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**PREVALENCE OF DEPRESSION IN INSTITUTIONALIZED ELDERLY
IN AN RESIDENTIAL STRUCTURE FOR THE ELDERLY (ERPI)**

**PREVALÊNCIA DA DEPRESSÃO EM IDOSOS INSTITUCIONALIZADOS
NUMA ESTRUTURA RESIDENCIAL PARA PESSOAS IDOSAS (ERPI)**

**LA PREVALENCIA DE LA DEPRESIÓN EN LOS ANCIANOS
INSTITUCIONALIZADOS EN UN ESTRUCTURA RESIDENCIAL
PARA ANCIANOS (ERPI)**

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ABSTRACT

Introduction: In the older population, depression is the most prevalent mental disorder, exhibiting comorbidities that affect their quality of life. Geriatric depression is often underdiagnosed and undertreated by attributing its symptoms to the aging process.

Material and Methods: This study aims to analyze the prevalence of depression in institutionalized elderly people (age ≥ 65) in a RSEP in Portugal. The mental status assessment scale, a questionnaire and the Yesavage depression assessment scale, of 30 items, will be applied. This is a quantitative, descriptive and correlational study, with sampling for convenience.

Results: The sample consists of 51 elderly people, with a prevalent age between 81 and 85. There was a greater prevalence of depression in the female gender ($n=22$; 43.1%) and in the most prevalent age group ($n=10$; 19.6%). The prevalence of depressive symptoms was 56.86%. It was found that the widow's marital status is directly related to the state of depression ($p=0.048$; $r=0.279$), as well as the profession ($p=0.043$; $r=0.284$) in institutionalized elderly people.

Discussion and Conclusion: The percentage of older adults with depressive disorders is high and tends to increase. Thus, it is essential to implement strategies for early identification and prevention of depressive symptoms.

Keywords: Depression; Elderly; Residential Structure for Elderly People.

RESUMO

Introdução: No idoso, a depressão é a perturbação mental com maior prevalência, exibindo comorbidades que afetam a qualidade de vida deste. A depressão geriátrica é frequentemente subdiagnosticada e subtratada atribuindo-se os sintomas desta ao processo próprio do envelhecimento.

Material e Métodos: Pretende-se analisar a prevalência de depressão nos idosos institucionalizados (idade ≥ 65 anos) numa ERPI de Portugal. Será aplicada a escala de avaliação do estado mental, um questionário e a escala de avaliação da depressão de Yesavage, de 30 itens. Trata-se de um estudo quantitativo, descritivo e correlacional, com uma amostragem por conveniência.

Resultados: A amostra é composta por 51 idosos, com uma idade prevalente entre os 81 e 85 anos. Observou-se uma maior predominância de depressão no género feminino ($n=22$; 43,1%) e na faixa etária mais prevalente ($n=10$; 19,6%). A prevalência de sintomas depres-

sivos foi de 56,86%. Verificou-se que o estado civil de viuvez está diretamente relacionado com o estado de depressão ($p=0,048$; $r=0,279$), bem como a profissão ($p=0,043$; $r=0,284$) nos idosos institucionalizados.

Discussão e Conclusão: A percentagem de idosos com perturbações depressivas é elevada e tem tendência a aumentar. Desta forma, é essencial que se implementem estratégias de identificação precoce e prevenção de sintomas depressivos.

Palavras-chave: Depressão; Estrutura Residencial para Pessoas Idosas; Idoso.

RESUMEN

Introducción: En los ancianos, la depresión es el trastorno mental más frecuente y presenta comorbilidades que afectan su calidad de vida. La depresión geriátrica a menudo se sub-diagnostica y se sub-trata atribuyendo sus síntomas al proceso de envejecimiento en sí.

Material y Métodos: Se pretende analizar la prevalencia de depresión en ancianos institucionalizados (edad ≥ 65 años) en un ERPI en Portugal. Se aplicará la escala de evaluación del estado mental, un cuestionario y la escala de evaluación de depresión Yesavage, de 30 ítems. Este es un estudio cuantitativo, descriptivo y correlacional, con muestreo por conveniencia.

