

Original Article

Anxiety and depression symptoms in older adults in Primary Health Care in Maceió – AL*Sintomas ansiosos e depressivos em idosos na atenção primária à saúde em Maceió – AL*

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ABSTRACT: *Objective:* To analyze the occurrence of anxiety and depression symptoms in older adults treated in Primary Health Care. *Method:* This is a cross-sectional and non-probabilistic study carried out with 171 older adults aged 60-94 years old treated in a Primary Health Care unit. The aged individuals answered a sociodemographic questionnaire, the Geriatric Depression Scale (GDS-15) and the Geriatric Anxiety Inventory (GAI). *Results:* The results show high prevalence of the symptoms in females (72.5%). In addition to that, it was identified that older adults aged 60-69 years old and with low schooling levels present higher levels of “depression symptoms”. “Being divorced” and “low schooling” were factors associated with “anxiety symptoms” in older adults. *Conclusion:* The sociodemographic factors have proved to be quite influential in the occurrence of depression and anxiety symptoms among older adults.

Keywords: Anxiety symptoms; Depression symptoms; Older adults; Primary care.

RESUMO: *Objetivo:* Analisar a ocorrência de sintomas ansiosos e depressivos em idosos atendidos na atenção primária à saúde. *Método:* Trata-se de um estudo transversal e não probabilístico realizado com 171 idosos com idade entre 60-94 anos atendidos em unidade de saúde atenção primária. Os idosos responderam um questionário sociodemográfico, Escala de Depressão Geriátrica (GDS-15) e Inventário de Ansiedade Geriátrica (GAI). *Resultados:* Os resultados demonstram uma alta prevalência de indivíduos do sexo feminino 72,5%. Além disso, identificou-se que idosos com idade entre 60-69 anos e baixa escolaridade apresentam maiores “sintomas depressivos”. Os fatores “ser divorciado” e “baixa escolaridade” foram associados a “sintomas ansiosos” nos idosos. *Conclusão:* Os fatores sociodemográficos têm demonstrado bastante influência na ocorrência dos sintomas depressivos e ansiosos entre a população idosa.

Palavras-chave: Atenção primária; Idosos; Sintomas ansiosos; Sintomas depressivos.

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INTRODUCTION

Population aging is a phenomenon that is evolving rapidly, resulting from the reduction in the fertility rate and from the increase in life expectancy. It is estimated that the aged population in the world will exceed 727 million people, a 9.3% projection, which will reach 16% by 2050¹. According to the IBGE, the Northeast region presents the greatest concentration of poverty with more than 40%, when compared to the other Brazilian regions. Added to this, there is a negative assessment of the health status in 6% of this population². Access to health among the people living in communities has decreased due to factors such as sanitation and access to water, among others³.

In the state of Alagoas, the number of older adults corresponds to 7.87% of the population and life expectancy is 72.98 years old, below the national mean of 76.74 years old⁴, a fact that can be explained by the lower access to health in the city of Maceió, where, for example, the Family Health Strategy covers 27% of the population⁵. Linked to this reality is the increase in the prevalence of chronic non-communicable diseases such as cardiovascular, neurodegenerative and psychiatric diseases⁶. Among the psychiatric disorders, the most common in Brazil are depression (5.8%) and anxiety (9.3%), which, when left untreated, are related to higher morbidity and mortality rates, exerting a negative impact on all aspects of the individual's life, which may lead to loss of autonomy and worsening of preexisting diseases^{5,7,8}.

Anxiety and depression are frequently comorbid conditions and share several symptoms such as irritability, restlessness, decreased concentration, sleep disorders and fatigue^{9,10}. A number of studies show that nearly 47.5% of the aged patients diagnosed with depression also present anxiety disorders and that up to 27.5% of them meet the GAD criteria¹¹⁻¹³. Anxiety disorders are common in older adults, affecting nearly 28% of the aged individuals worldwide. Among them, the most common is Generalized Anxiety Disorder (GAD), with 11% prevalence in the aged population^{8,14}. Anxiety disorders in older adults are frequently underdiagnosed, generate anguish and disability and increase the mortality rates. Such disorders have been related to a higher risk of stroke and to more likelihood of mild cognitive impairment turning into Alzheimer's Disease^{15,16}.

