ORIGINAL ARTICLE

REVISTA ENFERMAGEM ATUAL IN DERME

DEPRESSION, ANXIETY AND QUALITY OF LIFE OF THE ELDERLY AT A THIRD AGE OPEN UNIVERSITY

DEPRESSÃO, ANSIEDADE E QUALIDADE DE VIDA EM IDOSOS DE UMA UNIVERSIDADE ABERTA À TERCEIRA IDADE

Bruno Felipe Ferreira Lopes[1] * Thaisy Rodrigues de Oliveira[2] * Kellen Karoline Almeida dos Santos Lira[3] * Gilberto Lima dos Santos[4] * Glauber Sá Brandão[5#]

ABSTRACT

Objective: The aim of this study was to test the association between anxiety, depression and the quality of life of elderly participants at a Third Age Open University (UATI, acronym in Portuguese). Methods: This is a descriptive, cross-sectional study with a quantitative approach, carried out with elderly people (≥ 60 years) without cognitive decline, UATI participants in Senhor do Bonfim, BA. The elderly were evaluated using three questionnaires: Geriatric Depression Scale, Geriatric Anxiety Inventory and World Health Organization quality of life assessment instrument (WHOQOL-Old). Data were subjected to descriptive analysis and Spearman's correlation analysis was used to verify the association between the variables. Results: Among the 28 elderly participants, there was a prevalence of 14.3% of depression and 17.9% of anxiety. Regarding the quality of life domains, Social Participation (77.9 ± 11.3) and Sensory Functioning (76.3 ± 17.1) had the highest means. Quality of life was negatively and moderately correlated with depression (-0.439) and anxiety (-0.436), while both disorders showed a positive and moderate correlation (0.671) with each other. Conclusions: The elderly who had a higher degree of anxiety and depression had a worse quality of life, demonstrating the existence of a significant association between these variables. These findings direct the need for studies that investigate the emergence of anxiety and depression in the elderly, dissociating these diseases from natural aging processes.

Keywords: Geriatric Nursing; Aging; Quality of Life; Depression; Anxiety.

RESUMO

Objetivo: O objetivo deste estudo foi testar a associação entre ansiedade, depressão e a qualidade de vida de idosos participantes de uma Universidade Aberta à Terceira Idade (UATI). Métodos: Trata-se de um estudo descritivo, transversal, com abordagem quantitativa, realizado com idosos (≥ 60 anos) sem declínio cognitivo, participantes da UATI em Senhor do Bonfim, BA. Os idosos foram avaliados por meio de três questionários: Escala de Depressão Geriátrica, Inventário de Ansiedade Geriátrica e instrumento de avaliação da qualidade de vida da Organização Mundial da Saúde (WHOQOL-Old). Os dados foram submetidos à análise descritiva e a análise de correlação de Spearman foi utilizada para verificar a associação entre as variáveis. Resultados: dentre os 28 idosos participante, observou-se prevalência de 14,3% de depressão e 17,9% de ansiedade. Em relação aos domínios de qualidade de vida, a Participação Social (77,9 ± 11,3) e Funcionamento do Sensório (76,3 ± 17,1) apresentaram as maiores médias. A qualidade de vida se correlacionou negativa e moderadamente com a depressão (-0,439) e a ansiedade (-0,436), enquanto que ambos os transtornos apresentaram correlação positiva e moderada (0,671) entre si. Conclusões: Os idosos que obtiveram maior grau de ansiedade e depressão, apresentaram pior qualidade de vida, demonstrando a existência de associação significativa entre estas variáveis. Estes achados direcionam a necessidade de estudos que investiguem o surgimento da ansiedade e depressão em idosos, dissociando estas doenças de processos naturais do envelhecimento.

Palavras-chave: Enfermagem Geriátrica; Envelhecimento; Qualidade de Vida; Depressão; Ansiedade.

