## RESEARCH

# DEPRESSION AMONG THE ELDERLY IN THE FAMILY HEALTH STRATEGY: A CONTRIBUTION TO PRIMARY CARE

DEPRESSÃO EM IDOSOS NA ESTRATÉGIA SAÚDE DA FAMÍLIA: UMA CONTRIBUIÇÃO PARA A ATENÇÃO PRIMÁRIA

DEPRESIÓN EN ADULTOS MAYORES DEL PROGRAMA ESTRATEGIA SALUD DE LA FAMILIA: UNA CONTRIBUCIÓN A LA ATENCIÓN PRIMARIA

- Juliana Macêdo Magalhães 1
- Arethuza de Melo Brito Carvalho <sup>2</sup>
  - Samuel Moura Carvalho 3
  - Delmo de Carvalho Alencar 4
  - Wanderson Carneiro Moreira <sup>5</sup>
- Adriana da Cunha Menezes Parente 6
- <sup>1</sup> RN. MS in Nursing. Professor, UNINOVAFAPI University Center. Teresina, PI Brazil; Alcohol and
- Drug Psychosocial Care Center (CAPS AD III). Caxias, MA Brazil.
- <sup>2</sup> RN. MS. Professor, State University of Piauí (UESPI). Teresina, PI Brazil.
- <sup>3</sup> RN. Specialist in Mental Health Psychosocial Care. Teresina Municipal Health Foundation. Teresina, PI Brazil.
- 4 RN. MS in Nursing. Pio IX Family Health Strategy. Pio IX, PI Brazil.
- <sup>5</sup> Undergraduate student in Nursing. UNINOVAFAPI University Center. Teresina, PI Brazil.
- <sup>6</sup> RN. MS in Psychiatric Nursing. Professor. Federal University of Piauí (UFPI). Teresina, PI Brazil.

Corresponding author: Delmo de Carvalho Alencar. E-mail: delmo-carvalho@hotmail.com Submitted on: 2015/10/31 Approved on: 2016/05/11

## **ABSTRACT**

Objective: The present study sought to estimate the prevalence of depression in the elderly at a Basic Health Unit (BHU) in order to identify cases of depression in the elderly patients that undergo follow-up treatment at this BHU and the use of drugs for the treatment of such disorders. Methodology: This was an exploratory and descriptive research with a quantitative approach, conducted with 241 elderly patients registered in the Family Healthcare Service (FHS) in the city of Teresina, PI, Brazil. Survey data were collected through the Geriatric Depression Scale (GDS) and analyzed using the SPSS software (version 11.0). The study was approved by the Research Ethics Committee at the UNINOVAFAPI University Center. Results: A high percentage of cases of depression in the elderly were identified. A higher prevalence was observed in females, of above 70 years of age, as well as in the widow/widower, retired, and no formal education categories. Regarding the severity of the situation, 26.6% were characterized as showing signs of mild depression, while 2.5% showed signs of probable severe depression. As for medication, most elderly people with severe depression do not use antidepressants, whereas 10.9% of the cases of elderly patients with mild depression reported only using anxiolytics. This study shows a significant rate of depression among the elderly. The analyzed variables demonstrate the need for more accurate research in the medical care provided to elderly patients in order to detect possible risk factors for depression. Conclusion: The recognition of depression in the elderly appears to be more difficult than at earlier ages, since healthcare professionals tend to attribute the onset of signs and symptoms to aging. Keywords: Aged; Depression; Primary Health Care.

