

Anxiety Levels Among Elderly With Comorbidities: A Descriptive Study In Ujung Tibu Village

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ABSTRACT

Background: The elderly with comorbidities are vulnerable to psychological problems such as anxiety, which can worsen their health and reduce their quality of life. This study aimed to describe the anxiety levels and demographic characteristics of elderly individuals with comorbidities in Ujung Tibu Village.

Methods: This study used a descriptive design with a cross-sectional approach. A sample of 37 elderly people who met the inclusion criteria was selected via purposive sampling. Anxiety levels were measured using the Geriatric Anxiety Scale (GAS) questionnaire. Data were analyzed using descriptive statistics and presented as frequency distributions and percentages.

Results: Most respondents experienced mild anxiety (73.0%), followed by moderate anxiety (21.6%), and severe anxiety (5.4%). The dominant demographic characteristics were female (78.4%), married (64.9%), living with their husband (45.9%), having a illness duration of 1-5 years (70.3%), and suffering from hypertension (64.9%).

Conclusion: The anxiety level of elderly people with comorbidities in Ujung Tibu Village is predominantly mild. Community activities like the Integrated Health Post (Posyandu) and family support are suspected to be protective factors. Focused nursing interventions are recommended for the minority experiencing moderate to severe anxiety.



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INTRODUCTION

Aging is an inevitable biological process characterized by progressive physiological decline, increasing vulnerability to various health challenges (Suls et al., 2022). The global population of individuals aged 60 and above is growing rapidly, presenting unique healthcare demands. In Indonesia, this demographic shift necessitates a focused approach to geriatric care, particularly concerning chronic disease management (Cai et al., 2022; eBioMedicine, 2024). The elderly often face a complex health landscape where multiple chronic conditions, known as comorbidities, frequently coexist, significantly impacting their physical and psychological well-being (Bruyère et al., 2024). Understanding the interplay between aging, chronic illness, and mental health is therefore crucial for developing effective healthcare strategies for this growing population (Bruyère et al., 2024).

Comorbidities represent a significant health burden among the elderly population. Data from the Indonesian Ministry of Health (2016) indicates a high prevalence of non-communicable diseases in this demographic, with hypertension (57.6%), osteoarthritis (51.9%), and stroke

(46.1%) being the most common (Kementerian Kesehatan Republik Indonesia, 2023). The presence of multiple chronic conditions often leads to a cascade of health complications, functional limitations, and decreased independence (Graham et al., 2024; Griselda et al., 2023). This complex health status requires continuous medical management and can profoundly affect an individual's quality of life (Triposkiadis et al., 2023). The multifaceted nature of comorbid conditions makes elderly individuals particularly vulnerable to various physical and psychological complications that require comprehensive healthcare approaches (Zhu VI, 2024).

The psychological impact of comorbidities on the elderly is substantial and often manifests as anxiety. Geriatric anxiety is a prevalent yet frequently overlooked condition characterized by feelings of worry, restlessness, and tension, often accompanied by physical symptoms. According to (Belen et al., 2023), anxiety in the elderly typically arises from concerns about health deterioration, dependence on others, fear of death, and the perceived burden on family members. This condition is particularly concerning as excessive and persistent anxiety can initiate a vicious cycle by reducing physical immunity, exacerbating existing comorbid conditions, and ultimately diminishing overall quality of life, creating a challenging scenario for both patients and healthcare providers (SUMINAR & DINIARI, 2023).

The scope of this problem is significant both globally and within the Indonesian context. The World Health Organization estimates that approximately 13.5% of the elderly population worldwide experiences anxiety disorders. In Indonesia, data from the Ministry of Health (2018) indicates that from approximately 20.893.000 elderly individuals, about 32% experience varying degrees of anxiety, ranging from mild to severe. This high prevalence underscores the urgent need to address mental health issues in the geriatric population, particularly those managing multiple chronic health conditions (Yudha et al., 2023). The intersection of physical comorbidities and psychological distress represents a critical area for healthcare intervention and research (Kementerian Kesehatan Republik Indonesia, 2018).

Preliminary observations in Ujung Tibu Village revealed potential anxiety issues among the elderly population with comorbidities. Interviews with community nurses and random elderly residents indicated behavioral patterns suggestive of anxiety, such as excessive health-related worries manifested through frequent blood pressure monitoring. With 37 elderly individuals in Ujung Tibu Village documented as having comorbidities, understanding their mental health status becomes imperative. This study therefore aims to describe the anxiety levels among elderly individuals with comorbidities in Ujung Tibu Village. The findings will provide essential baseline data for developing targeted nursing interventions and community health programs to improve the psychological well-being of this vulnerable population, ultimately contributing to better holistic care for the elderly in similar community settings.

