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Mental health and chronic diseases of the elderly in a Hiperdia group

Saúde mental e doenças crônicas em idosos de um grupo Hiperdia

Salud mental y enfermedades crónicas en ancianos en un grupo de Hiperdia

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This quantitative cross-sectional exploratory and descriptive study, carried out between the second semester of 2018 and the beginning of 2019, aimed at describing mental health indicators in elderly people who attend a group of Hypertension and Diabetes. Instruments were applied that evaluated: sociodemographic aspects, cognitive condition, depression, loneliness, pleasurable activities, subjective well-being, positive and negative affects and functional status. It was observed that 41.7% had depressive symptoms; 10% had moderate or intense loneliness and average levels of subjective well-being and pleasurable activities. Although depression was more prevalent, median levels of subjective well-being and pleasurable activities suggest that mental health is preserved. It is important to prepare primary health care professionals to recognize depressive symptoms in the elderly, to direct appropriate interventions, as well as to pay attention to the potential of these individuals and intervene from them, with a view to promoting and strengthening well-being of elderly people with chronic diseases.
Descriptors: Depression; Hypertension; Diabetes mellitus.

Este estudo quantitativo de corte transversal do tipo exploratório e descritivo, realizado entre o segundo semestre de 2018 e o início de 2019, que teve por objetivo descrever indicadores de saúde mental em idosos frequentadores de um grupo de Hipertensão e Diabetes. Foram aplicados instrumentos que avaliaram: aspectos sociodemográficos, condição cognitiva, depressão, solidão, atividades prazerosas, bem estar subjetivo, afetos positivos e negativos, e estado funcional. Observou-se que 41,7% apresentou sintomas depressivos; 10% solidão moderada ou intensa e níveis medianos de bem estar subjetivo e atividades prazerosas. Embora depressão tenha apresentado maior prevalência, os níveis medianos de bem estar subjetivo e atividades prazerosas sugerem que a saúde mental está preservada. É importante preparar os profissionais da atenção primária à saúde para reconhecer sintomas depressivos em idosos, para direcionar a intervenções adequadas, bem como é relevante atentar-se às potencialidades desses indivíduos e intervir a partir destas, com vistas a promover e fortalecer o bem-estar de idosos com doenças crônicas.
Descritores: Depressão; Hipertensão; Diabetes mellitus.

Este estudio cuantitativo de corte transversal exploratorio y descriptivo se llevó a cabo entre el segundo semestre de 2018 y principios de 2019, con el objetivo de describir los indicadores de salud mental en ancianos que frecuentan un grupo de Hipertensión y Diabetes. Se aplicaron instrumentos que evaluaron: aspectos sociodemográficos, estado cognitivo, depresión, soledad, actividades placenteras, bienestar subjetivo, afectos positivos y negativos, y estado funcional. Se observó que el 41,7% presentó síntomas depresivos; el 10% soledad moderada o intensa y niveles medios de bienestar subjetivo y actividades placenteras. Aunque la depresión presentó una mayor prevalencia, los niveles medios de bienestar subjetivo y de actividades placenteras sugieren que se preserva la salud mental. Es importante preparar a los profesionales de la atención primaria de la salud para reconocer los síntomas depresivos en los ancianos, para dirigir las intervenciones apropiadas, así como es pertinente considerar las potencialidades de estas personas e intervenir desde ellas para promover y fortalecer el bienestar de los ancianos con enfermedades crónicas.
Descriptores: Depresión; Hipertensión; Diabetes mellitus.

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INTRODUCTION

Population aging is a reality in Brazil. It is estimated that, in 2050, individuals aged 60 years or older will correspond to 30% of the Brazilian population, due to increase in life expectancy and decrease in birth rates[1]. Along with population aging, chronic non-communicable diseases represent 72% of causes of death in Brazil, with Arterial Hypertension (AH) and Diabetes Mellitus (DM, one of the most prevalent chronic diseases in the country[2]).

DM is often asymptomatic, being associated with unhealthy eating habits, physical inactivity and obesity. Diagnosis of Diabetes grew by 61.8% from 2006 to 2016, and the indicator increased with age, with 27.2% of diagnoses being made in elderly people[2].

AH is characterized by systemic arterial pressure measured from 115 mmHg systolic pressure and 75 mmHg diastolic pressure, with high morbidity and mortality, resulting in loss of quality of life and mainly cardiovascular complications[2]. The incidence of arterial hypertension was 14.2% between 2006 and 2016, for which 64.2% of diagnoses were made in elderly people[3]. Therefore, it appears that many elderly Brazilians need to live with chronic diseases that impact their quality of life.