## **RESUMO**

Objetivo: estimar a prevalência de depressão em idosos em uma Unidade Básica de Saúde, identificar os quadros de depressão na população de idosos que realiza acompanhamento nesta UBS e o uso de medicação para tratamento dos transtornos. Metodologia: pesquisa exploratória e descritiva com abordagem quantitativa, realizada com 241 idosos cadastrados na ESF do município de Teresina – Pl. Os dados da pesquisa foram coletados com base na Escala de Depressão Geriátrica e analisados no software SPSS (versão 11.0). A pesquisa foi aprovada pelo CEP do Centro Universitário UNINOVAFAPI. Resultados: encontrou-se alta percentagem de casos de depressão nos idosos. Houve mais prevalência no sexo feminino, faixa etária maior de 70 anos, viúvos, aposentados e sem escolaridade. Em relação ao quadro de gravidade, 26,6% foram caracterizados como tendo indícios de depressão leve e 2,5% como provável depressão grave. Quanto ao uso de medicação, a maioria dos idosos com depressão grave não faz uso de antidepressivos e 10,9% dos casos de indícios de quadro depressivo leve fazem apenas uso de ansiolíticos. O estudo comprova significativo índice de depressão entre os idosos. As variáveis analisadas demonstram a relevância de uma investigação mais acurada na consulta do idoso, para detectar prováveis fatores de risco para a depressão. Conclusão: o reconhecimento da depressão no idoso parece ser mais difícil do que em idades anteriores, uma vez que os profissionais de saúde atribuem o aparecimento de sinais e sintomas ao envelhecimento.

Palavras-chave: Idoso; Depressão; Atenção Primária à Saúde.

#### How to cite this article:

Magalhães JM, Carvalho AMB, Carvalho SM, Alencar DC, Moreira WC, Parente ACM. Depression among the elderly in the family health strategy: a contribution to primary care. REME - Rev Min Enferm. 2016; [cited \_\_\_\_\_ \_\_\_\_]; 20:e947. Available from: \_\_\_\_\_\_ DOI: 10.5935/1415-2762.20160016

#### RESUMEN

El objetivo de este estudio fue estimar la prevalencia de la depresión en adultos mayores de una Unidad Básica de Salud, identificar los casos de depresión y el uso de medicación para tratar los trastornos. Se trata de una investigación exploratorio descriptiva de enfoque cuantitativo realizada con 241 adultos mayores inscritos en la ESF de la ciudad de Teresina, Pl. Los datos de la encuesta fueron recogidos a través de la Escala de Depresión Geriátrica y analizados por medio del software SPSS (versión 11.0). El estudio fue aprobado por el CEI del Centro Académico UNINOVAFAPI. Fue encontrado un alto porcentaje de casos de depresión entre dichos adultos, con mayor prevalencia en el sexo femenino, edad superior a los 70 años, viudos, jubilados y sin educación. En cuanto a su gravedad, un 26,6% tenía indicios de depresión ligera y un 2,5% probable depresión severa. Con respecto al uso de medicación, la mayoría de aquéllos con depresión severa no tomaba antidepresivos y un 10,9% de los casos de indicios de depresión ligera tomaba sólo ansiolíticos. El estudio señala un alto índice de depresión entre los adultos mayores. Las variables analizadas demuestran la pertinencia de un estudio más a fondo en la consulta de los adultos mayores con miras a detectar posibles factores de riesgo para la depresión. Reconocer la depresión en la tercera edad parece ser más difícil que en otras edades porque los profesionales atribuyen la aparición de sus señales y síntomas al envejecimiento. Palabras clave: Anciano; Depresión; Atención Primaria de Salud.

## INTRODUCTION

The measurable increase in the elderly population is a phenomenon that has been ongoing worldwide for some time now and is among the twenty-first century society's greatest challenges. This phenomenon stems from the ever-growing elderly population, which had previously only been perceived in developed countries, but which today can be seen in developing countries as well.<sup>1</sup>

The World Health Organization projects that by 2020 the elderly will correspond to 15% of the Brazilian population. In 2025, it is estimated that the elderly population will have swelled by 15 fold, while the total population will have grown by only five fold, placing Brazil in sixth place in the ranking of countries with the highest number of "gray-haired people."<sup>2</sup>

In this sense, as the third age represents the fastest growing age group in Brazil, proportionally, it is assumed that the diseases resulting from old age will also rise considerably, running in direct correlation with the total number of elderly individuals. In this context, what stands out is the prevalence of neurological-degenerative diseases and tendencies toward depression.<sup>3</sup>