METHODS

Study Design

This study used a descriptive design with a cross-sectional approach. This design was chosen as it aligns with the research objective to describe a condition (anxiety level) in a specific population without manipulating variables. The study was conducted in Ujung Tibu Village. Primary data collection was carried out from October - November 2022.

Population and Sample

The population in this study were all elderly people living in Ujung Tibu Village, totaling 96 people. The sample was selected by purposive sampling according to the inclusion criteria. The inclusion criteria were: (1) Elderly (age \geq 60 years); (2) Have at least one diagnosed comorbid disease (hypertension, diabetes mellitus, heart disease, or rheumatoid) as recorded; (3) Willing to be a respondent by signing informed consent; (4) Able to communicate well. Based on these criteria, a sample of 37 people was obtained.

Variables and Instrument

The variables in this study were anxiety level and demographic characteristics (gender, marital status, living status, illness duration, and type of disease).

The instrument used to measure anxiety levels was the Geriatric Anxiety Scale (GAS) questionnaire. The GAS is an instrument specifically designed to measure anxiety in the elderly population. This questionnaire consists of 30 dichotomous (yes/no) items. The total score is classified into three categories: mild anxiety (score 0-10), moderate anxiety (score 11-20), and severe anxiety (score 21-30). This instrument has been widely used in research and has shown good validity and reliability.

Data Collection

After ethical approval was obtained, the researcher approached eligible respondents, explained the research objectives, and requested participation consent. Questionnaires were filled out through guided interviews to ensure data completeness and accuracy, considering the condition of some elderly participants.

Data Analysis

The collected data were then processed and analyzed using descriptive statistical analysis. Demographic data and anxiety levels are presented in frequency distribution tables and percentages. Analysis was performed using Microsoft Excel software.

Ethical Considerations

This study has considered ethical aspects. Informed consent was obtained from each respondent before participation. The confidentiality of respondents' identities was guaranteed by using anonymous codes. The researcher also respected the respondents' right to withdraw from the study at any time.

RESULTS

This study involved 37 elderly respondents with comorbidities in Ujung Tibu Village. The demographic characteristics of the respondents are presented in Table 1.

Table 1. Distribution of Respondents' Demographic Characteristics (N=37)

Characteristics	n	%
Gender		
Male	8	21.6
Female	29	78.4
Marital Status		
Married	24	64.9
Widower	3	8.1
Widow	8	21.6
Never Married	2	5.4
Living Status		
With Husband	17	45.9
With Wife	5	13.5
With Children	9	24.3
Alone	3	8.1
Other Family	3	8.1
Illness Duration		
< 1 year	5	13.5
1-5 years	26	70.3
>5 years	6	16.2
Type of Disease		
Hypertension	24	64.9
Rheumatoid	9	24.3
Diabetes Mellitus	3	8.1
Heart Disease	1	2.7

The demographic characteristics of the respondents are presented in Table 1. The sample was predominantly female (29 respondents, 78.4%), with males comprising 21.6% (8 respondents). Regarding marital status, the majority were married (24 respondents, 64.9%), followed by widows (8 respondents, 21.6%), widowers (3 respondents, 8.1%), and those who never married (2 respondents, 5.4%).

Analysis of living arrangements revealed that most respondents lived with their spouse (17 respondents, 45.9%), while 24.3% lived with their children (9 respondents). A smaller proportion lived with their wife (5 respondents, 13.5%), alone (3 respondents, 8.1%), or with other relatives (3 respondents, 8.1%).

Concerning illness duration, the majority of respondents had been diagnosed with their condition for 1-5 years (26 respondents, 70.3%). Those with illness duration of more than 5 years and less than 1 year accounted for 16.2% (6 respondents) and 13.5% (5 respondents) respectively.

