

## Risk of Depression in the Geriatric Population in a Mexican Community at an Institution of the Health Services of Mexico

Edgar Uriel Robles-Salgado<sup>1\*</sup>, Hector Riquelme-Heras<sup>2</sup>, Raul Gutierrez- Herrera<sup>2</sup>, Iracema Sierra Ayala<sup>2</sup>, Olga Magdalena Padron Lopez<sup>2</sup>, Celina Gomez-Gomez<sup>2</sup> and Pablo Gutierrez-Sanchez<sup>2</sup>

<sup>1</sup>Family physician, Outpatient clinic at the ISSSTE, Morelos, Mexico

<sup>2</sup>Academic Staff Research at the "Universidad Autonoma de Nuevo Leon", Mexico

\*Corresponding author: Edgar Uriel Robles-Salgado, Family physician, Outpatient clinic at the ISSSTE, Morelos, Mexico, E-mail: [urielrobles@outlook.com](mailto:urielrobles@outlook.com)

### Abstract

**Introduction:** Depression in older adults is an underdiagnosed public health problem, with great repercussions for the elderly as well as their families and the health system.

**Objective:** To determine the prevalence of risk of depression in the geriatric population ascribed, and assistant to the Primary Care of a health institution in Mexico.

**Method:** Descriptive, cross-sectional, prospective study. The 30-item Yesavage scale to detect depression was applied after signing informed consent.

**Results:** Of a total of 149 subjects: 6 at high risk, 16 cases at intermediate risk, the remaining one presented a low risk.

**Discussion:** The diagnosis of depression is through clinical history with the application of screening and confirmation tests, it should be done with a broad approach and should not be based solely on the symptom count, the long-term prognosis of depression in the population geriatric is favorable when an accurate diagnosis and comprehensive management is made, considering biological and psychosocial factors, for an adequate period of time.

**Conclusions:** The participation of women is twice that of men, which agrees with what is observed in those who attend the first level of care, the prevalence of obesity and depression is also higher in women; This may be due to the need to increase the sample for better representation. There is a need to carry out a better interrelation between the different services of the Family Medicine Clinic

**Keywords:** *Depression; Psychosocial factors; Obesity; Geriatric*

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### Introduction

Depression is a public health problem whose diagnosis is not timely in the elderly, and depression is often underdiagnosed because, on several occasions, depressive symptoms occur atypically or simply are not investigated directly by understanding

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as a natural aging process.

In a study conducted in Mexico through the National Survey of Health and Aging, a prevalence of 74.3% of depression was found in older adults [1], in another study, conducted at the Military Hospital of Santiago, Chile, it was found a prevalence of 28.4% of patients hospitalized in the internal medicine service [2].

This disease is of multifactorial etiology, genetic factors in the elderly are considered the least important, social and family are much more, as well as the presence of serious diseases, chronic and terminal, loss of spouse, friends, self-esteem, economy and social role; polypharmacy, nutritional status, frequent and repeated hospitalizations, unresolved duels, the age and the personality of the elderly [3].

According to the DSM-V, the realization of the BLINK and Yesavage depression test of 15 subjects is ideal for the screening, confirmation and evolution of depression in the elderly [4,5].

The elderly patient who suffers from depression goes to health services more often, those who are hospitalized tend to become more complicated and prolong their hospital stay, increasing the costs of medical care, which is why it has been proposed to increase the number of investigations in this area, integrate a continuing medical education program for physicians of first contact [6] also, a depressive episode in the elderly increases the risk of death, some cardiac and neurological problems, although the reason why and prolonging the hospital stay is not understood [7].

An important point is that suicidal behavior in the elderly differs from that of other age groups in that they have fewer suicide attempts and more specific suicides using more lethal methods, give more subtle warning signals and therefore more difficult to detect [8].

## **Objective**

To determine the prevalence of risk of depression in the geriatric population ascribed, and assistant to the Primary Care of a health institution in Mexico.

To determine the presence of frequent comorbidities in elderly subjects with risk factors for the depressive disorder.