Resultados: La muestra consta de 51 personas mayores, con una edad prevalente entre 81 y 85 años. Hubo una mayor prevalencia de depresión en el género femenino ($n=22$; 43,1%) y en el grupo de edad más prevalente ($n=10$; 19,6%). La prevalencia de síntomas depresivos fue del 56,86%. Se encontró que el estado civil de la viuda está directamente relacionado con el estado de depresión ($p=0,048$; $r=0,279$), así como con la profesión ($p=0,043$; $r=0,284$) en ancianos institucionalizados.

Discusión y Conclusión: El porcentaje de personas mayores con trastornos depresivos es alto y tiende a aumentar. Por lo tanto, es esencial implementar estrategias para la identificación temprana y la prevención de los síntomas depresivos.

Descriptores: Ancianos; Depresión; Estructura Residencial para Personas Mayores.

INTRODUCTION

Population aging has been the subject of major interest both in the socio-economic aspect and with regard to health conservation. Currently, older people represent 12% of the world population, with this number expected to double by 2050 from 12% to 22% and triple in 2100⁽¹⁻²⁾. The rapid process of population aging, associated with a low birth rate, is a phenomenon that can be observed worldwide, assuming a prominent role and lacks an emerging role⁽³⁾. Portugal is no exception, there is an increase in average life expectancy resulting in a significant increase in the elderly people and, consequently, interfering with the need for institutionalization. In fact, in Portugal the average life expectancy at birth is currently 80.2 years-old for women and 77.4 years-old for men⁽³⁾. Regarding the aging index, it went from 27.5% in 1961 to 157.4% in 2018⁽⁴⁾. Forecasts point to Portugal, in 2050, being the fourth country with the highest percentage of elderly people in the European Union⁽⁵⁾.

According to the World Health Organization, depression is the fourth specific cause of social disability and is expected to be the second cause in developed countries until 2020⁽⁶⁾. It is also estimated that approximately one in ten elderly people suffers from depression⁽⁷⁾. In Portugal, it affects between 6% and 10% of the elderly population⁽⁸⁾. The National Health Program for Elderly People identifies depression as one of the main problems to be prevented in people aged 65 and over⁽⁹⁾. The studies carried out have shown a positive correlation between people over the age of 65 and the presence of depressive symptoms⁽¹⁰⁾, reaching the highest rates of mortality and morbidity, especially in institutionalized elderly people⁽¹¹⁾. Prevention, early detection and adequate treatment play a fundamental role, with active interventions by health professionals. However, geriatric depression is often underdiagnosed and undertreated, attributing its symptoms to the aging process⁽¹²⁾. Intrinsic to this process, it is undoubtedly one of the main milestones, the admission of the elderly individual to an institution, given that it can contribute to the presence of depression by limiting their options of choice given the environment of the institution where they now reside. For the elderly people, it can cause unwillingness to start activities that they like, reluctance towards new experiences, loss of identity, interruption of their lifestyle, family disconnection, loss of autonomy choosing not to leave the institution, thus contributing to the prevalence depression⁽¹³⁻¹⁴⁾. Institutionalization for many elderly people is seen as a last resort and is rarely seen as a life project⁽¹⁵⁾.

Thus, with the present study it is intended to ascertain the prevalence of depression in older people institutionalized in an ERPI at national level.

MATERIAL AND METHODS

Given the professional interest in the subject and the practical observation of the need for greater awareness on the part of professionals, a brief analysis of the available literature was carried out, using keywords and search engines.

The present study is characterized by being quantitative, descriptive and correlational, with a sampling for convenience. This was applied in a national ERPI, in the interior region.

Inclusion criteria consisted of the elderly people who attended the institution on a day-care basis and were permanently institutionalized, aged over 65 years-old and who did not have severe cognitive impairment.

The study began with the application of the Mini Mental Statement in order to ascertain the cognitive capacity of the elderly. It consists of questions that assess orientation, immediate and recent memory, attention and calculation capacity, language and constructive capacity. One point is assigned to each correct answer, making a maximum score of 30 points. This is influenced by age and education. In people with more than 11 years of schooling, cognitive function is considered affected when the score is ≤ 27 , in a person with 1 to 11 years of schooling, cognition is considered to be affected when ≤ 22 and in an illiterate person when ≤ 15 ⁽¹⁶⁻¹⁷⁾. After the end of this, a questionnaire of closed questions was applied and the Scale of Geriatric Depression of 30 items, the Scale of *Yesavage*, developed specifically for the elderly people⁽¹⁸⁾. This is quoted in a dichotomous way (Yes/No), with one point attributed for each response compatible with depression. The final score determines the severity of the individual's depression: 0 to 10 points indicates no evident depression; 11 to 20 points mild depression and 21 to 30 points severe depression.

