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Exploring Loneliness among Geriatric Patients in Critical Care Areas of a Tertiary Care Hospital in Islamabad

[a]Allyan Khokhar, [b]Rakhta Tasleem, [c]Sadia Bibi, [d]Raja Shahzad Ahmad, [e]Samreen Aman, [f]Anees Fatima

[a]*Trainee Nurse at Rawal General and Dental Hospital, Islamabad. Pakistan*
[b]*Pharmacist at Rawal College of Nursing, Islamabad, Pakistan*
[c]*Statistician, Rawal College of Nursing, Islamabad, Pakistan*
[d]*Tehsil Polio Officer, Program Data Assistant and Migrant Mobile Population UN World Health Organization, Muzaffarabad Azad Jammu and Kashmir*
[e]*Trainee Nurse, Rawal General and Dental Hospital, Islamabad, Pakistan*
[f]*Trainee Nurse and Pakistan Institute of Medical Sciences Islamabad, Pakistan*

*CORRESPONDENCE
Rakhta Tasleem
Pharmacist at Rawal College of Nursing, Islamabad, Pakistan
E-mail: rakhtatasleem7@gmail.com
Phone: +92- 301 1221962

ABSTRACT

Background: Loneliness is prevalent among the elderly population. This, in turn, is a significant risk factor for various physical and psychosocial health ailments. Chronic loneliness emerges as a predisposing factor for suicidality, exacerbating cognitive decline and diminishing the overall quality of life. This study investigates loneliness among geriatric patients in critical care at a tertiary hospital in Islamabad, aiming to identify contributing factors and support interventions for improved emotional well-being. **Methods:** The study applied a cross-sectional quantitative research design that used a convenient non-probability sampling technique. The University of California, Los Angeles Loneliness Scale Version 3 (UCLA-LS V3), a 20-item questionnaire developed by Russell, was used to measure the loneliness and social isolation of geriatric patients. The sample included 100 geriatric patients aged above 65 years with acute clinical loneliness and chronic illnesses and those admitted. The study excluded patients under 65 years of age, unconscious, or on mechanical ventilation. The collected data was analyzed through SPSS version 27, and outcomes were presented in graphs and tables. **Results:** This study assessed loneliness in 100 geriatric patients, with 63% male and 37% female participants, and a mean age of 75.83 years. The average UCLA Loneliness Scale score was 33.06, indicating moderate loneliness. Gender did not significantly affect loneliness ($t = 0.225$, $p = 0.22$), and there was a weak, non-significant correlation between age and loneliness ($r = 0.14$, $p = 0.17$). Most participants (65%) experienced moderate loneliness, with males reporting higher levels of severe loneliness. The primary factors contributing to loneliness were perceived lack of support (22%) and social exclusion (12%). **Conclusion:** The study concludes that there is a significant prevalence of loneliness among geriatric patients, with a majority experiencing moderate loneliness. Gender and age did not have a significant impact on loneliness levels, suggesting that other factors, particularly a perceived lack of support and social exclusion, play a more substantial role. The findings underscore the need for targeted interventions that address the multifactorial nature of loneliness, emphasizing the importance of enhancing social support and emotional connections to improve the well-being of geriatric patients.

Keywords: Loneliness, Geriatric Patients, Critical Care, Cross-Sectional Study, Social Isolation, UCLA Loneliness Scale, Chronic Illness