[1] Universidade do Estado da Bahia, Senhor do Bonfim-BA, Brasil. ORCID: https://orcid.org/0000-0002-5049-7356
[2] Universidade do Estado da Bahia, Senhor do Bonfim-BA, Brasil. ORCID: https://orcid.org/0000-0003-3313-1624
[3] Universidade do Estado da Bahia, Senhor do Bonfim-BA, Brasil. ORCID: https://orcid.org/0000-0003-3121-838X
[4] Universidade do Estado da Bahia, Senhor do Bonfim-BA, Brasil. ORCID: https://orcid.org/0000-0002-6582-724X
[5] Universidade do Estado da Bahia, Senhor do Bonfim-BA, Brasil. ORCID: https://orcid.org/0000-0003-4462-0861

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INTRODUCTION

Aging is a dynamic, progressive and irreversible biological process whose changes are characterized by structural and functional changes in the human body [1]. The population aging process is expressed in the increase in life expectancy, which is due to technological advances in health, changes in family structure, work patterns and migrations, as well as in the perceptions of subjects about biological, cultural, psychological and social aspects [2].

According to World Health Organization (WHO), the number of people aged 60 and over will have increased by approximately 70% by 2025, especially in developing countries [3]. In Brazil, there are an estimated 32.9 million people aged 65 or over, with a growth curve projected to 58.2 million by 2060, equivalent to 25.5% of the population [2].

Currently, there is an increase in the incidence of psychological disorders in the elderly. WHO estimates that approximately one in 10 elderly people may suffer from depression [4].

In elderly, depression is the most frequent psychiatric disorder, being associated with a higher risk of morbidity, mortality and lack of control over one's emotional state [5]. Still, it is a disease that is often underdiagnosed and undertreated for having similarities with physical and mental complications, considered natural to aging [6].

Anxiety is associated with limitations present in old age, causing negative perceptions of reality and questions about their own intellectual abilities. High levels of anxiety in the elderly lead to experiences that interfere with selective attention and the encoding of information in memory, thus blocking understanding and reasoning [7].

Quality of life is a multidimensional and multifactorial set of subjective satisfactions that subjects obtain in their daily lives, which consider physical, psychological and social aspects of life, being useful to determine the global impact of diseases and medical treatments from the perspective of the subject [8]. Therefore, considering that anxiety and depression disorders tend to reduce quality of life, understanding the relationship between these conditions is especially important in elderly, as these disorders can affect the interpersonal relationships, the physical and social support and the performance cognitive, which negatively impacts the quality of life [9]. However, there are few studies regarding the relationship between these psychiatric disorders and the quality of life in the elderly population [10].

The aim of this study was to test the association between anxiety, depression and the quality of life of the elderly.

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METHODS

Participants, Study Type and Place

This is a descriptive, cross-sectional study with a quantitative approach. The sampling procedure used was non-probabilistic for convenience, and the sample consisted of elderly people from the Third Age Open University – UATI in the Universidade do Estado da Bahia – UNEB, in Senhor do Bonfim, BA, Brazil. This research was carried out with data from a larger project that aims to verify the effect of a multidisciplinary approach program on the quality of life of elderly people at UATI, which was developed by researchers linked to the study and research group on quality of life and healthy aging (QualES) from UNEB-BA, Brazil. The design and conduct of this study followed the recommendations of the Reporting of Observational Studies in Epidemiology (STROBE).

As inclusion criteria, it was defined that the participants were elderly (60 years old or more), regardless of gender, enrolled at UATI. As an exclusion criterion, the presence of cognitive decline was considered according to the Mini Mental State Examination (MMSE) [11].

Participants Assessment Instruments

An identification form was applied to collect sociodemographic data: gender, age, marital status, education, living arrangement and income.

Geriatric Depression Scale

Depression was assessed using the Geriatric Depression Scale (GDS-15), a simplified version of the original scale, widely used for tracking depressive symptoms in the elderly population, both in identifying the condition and in monitoring changes over time. It can be self-applied or applied by an interviewer [12]. The scale has a range from zero (absence of depressive symptoms) to fifteen points (maximum score for depressive symptoms), in which the authors [13] defined the cutoff point equal to or greater than five to determine the presence of depressive symptoms in the elderly.

Geriatric Anxiety Inventory

The Geriatric Anxiety Inventory (GAI) is an instrument for assessing anxiety in the elderly in community and geriatric contexts, proposed by the study.[14]. This questionnaire consists of 20 questions, in which the respondent declares that he agrees or disagrees with the statements presented. The sum of the answers being >10 characterizes the individual with symptoms of anxiety. It can be self-applied or applied by an interviewer.