The questionnaire investigated themes related to the socioeconomic aspect of the elderly people, such as the institution in which they are, the fact that they are in day care or permanently institutionalized, age, gender, marital status, educational level and profession. After a brief characterization, they were asked about the degree of dependence (question asked according to the Katz scale), time of institutionalization, antidepressant therapy and the presence of visits. In the elderly people who, due to illiteracy, were unable to complete the questionnaire *per se*, it was completed by the researcher and the questions were read and the responses from the participant were marked.

For the statistical analysis of the study, the program SPSS® Statistics (version 23) was used. The variables in use were described: gender, age, marital status, education, profession, time of institution and degree of dependence. In addition, cross tables were used to allow data crossing. The variables were described using absolute and relative frequencies. In order to correlate the variables, Pearson's coefficient was used, whose values for reading the meaning of the correlation were: <0.30 low correlation; 0.31 – 0.50 moderate correlation; 0.51 – 1 high correlation.

All study participants signed an informed consent form, having consented to their participation. Anonymity was guaranteed throughout the process and submitted to the ethics committee of the Local Health Unit in Castelo Branco, which approved it.

RESULTS

A total of 51 participants were obtained: male (n=14; 27.5%) and female (n=37; 72.5%), with a prevalence of ages in the age group between 81 and 85 years-old (n=17; 33.3%). Crossing the depression scale with gender, we found that for the sample, there was a prevalence of 43.1% (n=22) of depression in females.

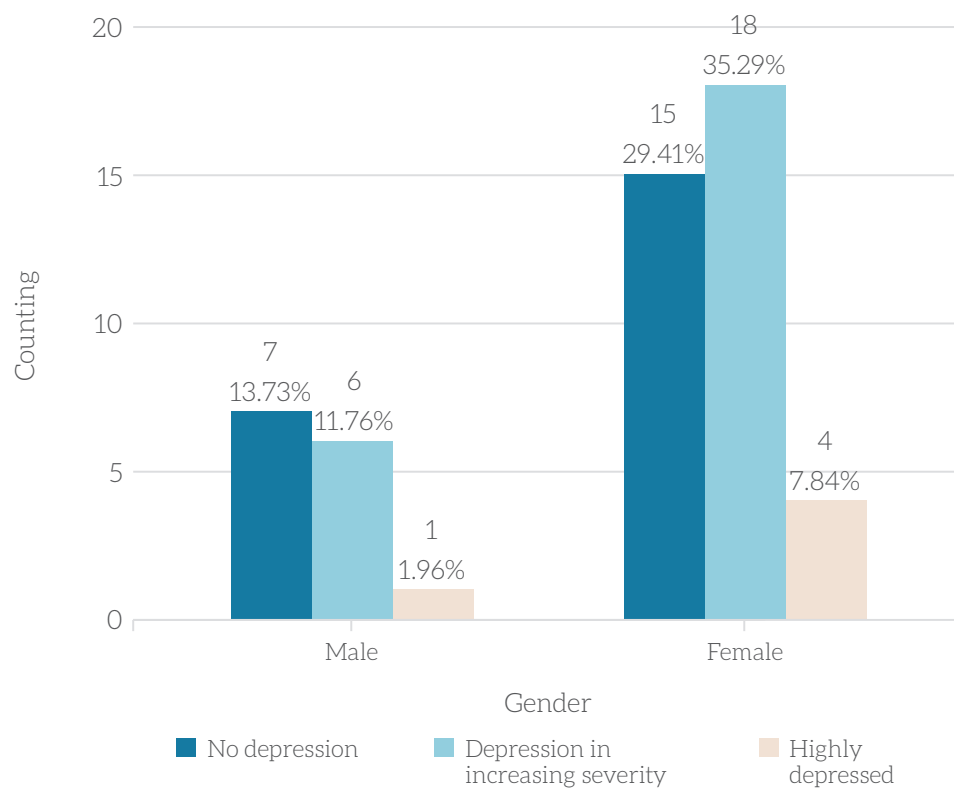


Figure 1 – Crossing of variables: gender and the Geriatric Depression Assessment Scale.