Chronic diseases in the elderly are associated with a higher probability of functional and mental disability which, in turn, lead to limitations for performing basic activities of daily living and hamper self-care[4].

Elderly people living with chronic diseases may be more vulnerable to developing mental disorders, such as depression[5]. Thus, it is essential to carry out a survey of mental health indicators in this population, since depressive symptoms have the potential to further compromise health[6,7].

The concept of mental health should not be understood as the absence of disease, but it must also consider the potential of the human being in its social, biological, psychological and cultural dimensions[8]. There are many studies that investigate the relationship between chronic diseases and depression in the elderly. However, there are other constructs that are equally relevant to be investigated in order to better understand the mental health of the elderly population.

For example, investigating the prevalence of loneliness is also important, as it is a predictor of risk behaviors for suicide in the elderly[9]. However, in line with the concept of mental health, it would be relevant to examine not only negative aspects of mental health, such as depression and loneliness, but also positive dimensions, such as Practice of Pleasurable Activities (PPA) and subjective well-being (SWB), which can be considered protective factors in the face of vulnerabilities both associated with advancing age and chronic illness. High levels of PPA are associated with lower rates of depression[10], with PPA and SWB being candidate variables for health-promoting interventions, as they take into account the individual's potential and virtues.

It is necessary to urgently face the challenges of old age, not only reorganizing the levels of care to meet new demands, but also planning and prioritizing public policies to promote the mental health of this population[11]. In this scenario, health professionals should value signs indicating depression in the population that already lives with chronic diseases, such as AH and DM, as well as being able to promote the mental health of these people, also considering the positive dimensions and individual potential.

The health professional must not only collect information, but also must have the ability to transform the reality of the elderly from the information collected[12]. The psychologist's work becomes useful to help in prevention and identification of mental disorders, and also enabling planning and application of interventions aimed at promoting the well-being of the elderly and improving adherence to treatment of chronic diseases.

Thus, mapping mental health indicators in the elderly who suffer from chronic diseases, such as diabetes and hypertension, can help in the planning and adequacy of activities and health-promoting interventions offered to this public. Therefore, the present study intends to describe mental health indicators in elderly people who attend a group for Hypertension and Diabetes.

METHOD

This is an exploratory and descriptive quantitative cross-sectional study. The sample consisted of non-institutionalized elderly people (people aged 60 or over) who do not suffer from any cognitive deficits, tracked using the Mini Mental State Examination (MMSE)[13]. All the elderly people who agreed to participate in the study attended the Hypertension and Diabetes group (HIPERDIA) linked to a Basic Health Unit (BHU) in a city in the interior of the state of Minas Gerais.

The Hiperdia program comes from the National Pharmaceutical Assistance Plan for Arterial Hypertension and Diabetes Mellitus and is a strategy for monitoring hypertensive and/or diabetic users with the aim of linking the patient to the Basic Health Unit and the family health team[14].

A socio-demographic questionnaire was used: it includes questions about: age, gender, education, diseases and marital status, self-reported health, economic situation, with whom they live, among other topics.

The Geriatric Depression Scale, reduced version - GDS-15 - was translated and validated for Brazil and consists of 15 items, being one of the most used instruments for detecting severe and mild depressive symptoms in the elderly, both in research and in practice. clinic. Scores above 5 indicate the presence of depressive symptoms, and the GDE-15 has a sensitivity of 85.4% and specificity of 73.9%[15,16].

For the evaluation of pleasurable activities, the adapted Brazilian version (OPPES-BR) of the California Older Person's Pleasant Events Schedule - OPPES[17] was produced after studies to assess the semantic, conceptual, cultural, idiomatic and operational equivalence between the original version and the Brazilian version[18], with evidence of internal and external validity of the scale[10]. The Brazilian version of the instrument consists of 67 items that describe activities that elderly people tend to find pleasant.

The respondent must indicate the frequency with which they performed such activities in the last month, according to the following likert scale: 0 (never); 1 (1-6 times), and 2 (more than 7 times). The respondent should also rate the subjective pleasure they experienced while performing each activity, or that they would experience if they had performed it, using the following scale: 0 (it was not or would not have been pleasant), 1 (it was or would have been reasonably pleasant) and 2 (it was or would have been quite pleasant). Scores range from 0 to 2, with the closer to 2 the greater the pleasure and frequency of activities[18].

