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The Frequency of Depression in Institutionalized and Homebound Older Adults and Related Factors

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ABSTRACT

Objectives: The aim of this study was to determine and compare the frequencies of depression in institutionalized and homebound older adults.

Methods: This descriptive study was conducted in aged over 65 years, in home-bound seniors who living with or without other family members, and institutionalized seniors who living in a geriatrics facility in Lima, Peru between July 01 and July 31, 2019. The Yesavage Geriatric Depression Scale (Short Form) was used to assess depression.

Results: The study included 250 elderly adults. One hundred and twenty-five (50.0%) of the participants were in the home-bound group and 125 (50.0%) of the participants were in the institutionalized group. The mean age of the participants was 75.2±6.2 years, 134 (53.6%) were male and 100 (40.0%) were single. Among the homebound older adults, 87 (69.6%) were found to have moderate depression and the results of 15 (12.0%) suggested severe depression. In the institutionalized group, 45 (36.0%) had moderate depression, and 22 (17.6%) showed severe depression. In the elderly, 102 (60.4%) in the home-bound group and 67 (39.6%) in institutionalized group had depression (p<0.001). While 33 (19.5%) of married elderly people had depression, 5 (6.2%) did not have depression (p=0.017).

Conclusion: Among older adults, a high frequency of depressive symptoms was found. Depression was observed mainly in home-bound elderly and married. The participation of governments and family members is required to ensure the provision of adequate health services and assistance for the growing elderly population.

Keywords: Elderly, depression, depressive disorder, mental health, Peru

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INTRODUCTION

The world population is aging rapidly, and the proportion of the planet's inhabitants aged ≥60 years is expected to rise from 11% to 22%, or from 605 million to some 2 billion between 2000 and 2050.[1] In the same period, the number of people aged ≥80 will increase almost 4 times to an estimated 395 million. There is a particularly steep increase in the aging index in the Americas.[2] It has been projected that those aged ≥60 will constitute 18.6% of the total population of the Americas in 2025. The 2017 census in Peru indicated that people aged ≥65 already represented 8.4% of the total population.[3]

Increased longevity and declining birth rates have broad implications and present complex social challenges. Programs and policies are needed that enable living well in addition to living longer. The elderly may face age-related diseases, such as dementia, and conditions and con-

cerns like depression, anxiety, suicide, and serious limitations to quality of life.[4] However, while older adults frequently suffer from multiple somatic and often chronic conditions, depression is not a normal consequence of aging.[5]

The reported prevalence of depression varies. In the United States, a general prevalence of 11.19% has been reported among older individuals.[6] Researchers found that 34.4% of the elderly population of India suffered from depression.[7] A prevalence of depressive symptoms among institutionalized older adults in Brazil was determined to be 48.7%.[8] The variance may reflect several variables in terms of measurement as well as cultural and economic factors.

Depression has typically been less prevalent among older adults than younger adults, but the consequences of the disease among elderly individuals can be quite serious, as there may be an additional burden of physical illness, impaired functioning, and greater risk of suicide.[9] Older adults are less likely to report affective symptoms and more likely to display cognitive changes, somatic symptoms, and loss of interest than younger adults.

Adequate support and services are essential, yet there is no single formula for success. Qiu et al. reported that 41% of home-bound elderly individuals suffered from 2-3 comorbid medical/psychiatric conditions, and 32% suffered from ≥4 comorbid conditions.[10] Specialized residential facilities that can provide specialized care for older adults can offer benefits to the individuals and their families; however, separation from the family unit can also have negative effects on mental health.

The aim of this study was to determine the frequencies of depression in institutionalized and homebound older adults and related factors.

METHOD

This descriptive study was conducted in aged over 65 years, in home-bound seniors who living with or without other family members, and institutionalized seniors who living in a geriatrics facility in Lima, Peru between July 01 and July 31, 2019. Half of the participants were from the home-bound group and other half of the participants were from the institutionalized group. The home-bound group was enrolled up during their health visit or from the Seniors Club in the Puente Piedra district in northern Lima. The institutionalized group consisted of seniors living in two institutions in the city of Lima as San Vicente de Paul and Rodolfo Ignacia de Canevaro.

Depression is a common mental disorder, characterized by the presence of sadness, loss of interest or pleasure, feelings of guilt or lack of self-esteem, sleep, or appetite disorders, feeling tired, and diminished ability to concentrate.[11] The Spanish version of the Yesavage Geriatric Depression Scale (Short Form) was used to assess depression in the study group. This instrument consists of 15 questions (10 positive and 5 negative) and each positive response to a symptom is scored with 1 point.[12] Scores of 0-5 were considered normal, 6-10 indicated mild depression, and >10 suggested severe depression.

Elderly people with cognitive dysfunction were excluded in the study.

IBM SPSS Statistics for Windows, Version 23.0 software (IBM Corp., Armonk, NY, USA) was used to perform the data analysis. The mean and standard deviation were used to describe the age of the participants, and other general characteristics and the classification of depression were presented using frequency and percentage. A chi-squared test was used to evaluate the difference between groups. A p value of <0.05 was considered significant.