According to a meta-analysis, the prevalence of depression in Brazilian community-dwelling older adults is 21%, varying from 7.10% in a study conducted in the South of the country to 39.6% in the Northeast region¹⁷. Among the depressive disorders, the most prevalent in advanced aged is Major Depressive Disorder (MDD), affecting the life of nearly 4% of this population^{18,19}. There are few studies conducted with the aged population in Maceió – AL. A study carried out with 86 community-dwelling older

adults verified the presence of anxiety symptoms in 48.84% of the population studied and, in relation to depression symptoms, the percentage found was 46.51%²⁰. Similar results were identified in another study conducted in the municipality of Maceió – AL²¹.

Considering population aging and the increasing prevalence of mental disorders in older adults, this study aims at analyzing the occurrence of anxiety and depression symptoms in older adults treated in a Primary Health Care unit in the city of Maceió/AL.

METHOD

Study design, setting, and ethics

This is a cross-sectional study of the non-probabilistic and for convenience type. The ethical principles set forth in Resolution No. 466/2012²⁸ were respected and, to develop the research, approval was obtained from the Committee of Ethics in Research with Human Beings (opinion No. 1,904,318). All the older adults agreed to participate in the study by signing the Free Informed Consent Form (FICF).

The participants of this study were 171 older adults of both genders, treated in a Primary Health Care unit from the municipality of Maceió/AL. Individuals aged at least 60 years old and who were undergoing monitoring in the health unit for a minimum of three months were included in the research. Older adults who presented some cognitive impairment and/or deficit that precluded them from understanding the instruments were excluded.

Research instruments

Geriatric Depression Scale – GDS-15: it is a scale used to assess depression symptoms in older adults. Its first version, consisting of 30 items, was developed by Yesavage et al.²². Four new versions of GDS, also developed to screen depressive symptoms by Almeida and Almeida²³, compared versions with 1, 4, 10 and 15 items and identified that a 15-item scale showed reliability and internal consistency through a Cronbach's alpha coefficient of 0.81. This instrument is of the dichotomous type with yes/no answers and a score varying from 0 to 15, where values equal to or greater than 6 indicate presence of depression symptoms²³. In this research, the version adapted and translated for the Brazilian context was used²⁴.

Geriatric Anxiety Inventory – GAI: created to screen anxiety symptoms in older adults. Its single and current version consists of 20 items and was developed by Pachana et al.²⁵. Martiny et al.²⁶ carried out the validation, adaptation and translation for the Brazilian context, which presented a Cronbach's alpha coefficient of 0.91, indicating the instrument's efficacy for its purpose. GAI is a self-reporting instrument with binary answers (agree/disagree), whose score varies between 0 and 20; a higher number of "agree" answers indicate higher presence of anxiety symptoms.

Anxiety symptoms are characterized with scores equal to or greater than 11.

Procedure

The instruments were filled out between August 2017 and June 2018. The assessment was conducted during two days of the week (Monday and Thursday) by four researchers (medical students) previously trained to apply the instruments. The researchers conducted the interviews after the older adults' medical appointments in the health units.

To identify the participants, a structured questionnaire was developed, containing information such as age, gender, schooling and skin color/race, among others, with the objective of characterizing the older adults. In addition to this questionnaire, the aforementioned GAI and GDS-15 instruments were applied and later tabulated in Microsoft Office Excel 2013. Elaboration of this manuscript followed the recommendations set forth in the STROBE Statement²⁷.

Statistical analysis

The data analyses were performed in the *Statistical*

Package for the Social Sciences (SPSS) software, version 23.0. The sociodemographic factors were presented descriptively by means of percentages, mean values (\bar{X}) and standard deviations (σ). An analysis regarding data normality was performed through the Kolmogorov-Smirnov test. Pearson's test was used to analyze if the variables are directly or inversely proportional. The ANOVA test was performed to compare the groups and, between the groups, Bonferroni's *post hoc* test ($\alpha < 0.05$) was employed. The significance level was $p \leq 0.05$, adopted for all the analyses.

RESULTS

Table 1 presents the detailed sociodemographic and clinical characteristics of the population studied, consisting of 171 older adults aged between 60 and 94 years old, with a mean of 72.91 years old (± 8.96) and high prevalence of female individuals (72.5%). In addition to that, 31.74% of older adults presented depression symptoms and 33.91% had anxiety symptoms.

Table 1. Sociodemographic and clinical characterization of the older adults treated in Primary Health Care in Maceió.