Depression is a psychiatric illness that is more common among the elderly, yet frequently goes without diagnosis and without treatment. It affects their quality of life, increasing the economic burden due to their direct and indirect costs, and can even lead to suicidal tendencies. This illness has thus become a public health problem due to its high frequency of occurrence.<sup>4</sup>

The investigation of depression in the elderly has become ever-increasingly important, given that it is an highly prevalent illness and that it is frequently considered a natural outcome brought on by aging. Likewise, it has often been neglected as a possible indicator of morbidity that can cause serious damage to the quality of life of elderly patients and their family members, in turn resulting in high costs for society in general. Therefore, the importance of this public health issue requires continuous study, since healthcare professionals must recognize, evaluate, refer, and treat the elderly who present such a psychological disorder.<sup>5</sup>

The Geriatric Depression Scale (GDS) is commonly used in many countries to deal with the theme of the relationship between the elderly and depression and has shown validity indexes that are considered to be quite adequate. GDS is currently one of the most commonly used instruments to trace depression in the elderly and can be applied in hospitals, homes, family healthcare programs, and even long-term nursing homes.<sup>6</sup>

Therefore, the present study seeks to treat the issue of depression in the elderly within the Family Healthcare Strategy in Brazil, with the objective of estimating the prevalence of depression in the elderly in a Basic Healthcare Unit (BHU), as well as identifying the medical symptoms of depression in the elderly who undergo follow-up therapy at a BHU and the medication used to treat these disorders.

## **METHOD**

This work is an exploratory and descriptive study with a quantitative approach and was conducted in a BHU in the city of Teresina, Piauí, Brazil, which provides medical care to 980 registered families, of which 400 are elderly.

The BHU in this study provides activities for the elderly, including: educational speeches and working groups on Mondays (every 15 days) from 8:00a.m. to 12:00p.m., in addition to walks guided by Community Health Agents (CHA).

The source population of this study consisted of 400 elderly individuals registered at the BHU. The finite sample calculation was used to limit the sample:  $n = Z^2 \cdot p \cdot q \cdot N / e^2 \cdot (N - 1) + Z^2 \cdot p \cdot q$  (with: n = sample; z = 1.96; p = q = 0.5; N = universe), resulting in a sample of 241 elderly individuals (confidence interval (CI) of 95%, with a 4% margin of error).

Research data were collected by means of GDS surveys, comprised of 15 items in its short version, and of a questionnaire consisting of socioeconomic questions and factors possibly associated with symptoms of depression.<sup>6,7</sup> The GDS is a questionnaire with objective answers that treats questions referent to the elderly individual's feelings over the past week. It is an quick assessment tool that aids in the identification of symptoms of depression in the elderly. To assess the results, the sum of the scores is taken as a reference: between 0 and 5, the individual is considered to be without signs of depression; from 6 to 10, there is an indication of signs of mild depression; and from 11 to 15, there is an indication of signs of severe depression.<sup>7</sup>

The questionnaire can be self-applied; however, one of the researchers was always on hand to clarify any doubts on the part of the elderly participants. The application of the instrument was conducted with the elderly participants during their working group meetings, according to the schedule set by the BHU, as well as by home visits to the elderly individuals, accompanied by a CHA. A pilot study was conducted to test the understanding of the questions and to refine the final questionnaire. Through this pilot study, it was determined that there was no need to adjust the instrument.<sup>6</sup>

This study set the inclusion criteria as elderly users of the BHU network who were duly registered for follow-up in the BHU, who agreed to participate in the study, and who did not present any clinical diagnosis that would compromise the understanding of the questionnaire (cognitive changes). Exclusion criteria included elderly individuals who presented some form of cognitive deficit and those who refused to sign the Free Informed Consent Form.

The Statistical Product and Service Solutions (SPSS) (version 11.0) for Windows was used to develop the descriptive analysis of the collected data. This study was approved by the Research Ethics Committee from the UNINOVAFAPI University Center (protocol number: CAAE 0007.0.043.000-08), meeting all national and international guidelines for research ethics involving human beings.

