

Anxiety among Elderly in a Community of Lalitpur Metropolitan City, Nepal

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Abstract:

Background: Anxiety is a common psychological issue among the elderly, affecting their quality of life and mental health.

Objective: To find out the level of anxiety among older adults in Harisiddhi-28, Lalitpur Metropolitan City.

Methods: A descriptive cross-sectional study was conducted among 72 purposively selected elderly participants. Data were obtained through a structured interview schedule with assured validity, reliability, and ethical considerations. Statistical analysis was performed using SPSS version 16, applying descriptive (frequency, percentage, mean, SD) and inferential statistics (Chi-square test).

Results: The mean age of respondents was 73 ± 4.3 years, and the majorities (69.4%) were female. Most elderly (84.7%) had low levels of anxiety, while 15.3% reported moderate level of anxiety. Anxiety was significantly associated with family type ($p = 0.021$).

Conclusion: Most elderly participants had low anxiety levels, with family structure playing an important role in determining anxiety. Strengthening family support systems may help reduce anxiety and promote mental well-being among older adults.

Keywords: Anxiety, Elderly, Mental Health, Family Type, Cross-Sectional Study, Nepal

Introduction

Anxiety is one of the most prevalent psychological conditions affecting older adults and represents a growing public health concern worldwide. It is characterized by excessive worry, fear, or nervousness that interferes with daily functioning and psychosocial well-being (1). Epidemiological evidence suggests that approximately one in ten older adults experience clinically significant anxiety disorders, while an even larger proportion suffer from subclinical anxiety symptoms that adversely affect daily life and overall functioning (2). In later life, anxiety is frequently associated with bereavement, chronic physical illnesses,

polypharmacy, stressful life events, declining functional capacity, and reduced social support. Collectively, these factors contribute to diminished quality of life, functional impairment, increased dependency, and higher healthcare utilization among elderly populations (3).

The World Health Organization (WHO) defines older adults as individuals aged 65 years and above, a stage of life often accompanied by declining physical and cognitive abilities, multimorbidity, and increased psychosocial vulnerability (4). The global prevalence of anxiety among older adults varies considerably across regions, reflecting differences in socioeconomic conditions, health status, cultural norms, and the

availability of formal and informal support systems. Family structure, living arrangements, and perceived social support have been consistently identified as key determinants of mental health outcomes in later life, with strong social ties serving as a protective factor against psychological distress (5,6,7).

In Nepal, individuals aged 60 years and above account for approximately 10% of the total population, and this proportion is steadily increasing. Available studies indicate that the prevalence of anxiety among the Nepalese elderly ranges from 21.7% to 32.3%, highlighting a substantial mental health burden in this age group (8,9). Socioeconomic adversities such as poverty, chronic illness, widowhood, limited access to healthcare, and the gradual erosion of traditional joint family systems may further heighten vulnerability to anxiety among older adults. Evidence from Nepal and similar settings demonstrates that strong family support, positive interpersonal relationships, and social connectedness play a crucial protective role against anxiety and psychological distress in later life (10,11).

Despite its significant impact on physical, psychological, and social functioning, anxiety among older adults often remains under-recognized and undertreated, particularly in low- and middle-income countries such as Nepal. Limited mental health resources, stigma, and inadequate screening at the primary care level further contribute to this treatment gap. Therefore, assessing the prevalence of anxiety and identifying its associated factors among elderly populations is essential for informing multidisciplinary interventions, strengthening family and community-based support mechanisms, and developing evidence-based strategies to promote healthy and active ageing (12).

Objectives of the Study

General Objective:

To assess the level of anxiety among elderly individuals.

Specific Objectives:

1. To determine the level of anxiety among the elderly.
2. To identify the association between anxiety level and selected background variables.

Materials and Methods

A descriptive cross-sectional research design was used for the study. The research was conducted in Harisiddhi-28, Lalitpur Metropolitan City, Bagmati Province, Nepal. The study population consisted of elderly men and women aged 68 years and above. The sample size was calculated using Slovin's formula $n=N/(1+Ne^2)$ = $N / (1 + Ne^2)$, where $N = 250$ and $e = 0.1$. The calculated sample size was 72. Participants were selected using a non-probability purposive sampling technique. Elderly individuals who were unwilling to participate, severely ill, had hearing or speech problems, or had difficulty understanding the language were excluded.

Data were collected using a structured interview schedule. The tool consisted of background information and the Beck Anxiety Inventory (BAI), a 21-item modified Likert scale rated from 0 (not at all) to 3 (severely). Total scores were categorized as low (0–21), moderate (22–35), and potentially concerning anxiety (≥ 36). The tool was prepared in English, translated into Nepali, and back-translated to ensure consistency. Content validity was ensured through expert consultation and literature review. Reliability was maintained through pre-testing among 10% of the sample.

Data were collected through face-to-face interviews after obtaining written informed consent and ethical approval from the Research Committee of Alka Hospital Pvt. Ltd. (College) and permission from the concerned local authority. Confidentiality and voluntary participation were ensured.