Variables	(N=171)	Older adults	%
Sociodemographic			
Age		72.91 (±8.96)	
Gender			
Female	124		72.5
Male	47		27.5
Schooling			
Elementary School	84		49.1
High School	38		22.2
Higher Education	49		28.7
Marital status			
Single	26		15.2
Married	66		38.6
Divorced	18		10.5
Widowed	61		35.7
Ethnicity/Skin color			
White	60		35.1
Black	17		9.9
Brown	89		52.0
Asian	4		2.3
Indigenous	1		0.6
Living alone			
Yes	33		19.3
No	138		80.7
Income			
1 minimum wage	43		25.1
2 minimum wages	36		21.1
3 minimum wages	8		4.7
4 or more minimum wages	84		49.1
Clinical			
GDS-15 (depression symptoms)		4.56 (±2.84)	
Yes	56		31.74
No	115		68.26
GAI (anxiety symptoms)		8.16 (±5.51)	
Yes	58		33.92
No	113		66.08

GDS-15: Geriatric Depression Scale. GAI: Geriatric Anxiety Inventory.

Table 2 shows the relationship between the sociodemographic data and anxiety (GAI) and depression (GDS-15) symptoms using the ANOVA test and, after finding a difference between the variables, the Bonferroni *post hoc* test ($\alpha < 0.05$) was conducted to identify the difference within the group. It was possible to identify a significant difference in relation to age ($p = 0.041$): the older adults aged between 60 and 69 years old with low schooling

($p = 0.001$) presented higher levels of depression symptoms. Regarding the anxiety symptoms, a statistically significant result is observed in relation to the schooling variable ($p = 0.001$), in which older adults with low schooling presented more anxiety symptoms. Marital status was a variable that also presented a significant result ($p = 0.007$), and divorced older adults had higher scores in GAI.

Table 2. Relationship between depression and anxiety symptoms and the sociodemographic data of the older adults treated in Primary Health Care in Maceió.

Variables	GDS-15			GAI	
	N	\bar{X} (σ)	<i>P</i>	\bar{X} (σ)	<i>P</i>
Age					
60-69	79	5.16 (± 2.72) [‡]	0.041*	8.94 (± 5.76)	0.205
70-79	55	3.96 (± 2.80) [‡]		7.25 (± 5.10)	
80+	37	4.40 (± 2.60)		8.10 (± 5.06)	
Gender					
Female	124	4.58 (± 2.77)	0.424	8.18 (± 5.48)	0.562
Male	47	4.51 (± 3.07)		8.10 (± 5.66)	
Schooling					
Elementary School	84	5.78 (± 2.56) ^{‡**}	0.001**	10.35 (± 5.40) ^{**}	0.001**
High School	38	3.47 (± 2.59) ^{‡*}		6.31 (± 4.68) [*]	
Higher Education	49	3.30 (± 2.63) ^{‡*}		5.83 (± 4.87) ^{‡*}	
Marital status					
Single	26	4.19 (± 2.57)	0.356	8.15 (± 9.98)	0.007**
Married	66	4.39 (± 2.73)		6.97 (± 8.93) [‡]	
Divorced	18	5.55 (± 2.59)		11.88 (± 7.53) [‡]	
Widowed	61	4.79 (± 2.91)		8.52 (± 5.25)	
Living alone					
Yes	33	4.36 (± 2.58)	0.272	7.60 (± 5.87)	0.148
No	138	4.67 (± 2.81)		8.37 (± 5.33)	

\bar{X} : Mean value. σ : Standard Deviation. * $p < 0.05$. ** $p < 0.01$. [‡] Bonferroni's *post hoc* ($\alpha < 0.05$).

DISCUSSION

Given the results identified above, our study shows that the sociodemographic factors are associated with the presence of anxiety and depression symptoms in the aged population. In this research, lower age and low schooling are factors that contribute to depression symptoms; and, in relation to the anxiety symptoms, being divorced and low schooling are contributing factors.

The characteristics of this sample are similar to the ones found in other studies carried out with older adults, aged 72.91 years old²⁹, high prevalence of the female gender^{21,30-32}, low schooling^{20,33} and married^{12,34,35}. These results are similar to international surveys^{36,37}. In the opposite direction regarding the characteristics, our sample is in disagreement with other studies in relation to

living alone²⁰ and having high incomes³⁸. What can possibly justify the difference between living alone and income is the number of older adults included in the studies, since the current research presents a lower number of aged individuals.

