Prevalence of violence and related aspects...



AND DELATED ASSECTS: DDELIMINARY STUD

PREVALENCE OF VIOLENCE AND RELATED ASPECTS: PRELIMINARY STUDY OF OLDER ADULTS

PREVALÊNCIA DE VIOLÊNCIA E ASPECTOS RELACIONADOS: ESTUDO PRELIMINAR COM IDOSOS

PREVALENCIA DE VIOLENCIA Y ASPECTOS ASOCIADOS: ESTUDIO PRELIMINAR COM ADULTOS MAYORES

Rodrigo da Silva Maia¹, Eulália Maria Chaves Maia²

ABSTRACT

Objective: to characterize the prevalence of violence and related sociodemographic aspects in a sample of older adults cared for in the public health network of a city in northeastern Brazil. *Method:* cross-sectional study conducted with 66 older adults in the metropolitan region of Natal, State of Rio Grande do Norte, Brazil. The interviews were analyzed through descriptive and inferential statistics (Student's *t*-test and Pearson correlation coefficient). Data collection was carried out from December 2013 to February 2014. The research project was approved by the Research Ethics Committee, Protocol No. 97.186/2012. *Results:* the minimum variance was zero and maximum ten points in the score values of the instrument used to measure violence (Mean = 3.71; Standard deviation = 2.404). There was a prevalence of 13.6%. Sociodemographic variables, such as age, education, falls within 12 months prior to the study, and self-assessment of the relationship with partners and children were significantly correlated (*p*<0.05) according to the score of the instrument. *Conclusion:* the population studied had fully experienced aging and had their rights minimally guaranteed by the individuals who were close to them. *Descriptors:* Domestic Violence; Mistreatment of Older Adults; Older Adults.

RESUMO

Objetivo: caracterizar a prevalência de violência e aspectos sociodemográficos relacionados em uma amostra de idosos usuários da rede pública de saúde de um município do Nordeste do Brasil. Método: estudo transversal realizado com 66 idosos da região metropolitana de Natal, Estado do Rio Grande do Norte, Brasil. As entrevistas foram analisadas através de estatística descritiva e inferencial (teste t de Student e correlação de Pearson). A coleta de dados realizou-se de dezembro de 2013 a fevereiro de 2014. A pesquisa teve o projeto aprovado pelo Comitê de Ética em Pesquisa, Protocolo nº 97.186/2012. Resultados: houve variância mínima de zero e máxima de dez pontos no valor do escore do instrumento utilizado para mensurar violência (Média = 3,71; Desvio padrão = 2,404). Verificou-se uma prevalência de 13,6%. Variáveis sociodemográficas como faixa etária, escolaridade, ter sofrido quedas nos 12 meses anteriores à pesquisa e autoavaliação do relacionamento com o companheiro e filhos mostraram-se correlacionados significativamente (p<0,05) com o escore do instrumento. Conclusão: a população estudada havia vivenciado seu envelhecimento plenamente, estando com seus direitos minimamente garantidos pelos que os circunscreviam. Descritores: Violência Doméstica; Maus-Tratos ao Idoso; Idoso.

RESUMEN

Objetivo: caracterizar la prevalencia de la violencia y aspectos sociodemográficos asociados en una muestra de adultos mayores usuarios de la red de salud pública de una ciudad en el noreste de Brasil. Método: estudio transversal llevado a cabo con 66 adultos mayores de la región metropolitana de Natal, Estado de Rio Grande do Norte, Brasil. Las entrevistas fueron analizadas mediante estadística descriptiva e inferencial (prueba t de Student y coeficiente de correlación de Pearson). La recolección de datos se realizó de diciembre de 2013 a febrero de 2014. El proyecto de la investigación fue aprobado por el Comité de Ética en Investigación, Dictamen N° 97.186/2012. Resultados: la varianza mínima fue cero y la máxima diez puntos en el valor de la puntuación del instrumento usado para medir la violencia (Media = 3,71; Desviación estándar = 2,404). Hubo una prevalencia del 13,6%. Variables sociodemográficas como edad, educación, caídas en los 12 meses anteriores a la investigación y autoevaluación de la relación con compañeros e hijos se correlacionaron significativamente (p<0,05) de acuerdo con el puntaje del instrumento. Conclusión: la población estudiada había vivenciado su envejecimiento plenamente y sus derechos estaban mínimamente garantizados por los que los rodeaban. Descriptores: Violencia Doméstica; Malos Tratos a Adultos Mayores; Adultos Mayores.