## **Method**

A descriptive, cross-sectional, prospective study was carried out. A sample size of 377 subjects was calculated, taking into account a population of adults over 3400 subjects, a margin of error of 5% was considered, with a reliability index of 95% and the distribution of responses to the scale at 50%.

Ambulatory patients were collected from a first-level care consultation in a health sector institution in the center of the country that met the following inclusion criteria: be 65-years of age or older, sign informed consent and not have features of severe cognitive impairment. The exclusion criterion was that the subjects suffered from a disease that prevents them from completing the evaluation.

The Yesavage depression scale of 30 subjects was applied since it can be used in healthy or sick patients (sensitivity of 92%

and specificity of 89%).

The technique of analysis and processing of the information to be used is the Univariate / Multivariate Analysis through STATA 11.

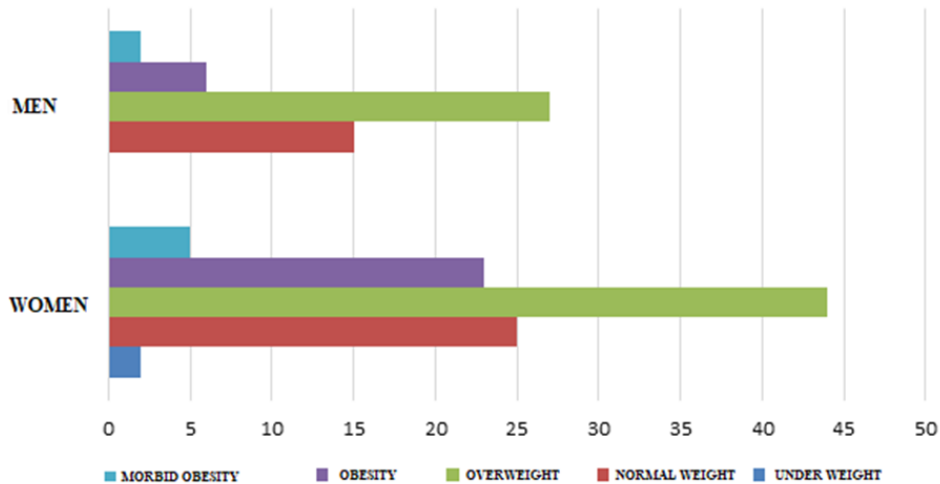
**Results**

Of a total of 149 subjects interviewed, 99 were women (66.4%) and 50 men (33.6%) of whom women were the most overweight of both groups comparing according to the body mass index, as shown in the next graph. (Figure 1) (Table 1).

Body mass index	Women	Men
Underweight	2	0
Normal Weight	25	15
Overweight	44	27
Obese	23	6
Morbidly obese	5	2

**Table 1:** Body mass index.

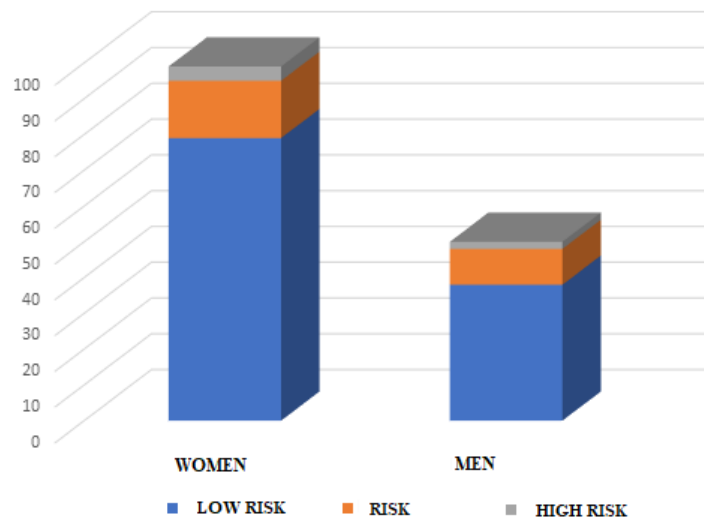
Regarding the risk of depression considered as high, there were only 4 cases in women and 2 in men. The low risk (less than 11 points) was the most prevalent. However, 16 cases in women and 10 in men constitute the population with an intermediate risk. (Figure 2).