INTRODUCTION

Loneliness can be comprehended through diverse perspectives. Loneliness, as posited by Poscia (2018) and Russell (2018), represents the subjective perception of communicative inadequacy and a discrepancy between desired and actual social connections [1-3]. Banerjee (2021) defines it as encompassing feelings of isolation, emotional detachment, and a subjective absence of social bonds [4]. Poscia (2018) delineates social isolation as the objective absence of meaningful interactions, [1], while Nicholson (2012) conceptualizes it as a state of social detachment [5]. In essence, loneliness is the subjective distress arising from the disparity between one's desired and existing social relationships, as described by Macled (2018) [6]. According to Banerjee's 2021 research findings, loneliness is prevalent among the elderly, posing a significant risk for physical and psychosocial health issues. Chronic loneliness predisposes to suicidality, worsens cognitive decline, and reduces overall quality of life [4]. The global public health discourse on loneliness and social isolation is particularly pertinent for the aging demographic. Although separate, these concepts are interconnected, as emphasized by Olujoke A. Fakoya in 2020 [7]. Valtorta and Hanratty propose a prevalent characterization of loneliness, integrating social and emotional aspects. Loneliness is described as subjective distress stemming from the perceived absence of a desired confidant (emotional loneliness) or a reduced social circle (social loneliness). In contrast, consensus on the definition of social isolation is limited.

Nonetheless, scholars portray it as a multifaceted concept indicating the objective scarcity of social interactions within familial, friendship, or broader community contexts [8]. With aging, individuals face heightened susceptibility to age-related declines, posing challenges in fostering meaningful relationships and increasing the risk of loneliness. Factors such as living alone, lacking familial and cultural ties, or constraints in community engagement contribute significantly to loneliness. The intersection of social isolation and loneliness often leads to adverse health outcomes, including depression and demoralization, especially when compounded by physical impairments. Singh's 2009 research underscores the pivotal role of social isolation and loneliness in determining health outcomes [9]. Dejection is prevalent among older adults, especially those 80 and above, with rates from 30% to 60%, globally recognized. Social isolation affects 17% to 43% of geriatric patients aged 60 and above, impacting well-being significantly, akin to smoking, alcohol, and obesity. Loneliness is associated with depression, insomnia, high blood pressure, and cognitive decline.

Similarly, social isolation increases mortality, mental illness risk, dementia, and disability, and diminishes life satisfaction. Older socially isolated individuals, especially during major life changes like retirement or the loss of a partner, face heightened risks of severe depression. Inadequate social connections detrimentally affect both physical and mental health, often leading to dissatisfaction with healthcare providers. Factors contributing to loneliness and social isolation include lower socioeconomic status, poor health, living alone, limited social contact, caregiving responsibilities, increasing age, depression, low optimism, physical or cognitive limitations, and sensory impairments [10]. The ability of geriatric individuals to adapt to changes in social dynamics relies on various factors, including individual, societal, and environmental influences. Prior research on social isolation and loneliness among the elderly has identified individual-level determinants such as age, marital status, socioeconomic status, gender, education, functional impairments, and chronic illnesses. Advanced age, living alone, and lower socioeconomic status are notable predictors of susceptibility to social isolation and loneliness.

Additionally, recent studies highlight the importance of understanding the impact of environmental factors on these experiences [11]. Addressing loneliness among geriatric patients in critical care units of tertiary hospitals is a pressing concern in geriatric care. Understanding the relationship between physical health and psychosocial well-being has become crucial with the global aging population. Loneliness, often overlooked clinically, significantly affects health outcomes and quality of life, especially during acute medical treatments and extended hospital stays. The critical care setting, with its intense medical interventions and limited social interactions, exacerbates feelings of loneliness among geriatric patients [11]. This research in Islamabad's tertiary care hospital aims to investigate loneliness prevalence, factors, and impacts on health outcomes and quality of life among geriatric patients. Focused on ICU and CCU wards, where prolonged hospitalization disrupts social interactions, the study explores

patients' coping mechanisms with physical distancing and isolation, aiming to inform interventions to alleviate loneliness and enhance well-being from July to December 2023.