## RESULTS

This study was conducted with 241 elderly individuals who received medical care at a BHU, according to the variables analyzed in the questionnaire. The predominant variables included females, 170 (70.5%); an age group of 60 to 69 years of age, 93 (48.5%); in a stable relationship, 124 (51.5%); retired, 181 (75.1%); and with no education, 71 (29.5%). It was also found that the majority of the elderly individuals did not participate in community activities,168 (69.7%).

As regards the GDS scoring system (Table 1), it should be noted that 29.0% (n=70) of the elderly participants presented signs of depression, scoring more than 5 points on the GDS survey.

Table 2 illustrates the characterization of the elderly individuals per score result and variables of sex, age group, marital status, occupation, and education level.

Table 1 - Distribution of the elderly individuals from a BHU by GDS. Teresina, PI Brazil, 2008

		N°	
Result	Normal Exam	171	71.0
	Indications of signs of mild depression	64	26.6
	Probable severe depression	6	2.5
Total		241	100

Source: direct research.

Table 2 - Characterization of the elderly individuals from a BHU per GDS score x sex, age group, marital status, occupation, education level. Teresina, PI Brazil, 2008

		Indication of signs of mild depression		Probable severe depression	
					%
Sex	Male	13	20.3	1	16.7
Sex	Female	51	79.7	5	83.3
Total	64	100	6	100	
	60 to 64 years	10	15.6	1	16.7
	65 to 69 years	5	7.8	1	16.7
Age group	70 to 74 years	11	17.2	2	33.3
Age group	75 to 79 years	17	26.6	2	33.3
	80 to 84 years	10	15.6	-	-
	85 years +	11	17.2	-	-
Total	64	100	6	100	
	Single	4	6.3	-	-
Marital	Married/stable relationship	23	35.9	3	50.0
status	Separated/divorced	1	1.6	-	-
	Widow/Widower	36	56.3	3	50.0
Total	64	100	6	100	
	Retired	45	70.3	5	83.3
0	Active	4	6.3	1	16.7
Occupation	Unemployed	4	6.3	-	-
	Pensioner	11	17.2	-	-
Total	64	100	6	100	
	No education	29	45.3	2	33.3
	Elementary School – Incomplete	21	32.8	2	33.3
Education	Elementary School – Complete	6	9.4	1	16.7
	High School – Incomplete	2	3.1	-	-
	High School – Complete	5	7.8	1	16.7
	Higher Education – Complete	1	1.6	-	-
Total	64	100	6	100	

Source: direct research.

Therefore, it was observed that, among the subjects of this study, 26.6% (n=64) were characterized as having indications of signs of mild depression (score between 5 and 10 points) and 2.5% (n=6) as probable severe depression (score of 11 or more points). The other 71% (n=171) presented a normal medical exam, as they scored less than 5 points. An important finding in this study was the identification of elderly individuals with signs of depression, almost none of whom used antidepressants. Among the patients detected with signs of mild depression, 85.9% did not use antidepressants and 10.9% used anxiolytics. Among the elderly patients with probable severe depression, 100% did not use antidepressants, which proves the need to provide better medical care to this population, since the use of medication may well be an indication of the diagnosis and treatment.

## **DISCUSSION**

Depression is a severe disease that is common in the elderly, but it is frequently underdiagnosed and even ignored, given that healthcare professionals see the symptoms of depression as normal symptoms in the aging process. Research conducted in communities has shown a positive correlation between age (above 65 years of age) and symptoms of depression. Epidemiological investigations demonstrate that depression is the most common mental health disorder in the third age and that it is associated with greater morbidity and mortality in this age group, especially when a physical illness or cognitive decline is present.

The lack of concern over depression among healthcare professionals that deal with the elderly occurs because they either consider the symptoms of depression to be a natural result of aging or do not in fact comprehend the magnitude of this illness, not to mention the degrees of incapacity and costs that this morbidity causes to the elderly individuals, their families, society, and the healthcare system in general.<sup>9</sup>

Regardless of the country or culture, the prevalence of depression in women is twice that found in men. There are many reasons for this, including the result of stress, birth, hormonal defects, etc.<sup>10</sup> The high rate of becoming a widow/widower, social isolation among those of over 60 years of age, and estrogen deprivation all contribute in such a way that women are more vulnerable to the development of mental disorders in old-age.