RESULTS

The mean age of 250 elderly adults was 75.2±6.2 years. Sociodemographic features of the elderly are summarized in Table 1.

In our study group, 132 (52.8%) had moderate depression and 37 (14.8%) had severe depression. In the home-bound group, 87 (69.6%) had moderate depression and 15 (12.0%) had severe depression. In the institutionalized group, 45 (36.0%) had moderate depression and 22 (17.6%) had severe depression. Frequency of depression among institutionalized and home-bound older adults is shown in Figure 1.

In the elderly, 102 (60.4%) in the home-bound group and 67 (39.6%) in institutionalized group had depression ($p<0.001$). While 33 (19.5%) of married elderly people had depression, 5 (6.2%) did not have depression ($p=0.017$). Sociodemographic features of the elderly according to the presence of depression are summarized in Table 2.

DISCUSSION

The frequency of depression in both institutionalized and home-bound older adults is worrying, a high frequency of depressive symptoms was found among older adults. Depression was observed mainly in home-bound elderly and married.

The circumstances of modern life may no longer support previous solutions. In fact, they may contribute to depression in adults who live at home through their later years. In Peru, only 37% of the population aged ≥60 has a pen-

Table 1. Sociodemographic features of the elderly

	Home-bound (n=125)	Institutionalized (n=125)	Total (n=250)
Gender			
Female	54 (43.2)	62 (49.6)	116 (46.4)
Male	71 (56.8)	63 (50.4)	134 (53.6)
Age groups			
65-79 years	91 (72.8)	99 (79.2)	190 (76.0)
≥80 years	34 (27.2)	26 (20.8)	60 (24.0)
Marital status			
Single	29 (23.2)	71 (56.8)	100 (40.0)
Married	29 (23.2)	9 (7.2)	38 (15.2)
Divorced	27 (21.6)	12 (9.6)	39 (15.6)
Widowed	40 (32.0)	33 (26.4)	73 (29.2)
Communication with the family			
Good	47 (37.6)	13 (10.4)	60 (24.0)
Average	73 (58.4)	80 (64.0)	153 (61.2)
Bad	5 (4.0)	32 (25.6)	37 (14.8)
Frequency of family visit			
One time per day/2 days	23 (18.4)	3 (2.4)	26 (10.4)
One time per week	40 (32.0)	17 (13.6)	57 (22.8)
One time per month	47 (37.6)	71 (56.8)	118 (47.2)
Never	15 (12.0)	34 (27.2)	49 (19.6)
Treatment by healthcare personnel			
Good	87 (69.6)	74 (59.2)	161 (64.4)
Average	37 (29.6)	39 (31.2)	76 (30.4)
Bad	1 (0.8)	12 (9.6)	13 (5.2)
Frequency of physical activity			
Never	29 (23.2)	16 (12.8)	45 (18.0)
At least once a week	43 (34.4)	57 (45.6)	100 (40.0)
At least once a month	24 (19.2)	39 (31.2)	63 (25.2)
Seldom	29 (23.2)	13 (10.4)	42 (16.8)
Frequency of walking			
Never	14 (11.2)	23 (18.4)	37 (14.8)
At least once a week	39 (31.2)	20 (16.0)	59 (23.6)
At least once a month	46 (36.8)	35 (28.0)	81 (32.4)
Occasionally	26 (20.8)	47 (37.6)	73 (29.2)

Data is presented as n (%).

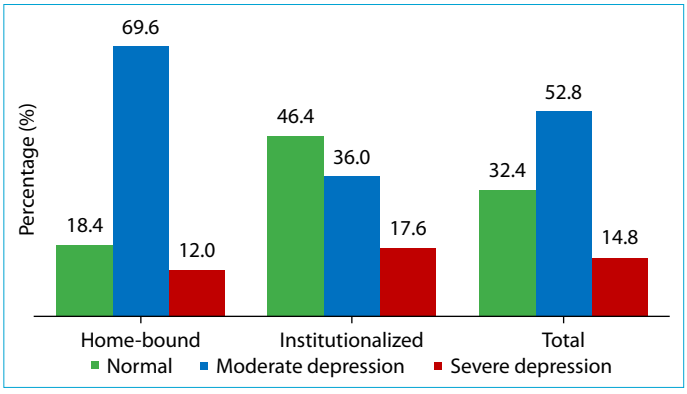

Figure 1. Frequency of depression among institutionalized and home-bound older adults.

sion; 70% are members of the National Pension System (ONP) and the pension is insufficient to meet their needs.[13] This is a problem seen around the world. However, among older Korean widows without financial difficulties, living alone was not perceived as stressful. Independence can help to prevent the development of depressive symptoms.[14]

Among older adults living in care facilities, the prevalence of major depression has been reported to be 1% to 4%, with a rate of subsyndromal depression estimated at 15% to 30%.[15] Among the elderly, physical illness and disability are major risk factors for depression. These factors in-