WHOQOL-Old

To assess the quality of life of the elderly, it was used the World Health Organisation Quality of Life (WHOQOL-Old) Assessment Instrument [15]. This

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instrument consists of 24 questions, assigned to six facets: (I) Sensory Functioning, (II) Autonomy, (III) Past, Present and Future Activities, (IV) Social Participation, (V) Death and Dying, and (VI) Privacy. Each of the facets has four questions, whose answers follow a Likert scale (1-5). For all facets, the score of possible values can range from 0 to 100, in which higher values represent a higher quality of life.

Data Collection and Analysis

Data collection was carried out between November and December 2019. The questionnaires were applied in the form of an interview, in a clear and objective manner, without the interference of the interviewer. In case of doubts in the understanding by the elderly, the interviewer repeated the question until the interviewee understood.

This study was approved by the Ethics Committee for research involving human beings of the Universidade do Estado da Bahia, with CAAE: 25875819.8.0000.0057. All participants signed an Informed Consent Form (ICF). The general ethical principles were accepted considering that research in any area of knowledge, involving human beings, must be consistent with the principles of science. This study ensured compliance with the ethical principles of resolution 466/12 of the National Health Council.

Data were tested for normality, then submitted to descriptive analysis using absolute frequencies and percentages for categorical variables, and measures of central tendency and dispersion for numerical variables. To perform the correlation analysis, due to the identification of the non-normality of the data, it was decided to use the Spearman's ρ, a non-parametric test, to verify the association between the variables depression, anxiety and quality of life. For decision criteria, the significance level $\alpha \leq 0.05$ was adopted and analysis were performed using the Statistical Package of the Social Sciences (SPSS 21.0, IBM, EUA) software.

RESULTS

The sample of the present study consisted of 28 elderly people, predominantly female (n = 27; 96.4%), aged between 60 and 86 years (mean 68.6 ± 6.2), the majority being widows (n = 14; 50.0%), with elementary education (n = 16; 57.1%) and with monthly income of up to one minimum wage (n = 15; 53.6%), as shown in Table 1. All participants of the Third Age Open University.

Table 1 - Sociodemographic variables of the elderly participants (n = 28). Senhor do Bonfim, BA, 2019.

Sociodemographic Variable	n	%
Gender		

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Female	27	96.4
Age		
60-69 years	18	64.3
70+ years	10	35.7
Marital Status		
Single	4	14.3
Married	10	35.7
Widower/Widow	14	50.0
Education		
Elementary education	16	57.1
Secondary education	9	32.1
Higher education	3	10.7
Living Arrangement		
Live alone	9	32.1
Live with someone else	19	67.9
Income		
Up to 1 minimum wage	15	53.6
2-3 minimum wages	10	35.7
4 or more minimum wages	3	10.7

Source: The authors.

Table 2 presents descriptive statistics for the six domains of quality of life assessed by the WHOQOL-Old questionnaire. Each domain of the questionnaire consists of four questions. Among the six domains, Death and Dying (65.6 ± 19.1) and Autonomy (67.0 ± 11.0) had the lowest averages, while Social Participation (77.9 ± 11.3) and Sensory Functioning (76.3 ± 17.1) had the highest means.

Table 2 - Descriptive statistics of the six facets of the WHOQOL-Old questionnaire evaluated in the elderly (n = 28). Senhor do Bonfim, BA, 2019.