Medical literature reports that people who do not have intimate interpersonal relationships, or who are divorced or separated, more commonly show signs of depression, emphasizing that the death of a family member or a very special person in one's life represents an life-changing event that unleashes medical symptoms of depression.<sup>11</sup>

Among the elderly, the retired show the highest indices of depression. The elderly individual's occupation is an important factor in the appearance of signs of depression, as it involves

psychosocial, emotional, and economic factors. Due to the devaluation of the elderly in society, a greater frequency of the signs of depression have been observed among the elderly who do not work, mainly in developing countries. This finding may well indicate that those who remain in the work market continue to feel useful in their communities. However, one must not disregard the possibility of the reverse causality in this association, since both the absence of work, as well as the contrary, can both lead to depression.<sup>12</sup>

Elderly individuals with no education level tend to exhibit signs of depression. It is understood that the higher the educational level, the lower the number of cases of elderly individuals who show signs of depression. National and international studies also confirm this result in studies which show large proportions of elderly individuals with no educational background who show signs of depression. These studies also affirm that, as in other chronic diseases, a higher educational level proved to be an important protective factor against depression, perhaps due to the individual's greater knowledge on the subject, more access to preventive measures that improve one's quality of life, and better financial conditions.<sup>13,14</sup>

Also important in this study was the elderly individual's participation in community activities. Of the participants in this study who did not present a normal medical exam, the majority did not participate in any community activity and presented signs of depression.

This result is confirmed by prior studies that cite specific activities, such as physical exercise done with moderate intensity for a longer period of time (no less than 30 minutes), which alleviates stress or tension, due to the increase in the rate of the hormone group, called endorphins, which act upon the central nervous system, reducing the stress impact from the environment, and in turn prevent or reduce depression disorders.<sup>15</sup>

The treatment of depression in the elderly seeks to reduce psychological suffering caused by this disorder, diminish the risk of suicide, improve the patient's overall state of health, and guarantee a greater quality of life. This treatment, as in other neuropsychiatric diseases in the elderly, consists of a challenge that involves specialized intervention and requires strategies, such as psychopharmacology or even electroconvulsive therapy. Complementary studies have shown good results in the association of psychopharmacology with psychotherapy in the treatment of cases of depression. The streatment of cases of depression.

Regular physical activity must also be considered as a non-pharmacological alternative treatment for depression disorders, with the advantage of not presenting undesirable side effects. In addition, its practice, contrary to the relatively passive attitude of merely taking a pill, requires an active commitment on the part of the patient, which can result in improvements in both self-esteem and self-confidence.<sup>19</sup>

The relationship among depression and general clinical diseases in the elderly, the non-identification of the illness, and the non-treatment of depression contribute to the exacerbation of future organic diseases that can affect the patient, thus increasing morbidity and the risk of death.

## CONCLUSION

The recognition of depression in the elderly may be more difficult than in younger age groups. In this age group, both the healthcare professional and the patients themselves can attribute depression to the aging process.

The present study showed a significant index of depression among elderly individuals. The analyzed variables demonstrate the need for a more accurate investigation when examining an elderly patient in order to detect probable risk factors for depression, considering that the present study illustrated a greater incidence of cases of depression in elderly women, between 70 and 79 years of age, who are widows, retired, without education or with an incomplete elementary school education, and who do not participate in community activities.

This study also presents a high index of elderly individuals with signs of depression who do not use antidepressants (nearly 100%), and reported that in 10.9% of the cases that indicate a sign of mild depression, the patients reported using only anxiolytics, bearing in mind that the treatment of depression in the elderly seeks to reduce psychological suffering, diminish the risk of suicide, and provide a better quality of life.