Hypertension was the most prevalent comorbidity (24 respondents, 64.9%), followed by rheumatoid diseases (9 respondents, 24.3%), diabetes mellitus (3 respondents, 8.1%), and heart disease (1 respondent, 2.7%). This distribution reflects the common pattern of non-communicable diseases among the elderly population in Indonesia

Table 2. Distribution of Anxiety Levels Among Elderly Respondents with Comorbidities (N=37)

Anxiety Level	n	%
Mild	27	73
Moderate	8	21.6
Severe	2	5.4

The distribution of anxiety levels among elderly respondents with comorbidities is presented in Table 2. The findings demonstrate that the majority of respondents experienced mild anxiety (27 respondents, 73.0%). A significant proportion reported moderate anxiety levels (8 respondents, 21.6%), while a smaller segment of the population exhibited severe anxiety symptoms (2 respondents, 5.4%).

These results indicate a predominantly mild anxiety profile within the studied population, with nearly three-quarters of respondents falling into this category. However, the presence of moderate to severe anxiety in approximately 27% of the sample warrants clinical attention. The substantial representation of moderate anxiety levels suggests that a considerable minority of elderly individuals with comorbidities experience significant psychological distress that may impact their disease management and overall quality of life.

The relatively low prevalence of severe anxiety (5.4%) is encouraging, yet highlights the need for targeted mental health interventions for this vulnerable subgroup. The overall distribution pattern suggests a gradient of psychological adaptation among elderly individuals managing chronic health conditions, with most demonstrating adequate coping mechanisms while a substantial minority require additional psychological support.

Table 3. Distribution of Anxiety Levels Based on Respondents' Demographic Characteristics (N=37)

Characteristics	Mild Anxiety		Moderate Anxiety		Severe Anxiety		Total	
	n	%	n	%	n	%	n	%
Gender								
Male	5	13.5	2	5.4	1	2.7	8	21.6
Female	22	59.5	6	16.2	1	2.7	29	78.4
Marital Status								
Married	17	45.9	5	13.5	2	5.4	24	64.9
Widower	2	5.4	1	2.7	0	0	3	8.1
Widow	6	16.2	2	5.4	0	0	8	21.6

Never Married	2	5.4	0	0	0	0	2	5.4
Living Status								
With Husband	13	35.1	4	10.8	0	0	17	45.9
With Wife	3	8.1	1	2.7	1	2.7	5	13.5
With Children	6	16.2	2	5.4	1	2.7	9	24.3
Alone	3	8.1	0	0	0	0	3	8.1
Other Family	2	5.4	1	2.7	0	0	3	8.1
Illness Duration								
< 1 year	5	13.5	0	0	0	0	5	13.5
1-5 years	18	48.6	7	18.9	1	2.7	26	70.3
>5 years	4	10.8	1	2.7	1	2.7	6	16.2
Type of Disease								
Hypertension	18	48.6	5	13.5	1	2.7	24	64.9
Rheumatoid	6	16.2	3	8.1	0	0	9	24.3
Diabetes Mellitus	3	8.1	0	0	0	0	3	8.1
Heart Disease	0	0	0	0	1	2.7	1	2.7

Table 3 presents the cross-tabulation of anxiety levels with various demographic characteristics. Several notable patterns emerge from the data analysis. Female respondents demonstrated a higher prevalence of anxiety across all categories, with 59.5% experiencing mild anxiety and 16.2% moderate anxiety. Interestingly, both genders showed equal representation in the severe anxiety category (2.7% each).

Regarding marital status, married individuals constituted the largest proportion across all anxiety levels, including the severe category (5.4%). Widows and widowers showed no instances of severe anxiety, while never-married individuals exhibited only mild anxiety symptoms.

The analysis of living arrangements revealed that respondents living with their husband showed no severe anxiety cases, with the majority reporting mild anxiety (35.1%). In contrast, those living with their wife or children represented the groups with severe anxiety (2.7% each). Individuals living alone demonstrated exclusively mild anxiety symptoms.

Concerning illness duration, respondents with 1-5 years of illness showed the highest prevalence of moderate anxiety (18.9%). Those with less than one year of illness duration reported exclusively mild anxiety, while the longest illness duration (>5 years) contained cases across all anxiety levels, including severe anxiety.

The distribution by type of disease revealed that hypertension patients predominantly experienced mild anxiety (48.6%), while rheumatoid arthritis patients showed the highest proportion of moderate anxiety (8.1%) among disease groups. Notably, the single respondent with heart disease represented the only case in the severe anxiety category (2.7%), while diabetes mellitus patients reported exclusively mild anxiety symptoms.