MATERIALS AND METHODS

A cross-sectional quantitative study was conducted to assess the subjective experience of loneliness among geriatric patients admitted to the intensive care units of a tertiary care hospital in Islamabad. The study included 100 individuals aged 65 years and older, comprising 63 males and 37 females, with a mean age of around 76 years. Participants were selected from geriatric patients admitted to the hospital, and the questionnaire was explained and distributed to them. The inclusion criteria encompassed geriatric patients aged 65 years and older with chronic illnesses or acute clinical conditions who provided both verbal and written consent. Patients under 65, those unable to communicate verbally, those requiring mechanical ventilation, or those that unconscious were excluded from the study. Conducted from July to December 2023, the study used a convenient non-probability sampling method for practicality and accessibility. Participation was entirely voluntary, and the target population of 130 was decided using Slovin's Formula, resulting in a sample size of approximately 100 [12]. Ethical approval for the study was obtained from the institutional review committee of a private hospital in Islamabad, and all participants provided informed consent, emphasizing the voluntary nature of their involvement and their right to withdraw at any time. Participants were guided through the questionnaire, with verbal explanations provided for each item. Standardized instructions ensured consistent assessment, with assurances that there were no right or wrong answers and encouragement to seek clarification if needed. The complete questionnaires were collected, with an average completion time of approximately 45 minutes per participant. The University of California Los Angeles (UCLA) Loneliness Scale Version 3, a 20-item instrument designed to evaluate subjective experiences of loneliness and social isolation, was used as the data collection tool. Participants rated the frequency of each feeling using options O ("I often feel this way"), S ("I sometimes feel this way"), R ("I rarely feel this way"), and N ("I never feel this way"). The scale, developed by Russell in 1980, has undergone revisions to improve validity and reliability, including reverse-scored items and streamlined language, and is recognized as a valid and reliable measure [13, 14]. The scale was translated into Urdu by two bilingual individuals proficient in English and Urdu and reviewed by two others to ensure the correct reflection of the original items. The Cronbach's Alpha for the Urdu-translated scale was 0.90. Data collection involved participants completing the UCLA Loneliness Scale Version 3 questionnaire based on their subjective experiences of loneliness. This confirmed instrument, forming 20 items, was administered among patients in ICU and CCU settings. Data analysis was performed using the Statistical Package for Social Sciences (SPSS) version 27.

DATA COLLECTION PROCEDURE

Data for this cross-sectional study were collected from 100 geriatric ICU patients in Islamabad (July–December 2023) using the Urdu-translated UCLA Loneliness Scale Version 3. Convenience sampling included patients aged 65+ with chronic or acute conditions who consented, excluding those unable to communicate or on ventilation. Ethical approval was secured, and data were analysed with SPSS 27.

STATISTICAL ANALYSIS

The statistical analysis in this study included the use of frequency distribution for categorical variables (e.g., gender distribution), descriptive statistics (e.g., mean, standard deviation) for continuous variables like age and UCLA loneliness scores, and inferential tests such as the independent t-test to compare loneliness scores between genders. Additionally, Pearson correlation analysis assessed the relationship between age and loneliness scores. Visual tools like bar charts and tables were used to summarize and interpret findings. All analyses were conducted using SPSS version 27.

RESULTS

Table 1 presents the frequency distribution of gender among the geriatric patients included in the study. Out of a total of 100 participants, 63% were male, while 37% were female, highlighting a higher proportion of male patients in the sample.

Table 1: Frequency Distribution Gender-Based Analysis of Geriatric Patients

	Frequency	Percent
Male	63	63
Female	37	37
Total	100	100

Table 2 gives the descriptive statistics of the age of geriatric patients. The participants' ages were between 65 and 97 years, with a mean age of 75.83 years and a standard deviation of 9.626, which shows that the age of the participants was not uniform across the sample.

Table 2: Descriptive Statistical Analysis for Age of Geriatric Patients

	Minimum	Maximum	Mean	Std. Deviation
Age (in Years)	65	97	75.83	9.626

Table 3 shows the descriptive statistics of the UCLA loneliness scores of geriatric patients. The scores varied between 8 and 54, and the mean score was 33.06, with a standard deviation of 11.32. This means that the participants' loneliness is moderate as the mean score is closer to the mid-point of the loneliness scale. The standard deviation is slightly higher, which means that the scores for loneliness are rather diverse, and some participants reported rather high levels of loneliness, while others reported lower levels. This variation is due to multiple factors, including health status, social support, or previous experiences, and hence the need to design and implement interventions to meet the needs of geriatric patients in critical care facilities.

