



# Anxiety Among The Aged During COVID-19 Pandemic

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## ABSTRACT

COVID-19 pandemic is associated with negative impacts on anxiety and mental health. The study investigated the influence of gender, age and socio-economic status on anxiety among the aged in the COVID-19 era. The study participants were selected from Chittoor and Tirupati districts in Andhra Pradesh, India, aged between 50 and 70 years. A total of 320 men and women from low and high socio-economic status took part in the research by completing anxiety assessment survey. The anxiety levels of participants were evaluated using the geriatric anxiety scale developed by Daniel L. Segal (2010). The acquired data have been statistically analysed to assess the hypotheses. The data underwent ANOVA (Analysis of Variance) to examine the influence of gender, age and socio-economic status on anxiety among the aged during COVID-19 pandemic. Results revealed that gender, age and socio-economic status have significant influence on anxiety among the aged during COVID-19 pandemic. The results of this study will benefit decision-makers in establishing a plan to prevent the consequences of anxiety during pandemics.

**Key Words:** Depression, Stress, Anxiety, COVID-19 and Pandemic

- The author, Dr.B.S.Kumar Reddy is the awardee of ICSSR senior fellowship. This article is an outcome of senior fellowship sponsored by the Indian Council of Social Science Research (ICSSR). The responsibility for the facts stated, and the conclusions drawn is entirely of the author.

## INTRODUCTION

Anxiety is a complex emotional state characterized by subjective feelings of tension, apprehension, and worry. It emerges when an individual interprets a specific stimulus or situation as potentially threatening or dangerous. The intensity of anxiety can vary and fluctuate over time based on the level of stress experienced in new environments, such as entering a campus without clear expectations of behaviour. Anxiety is an inherent aspect of contemporary student life, impacting cognitive functions like thinking, perception, and learning, often leading to challenges in concentration and memory retention.

Anxiety is pervasive among the elderly, with implications for the aging population including increased disease burden, amplified healthcare needs, and elevated mortality rates. Beyond population-level impacts, anxiety can lead to adverse outcomes at an individual level, such as diminished well-being, disability, and exacerbation of physical and mental health conditions. To address anxiety in the elderly effectively and support appropriate treatment interventions, a comprehensive assessment of contributing anxiety factors is crucial.

The World Health Organization (WHO) has cautioned that older individuals are subject to elevated distress, anxiety, anger, stress, agitation, and withdrawal during disease outbreaks or periods of isolation. Moreover, according to Craske & Stein (2020), COVID-19 may serve as an anxiety inducing factor, fuelling collective panic arising from uncertainties and gaps in knowledge.

Pandemics that occurred in the past caused fear to the public and most people developed anxiety and fear-related behavioural issues. Corona virus disease of 2019 (COVID-19) overwhelmed the world with panic, uncertainties, and possibilities of fatal outcomes (Usher, Durkin, Bhullar, Xiong, Lipsitz, Nasri, Lui, H. Gill, Phan, *et al*(2020).

The public has experienced anxiety, depression, psychological distress, post-traumatic stress disorder, and insomnia (Kumar and Nayar, 2021) during COVID-19 pandemic. Systematic review documenting studies from Asia and Europe revealed that 29.6%, 31.9%, and 33.7% have experienced stress, anxiety, and depression, respectively (Salari, Hosseini-Far, Jalali, Vaisi-Raygani, Rasoulpoor, Mohammadi, *et al*. 2020).

Similar findings were reported in studies that included several countries from three continents (Wang, Chudzicka-Czupala, Tee, Núñez, Tripp, Fardin, *etal*. 2020). These psychological changes have been attributed mainly to fear of contracting the disease, the financial need to work, and the inability to avoid interacting with the public (Vindegaard, M.E. Benros, Zhai, Du, 2020).

The infections or death of a family member could impact the mental wellbeing of individuals including experiencing fear and depression. At the same time, those in quarantine experience loneliness, boredom, and anger. Studies have shown that individuals experiencing overwhelming emotional trauma and socioeconomic stressors during COVID-19 were more vulnerable to committing suicide (Galbraith, oyda, McFeeters and Hassan, 2021).