DISCUSSION

Interpretation of Key Findings

This study reveals that the majority of elderly individuals with comorbidities in Ujung Tibu Village experience mild anxiety (73.0%), while moderate and severe anxiety affect 21.6% and 5.4% of the population respectively. The predominance of mild anxiety suggests the presence of effective coping mechanisms and protective factors within this community (Lumban Tobing & Wulandari, 2021). The substantial proportion of moderate anxiety, however, indicates a significant minority requiring clinical attention (Shafiee et al., 2025). The cross-tabulation analysis reveals intriguing patterns females show higher anxiety prevalence across all categories, married individuals constitute the largest proportion in severe anxiety, and those with heart disease represent the only case in the severe anxiety category (Rakhmad Rosadi et al., 2023). These findings suggest that while most elderly have adapted reasonably well to their health challenges, specific demographic and clinical factors significantly influence anxiety severity (Utami & Silvitasari, 2022).

Comparison with Previous Studies

Our findings align with several previous studies while revealing some distinctive patterns. The higher prevalence of anxiety among females (78.4%) consistent with (Rindayati et al., 2020) who reported a 2:1 female-to-male ratio in anxiety disorders among elderly populations. However, the predominance of mild anxiety in our study contrasts with (SUMINAR & DINIARI, 2023) who found nearly 50% of comorbid elderly experienced clinical anxiety. This discrepancy may be attributed to cultural factors and the strong community support system in rural Indonesia. The association between heart disease and severe anxiety supports previous findings by (Aritonang, 2021) regarding the psychological impact of cardiovascular conditions. The protective effect of social support through family integration aligns with (Sumiatin et al., 2023) emphasis on family support as a crucial factor in managing geriatric anxiety.

Implications

The findings have significant implications for healthcare delivery in similar rural settings. First, the high prevalence of mild anxiety suggests that community-based interventions through Posyandu Lansia could be effective in maintaining mental well-being. Second, the identified risk factors (female gender, specific living arrangements, heart disease) enable targeted screening for early detection of anxiety disorders (Vasiliadis et al., 2020). Third, the substantial proportion of moderate anxiety (21.6%) indicates the need for integrating mental health services into primary care for the elderly (Yudha et al., 2023). Healthcare policymakers should consider developing standardized screening protocols for anxiety in elderly patients with comorbidities, particularly those with identified risk factors. Community health workers should receive training in basic mental health assessment and supportive counseling techniques (Adelia & Supratman, 2023).

Limitations and Cautions

Several limitations warrant consideration when interpreting these findings. The cross-sectional design prevents establishing causal relationships between variables. The relatively small sample size (N=37) from a single rural village limits generalizability to other populations. The use of purposive sampling may introduce selection bias, and the reliance on self-reported data through interviews might be subject to social desirability bias. The study did not control for potential confounding variables such as socioeconomic status, education level, or specific medication use that might influence anxiety levels. Furthermore, the cultural context of Ujung Tibu Village may produce different patterns from urban or other rural settings. These limitations suggest cautious interpretation of the findings and highlight the need for verification through larger, more diverse studies.

Recommendations for Future Research

Future research should address the identified limitations through several approaches. First, longitudinal studies are needed to examine the trajectory of anxiety in comorbid elderly populations and identify causal factors. Second, mixed-methods research combining quantitative measures with qualitative interviews could provide deeper insights into the cultural and personal factors influencing anxiety experiences. Third, expanded studies across multiple rural and urban settings would enhance generalizability and enable comparative analysis. Fourth, intervention studies evaluating the effectiveness of community-based mental health programs specifically designed for elderly with comorbidities are strongly recommended. Finally, research exploring the interaction between specific comorbidities and anxiety levels could help develop tailored interventions for different disease groups. These research directions would substantially contribute to evidence-based geriatric mental healthcare in Indonesia and similar settings.

CONCLUSION

This study provides a clear profile of anxiety levels among elderly individuals with comorbidities in Ujung Tibu Village. The findings indicate that the majority of the population experiences mild anxiety, suggesting that existing community structures, such as family support and Posyandu activities, may serve as protective factors. However, a significant minority suffers

from moderate to severe anxiety, with specific demographic and clinical characteristics such as being female, having a longer illness duration, or suffering from heart disease appearing to be associated with higher anxiety severity. These insights underscore the necessity for a dual approach in community health nursing: maintaining supportive, preventative programs for the majority while developing targeted, clinical interventions for at-risk subgroups to ensure comprehensive mental healthcare for all elderly individuals with chronic conditions.

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