Table 3: Descriptive Statistical Analysis for Loneliness Score of Geriatric Patients on UCLA Loneliness Scale

	Minimum	Maximum	Mean ± S. D
Loneliness	8	54	33.06 ± 11.32

Table 4 shows the UCLA Loneliness Scale scores of the two groups of participants, men and women, to determine whether there is a significant difference between the two groups using the independent t-test. The study indicated that the mean loneliness score was slightly higher for men (31.46) than women (30.89), but the difference was statistically insignificant (t= 0.225, p= 0.22). The standard deviations were 11.26 for the men and 10.01 for the women, which shows that the scores varied slightly more among the men. The obtained p-value of 0.22 implies that gender does not affect the loneliness levels of geriatric patients in this study. Consequently, the results suggest that other variables have higher chances of relevance to loneliness in this population than gender.

Table 4: Comparison of Loneliness Score among Men and Women by Using UCLA Loneliness Scale

Group	N	Mean	Standard Deviation	t-value	df	p-value
Men	63	31.46	11.26	0.225	98	0.22
Women	37	30.89	10.01			

The correlation between age and loneliness scores among geriatric patients is presented in Table 5. The value of the correlation coefficient is 0.14, which means that there is a weak positive relationship, which means that older patients may have slightly higher loneliness scores. However, the p-value of 0.17 is greater than 0.05, which makes the correlation non-significant at a 5% level of significance. This indicates that age has little or no effect on loneliness in this sample of geriatric patients. Other factors may play a greater role in the level of loneliness among individuals.

Table 5: Correlation Analysis Between Age of Geriatric Patients and their Loneliness Score

	Loneliness Score	
	Correlation Coefficient (r)	p-value
Age	0.14	0.17

Figure 1 shows that 15% of geriatric patients expressed a mild level of loneliness, 65% expressed a moderate level of loneliness, and 20% expressed a severe level of loneliness. Most of the patients described their level of loneliness as moderate, which is a characteristic of conditions in the critical care units. The 20% experiencing severe loneliness highlights the necessity for the provision of mental health services since severe loneliness can worsen the patient's condition and recovery process. The results of this research underscore the need to incorporate social support and psychological intervention in the management of geriatric patients to enhance their quality of life.