Subjective Well-Being was accessed through the Life Satisfaction Scale - LSS and the Positive and Negative Affections Scale - PNAS, both translated to Brazilian Portuguese and adapted for use with elderly Brazilians[19,20]. The LSS allows a more global assessment of the individual's personal satisfaction with his life, while the PNAS evaluates affections experienced by people.

The LSS is composed of 4 statements that the interviewee must answer on a scale from 1 (strongly disagree) to 10 (strongly agree), regarding their satisfaction with life. The PNAS, on the other hand, is composed of ten different affects (5 positive and 5 negative), and the respondent must answer on a scale of 1 (nothing) to 10 (extremely), how much each affection has been experiencing lately. Both scales showed good internal consistencies (α = 0.84 for the LSS and α = 0.78 for the PNAS). Scores range from 1 to 10, and the closer to 10, the greater the satisfaction with life and the experience of positive or negative affects[19,20].

Loneliness was accessed through UCLA-BR, a scale adapted to Brazil for use with adults and the elderly[21] from the foreign version UCLA-R22. The instrument consists of 20 statements that describe affective and cognitive states of loneliness, in which the respondent has to mark the frequency (ranging from 1 - never to 4 - often) with which they identify with each statement lately. The results may indicate minimal loneliness (0-22 points), mild (23-35 points), moderate (36-47 points) and intense (48-60 points)[22].

The functional status was assessed by the Pfeffer Instrumental Activities of Daily Living Scale (IADL), which is composed of 10 items that assess the ability of the elderly to perform instrumental activities of daily living. Scores can range from 0 to 30, with scores above 5 signifying functional dependence[23,24].

Data collection took place in the second semester of 2018, beginning of the first semester of 2019. Through contact with a BHU nurse, the HIPERDIA group was introduced to the researcher, in addition to dates and times of weekly meetings. While waiting to do the screening or medical consultation, the elderly were invited to participate in the research and, if they accepted, the instruments were applied after the medical appointment.

On that occasion, the elderly were taken to a reserved space where the Free and Informed Consent Term was first read and signed. Then the MMSE was applied and if the elderly did not have cognitive deficits, it was followed with the application of the other instruments.

The data were analyzed using descriptive statistical techniques (means, percentages, standard deviation and others) using the IBM SPSS software version 20. The project was approved by the Research Ethics Committee of the Universidade Federal do Triângulo Mineiro (CAAE 65813417.9.0000.5154).

RESULTS

The were 60 participants, of which: younger elderly (50%), women (81.7%), married or cohabiting with partners (43.3%), literate (76.7%), who considered their economic situation to be average (63, 3%) and lived with their families (53.3%). The average age was 71.32 years (SD = 6.62). (Table 1).

Table 1. Elderly people according to sociodemographic data. Uberaba, Minas Gerais, 2019.

Variables	Categories	n (60)	100 (%)
Gender	Female	49	81.7
	Male	11	18.3
Age	60-70 years old	30	50.0
	71-80 years old	21	35.0
	More than 80 years old	9	15.0
Marital Status	Single	1	1.7
	Married/Partner	26	43.3
	Separated	8	13.8
	Widowed	23	38.3
Educational Level	Illiterate	14	23.3
	Literate	46	76.7
Economical Situation	Very Good	3	5.0
	Good	13	21.7
	Average	38	63.3
	Poor	2	3.3
	Very Poor	3	5.0
	Does not Know	1	1.7
Lives With Who	Alone	13	21.7
	Spouse/Partner	15	25.0
	Family	32	53.3

AH and DM were found in 73.3% and 65% respectively (Table 2). In the self-declaration on whether or not to have depression, only four participants reported it (6.6%) differently from that captured by the application of the GDS-15, which identified depressive symptoms in 41.7%. Most elderly people were classified as having minimal loneliness (73.3%) and the majority considered their health to be reasonable (51.7%).

Table 2. Chronic illnesses reported by the elderly. Uberaba, Minas Gerais, 2019.

Variables		n (60)	100 (%)
Arterial Hypertension	No	16	26.7
	Yes	44	73.3
Diabetes Mellitus	No	21	35.0
	Yes	39	65.0

In terms of depressive symptoms due to GDS-15, it was not indicative for positive screening for depression, although it was close to the cut-off score (equal to 5) for positive screening. In the affections, positive ones were more frequent than negative ones, suggesting that the experience of positive emotions was more frequent than negative emotions. The average for loneliness was found in the screening for minimum loneliness. The averages for pleasurable activities indicated moderate rates for frequency and pleasure experienced in activities (with a scale ranging from 0 to 2). The average for pleasure was higher than the average for frequency, indicating that the elderly would like to do more pleasurable activities than they reported doing (Table 3).