**Figure 1:** BMI according to sex elderly patients.

**Discussion**

There is evidence that older adults, who are in contact with their family, friends, church and, in general, society, are in better physical and mental form. Moreover, the data show that an active social life benefits brain function almost as much as physical capacity. Staying socially active also allows you to maintain a positive attitude.



**Figure 2:** Risk of depression by sex

The birth rates have decreased to less than a fifth of what they were in the fifties, in this respect it will not be much, but it is what causes the importance of aging in our country since it imposes problems that become a moral, social and political necessity; Among the most relevant:

- A. Financial insufficiency of social security, pensions and retirement systems.
- B. Displacement towards older ages in the composition of the labor force and changes in development models.
- C. Fragility in the health conditions of the population in advanced ages, as well as the higher incidence and prevalence of chronic diseases and disabilities.
- D. Change in family relationships and domicile conditions, as a result of the transformation of family structures and households, formed more and more by older adults and by less and less young people.
- E. Feminization of aging.
- F. Vulnerability to old age, physical, social, ethical, legal and human rights.

Reports from the epidemiological panorama of Mexico point out that "many of the 16 million older adults who will live in Mexico in 2030 will be poor and sick" [9]. The most prevalent diseases in this population are, in decreasing order: arterial hypertension, diabetes mellitus, other types of heart disease and osteoarticular disorders mainly [10]. Geriatric syndromes or mental disorders are not contemplated in the first instance.

The diagnosis of depression is always through clinical history with the application of simple tests of detection and confirmation. Cardinal symptoms are persistent feelings of worthlessness, ideas of death, decreased mood, loss of ability to enjoy life, tiredness and fatigue exaggerated by somatic symptoms such as pain, sadness, anxiety, guilt, shame, contempt, irritability, indecision, decreased concentration and ability to solve problems, together with symptoms common to other pathological

conditions, such as lumbago, anorexia, dizziness, insomnia, etc [3].

The Clinical Practice Guideline (2011) for Mexico presents depression as "a set of symptoms manifested by the loss of interest and the inability to satisfy the activities and experiences of daily life. It includes demotivation, emotional, cognitive, physical and behavioral alterations. In the elderly, it is characterized by persistence, severity and deterioration of functionality, with different levels of severity [11].

The Spanish Clinical Practice Guide [12] speaks of the disorder as "symptoms of affective predominance (pathological sadness, apathy, anhedonia, despair, decay, irritability, subjective feeling of discomfort and importance in the face of the demands of life) although, to a greater or lesser degree, of a cognitive, volitional and somatic type, reason why one could speak of a global psychic and physical affectation, with special emphasis on the affective sphere".

The most commonly used diagnostic criteria for depression, both in the clinic and in research, are those of the International Statistical Classification of Diseases and Related Health Problems (CIE) and those of the American Psychiatric Association (DSM). The first is subdivided into the mild, moderate, severe episode without psychotic symptoms, severe with psychotic symptoms, other and not specified, provided that it meets a minimum period of two weeks presenting typical symptoms: depressive mood, loss of interest and ability to enjoy with increased fatigability.

For the DSM-V classification, a period of two weeks with at least five manifestations is also considered, with at least one being depressed and/or diminishing interest or pleasure in all or almost all activities. It divides the disorder into mild, moderate or severe with specific codes for partial, total or unspecified remission.

The differential diagnosis in both classifications deals with anguish/anxiety disorder, obsessive-compulsive, bipolar, adaptive type, dysthymia, toxic consumption and negative symptoms of schizophrenia.

And although the evaluation and screening of depression "should be carried out with a broad approach and should not be based solely on symptom counts" [12], different instruments for rapid application are used to assess the risk of the disease.

There are several scales of depression, some of them for specific use in older adults. The most widespread is the Geriatric Depression Scale (GDS) of Brink and Yesavage and the Rating Scale for Depression of Hamilton. These scales-surveys, conducted by patient interview or by self-completed questionnaire, include items on mood, insomnia, anxiety, inhibition, guilt and death thoughts, somatic, paranoid and compulsive symptoms, etc.