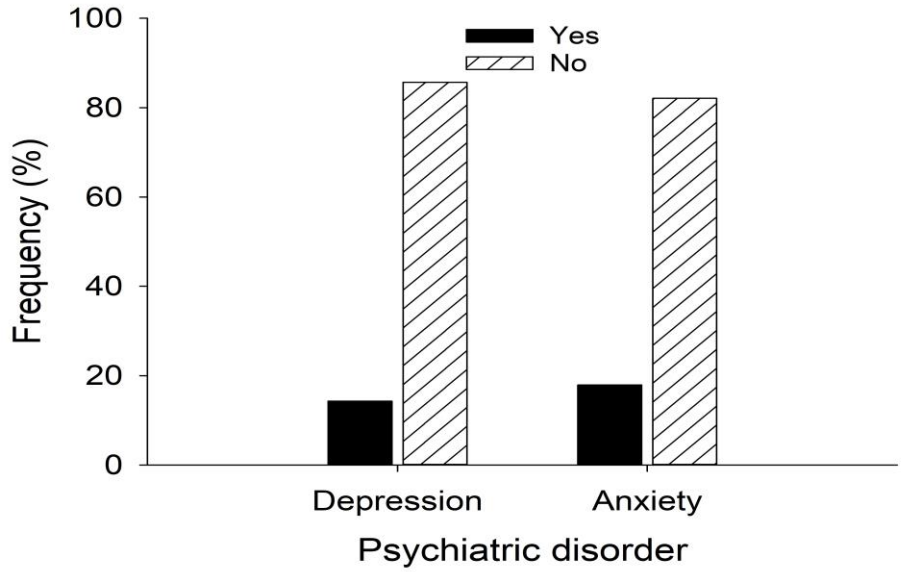
Domain	Mean ± SD	Minimum	Maximum
Sensory Functioning	76.3 ± 17.1	43.8	100.0
Autonomy	67.0 ± 11.0	50.0	81.3
Past, Present and Future Activities	74.3 ± 17.1	43.8	100.0
Social Participation	77.9 ± 11.3	56.3	100.0
Death and Dying	65.6 ± 19.1	12.5	87.5

Privacy	68.5 ± 21.9	25.0	100.0
Overall Average	71.6 ± 10.8		

Source: The authors.

From the cutoff points suggested by the authors [13] for depression and by the authors [14] for anxiety, there was a prevalence of 14.3% of elderly people with depression and 17.9% with anxiety, as shown in figure 1.

Figure 1 - Prevalence of depression and anxiety in elderly participants (n = 28). Senhor do Bonfim, BA, 2019.



Fonte: Autores [13,14]

The association between anxiety, depression and quality of life was assessed using Spearman's correlation, whose values are shown in table 3. Quality of life was negatively and moderately correlated with depression ($\rho = -0.439$; $p = 0.02$ and anxiety ($\rho = -0.436$; $p = 0.021$), while both disorders showed a positive and moderate correlation ($\rho = 0.671$; $p<0.001$) between each other.

Table 3 - Spearman correlation between depression, anxiety and quality of life of elderly participants (n = 28). Senhor do Bonfim, BA, 2019.

Source: The authors.

		Anxiety	Quality of Life
Depression	ρ	0.671	-0.439
	p-value	<0.0001	0.0196
Anxiety	ρ		-0.436
	p-value		0.0207

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DISCUSSION

The participation of the elderly in interventional health education and self-care programs has a positive impact on promoting mental health and healthy lifestyles, as well as preventing physical and cognitive declines [16]. An example of such a program is the Third Age Open University (UATI), which is an alternative to promote psychosocial reintegration and the development of permanent educational activities.

In this study, conducted at the UATI in Senhor do Bonfim, BA, the sample consisted mostly of women, widows, with elementary education and with a monthly income of up to one minimum wage. A probable explanation for the female predominance is described in a socio-epidemiological and demographic study in a UATI in the state of Pernambuco, in which the authors [17] relate the differences in the perception of aging and how subjects experience such changes, with women showing greater interest in culture, well-being and health and men showing an interest in political matters.

With regard to living arrangement, most participants lived with their spouse and/or close relatives, including children and grandchildren. These data bring positive aspects related to health, because according to study [18], family support tends to reduce the negative effects of stress on mental health, thus enabling a positive influence on psychological well-being. In their studies, the authors [19], suggest that social interaction reduces isolation and offers the elderly the stimulation of cognitive performance, increasing their satisfaction and improving their quality of life.

In this study, it was observed that the general average of the quality of life domains of the WHOQOL-Old questionnaire was high, noting that the domains related to social participation and sensory functioning had the highest averages, which may be a reflection of participation in an interventional program to promote health and well-being, with the practice of regular physical exercise and interventions that stimulated mnemonic performance. In a study by [20] it was observed that elderly participants of a regular physical exercise program showed significant improvement in functional mobility and quality of life. To the authors [21] o physical exercise reduces functional decline, especially aerobic and resistance activities. The authors [22] state that interventions aimed at improving mnemonic performance provide the maintenance of functional capacity, minimizing the risk of dependence and possible institutionalization of the elderly person.