The predominant marital status is the widower (n=37; 72.5%) and in terms of their education, most of the sample is literate up to and including the 3rd year of schooling (n=27; 52.9%).

Table 1 – Crossing of variables: professions and the Geriatric Depression Assessment Scale.

			YesavageRatingScale			Total
			No Depression	Mild Depression	Severe Depression	
Profession	Housewife	Counting	7	10	0	17
		% in profession	41.2%	58.8%	0.00%	100%
	Armed Forces Professions	Counting	2	1	0	3
		% in profession	66.7%	33.3%	0.00%	100%
	Farmer	Counting	6	3	1	10
		% in profession	60.0%	30.0%	10.0%	100%
	Construction	Counting	2	1	0	3
		% in profession	66.7%	33.3%	0.00%	100%
	Health professionals	Counting	2	1	0	3
		% in profession	66.7%	33.3%	0.00%	100%
	Undifferentiated professions	Counting	2	3	3	8
		% in profession	25.0%	37.5%	37.5%	100%
	Cook	Counting	0	2	0	2
		% in profession	0.00%	100.0%	0.00%	100%
Professions with a cash domain	Counting	1	3	1	5	
	% in profession	20.0%	60.0%	20.0%	100%	
Total		Counting	22	24	5	51
		% in profession	43.1%	47.1%	9.8%	100%

The professions that stand out the most in terms of prevalence are domestic (n=17; 33.3%), farmer (n=10; 19.6%), and undifferentiated professions as a merchant or seamstress (n=8; 15.7%). Therefore, in the professions of domestic, farmer and undifferentiated professions, they obtained the highest rate of depression (n=20; 39.21%), presenting statistical significance ($p=0.043$; $r=0.284$).

At the level of dependence, the majority of the sample is independent (n=33; 64.7%). Regarding the taking of antidepressant therapy, it was found that 35.3% (n=18) take medication, being more prevalent in the female gender (n=16; 31.4% of the female subjects claimed to take antidepressant therapy).