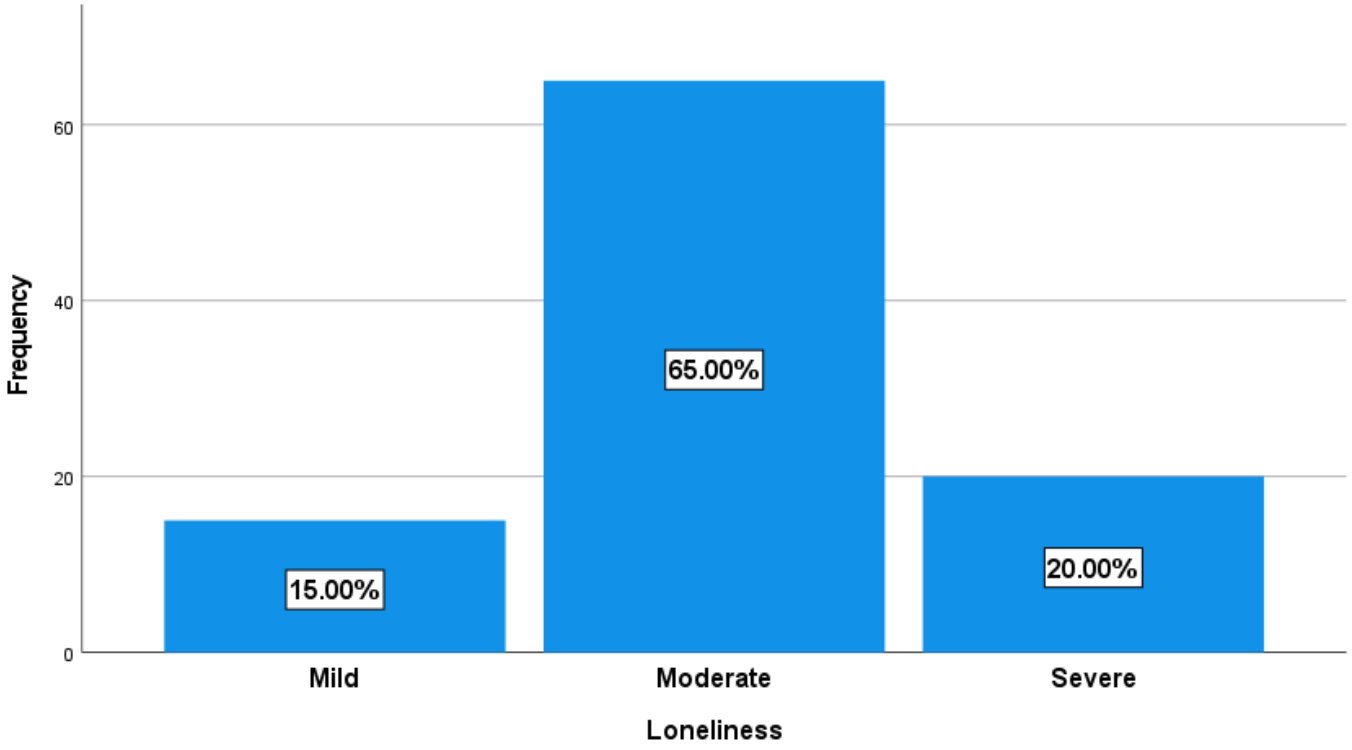

Figure 1: Levels of loneliness among Geriatric Patients

Figure 2 compares loneliness levels between male and female geriatric patients. The chart shows that more males experience moderate and severe loneliness than females, with 41 males and 24 females reporting moderate loneliness, and 9 males and 11 females reporting severe loneliness. However, females slightly outnumber males in the mild loneliness category (24 females vs. 13 males). These findings indicate that male geriatric patients are more prone to moderate and severe loneliness, suggesting a need for targeted interventions addressing gender differences in loneliness among older adults.