Data were coded and analyzed using SPSS version 16. Descriptive statistics (frequency, percentage, mean, and standard deviation) and inferential statistics (Chi-square test) was used to identify the association.

Data Analysis and Interpretation

This section presents the analysis and interpretation of data collected from 72 elderly

Background Characteristics of Respondents

respondents. The findings are organized according to background characteristics, anxiety status, and association between anxiety and selected variables.

Table 1 presents the socio-demographic characteristics of the respondents.

n=72

Variables	Frequency(N)	Percentage (%)
Age*		
68-77 years	59	81.9
78 and above	13	18.1
Sex		
Male	22	30.6
Female	50	69.4
Ethnicity		
Brahman/Chhetri	27	37.5
Janjati, Dalit	45	62.5
Religion		
Hindu, Buddhist	42	58.3
Christian	30	41.7
Education		
Informal*	53	73.6
Formal*	19	26.4
Marital status		
Married	48	66.7
Widow /widower	24	33.3
Occupation		
Home maker/Farmer	51	70.8
Retired, Business	21	29.2
Family type		
Single	23	31.9
Joint / Extended	49	68.1
Economic status		
Insufficient to spent	11	15.3
Enough to extra saving	61	84.7
Source of income		
Old age allowance/pension	68	94.4
House rent/ Business	31	43.1
Presence of family support	65	90.3
Presence of chronic disease	41	56.9

*Mean Age \pm SD: 73 ± 4.3 years; minimum age: 68 years; maximum age: 86 years

*Informal =Illiterate to primary, *Formal=secondary to bachelor and above

The majorities (81.9%) of the elderly were aged 68–77 years, with a mean age of 73 ± 4.3 years (range: 68–86 years). Females constituted 69.4% of the sample. More than half of the respondents belonged to Janajati/Dalit ethnicity (62.5%), and 58.3% followed Hindu or Buddhist religion. Regarding education, 73.6% had informal education. Most respondents were married (66.7%)

and engaged in homemaking or farming (70.8%). A majority lived in joint or extended families (68.1%) and reported sufficient economic status with extra savings (84.7%). Old age allowance or pension was the main source of income (94.4%). Most respondents had family support (90.3%), while more than half (56.9%) reported the presence of chronic illness.

Responses on Anxiety

Table 2 Respondents' Responses on Anxiety

n=72

Items	Not at all (0)	Mildly but it didn't bother me much (1)	Moderately- it wasn't pleasant at times (2)	Severely-it bothered me a lot (3)
	N (%)	N (%)	N (%)	N (%)
Numbness or tingling	28(38.9)	34(47.2)	10(13.9)	-
Feeling hot	30(41.7)	37(51.4)	5(6.9)	-
Wobbliness in legs	26(36.1)	35(48.6)	11(15.3)	-
Unable to relax	25(34.7)	36(50)	9(12.5)	2(2.8)
Fear of worst happening	49(68.1)	14(19.4)	8(11.1)	1(1.1)
Dizzy or lightheaded	32(44.4)	31(43.1)	7(9.7)	2(2.8)
Heart pounding/racing	34(47.2)	28(38.9)	9(12.5)	1(1.4)
Unsteady	43(59.7)	21(29.2)	8(11.1)	-
Terrified or afraid	44(61.1)	18(25)	9(12.5)	1(1.4)
Nervous	48(66.7)	16(22.2)	8(11.1)	-
Feeling of choking	32(44.4)	32(44.4)	6(8.3)	2(2.8)

Hands trembling	45(62.5)	19(26.4)	7(9.7)	1(1.4)
Shaky / unsteady	49(68.1)	19(26.4)	3(4.2)	1(1.4)
Fear of losing control	48(66.7)	16(22.2)	7(9.7)	1(1.4)
Difficulty in breathing	41(56.9)	23(31.9)	5(6.9)	3(4.2)
Fear of dying	51(70.8)	16(22.2)	3(4.2)	2(2.8)
Indigestion	33(45.8)	26(36.1)	8(11.1)	1(1.4)
Faint / lightheaded	46(63.9)	23(31.9)	2(2.8)	1(1.4)
Face flushed	40(55.6)	26(36.1)	5(6.9)	1(1.4)
Hot/cold sweats	41(56.9)	24(33.3)	7(9.7)	-

Table 2 illustrates the respondents' responses to individual anxiety symptoms. Most respondents reported "not at all" for major anxiety symptoms. Fear of dying was absent in 70.8% of respondents,

fear of worst happening and shakiness/unsteadiness were absent in 68.1%, and nervousness was absent in 66.7% of respondents, indicating generally low anxiety symptomatology among the elderly.

Level of Anxiety

Table 3 Respondents' Level of Anxiety

n=72

Items	Frequency(N)	Percentage (%)
Low anxiety (0-21)	61	84.7
Moderate anxiety to Potential concerning levels of anxiety(22-36 and above)	11	15.3

Total Score =63

Table 3 shows that, majority (84.7 %) of the respondents' level of anxiety was low. Similarly, 15.3 percent of the respondents' level of anxiety was moderate to potential concerning levels.