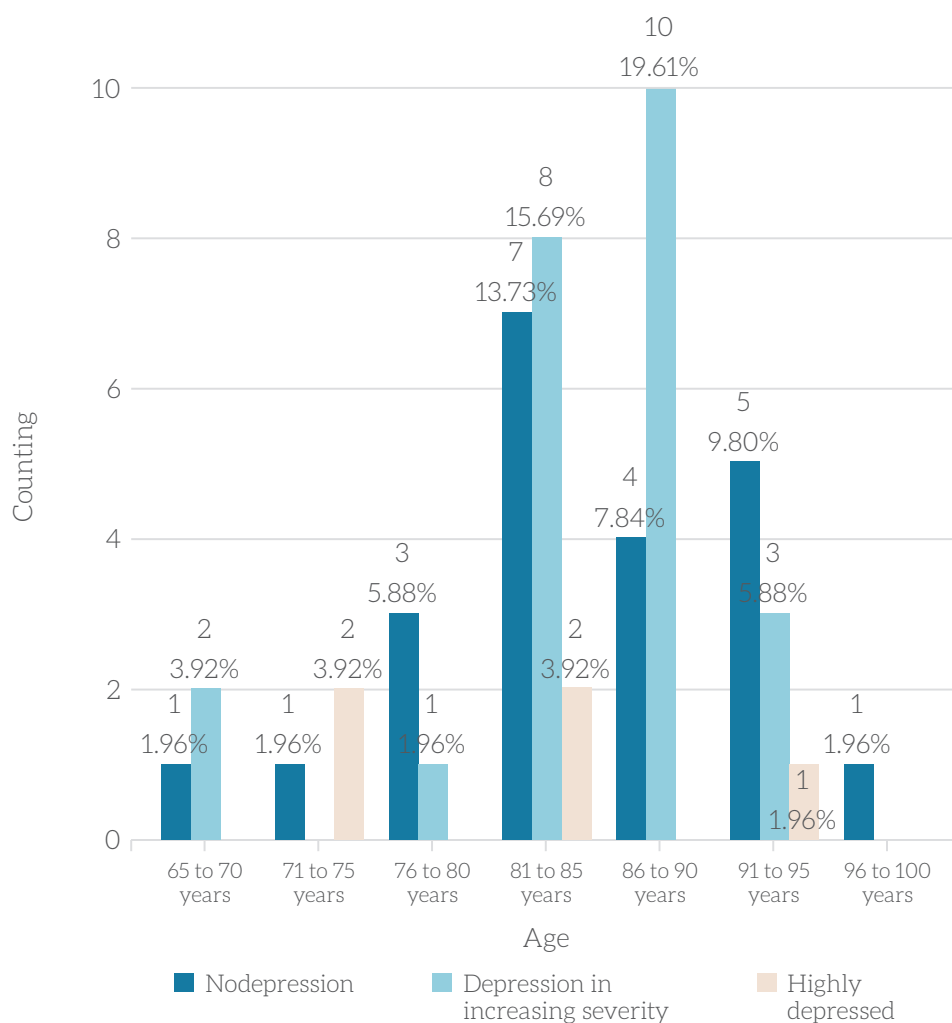


Figure 2 – Crossing of the age variables and Geriatric Depression Evaluation Scale.

When analyzing the presence of depression with age, it was found that the major prevalence of depression is in the age group between 81 and 85 years-old ($n=10$; 19.6%). Crossing depression and marital status, it appears that the highest prevalence is found in the widowed state ($n=24$; 47.1%), presenting low correlation levels, however with statistical significance for the study sample ($p=0.048$; $r=0.279$). It can be observed that the predominant age group from 81 to 85 years-old presents 35.1% ($n=13$) individuals whose marital status is widowhood, with an apparent moderate level correlation ($p=0.007$; $r=0.376$).

Given the time of institutionalization, it was found that the elderly person who had been institutionalized for the longest time (≥ 8 years) had a higher prevalence of depression ($n=7$; 13.7%).

Table 2 – Crossing of variables: institutionalization time and Geriatric Depression Evaluation Scale.

Institutionalized for 8 years or more	No depression	Depression in increasing severity	Highly depressed	Total
Counting	4	5	2	11
% institutionalized	36.4%	45.5%	18.2%	100.0%
% Yesavage Scale	18.2%	20.8%	40.0%	21.6%
% of Total	7.8%	9.8%	3.9%	27.6%

When confronted with the degree of dependence, it was observed that non-dependent elderly people show a higher rate of depression (n=17; 33.3%) compared to dependents (n=12; 23.6%).

When crossing the performance of anti-depressive therapy with depression, it was found that the prevalence of depression is lower in the elderly who take antidepressants (n=11; 21.5%) although there is still the presence of mild depression (n=9; 17.6%) and severe depression (n=2; 3.9%).

DISCUSSION

The prevalence of depression obtained in the present study corroborates the data found in the researched literature. A value of 56.86% (n=29) was obtained, which means that the majority of respondents present a state of depression. This study sought to identify the maximum number of variables that could be present and be influenced by depression. However, a study with a larger sample would be necessary to ascertain the prevalence of depression in the elderly, with a greater degree of certainty and reliability. However, a value higher than 50% is commonly found in the literature^(8,10,12,19).

Regarding age, although some studies indicate that depression is observed in individuals over 60 years-old⁽²⁰⁾, its prevalence is also more exacerbated in the age group of 80 years-old⁽²¹⁾. In this study, this relation was found for the age group between 81 and 85 years-old (n=10; 19.6%). In addition, also in this age range, there was a statistical significance with the widow's marital status (n=13; $p=0.007$; $r=0.376$), showing a moderate correlation. Regarding marital status, there was statistical significance in its correlation with depression (n=24; $p=0.048$; $r=0.2279$). Thus, although it is at the low level of correlation, mari-

tal status seems to influence the increase in depressive status. These results demonstrate the importance of further studies that correlate these variables in order to have a valid perception of the impact of depression on the institutionalized elderly population.

The prevalence of depression is commonly found in females⁽⁷⁾, as we can see from the study that showed 43.1% (n=22) of depressive symptoms in females. The justification for this more pronounced presence may be due to the fact that women have a higher average life expectancy, which also translates into the appearance of pathologies such as depression. This vulnerability to depression must be understood and taken into account when the elderly woman is admitted to the institution, taking measures to encourage early identification⁽²¹⁾. However, in this study, there was no statistical relationship between gender and depression ($p=0.527$; $r=0.091$).