Table 3. Descriptive data measures of mental health in elderly people. Uberaba, Minas Gerais, 2019.

Scale/Construct	Mean	Standard Deviation	Min	Max
GDS-15/Depression	4.61	3.17	0.00	13.0
Negative Affections	5.17	2.16	1.00	9.8
Positive Affections	8.95	11.6	1.80	9.6
Satisfaction with Life	7.47	1.9	2.75	10.00
UCLA-BR/Solitude	15.01	13.82	0.00	54.00
OPPES-BR Frequency	1.43	0.27	0.70	1.90
OPPES-BR Pleasantness	1.69	0.20	1.07	2.00

DISCUSSION

Depression in old age is a very common pathology that has a negative impact on several aspects of life, in the family and in the community[25]. A study indicated that the prevalence of depression in elderly Brazilian residents in the community can vary between 2% and 14%, reaching 30% for those who live in long-term institutions[26].

The prevalence of depression found was 41.7%, higher than that found in another study that evaluated depression in 100 elderly participants in a HIPERDIA group in the state of Paraná (equal to 30%)[7].

The prevalence of depression found in the present study was even higher than the proportion of elderly people screened for depression (34.4%) using GDS-15 in a study to analyze scale items[27]. Therefore, the data in this study suggest that elderly people who suffer from diabetes and hypertension have a higher prevalence of depression and, for this reason, they may be at higher risk for developing the disorder. Other studies have also pointed to the existence of significant associations between depression and the presence of chronic diseases in the elderly[7,27-29].

The identification of risk factors for depression is a fundamental step in planning interventions focused on reducing the prevalence of depressive symptoms and their complications[29]. For this reason, health professionals who work with the elderly who suffer from diabetes or hypertension must be able to identify the first signs of depression and then refer them to appropriate assessments and interventions.

In self-declaration and tracking by GDS-15 about depression, a discrepancy was observed. This may suggest that the elderly have difficulties in discriminating symptoms related to depression and, for this reason, they did not declare themselves depressive, which can contribute to the fact that this disorder is still underdiagnosed and does not receive adequate treatment in this population[26]. A study that sought to assess self-reported depression by elderly people living in the community in the city of João Pessoa, state of Paraíba, observed that the perception of depression symptoms may be related to culture, socioeconomic conditions and also biological aspects[30].

Elderly people seem to be uninformed not only about depression, but also about other chronic diseases like AH and DM, as shown by a study carried out in the HIPERDIA Program in the city of Teresina, where there was a lack of information regarding these diseases and treatments[31,32]. This misinformation can lead to non-adherence to treatment and further harm health, in addition to increasing sector spending, especially when AH and DM are associated with depression[5].

This context shows the relevance of working with psychoeducational interventions with elderly participants of HIPERDIA groups, with a view to the perception and care of symptoms related to both their physical and mental health, which would contribute to proper diagnosis and treatment of diseases.

Studies with elderly people diagnosed with hypertension and who suffered from depressive symptoms showed that they benefited from cognitive training combined with psychoeducation, since a significant reduction in depressive symptoms was observed after the intervention, in comparison with pre-test of experimental group and with the control group measures, with the hypothesis that the increase in knowledge about hypertension and forms of treatment may have generated a greater perception of control over the disease and contributed to the reduction of depressive symptoms[33-35]. Thus, psychoeducational actions regarding physical and mental health of the elderly seem to be important strategies for promoting well-being.

In the study presented here, 63.4% of those surveyed rated their health as being average or poor. Self-reported health is an important indicator of well-being in several epidemiological studies carried out with the elderly population in the national and international context, and for this reason it deserves substantial consideration[24].

A cross-sectional study carried out with 1911 elderly people living in the urban region of Florianópolis, in the state os Santa Catarina, revealed an association between higher levels of depression and worse self-perceived health, indicating that elderly people who suffer from depression tend to classify their health in worse condition[35]. Thus, the high prevalence of depressive symptoms may also partially explain the reason why more than half rated their health as poor or average. Living with AH and DM also impacts quality of life[12], which is another factor that probably contributed to the elderly having a worse self-perception regarding their health.

Most had minimal or mild loneliness levels. As a little more than half reported living with family members, it can be inferred that most of these elderly people have some support network and intergenerational coexistence that may be serving as a protective factor for the development of symptoms of loneliness. Research has shown that family life can bring benefits, such as opportunities for establishing support networks, especially for elderly people[36].