¹Psychologist, Master's degree holder in Psychology, Researcher of the Psychology and Health Study Research Group, Department of Psychology, Federal University of Rio Grande do Norte (GEPS/UFRN). Natal, RN, Brazil. E-mail: rodrigo:maia89@yahoo.com.br; ²Psychologist, PhD. in Psychology, Professor, Researcher and Coordinator of the Psychology and Health Study Research Group, Department of Psychology and Graduate Programs in Health Sciences and Psychology, Federal University of Rio Grande do Norte (PPGCSA/PPGPSI). Natal, RN, Brazil. E-mail: eulalia.maia@yahoo.com.br

INTRODUCTION

The aging of the population is a phenomenon experienced worldwide and recurrently regarded as a challenge to public health actions. Estimates indicate that the older adult population is set to double by 2025 in the world. Proportions of high growth in this population are also expected in the Brazilian reality. It is estimated that this population will consist of 32 million older adults by 2020, which will make it the sixth largest older adult population in the world in the decades to come.¹⁻²

Associated with this growing population aging, the occurrence of mistreatment and violence episodes against this population can be observed. Domestic violence against older adults is growing, affecting expressively interpersonal relations. This is a recurrent issue experienced in the Brazilian reality. The frequency and seriousness of this issue increases exponentially affecting the spaces of social coexistence. It takes place in the family and home environment or in other social institutions, and the rights and citizenship of those who suffer these offences are cruelly infringed.³⁻⁴

Furthermore, although violence is an increasing phenomenon that becomes visible in society and the media, it is still difficult to trace, identify, and prevent. Some reasons that lead to withhold information and make it difficult to report the cases-those who are listed as major causes of the underreporting of violence- are the degree of closeness and/or kinship between the offender and the victim, and/or relationships based emotional-affective, care, financial or dependency that, for example, occur in the victim-offender relationship.5-6

Therefore, violence against older adults is considered a delicate issue, since it does not only involve older adult victims of violence, but also their families, professionals who provide care to them, and all the system that protects/ensures older adults' rights. It is also worth mentioning that violence against older adults is commonly confirmed when it occurs and is reported, determining the facts through clinical examinations, which usually assess physical signs and evidence only mistreatment.7

The literature points to the lack of studies addressing the detection of signs of domestic violence against older adults. This way, it is relevant to investigate this phenomenon in this population using sensitive strategies.^{4,8} From this perspective, the goal of the present study is:

Prevalence of violence and related aspects...

• To characterize the prevalence of violence and related sociodemographic aspects in a sample of older adults cared for in the public health network of a city in northeastern Brazil.

METHOD

This article was drawn from the thesis "Cross-cultural adaptation of the Vulnerability to Abuse Screening Scale (VASS) to Portuguese/Brazil", submitted to the Graduate Program in Psychology, Center for Human Sciences, Languages and Arts of the Federal University of Rio Grande do Norte (UFRN), Natal, State of Rio Grande do Norte, Brazil. 2014.

This is a cross-sectional and quantitative study conducted in an older adult population of the metropolitan area of Natal, State of Rio Grande do Norte, Brazil. The unintentional and random sample was composed of older adults cared for in the health units of the abovementioned city. Six health units were drawn for the selection of the sample, one from each health district and one from a neighboring municipality of the metropolitan area.

Subsequently, the older adults cared for at the units were randomly invited to participate in the research. However, only those subjects aged 60 years or older who gave their free and informed consent to participate in this research, were able to communicate orally, and had their mental functions preserved being aware of time and space were included.

A total of 81 older adults participated in the research; however, only 66 could be included in the sample, representing 81.5% of the participants. The older adults considered non-eligible (n = 15, 18.5%) were excluded because at the time of completion of the research their ability to communicate orally was impaired and/or exhibited impaired awareness of time and space.