The results of this study suggest the need to keep a closer eye on the signs of depression in the elderly. Healthcare professionals, especially nurses, should be trained to recognize the more common symptoms of depression in the elderly, providing more basis for routine clinical investigations and allowing for early and efficient medical interventions.

There is also an apparent need for the creation of national programs geared toward the elderly in an attempt to promote their participation in medical care programs and social movements; their involvement in cultural, sports, and leisure activities; as well as actions geared toward the general health of the elderly.

Finally, it is important to highlight that this study can provide the basis for discussions and preventive measures together with the general population, as well as provide a foundation for reflection on healthcare practices for the elderly, given that the results found in this study presented a clinical look at this symptomatology on the part of the Family Heath Strategy healthcare team. According to the results (high scores), elderly patients were referred for a specific evaluation and were later referred to a specialized service and/or followed up directly by the healthcare team itself.

For healthcare professionals, the discussions and the collected and analyzed data broadened their viewpoints as regards the recognition, evaluation, referral, treatment, and rehabilitative measures focused on this issue.

## REFERENCES

- Clegg A, Young J, Iliffe S, Rikkert MO, Rockwood K. Frailty in elderly people. Lancet. 2013[cited 2016 Apr 20]; 381(9868):752-62. Available from: http://www.ncbi.nlm.nih.gov/pubmed/23395245 DOI: 10.1016/S0140-6736(12)62167-9.
- Nascimento DCD, Brito MACD, Santos AD. Depressão em idosos residentes em uma instituição asilar da cidade de Juazeiro do Norte, Ceará, Brasil. J Manag Prim Health Care. 2014[cited 2016 Apr 20]; 4(3):150-62. Available from: http://www.jmphc.com.br/saude-publica/index.php/ jmphc/ article/ viewFile/182/185
- Santos CA, Ribeiro AQ, Rosa COB, Ribeiro RCL. Depressão, déficit cognitivo e fatores associados à desnutrição em idosos com câncer. Ciênc Saúde Coletiva. 2015[cited 2016 Apr 20]; 20(3):751-60. Available from: http://www.redalyc. org/pdf/630/63035388012.pdf DOI: 10.1590/1413-81232015203.06252014
- Monteso P, Ferre C, Lleixa M, Albacar N, Aguilar C, Sanchez A, et al. Depression in the elderly: study in a rural city in southern Catalonia. J Psych Ment Health Nurse. 2012 [cited 2016 Apr 20]; 19(5):426-9. Available from: http://www. ncbi.nlm.nih.gov/pubmed/22070581 DOI: 10.1111/j.1365-2850.2011.01798.x
- Kiosses DN, Szanto K, Alexopoulos GS. Suicide in older adults: the role of emotions and cognition. Current Psychiatry Reports. 2014[cited 2016 Apr 20]; 16(11):1-8. Available from: http://www.ncbi.nlm.nih.gov/pubmed/25226883 DOI: 10.1007/s11920-014-0495-3.
- Alvarenga MRM, Oliveira MAC, Faccenda O. Sintomas depressivos em idosos: análise dos itens da Escala de Depressão Geriátrica. Acta Paul Enferm. 2012[cited 2016 Apr 20]; 25(4):497-503. Available from: http://www.scielo.br/pdf/ape/v25n4/03.pdf
- Snowdon J. How high in the prevalence of depression in old age? Rev Bras Psiquiatr. 2002[cited 2016 Apr 20]; 24 (Supl 1):42-7. Available from: http://scielo.br/pdf/rbp/v24s1/8856.pdf
- Wild B, Herzog W, Schellberg D, Lechner S, Niehoff D, Brenner H, et al. Association between the prevalence of depression and age in a large representative German sample of people aged 53 to 80 years. Inter J Ger Psych. 2012[cited 2016 Apr 20]; 27(4):375-81. Available from: http://www. ncbi.nlm.nih.gov/pubmed/21618284 DOI: 10.1002/gps.2728
- Jimenez DE, Bartels SJ, Cardenas V, Dhaliwal SS, Alegría M. Cultural beliefs and mental health treatment preferences of ethnically diverse older adult consumers in primary care. Am J Geriatr Psychiatry. 2012[cited 2016 Apr 20]; 20(6):533-42. Available from: http://www.ncbi.nlm.nih.gov/ pubmed/21992942 DOI: 10.1097/JGP.0b013e318227f876
- Cole MG, Dendukuri N. Risk factors for depression among elderly community subjects: a systematic review and meta-analysis. Am P Psychiatry. 2003[cited 2016 Apr 20]; 160(6):1147-56. Available from: http://www.ncbi.nlm.nih.gov/ pubmed/12777274
- 11. Chan CL, Wang CW, Ho AH, Qu ZY, Wang XY, Ran MS, *et al.* Symptoms of posttraumatic stress disorder and depression among bereaved and non-bereaved survivors following the 2008 Sichuan earthquake. J Anx Dis. 2012[cited 2016 Apr 20]; 26(6):673-9. Available from: http://www.ncbi.nlm.nih.gov/pubmed/22721751 DOI: 10.1016/j.janxdis.2012.05.002
- Mezuk B, Bohnert AS, Ratliff S, Zivin K. Job strain, depressive symptoms, and drinking behavior among older adults: results from the Health and Retirement Study. J Gerontol B Psychol Sci Soc Sci. 2011[cited 2016 Apr 20]; 66(4):426-34. Available from: http://www.ncbi.nlm.nih.gov/pubmed/21427175 DOI: 10.1093/geronb/gbr021.
- 13. Oliveira MFD, Bezerra VP, Silva AO, Alves MDSCF, Moreira MASP, Caldas CP. Sintomatologia de depressão autorreferida por idosos que vivem em