Table 2. Sociodemographic features of the elderly according to the presence of depression

	Presence of Depression		p
	No (n=81)	Yes (n=169)*	
Residence			
Home	23 (28.4)	102 (60.4)	<0.001
Institution	58 (71.6)	67 (39.6)	
Gender			
Female	33 (40.7)	83 (49.1)	0.214
Male	48 (59.3)	86 (50.9)	
Age groups			
65-79 years	63 (77.8)	127 (75.1)	0.649
≥80 years	18 (22.2)	42 (24.9)	
Marital status			
Single	40 (49.4)	60 (35.5)	0.017
Married	5 (6.2)	33 (19.5)	
Divorced	15 (18.5)	24 (14.2)	
Widower	21 (25.9)	52 (30.8)	
Communication with the family			
Good	18 (22.2)	42 (24.9)	0.716
Average	49 (60.5)	104 (61.5)	
Bad	14 (17.3)	23 (13.6)	
Frequency of family visit			
One time per day/2 days	5 (6.2)	21 (12.4)	0.075
One time per week	13 (16.0)	44 (26.0)	
One time per month	43 (53.1)	75 (44.4)	
Never	20 (24.7)	29 (17.2)	
Treatment by healthcare personnel			
Good	53 (65.4)	108 (63.9)	0.971
Average	24 (29.7)	52 (30.8)	
Bad	4 (4.9)	9 (5.3)	
Frequency of physical activity			
Never	13 (16.0)	32 (18.9)	0.123
At least once a week	41 (50.6)	59 (34.9)	
Al least once a month	16 (19.8)	47 (27.8)	
Seldom	11 (13.6)	31 (18.4)	
Frequency of walking			
Never	10 (12.3)	27 (16.0)	0.735
At least once a week	19 (23.5)	40 (23.7)	
At least once a month	25 (30.9)	56 (33.1)	
Seldom	27 (33.3)	46 (27.2)	

*Moderate and severe depression.
Data is presented as n (%).
Chi-squared test.

clude cognitive deficits, declining functional status, social network losses and low social support, and negative life events.[15]

A report from Brazil indicated that the prevalence of depression among older adults residing in long-term care facilities was 48.7%. Significant factors were ≥5 illnesses, hospitalization within the previous 12 months, and a lack of friends at the facility.[8] Although in the present study the prevalence of depression was statistically significantly higher in the home-bound participants, importantly, de-

pression was also present in 40% of the institutionalized older adults. In a study carried out in the district of San Martin de Porres (northern Lima), 8.4% of older adults were found to be depressed.[16] All of the participants in that study were living at home. Marital status has been a strong predictor of depressive disorders in adulthood in both genders, the prevalence of depression is higher in older people who are alone (never married, widowed, divorced, or separated).[17] A good marital union appears to be beneficial to the health of men and women and the dissolution of these ties may generate negative psychological consequences.[18]

A study conducted in Ambo, Ethiopia, reported a prevalence of depression in non-institutionalized older adults of 41.8%.[19] In our study, we found results indicating depression in 60% of older adults living at home and 40% of institutionalized older adults. This demonstrates a problem in both groups, but to a greater extent in those who live at home. Concerted, organized responses for members of our community of this age group are warranted.

In the present study, marital status had an influence on depression. There was a greater proportion of depression among those who were married. A study carried out in South Africa found marriage was associated with not being depressed (75.9% versus 24.1%); however, in our study we did not find such an association.[20] In Peru, it was reported that 38.4% of adults >70 was lived with another person of similar age (spouse, friend or relative), and 38.2% lived in a single-person home.[21]

Support for active aging and quality of life in older adults, comprising macro-social, micro-environmental, interpersonal, and personal efforts, is urgently needed.[22] It is increasingly necessary that appropriate guidelines for intervention and direction for healthcare personnel be provided and implemented.[23]

The level of depression seen in our study and general statistical evidence demonstrates the need for concerted, urgent consideration of improved mental health services. The participation of local governments and support for programs for the elder population are important.[24] The recent community impetus for the development of Mental Health Centers in Peru will be of great benefit.

Limitations of this study include the fact that the non-institutionalized older adults were recruited while presenting for healthcare, indicating that they had a pre-existing physical or mental health problem, which could have contributed to the level of depression.

CONCLUSION

A worryingly high frequency of depressive symptoms was observed in both institutionalized and home-bound older adults. Depression was observed mainly in home-bound elderly and married. The participation of governments and family members is required to ensure the provision of adequate health services and assistance for the growing elderly population.

Disclosures

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Conflict of Interest: None declared.

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Ethics Committee Approval: The Research Ethics Committee of the University of Sciences and Humanities approved this study (Approval date: July 19, 2019, and Approval number: 107-2019). The ethical principles of the Declaration of Helsinki were observed throughout the design and conduct of the study. The participants all provided informed consent.

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