According to the DSM-V, the completion of the BLINK and Yesavage depression test of 15 subjects is the ideal for the screening, confirmation and evolution of depression in the elderly. Differential diagnosis should be made with dementia, hypothyroidism, substance abuse, Parkinson's disease, cerebral vascular disease, cancer, normal mourning, and psychiatric illnesses other than depression.

It is insisted: The usefulness of the scales is as screening and control instruments, it does not replace the diagnostic interview with the specialist, and it is not useful in the risk assessment for the suicide attempt.

Simon [13] concludes that the long-term prognosis of depression in the geriatric population is favorable when an accurate diagnosis and comprehensive management is made, considering biological and psychosocial factors, for an adequate period of time. Undoubtedly, better results are achieved when the patient has a job, lives in the community, with other relatives, enjoys adequate social support, during the last year there have been few vital stressors or important changes, there is no other incapacitating medical condition associated and a careful follow-up is done.

## **Conclusion**

The participation of women is double that of male participants, which agrees with what is observed in those who attend the first level of care. Likewise, the prevalence of obesity is higher in females and to a greater degree. Women show a greater degree of depression. It was also observed that the attitude of the population is of greater interest in the group of women than in that of men. In the group of males, a lower percentage of risk for depression is observed, noting that it may be necessary to expand the sample to obtain a sample with greater representation.

Patients whose risk was high were referred to the psychology service where they were followed up and, if necessary, referred to the second level for their management.

The study demonstrates the need to carry out a better interrelation between the different services of the Family Medicine Clinic (medical, nutrition and psychology) in order to provide a more comprehensive service where different disciplines interact for the same condition.

## **References**

1. Santos PV, Valdés SE (2018) Prevalence of depression in elderly men and women in Mexico and risk factors. *Population and Health in Mesoamerica* 15(2): 1-24.
2. Von Mühlenbrock SF, Gómez DR, González VM, et al. (2011). Prevalence of Depression in patients over 60 years of age hospitalized in the Internal Medicine Service of the Military Hospital of Santiago. *Revista chilena de neuro-psiquiatría* 49(4): 331-337.
3. Glezer A, Byatt N, Cook R, et al. (2009) Polypharmacy prevalence rates in the treatment of unipolar depression in an outpatient clinic. *Journal of Affective Disorders* 117(1-2): 18-23.
4. American Psychiatric Association (2014) Updating of the DSM-5 coding. American Psychiatric Association, USA.
5. Durmaz B, Soysal P, Ellidokuz H, et al. (2018) Validity and reliability of geriatric depression scale-15 (short form) in Turkish older adults. *Northern clinics of Istanbul* 5(3): 216-220.
6. Katon W, Von Korff M, Lin E, et al. (1995). Collaborative Management to Achieve Treatment Guidelines. Impact on Depression in Primary Care. *JAMA* 273(13): 1026-1031.
7. Penninx BWJH, Geerlings SW, Deeg DJH, et al. (1999) Minor and Major Depression and the Risk of Death in Older Persons. *Archives of General Psychiatry* 56(10): 889-895.
8. Juurlink DN, Herrmann N, Szalai JP, et al. (2014) Medical Illness and the Risk of Suicide in the Elderly. *Archives of Internal Medicine* 164(11): 1179-1184.
9. Soto G, Moreno L, Pahua D (2016) Epidemiological panorama of Mexico, main causes of morbidity and mortality. *Revista de la Facultad de Medicina de la UNAM* 59(6).

10. National Institute of Public Health-Ministry of Health. (2016). Mexico National Survey on Health and Nutrition in the Mid-Way 2016.
11. National Center of Technological Excellence in Health. (2011) Diagnosis and Treatment of Depression in the Elderly in the First Level of Care. Mexico: CENETEC.
12. Ministry of Health, Social Services and Equality (2014). Clinical Practice Guideline on Managing Depression in Adults. Galicia: Clinical Practice Guidelines in the SNS.
13. Simon GE (2000) Long-term prognosis of depression in primary care. Center for Health Studies, Group Health Cooperative. Bulletin of the World Health Organization, USA.