In Brazil, it is also common for the elderly to provide some type of emotional, financial or instrumental support to the younger generations of the family[37], which could also alleviate symptoms of loneliness. However, the present study did not intend to investigate the relationship between loneliness and family support, which makes it possible to only raise some questions that should be investigated in future studies.

Subjective well-being (SWB) and the practice of pleasurable activities (PPA), in turn, are protective factors to mental health, due to the fact that high levels of SWB and PPA can help prevent depression, in addition to being variable to be worked on health-promoting interventions, in the context of public policies focused on healthy old age in different contexts[10,38].

With regard to PPA, it was noted that elderly people who attended the HIPERDIA group had average involvement in pleasurable activities. The average found for frequency in activities in this sample was even higher than the average found for frequency in activities (measured by OPPES-BR) in elderly people with Chronic Kidney Disease (CKD) in another investigation[39]. In fact, although the elderly people surveyed here had AH and/or DM (which are also chronic diseases), they still had their functionality preserved, which was not the case for the elderly with CKD in the mentioned study.

The preserved functionality possibly contributed to a greater frequency in pleasurable activities, because the greater the functionality, the greater the frequency of involvement in potentially pleasant activities[40]. Also, attending groups, even if of an informative nature, such as the HIPERDIA group, is a protective factor for mental health in the elderly, as it favors the practice of pleasurable activities and social coexistence, and may also reduce the chances of the elderly experiencing solitude.

SWB, when measured by the levels of satisfaction with life and positive and negative affects, also proved to be average, since they experienced more positive than negative affects, in addition to having an index of satisfaction with life considered average. Therefore, even in the presence of chronic diseases such as AH and or DM, the elderly showed reasonable levels of subjective well-being, being consistent with the SWB theory in the elderly, which states that even in the face of adverse events, such as the presence of chronic diseases, the elderly can also report feeling good and satisfied, suggesting the importance of psychological resilience and subjective variables for maintaining mental health[41].

However, this study did not investigate resilience or other subjective variables that are related to mental health (coping strategies, self-esteem, self-confidence, and others), and it is recommended that future studies seek to examine in greater depth the role of these other variables in maintaining of SWB in elderly people with chronic diseases. Thus, this study suggests that the elderly can maintain good levels of SWB, even in the presence of chronic diseases such as AH and or DM.

Depressive symptoms were the most prevalent, although the elderly mostly showed lower levels of loneliness and median levels of BSWB and PPA, which suggests that the mental health of these individuals may be partly preserved, because despite the depressive symptoms, they are functional elderly people who practice potentially pleasant activities, get involved in groups, experience positive emotions and do not experience extreme levels of loneliness, even though they suffer from chronic diseases like AH and or DM.

The mechanisms involved in the occurrence of depressive symptoms and the preservation of median levels of PPA and SWB for were not clear, since there was no design to investigate such relationships. In this context, the reasons why elderly people with AH and/or DM are more likely to suffer from depressive symptoms, but still can remain reasonably active, without intense loneliness and with reasonable SWB, are not yet clear and should be investigated in future studies.

CONCLUSION

The study had some limitations, such as a small and convenience sample, in addition to describing only mental health indexes, without proposing to investigate relationships established between these constructs, or even the effect of other variables on mental health outcomes. Future studies should be concerned with looking at these and other issues. On the other hand, the study showed the reality of a primary health care service (PHCS) and the possible contribution of psychoeducation actions.

It is evident the need to prepare the professional PHC team to recognize depressive symptoms and direct them to the indicated treatments, since depression can be more frequent in the elderly who have chronic diseases, such as AH and or DM even though they attend the HIPERDIA group. It is also important that these professionals are prepared to identify the potential of these individuals and work from them, with a view to promoting and strengthening the well-being of these people. Also, psychoeducational interventions for the elderly to recognize depressive symptoms and other chronic diseases can also contribute to the promotion of physical and mental health.

In this sense, the work of a psychologist within the HIPERDIA group becomes essential for preventive character and implementation of interventional practices that favor the well-being and greater adherence to treatment of AH and or DM. Finally, it is important to consider the need for access to information and treatments in different dimensions of health, both for professionals and users, for elaboration of more effective social public policies related to Family Strategy and to the groups of HIPERDIA.

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CONTRIBUTIONS
Maria Eduarda Benetti Maruyama contributed with data collection and writing. **Heloísa Gonçalves Ferreira** worked on data analysis and revision.

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