The level of education displayed, as well as the profession practiced, also seems to influence the onset or not of depression, functioning as a supporting factor⁽⁷⁾. In the present study, it can be seen that the professions where the highest depression rate was observed were the undifferentiated, farmer and domestic professions. However, it is not possible to assess that the level of education is directly related to the presence of depression. However, there seems to be a relationship between the profession performed and the onset of depression, even though it is a low level correlation ($p=0.043$; $r=0.284$). Thus, it is necessary to invest and ascertain whether or not there is a direct relationship between these variables in the institutionalized elderly population.

The literature points to the institution and the time in it as a factor that predisposes to depression⁽¹²⁾, this can be seen in the study in question, given that greater depression (mild and severe) was obtained in the elderly who were already 8 years or more at the institution, however in this aspect there was no statistical significance in the sample.

Practical and Health Policy Implications

According to the authors, depression in the older population is often characterized as common to the aging process. This contributes to under-diagnosis and, consequently, lack of treatment for this pathology⁽²²⁾.

In addition, depression contributes negatively to the quality of life of the elderly people, generating negative feelings and promoting their social isolation, thus affecting their general well-being and those people around them. Institutionalization has emotional repercussions for the elderly people, being feared and even rejected by them, what adds to the possibility of depression⁽¹⁹⁾.

Since depression is already considered one of the most disabling pathologies and its exuberant prevalence, it is necessary that it be observed with an emergent character in terms of performance and prevention^(11,23).

In this sense, it is necessary to adopt preventive measures in the institutions. The most relevant are: psychotherapy sessions; active listening; creating rich and stimulating environments; promotion of self-esteem and dignity⁽³⁾; encouraging regular physical exercise; healthy eating; promoting family or significant person involvement; invest in the animation service⁽²⁴⁾; develop leisure activities⁽¹¹⁾; control of chronic non-communicable diseases⁽²⁵⁾; maximizing functional capacity⁽³⁾; psychosocial interventions⁽²⁶⁾. The intervention of health professionals should be as early as possible in order to identify depressive signs and symptoms at an early stage⁽⁸⁾. Thus, together with the aforementioned preventive measures, it is possible to prevent depressive symptoms and promote quality of life for the older adults.

Limitations

One of the limitations of the present study may be the sample size. In addition, when observing the degree of dependency, the elderly population was mostly independent or partially dependent in their daily life activities (DLAs). Thus, no elderly individuals who were totally dependent on DLAs were obtained, which can influence the results obtained when the dependence and depression variables were crossed. The fact that the sample was for convenience, in this study, was seen as a limitation by the characteristics of the participants that was obtained.

Given the relevance of the theme, further studies are needed in view of the various variables that have been applied. In particular, they should be carried out in a comprehensive context, with the various types of dependence and without excluding the elderly who have severe cognitive impairment. It would also be interesting to compare between elderly people who are residents and those ones who are in day care, as well as comparing between different ERPI's in different locations.

CONCLUSION

The prevalence of depression in institutionalized elderly people was 56.86% (n=29) in the sample obtained. In short, although there was no statistical significance when all variables were correlated, it was possible to see that there are trends that corroborate the literature. Since the female gender, the age group from 81 to 85 years-old, widowhood, the time of institutionalization and the profession.

In conclusion, institutions should be guided by a facilitating order to implement measures aimed at minimizing the institutionalization burden. The varied activities that exercise the physical and mental capacities of the elderly individuals can be some measures to be adopted.

Ethical Disclosures

Conflicts of interest: The authors have no conflicts of interest to declare.

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Confidentiality of Data: The authors declare that they have followed the protocols of their work center on the publication of data from patients.

Protection of Human and Animal Subjects: The authors declare that the procedures followed were in accordance with the regulations of the relevant clinical research ethics committee and with those of the Code of Ethics of the World Medical Association (Declaration of Helsinki).

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Responsabilidades Éticas

Conflitos de Interesse: Os autores declaram a inexistência de conflitos de interesse na realização do presente trabalho.

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Proteção de Pessoas e Animais: Os autores declaram que os procedimentos seguidos estavam de acordo com os regulamentos estabelecidos pelos responsáveis da Comissão de Investigação Clínica e Ética e de acordo com a Declaração de Helsínquia da Associação Médica Mundial.

Proveniência e Revisão por Pares: Não comissionado; revisão externa por pares.

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