- comunidade. Ciênc Saúde Coletiva. 2012[cited 2016 Apr 20]; 17(8):2191-8. Available from: http://www.scielo.br/pdf/csc/v17n8/29.pdf
- Brown EL, McAvay G, Raue PJ, Moses S, Bruce ML. Recognition of depression among elderly recipients of home care services. Psychiatr Serv. 2003[cited 2016 Apr 20]; 54(2):208-13. Available from: http://www.ncbi.nlm.nih.gov/ pubmed/12556602
- Ferreira L, Roncada C, Tiggemann CL, Dias CP. Avaliação dos níveis de depressão em idosos praticantes de diferentes exercícios físicos Cons Saúde. 2014[cited 2016 Apr 20]; 13(3):405-10. Available from: http://www.redalyc. org/pdf/929/92932100011.pdf
- Costa J GF, Medeiros SM. Sofrimento psíquico e trabalho: uma revisão integrativa de literatura. Rev Bras Pesq Saúde. 2013[cited 2016 Apr 20]; 15(2):116-21. Available from: http://periodicos.ufes.br/RBPS/article/view/5683/4130
- 17. Clavenna A, Bonati M, Rossi E, Rosa M. Increase in non-evidence based use of antidepressants in children is cause for concern. Br Med J. 2004[cited 2016 Apr 20]; 328(7441):711-2. Available from: http://pubmedcentralcanada.ca/pmcc/articles/PMC381270/ DOI: 10.1136/bmj.328.7441.711-c
- Garcias CMM, Pinheiro RT, Garcias GDL, Horta BL, Brum CB. Prevalência e fatores associados ao uso de antidepressivos em adultos de área urbana de Pelotas, Rio Grande do Sul, Brasil, em 2006. Cad Saúde Pública. 2008[cited 2016 Apr 20]; 24(7):1565-71. Available from: http://www.scielo.br/pdf/csp/v24n7/11.pdf
- Groppo HS, Nascimento CMC, Stella F, Gobbi S, Oliani MM. Efectos de un programa de actividad física en los síntomas depressivos y la calidad de vida del ancianos con demencia de Alzheimer. Rev Bras Educ Fís Esp. 2012[cited 2016 Apr 20]; 26(4):543-51. Available from: http://www.scielo.br/scielo. php?script=sci\_arttext&pid=S1807-55092012000400002&lng=en. DOI: http:// dx.doi.org/10.1590/S1807-55092012000400002.