Association between Background Variables and Anxiety

TABLE 4 Association between Selected Background Variables and Level of Anxiety

Variables	Level of anxiety		χ^2	df	p-value
	Low anxiety	Moderate anxiety to potential concerning levels of anxiety			
Age					
68-77	52	7	0.66	1	0.51
>78	11	2			
Sex					
Male	18	4	0.72	1	0.44
Female	43	7			
Religion					
Hindu, Buddhist	34	7	0.74	1	0.44
Christian	27	4			
Marital status					
Married	40	8	0.74	1	0.46
Widow/widower	21	3			
Family type					
Single	16	7	0.03*	1	0.02*
Joint/extended	45	4			
Economic status					
Insufficient to spent	9	2	0.67	1	0.53
Enough to extra saving	52	9			
Presence of family support	57	8	0.06	1	0.06
Presence of Chronic disease	34	7	0.28	1	0.16

*Significant at <0.05

Table 4 shows the association between selected background variables and level of anxiety. No statistically significant association was found between anxiety level and age, sex, religion, marital status, economic status, presence of family support, or presence of chronic disease ($p > 0.05$). However, a statistically significant association was observed between family type and level of anxiety ($\chi^2 = 0.03$, $df = 1$, $p = 0.02$), indicating that family structure plays an important role in influencing anxiety among elderly individuals.

Discussion of the Study

Background Characteristics of Respondents

The present study revealed that the majority of respondents were aged 68–77 years, with a mean age of 73 ± 4.3 years, and females constituted a higher proportion of the study population. This female predominance aligns with previous studies among elderly populations, which have attributed the pattern to higher life expectancy among women (1,2). The predominance of Janajati/Dalit ethnicity, Hindu or Buddhist religion, informal education, and engagement in homemaking or farming

reflects typical socio-demographic characteristics of elderly populations in Nepal and comparable low- and middle-income settings (2).

Most respondents lived in joint or extended families and reported adequate economic status, primarily supported by old-age allowance or pension. Similar socio-economic conditions and living arrangements have been reported in other studies across South Asia, where family-based living remains common and plays a significant role in influencing mental health outcomes among older adults (10,11). Despite these supportive structures, more than half of the respondents reported the presence of chronic illnesses, which are known contributors to anxiety and psychological distress in older adults (3).

Level of Anxiety among Elderly

The findings indicated that the majority of respondents (84.7%) experienced low levels of anxiety. This result is comparable with a study conducted in Jahoram City, where 98.1% of elderly participants reported normal anxiety levels (2). Nevertheless, 15.3% of respondents exhibited moderate anxiety, suggesting a vulnerable subgroup at risk of psychological distress.

These results are consistent with a study from Turkey, which reported that 17.1% of elderly individuals had anxiety disorders (2). Conversely, studies conducted in Nepal, Iran, and Jordan have reported higher prevalence rates among the elderly, ranging from 21.7% to 34% (4,5,6,7). Such variations may reflect differences in socio-cultural contexts, health conditions, levels of social support, and the assessment tools employed to measure anxiety (8).

Association between Background Variables and Anxiety

In the present study, no statistically significant association was observed between anxiety levels and variables such as age, sex, religion, marital status, economic status, presence of family support, or presence of chronic disease. These findings

differ from several prior studies, which have reported significant associations between anxiety and these factors (4,3,5). The discrepancies may be attributable to differences in sample size, study design, cultural context, or coping mechanisms among elderly populations.

However, a significant association was observed between family type and anxiety levels. Elderly individuals residing in joint or extended families reported lower levels of anxiety compared to those living alone. This finding aligns with previous research emphasizing the protective role of family structure, social interaction, and emotional support in mitigating anxiety among older adults (10,11). Strong family relationships and shared living arrangements may enhance feelings of security, belonging, and emotional well-being, thereby reducing psychological distress in later life.

Conclusion

Based on the findings of the present study, it can be concluded that the majority of elderly respondents experienced low levels of anxiety. The study further revealed a statistically significant association between anxiety level and family type, highlighting the important role of family structure in influencing anxiety among elderly individuals.

Recommendations

Based on the findings of the study, the following recommendations are suggested:

1. Similar studies may be conducted with a larger sample size to enhance the generalizability of the findings.
2. Future research may include other population groups, such as middle-aged adults, who may experience increased anxiety due to family and social responsibilities.
3. Community-based awareness and intervention programs focusing on anxiety management through strengthened family support systems should be promoted to

improve the mental well-being of elderly individuals.

Limitations

The study was conducted among a limited population within a single community, which may restrict the generalizability of the findings.

Acknowledgement

The authors gratefully acknowledge the support and cooperation provided by their respective departments during the conduct of this research. No financial support was received for this study.

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