Elderly individuals confront a multitude of anxiety-provoking circumstances, including health issues, loss of social connections, and significant life transitions such as relocating to a nursing home amidst the COVID-19 pandemic. Stress and anxiety are prevalent among seniors and are linked not only to physical ailments but also to various mental health conditions beyond primary anxiety disorders during the pandemic.

Thus, it is crucial to determine the psychological changes to develop strategies to mitigate the psychological risks and consequences of the current and future pandemics. Therefore, this study was planned to measure the influence of age, gender and socio-economic status on anxiety among the Indian aged during the COVID-19 era.

The objective of the present investigation was structured to explore how socio-demographic factors such as gender, age, and socio-economic status impact anxiety levels among older individuals during the COVID-19 pandemic.

## HYPOTHESES

1. Age would significantly impact on anxiety levels among the elderly during the COVID-19 pandemic.
2. Gender would significantly affect anxiety levels among the elderly during the COVID-19 pandemic.
3. The socio-economic status would significantly influence anxiety among the elderly during the COVID-19 pandemic.

## METHODOLOGY

**Tool:** The anxiety levels of participants were evaluated using the geriatric anxiety scale developed by Daniel L. Segal (2010).

**Sample:** The study participants were selected from Chittoor and Tirupati districts in Andhra Pradesh, India. A total of 320 men (160) and women (160) from low and high socio-economic status in the age group of 60-70 years took part in the research by completing anxiety assessment surveys. The participants received detailed instructions on how to complete the questionnaires and collected the data.

## Analysis of Data:

The acquired data have been statistically analysed to assess the hypotheses. Calculations were conducted to determine the Means and Standard Deviations (SDs) of the scores. The data underwent ANOVA (Analysis of Variance) to investigate the impact of gender, age and socio-economic status on anxiety among the aged.

## RESULTS AND DISCUSSION

To explore the impact of gender, age, and socioeconomic status on anxiety, the data of eight groups of subjects were analyzed and presented in Table-I.

**Table-I: Means and SD's of Anxiety scores for eight groups.**

| Socio-economic status |      | Men         |             | Women       |              |
|-----------------------|------|-------------|-------------|-------------|--------------|
|                       |      | 50-60 years | 61-70 years | 50-60 years | 61-70 years  |
| Low                   | Mean | 55.92       | 67.91       | 57.58       | <b>58.53</b> |
|                       | SD   | 9.14        | 9.39        | 12.78       | 13.46        |
| High                  | Mean | 65.15       | 62.87       | 53.12       | 60.96        |
|                       | SD   | 14.69       | 12.96       | 12.66       | 11.18        |

*Means of the groups variable Wise*

Men = 58.72      50-60 years=57.94      Low socio-economic status = 63.01

Women =63.80      61-70 years= 64.59      High Socio-economic status = 59.52

In Table-I, it is observed that women between 50-60 years old who are of high socio-economic status achieved a mean score of 53.12, signifying lower anxiety levels compared to other groups. Conversely, men aged 61-70 from low socio-economic backgrounds obtained a mean score of 67.91, indicating higher anxiety levels relative to other groups.

In terms of gender, men exhibit higher anxiety levels (M=58.72) compared to women (M=63.80). With regards to age, individuals aged 61-70 years (M=64.59) experience greater anxiety than those in the 50-60 age group (M=57.94). Concerning socio-economic status, individuals from lower socio-economic backgrounds (M=63.01) display higher levels of anxiety than those from higher socio-economic backgrounds (M=59.52).

Significant differences are observed in the mean anxiety scores across gender, age, and socio-economic status groups. A factorial analysis of variance was conducted on the data to determine the impact of gender, age, and socio-economic status on anxiety among the elderly during the COVID-19 pandemic, with the results presented in Table II.

Hypothesis I: *The influence of gender on anxiety among the elderly during the COVID-19 pandemic would be significant.*

The calculated 'F' values for gender (6.89), age (11.53), and socio-economic status (7.18) indicate that gender, age, and socio-economic status indeed exert a significant influence on anxiety levels.