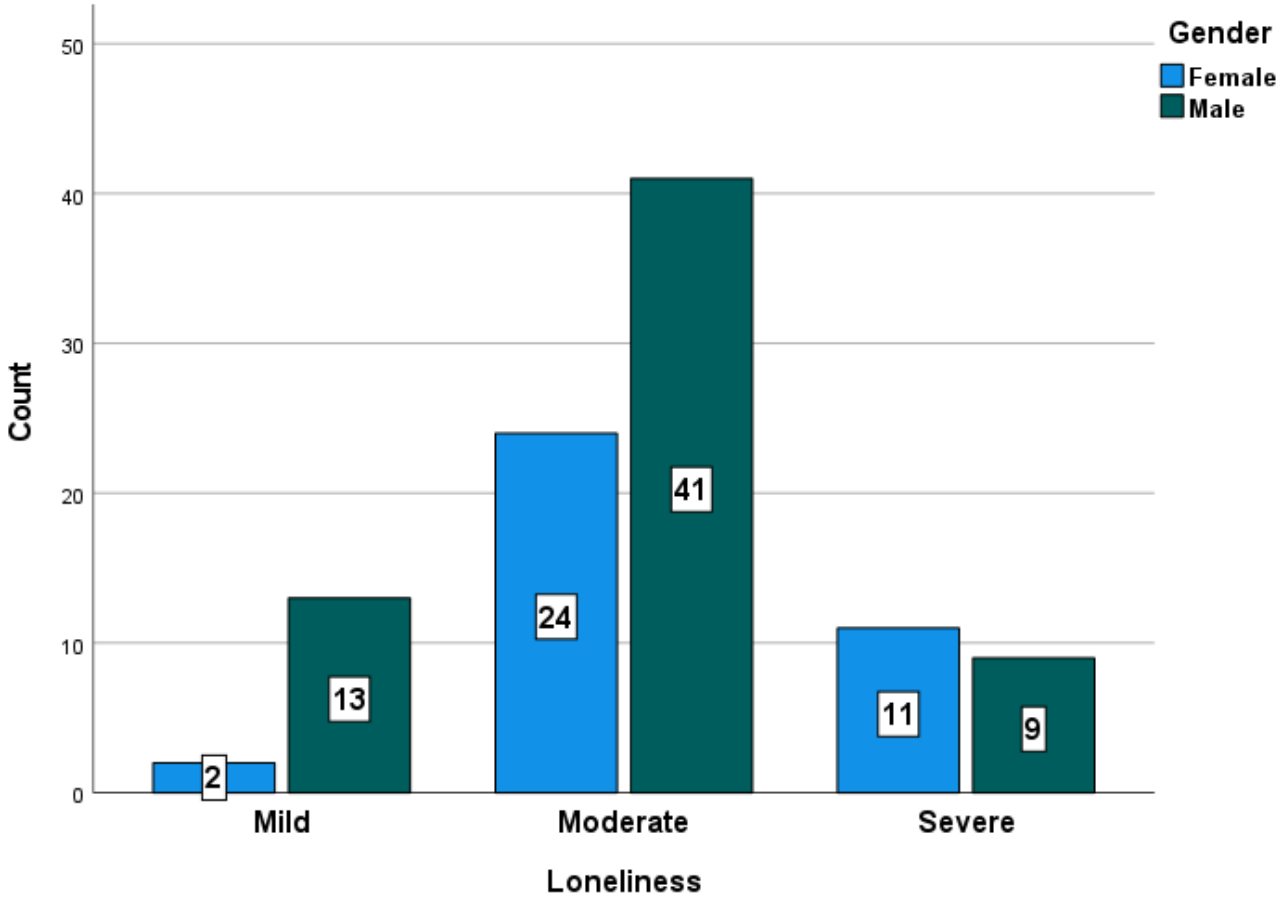

Figure 2: Comparative Assessment of Levels of Loneliness among Gender of Geriatric Patients

Table 6 shows the contributing factors to the loneliness of geriatric patients, where the most important reason is Perceived Lack of Support, with a 22% response from the participants. Other factors are Social Exclusion (12%) and Shallow Relationships (9%); Lack of Emotional Connection, Social Isolation, and Inadequate Social Interaction are all equal to 8%. These results imply that loneliness among geriatric patients is a multifactorial phenomenon, with insufficient support being the primary cause. These factors can be managed and reduced to prevent loneliness and enhance the quality of life of older people.

Table 6: Contributing Factors for Loneliness among Geriatric Patients

	F	%
Lack of Emotional Connection	8	8.0%
Lack of Companionship	9	9.0%
Social Exclusion	12	12.0%
Social Isolation	8	8.0%
Perceived Lack of Support	22	22.0%
Shallow Relationships	9	9.0%
Perceived Lack of Understanding	7	7.0%
Negative Self-Perception	9	9.0%
Inadequate Social Interaction	8	8.0%
Limited Social Support	8	8.0%

