, and group care homes house older adults who require care for their chronic illnesses, disability related to physical or mental illness, or cognitive dysfunction. Residents in care homes encountered additional challenges during the pandemic.

CHALLENGES IN CARE FACILITIES

Van der Roest *et al*[24] examined the impact of COVID-19 measures on long-term care residents' mental health in the Netherlands. In this cross-sectional analysis, 77% of the participants reported loneliness, and 51% reported poor mental health. Furthermore, most of the staff noted increased agitation, depression, irritability, and anxiety among the residents[24]. Care facilities are high-risk settings for transmitting infectious diseases and were inadequately prepared to manage the pandemic[25]. To combat the pandemic, these facilities employed several interventions that inadvertently affected resident's psychosocial wellbeing. For instance, facilities employed strict visitation policies and physical

distancing policies. As a result, facilities canceled or modified activities such as community dining, group recreational activities and worship services, group exercises, celebrations, and out-of-facility pleasure trips. Physical distancing policies required the residents to stay in their rooms and keep the doors closed. Stopping visitations from family, volunteers, and pets limited older adults' opportunities for socialization. Several care facilities had to employ temporary staff leading to inconsistent caregiving. Receiving care from unfamiliar staff could be anxiety-provoking even for older adults without prior mental health concerns or dementia. Care from healthcare professionals wearing personal protective equipment potentially decreased the 'human touch' in the care. Healthcare professionals limited their face-to-face time with the residents due to the physical distancing policy that worsened the residents' loneliness. Fear about contracting the illness from the asymptomatic carriers and regular surveillance screening and waiting for the results can make the residents anxious. These are some of the examples of challenges that exposed care home residents' vulnerability to emotional distress.

PANDEMIC AND EMOTIONAL DISTRESS

During the pandemic, the initial three levels of Maslow's hierarchy of needs- physiological need, need for safety and security, and the need for love and belongingness dominated people's needs irrespective of their pre-pandemic position in the hierarchy of needs[26]. Therefore, a rapid change in needs and the reassignment to a lower level of need in the hierarchy could create negative emotions in people. These negative emotions manifest in several forms.

Suicide risk

Before COVID, evidence supported older adults' increased risk for suicide[27-29]. Direct impact of COVID-19 on the suicidal risk of older adults is yet to be known. However, the pandemic's mental health consequences can precipitate the risk factors of suicidal behavior. According to the interpersonal theory of suicide, the simultaneous presence of 'thwarted belongingness' and 'perceived burdensomeness' produced the desire for suicide. Furthermore, the repeated exposure to painful and fear-inducing experiences contributes to the capability of suicide behavior[30]. Pandemic's effect on mental health, such as social isolation, perceived ageism, and fear of delayed or denied healthcare, may contribute to the interpersonal constructs of thwarted belongingness and feelings of burdensomeness. Additionally, emotional distress may contribute to the feeling of hopelessness and increase older adults' risk for suicide[31]. Emotional experiences become distressing under several circumstances.

Social isolation

Heid *et al*[19] explored older adults' adherence to physical distancing mandates and their pandemic stressors. Participants were community-dwelling older adults from New Jersey, the state once considered the pandemic's epicenter in the United States. The majority of the participants reported avoidance of usual activities that required in-person presence. Participants identified that continuing their social relationships and following activity restrictions were their significant challenges related to physical distancing[19]. Participants also reported stress related to missed social interactions with family and friends, especially grandchildren, and canceled social events[19]. Kim and Jung[32] analyzed the link between social isolation and mental wellbeing in older adults from 62 countries who responded to an online survey, 'Global Behaviors and Perceptions in the COVID-19'. The survey[32] response supported social isolation related to physical distancing and its association with psychological distress. Since social connectedness positively impacts health and longevity[33-35], appropriate interventions to improve social connectedness while maintaining physical distancing were essential. A feeling of inadequate social connectedness gives rise to loneliness.

Loneliness

Loneliness, the subjective feeling of being alone, has physical and mental health effects in older adults. Kotwal *et al*[36] examined the experience of loneliness and social isolation among community-dwelling older adults in San-Francisco, California, during the shelter-in-place period. Fifty-four percent of the participants reported worsening loneliness due to the pandemic leading to worsening depression and anxiety[36]. Krendl and Perry[11] also reported increased depressive symptoms and loneliness during the shelter-in-place period. In a similar study in Austria, Stolz *et al*[37] reported increased loneliness in 2020 than in previous years, resulting from the pandemic-related social isolation. Furthermore, loneliness was more significant during the lock-down period than the reopening phase[37]. Researchers reported sleep deprivation and depressive symptoms in older adults with subjective or objective social isolation and loneliness even before the pandemic[38]. Moreover, pre-pandemic studies supported the positive impact of resilience on sleep in other populations[39,40]. Grossman *et al*[41] reported increased sleep concerns and insomnia in older adults who reported loneliness during the pandemic and attributed it to their insecurity from loneliness leading to alertness preventing them from getting a restful night's sleep. Further, the sleep deprivation-loneliness connection was stronger in those with more COVID-related worries or low resilience[41].

RESILIENCE IN OLDER ADULTS DURING THE PANDEMIC

Despite experiencing stressful situations and facing hardships associated with emotional distress, older adults used their coping skills and created resilience during the pandemic. Several studies attest that older adults did reasonably well in their emotional status compared to other age groups[42]. This observation is similar to the strength and vulnerability integration model, which suggests older adults' ability to regulate their emotions constructively and navigate their stressful experiences compared to other age groups[43]. Furthermore, coping skills accumulated over time might have helped the older adults employ better coping mechanisms and stay positive. Older adult's coping strategies during COVID-19 are yet to be explored. However, older adults tend to anticipate hardships and take proactive measures to cope with possibly stressful situations in life[44]. In addition, proactive coping might have led the older adults to employ wishful thinking, support seeking, and empathetic responding, common coping mechanisms reportedly beneficial in past disasters[45].

CONCLUSION

During the pandemic, older adults experienced unique challenges with detrimental effects on their mental health and wellbeing. Older adults' pandemic-related psychosocial challenges may harbingers their post-pandemic mental health needs. Post pandemic psychosocial implications are overwhelming. Communities and care homes implemented multidimensional interventions to mitigate the psychosocial impact of the pandemic. Evaluating those interventions' success and adopting the successful interventions as a standard of practice will help create resilience and improve older adults' coping.

FOOTNOTES

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