The prevalence of psychiatric illnesses investigated in this study is lower than those observed [23,24], in Brazilian subjects from the community, with similar sociodemographic

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characteristics, which ranged between 29.6% and 47.4%. The population studied showed a low prevalence of depression (14.3%) compared to Brazilian studies carried out with elderly people in Primary Health Care, with variations between 26.1% and 30.6% [25-27]. A study [28] states that elderly people with higher levels of development in social relationships are more active and have better quality of life and less depressive symptoms than sedentary and socially isolated elderly people.

Quality of life is a multifactorial concept and can be influenced by different circumstances, causing different levels of anxiety. The concept of anxiety can be understood as an unpleasant feeling, related to negative perceptions of anticipation of danger, causing discomfort and tension. Thus, it is important to understand the influences of anxiety on the health of the elderly so that there is no confusion between the detection and diagnosis of anxiety disorders with common physical symptoms in old age [28].

The negative correlation between anxiety and quality of life in the elderly is highlighted, in agreement with results found in the literature in studies carried out by the authors [9,29], in which it was observed that there is an association between anxiety disorders and poorer quality of life, in addition to greater use of health services. Subjects with high levels of anxiety had worse quality of life scores in fields such as vitality, social aspects and social withdrawal [30].

It was possible to verify the negative, moderate and statistically significant association between quality of life and depression in line with the results of a Brazilian study carried out by the authors [31], which it was observed worsening in quality of life in domains such as autonomy, activities, privacy, and social participation in depressed older adults compared to older adults without symptoms of depression. The authors [30], found that subjects in a depressive state have little social interaction and use health services more.

There was a positive, moderate and statistically significant correlation between anxiety and depression. The authors [32] highlight that subjects affected in the same period by anxiety and depression suffered an increase in the occurrence of physical disorders, including vision problems, persistent cough, hypertension and gastrointestinal problems, as well as heart disease and asthma, compared to those who suffered only from anxiety and only with depression. According to the authors [7], subjects with depressive symptoms rate their health as poor and are less satisfied with their health status than people without depression. In addition, the authors report that it is common for people with anxiety to also present depression in some intensity.

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There are many studies that indicate the lack of investigation of these psychiatric diseases by health professionals in the clinical context, although they are common as clinical complaints presented by patients [7]. The clinical and laboratory evaluation of anxiety and depression is important, as it is necessary to investigate diseases that may be associated with these disorders, so that, if not properly understood and treated, they can cause negative repercussions on health and quality of life of elderly people, which can lead to an increase in morbidity and mortality, as well as increased costs for the health system [33].

Although small, the sample is representative and foresees the local situational outcome, considering that elderly participants in interventional programs tend not to form large groups.

This study has some limitations, such as the use of a cross-sectional design, in which the associations between the variables must be interpreted with caution, as it is not possible to make causal inferences in association studies. Another important limitation is related to the fact that, although validated questionnaires were used, the use of self-reported measures increases the possibility of measurement error, recall bias and the effect of social desire.

CONCLUSIONS

It was observed that anxiety and depression are positively related to each other and negatively related to quality of life. There is a statistically significant and moderate relationship between the three aspects mentioned above. Therefore, the intrinsic relationship between psychological disorders and their effects on the health of the elderly becomes understandable, as they begin to seek more the health services. Appropriate diagnosis and treatment of depression and anxiety can improve the quality of life of the elderly. Regarding the domains of quality of life, social participation and sensory functioning had the highest averages for the elderly participating in the study, evidencing the effectiveness of interventional programs, such as the UATI, in improving the quality of life.

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Submission: 2021-07-12
Approval: 2021-08-02

Corresponding author:

Glauber Sá Brandão. Rodovia Lomanto Júnior, BR 407, Km 127, Senhor do Bonfim, BA, CEP 48970-000, Brasil. Telefone: +55 74 98121-3811. E-mail: gbrandao@uneb.br