**Table-VI : Summary of ANOVA for Anxiety Scores.**

| Source of Variation              | Sum of squares (SS) | df  | Mean squares | F-Values |
|----------------------------------|---------------------|-----|--------------|----------|
| <b>Gender (A)</b>                | 948.753             | 1   | 948.753      | 6.89**   |
| <b>Age (B)</b>                   | 1588.653            | 1   | 1588.653     | 11.53**  |
| <b>Socio-economic status (C)</b> | 988.128             | 1   | 988.128      | 7.18**   |
| (AxB)                            | 896.378             | 1   | 896.378      | 6.50**   |
| (AxC)                            | 816.003             | 1   | 816.003      | 5.92*    |
| (BxC)                            | 730.003             | 1   | 730.003      | 5.30*    |
| (AxBxC)                          | 1254.453            | 1   | 1254.453     | 9.10**   |
| Within                           | 42968.125           | 312 | 137.718      | --       |
| Corrected Total                  | 50190.496           | 319 | --           | --       |

Note: \*\*Significant at 0.01 level \* Significant at 0.05 level

As the significant 'F' value of 6.89 is significant, the first hypothesis which stated that the influence of gender on anxiety among the elderly during the COVID-19 pandemic would be significant is accepted as warranted by the results. The first hypothesis positing a notable correlation between gender and anxiety is substantiated by the findings.

The data demonstrated that females exhibit higher levels of anxiety in comparison to males. The current research findings indicate that being female was not identified as a contributing factor that exacerbates psychological distress. Nevertheless, women experience greater psychological distress in their day-to-day lives when compared to men. Various social factors, including biological, psychological, and societal gender-based expectations, have been suggested as reasons for the heightened anxiety levels observed in women relative to men.

**Hypothesis II: *Age would significantly influence anxiety among the elderly during the COVID-19 pandemic.***

The obtained 'F' value for age 11.53 implying that age has significant influence on anxiety among the aged during COVID-19 pandemic. As the obtained 'F' value is significant the second hypothesis which stated that Age would significantly influence anxiety among the elderly during the COVID-19 pandemic is accepted as warranted by the results.

The current research explored the influence of age on anxiety levels amid the COVID-19 pandemic. Findings from this investigation revealed that individuals aged 61-70 years experienced higher levels of

anxiety compared to those aged 50-60 years. Psychological resilience, characterized by the ability to effectively navigate challenging circumstances and negative stressors through psychological, emotional, and behavioral adaptability to internal and external pressures, was discussed.

Factors such as a medical history comprising conditions like respiratory disease, diabetes, hypertension, and psychiatric illnesses such as depression and stress-related disorders, alongside adverse family environments and low income, likely contribute to heightened anxiety levels among the elderly when juxtaposed with young adults during the COVID-19 pandemic.

Individuals aged 60 and above are predisposed to encountering physical manifestations of anxiety more frequently than their younger counterparts. Given their heightened susceptibility to medical issues and medication intake, this demographic confronts an amplified risk of developing anxiety disorders. Notably, researchers estimate that a minimum of 4% of older adults are affected by anxiety, although this figure could be higher as older adults are prone to exhibiting physical symptoms of anxiety rather than explicitly expressing concerns about worry or fear, thereby potentially underreporting their anxiety levels.

**Hypothesis III: *Socio-economic status would play a substantial role in influencing anxiety among the elderly during the COVID-19 pandemic.***

The obtained 'F' value for socio-economic status 7.18 implying that socio-economic status has significant influence on anxiety. As the obtained 'F' value is significant the third hypothesis which stated that socio-economic status would play a substantial role in influencing anxiety among the elderly during the COVID-19 pandemic is accepted as warranted by the results.

Risk factors that can elevate the likelihood of anxiety in older adults within a low socio-economic status include medical conditions, chronic pain, limited mobility (e.g., difficulty in walking or moving around), loss of close relationships, financial adjustments due to retirement, and experiences of physical, verbal, financial, or sexual abuse, neglect, or abandonment (commonly referred to as elder abuse). These factors may contribute to higher levels of anxiety in older individuals from low socio-economic backgrounds compared to those from higher socio-economic backgrounds.

## CONCLUSIONS

1. Gender plays a significant role in anxiety levels during the COVID-19 pandemic, with women experiencing higher anxiety levels compared to men.
2. Age is a key factor influencing stress amid the COVID-19 pandemic. Individuals aged 61-70 years exhibit higher anxiety levels in comparison to those in the 50-60 age groups.
3. Socio-economic status significantly impacts stress levels during the COVID-19 pandemic, with individuals from lower socio-economic backgrounds experiencing higher levels of anxiety.

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