N=10

DISCUSSION

This study assessed loneliness among geriatric patients in critical units of a tertiary care hospital in Islamabad using the UCLA version 3 scale developed by D. P. Russell in 1980[15]. The study found a moderate level of loneliness among participants, with no significant gender difference suggesting an equal impact on both men and women. Surprisingly, age did not correlate significantly with loneliness scores ($p = 0.17$), indicating no age-related increase in loneliness. Questionnaire analysis revealed varying levels of loneliness: 14% mild, 57% moderate, and 29% severe, highlighting the prevalence of moderate to severe loneliness in the population. This study found that 29% of participants experienced frequent loneliness, in contrast, a study conducted in Canada in 2021, yielded that 34.8% experienced feelings of loneliness at least occasionally, 43.1% of respondents felt lonely sometimes, and 8.3% reported experiencing consistent or frequent loneliness [16] revealing that 14% of participants rated themselves as never lonely, 58% rated themselves as sometimes lonely, and 28% responded as often lonely. Living alone is an important risk factor for loneliness, both pre-COVID-19 [17, 18] and during the pandemic [19, 20]. This study further supported the notion that loneliness persists even among individuals living alone during hospital stays post-COVID-19. Our findings revealed that being alone predicted loneliness in both men and women, with no significant gender difference in loneliness levels. In contrast, a 2021 study in Canada indicated higher loneliness among females compared to males [21].

In a 2022 study in Bangladesh, geriatric patients exclusively experienced loneliness during the pandemic [22], similarly, a study conducted in Austria revealed heightened levels of loneliness due to the constraints imposed during the COVID-19 pandemic [23]. Contrary to expectations, recent research found that geriatric patients experience loneliness during hospitalizations for chronic conditions. A separate 2020 study in the US revealed a correlation between heightened mortality rates among geriatric patients and feelings of loneliness and social isolation [24]. Conversely, our study identified a decline in health outcomes associated with rising loneliness and social isolation over time. A 2022 study in Brazil observed mild depressive symptoms among geriatric patients despite low levels of loneliness during the COVID-19 pandemic [25]. Contrarily, our study indicates a persistent moderate level of loneliness among geriatric patient's post-pandemic, particularly during hospitalization. A prior 2022 study in China identified a link between heightened loneliness and deteriorating health outcomes among patients [26]. Similarly, our study findings aligned, indicating a decline in health outcomes associated with higher levels of loneliness. This study has notable advantages. Firstly, it addresses a significant research gap in Pakistan where studies on this topic are lacking. Secondly, findings reveal that most patients experience moderate loneliness during hospital admissions. The study's focus on documenting the unique environment of profound isolation within hospital settings is particularly noteworthy.

LIMITATIONS AND RECOMMENDATIONS

The investigation primarily used a cross-sectional approach, limiting causal inference. The study's scope was constrained by restricted access, focusing solely on participants from a single private hospital in Islamabad. This exclusion omitted geriatric patients receiving treatment elsewhere, impacting the study's generalizability. Future research should use longitudinal designs to establish causal relationships and include geriatric patients from diverse healthcare settings to improve generalizability. Expanding the factors examined, such as health conditions and cultural influences, could offer a more comprehensive understanding of loneliness in older adults.

CONCLUSION

The study concludes that most participants reported moderate levels of loneliness, with a significant proportion (20%) experiencing severe loneliness, highlighting the critical need for psychological and social support interventions. Gender differences in loneliness levels were not statistically significant, though more males reported higher levels of loneliness compared to females. Age also showed a weak, non-significant correlation with loneliness. The most prominent contributing factor to loneliness was the perceived lack of support, followed by social exclusion and shallow relationships, underscoring the importance of stronger social connections for this vulnerable population.

CONFLICT OF INTEREST

The authors declared no conflict of interest.

AUTHOR CONTRIBUTION

Allyan Khokhar conceived the study, performed the literature review, and was involved in all stages of manuscript development. Raja Shahzad Ahmed and Dr. Rkhta Tasleem provided critical feedback during the review process. Ms. Sadia Bibi handled statistical analysis and data interpretation. Samreen Aman contributed to the introduction and discussion sections, while Anees Fatima formulated the methodology. Naeem Khan and Mumtaz Ali assisted with data collection. All authors read and approved the final manuscript, contributing significantly to the research, analysis, and composition.

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FINDING SOURCE

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