The prevalence of female individuals is highlighted, which is still the current situation within the research field^{12,21,31,32,34,35}. However, as this is a survey conducted in a health unit, it is noted that a number of research studies show that, when compared to men, women seek health care more^{39,40,41}, which can possibly justify the greater participation of women in this research, conducted in a Primary Health Care unit.

With regard to the factors that determine the occurrence of anxiety and depression symptoms in the aged population, the results show that, in relation to the

depression symptoms, being younger and having low schooling were factors associated with this psychological impairment. A longitudinal study carried out between 2000 and 2006 in a Brazilian state with participation of 1,115 individuals, 972 of which were aged participants, identified high schooling level as a protective factor against the occurrence of depression symptoms³². Another research study with the participation of 86 older adults identified that low schooling is a factor that corroborates the presence of depression symptoms in aged individuals²⁰. This result was also identified in a systematic review⁴².

Also as described above, low schooling level contributes to the presence of depression symptoms. A study carried out with 621 older adults, whose objective was to analyze the prevalence and factors associated with depression in aged individuals, corroborates the evidence of low schooling as one of the factors associated with depression³³. This result was also similar in another research study²¹. Another study showed that individuals with high schooling levels have more access to the health system⁴³, thus attesting to the low incidence of depression symptoms in this research, which was 31.74%, since 22.2% have complete high school and 28.7% have complete higher education.

Regarding the anxiety symptoms, this research identified that being divorced and low schooling levels are determinants for the presence of these symptoms in this population. A study conducted with 1,021 older adults aged between 60 and 79 years old identified that aged individuals with low schooling levels present more anxiety symptoms, especially GAD¹². As initially presented, GAD is the most common anxiety disorder among older adults⁴⁴. Other studies also identified that aged individuals with low schooling levels present more anxiety symptoms^{34,45}.

Regarding marital status, the study with the participation of 30 older adults conducted in a municipality from Minas Gerais identified anxiety symptoms in divorced, single and widowed aged individuals²⁹; which corroborates our findings, as the divorced participants presented more anxiety symptoms. Consequently, social and family support becomes necessary, as these research studies have shown that loneliness contributes to the presence of these symptoms^{46,47}.

Given the sociodemographic factors, in addition to the possible comorbidities related to the occurrence of anxiety and depression symptoms in older adults, attention from the health professionals is necessary to detect these symptoms that affect this population, as a systematic review showed that health professionals have difficulties detecting depression symptoms, for example, in 40% to 50% of the older adults⁴⁸.

The community-dwelling older adults' satisfaction with life and happiness has been researched^{49,50}. The

studies have shown a reduction in the quality of life of these individuals, as well as in relation to happiness, which can justify the presence of depression symptoms in the aged population. Luchesi et al⁴⁹ carried out a study with 263 community-dwelling older adults treated in a Family Health unit and identified that not being happy is associated with psychological harms, including anxiety and depression.

Finally, some clinical implications can be highlighted, such as the low schooling level, which might possibly have repercussions in the handling of prescribed medications and in understanding and adherence to the treatment. In addition to that, conducting promotion and prevention activities with community-dwelling female older adults can minimize the consequences of the mental disorders.

Limitations

For being a non-probabilistic and for convenience study, this research cannot represent the general aged population. Non-heterogeneity of the sample can exert some direct and/or indirect influence on the results obtained. Finally, non-identification of organic factors that can exert a direct or indirect influence on the psychological harms.

CONCLUSION

The results show that the sociodemographic characteristics are associated with the presence of depression and anxiety symptoms in the population researched. Lower age and low schooling levels are relevant to the presence of depression symptoms, whereas anxiety symptoms are more associated with being divorced and with low schooling. The presence of depression and anxiety symptoms was lower in this population researched. In addition to that, this research presented a higher prevalence of female individuals.

This study shows that various social factors can corroborate the presence of depression and anxiety symptoms in older adults treated in health units. Since these are factors that cannot be modified, it is important to think of strategies that help to minimize these consequences in this population.

As this is research carried out in a Primary Health Care unit, it is important to qualify the professionals, with the aim of screening the occurrence of these psychological disorders in order to minimize the consequences they generate. It is important to develop health strategies with the objective of reducing the harms in this phase of life. Finally, future studies can be broadly carried out with community-dwelling older adults, in order to assess factors such as social inferences (housing, leisure, health), which are still little investigated in the literature.

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