The following instruments were used as Sociodemographic protocols: (a) questionnaire, containing questions biopsychosocial aspects, which assessed data such as age, sex, birthplace, education/time of study, marital status, religion, clinical characteristics (hospitalizations occurrence of falls), as well as self-assessment of family relationships (Likert scale of three items, categorizing as bad, poor, or good); (b) Mini-Mental State Examination, for screening cognitive impairment, used to verify whether the older adults could be included in the sample; and (c) Vulnerability Abuse Screening Scale (VASS), produced by Schofield and

Mishra and adapted to the Brazilian reality by Maia. The latter is an instrument for measuring the risk of violence through twelve dichotomous questions for affirmative or negative answers, intended to find evidence of violence. The scores range from zero to twelve and, if the value of the score reaches seven or over, it is indicative of violence. 9-10

Data collection was carried out individually in a room made available by the health units in which the research was conducted. The older adults were invited at random to participate and encouraged by the teams of the institutions. The instruments were applied by the researcher in the following order: (a) Informed consent form; (b) Mini-Mental State Examination, to verify whether the older adults had cognitive conditions to participate in the study; (c) Sociodemographic questionnaire; and (d) Vulnerability to Abuse Screening Scale (VASS).

As it was predicted that the older adults were frequent participants of the activities performed in the institutions to which they were linked, prior scheduling was not performed. This way, the participation took place spontaneously and conditioned to the presence of older adults interested in participating in the research when the researcher was at the units at the time in which the activities were performed with the older adults. Data collection was carried out from December 2013 to February 2014.

The data obtained in the interviews were categorized and analyzed through descriptive statistics, especially with respect to frequency, percentages, central tendency and dispersion, aimed at the characterization of the sample and the other quantitative results.

In order to assess aspects related to the prevalence of violence, inferential statistics was used to find differentiations and

Prevalence of violence and related aspects...

covariance among the data assessed, in particular by using Student's *t*-test and Pearson correlation coefficient. The analyses were performed using a software program for statistical analysis (SPSS v. 18.0).

The present study complied with Resolution No. 466/12 of the National Health Council which provides guidelines to carry out research involving human subjects. The research project was approved by the Research Ethics Committee of the Federal University of Rio Grande do Norte, under CAAE No. 05563712.8.0000.5537 and Approval Protocol No. 97.186/2012-CONEP. All the information obtained was confidential and the names of the participants were not identified at any moment of the present study.

RESULTS

The age of the participants ranged from 60 to 84 years (Mean = 70.86; Standard deviation = 7.377). The number of individuals who shared the home with the older adults ranged from one to seven (Mean = 4.32; Standard deviation = 1.511). The houses in which the older adults lived had an average of four to nine rooms (Mean = 5.80; Standard deviation = 0.980). A minimum variance of zero and maximum of ten points were observed in the value of the total score of the Vulnerability to Abuse Screening Scale (VASS) (Mean = 3.71; Standard deviation = 2.404). If the score values that indicate violence are taken as reference, there was a prevalence of 13.6%. about information **Further** the characterization of the sample can be observed in Table 1.

Prevalence of violence and related aspects...

Maia RS, Maia EMC.

Table 1. Sociodemographic data of the older adult population studied.

Variables			%
Sex	Male	28	57.6%
	Female	38	42.4%
Age group	60 to 64	18	27.3%
	65 to 69	14	21.2%
	70 to 74	8	12.1%
	75 to 79	15	22.7%
	80 ≥	11	16.7%
District	North	15	22.7%
	East	19	28.8%
	West	9	13.6%
	South	9	13.6%
	Countryside	14	21.2%
Marital status	Single	1	1.5%
	Marries	45	68.2%
	Widowed	18	27.3%
	Divorced	2	3.0%
Education level	Never studied	13	19,7%
	Elementary education	33	50.0%
	(Complete or not)		
	Secondary education (Complete or not)	14	21.2%
	Higher education (Complete or not)	6	9.1%
Are you alone most of the day?	Yes	14	21.2%
, ,	No	52	78.8%
Do you receive retirement	Yes	54	81.8%
income, benefit, and/or pension?	No	12	18.2%
Family income	Up to 1 minimum wage	3	4.5%
•	More than 1 minimum wage up to 6	39	59.1%
	More than 6 minimum wages	24	36.4%

Note. Variables = sociodemographic aspects assessed; AF = absolute frequency. Source: research.

Table 2 shows data concerning healthrelated factors of the older adult population studied (hospitalization, falls, and disabilities) within twelve months prior to the study. Table 3 shows the information concerning questions of the sociodemographic questionnaire on self-assessment of the older adults regarding their relationship with different individuals in their environment.

Table 2. Aspects related to hospitalization, falls, and disabilities of the older adult population studied.

Aspects		AF	%
Were you hospitalized in the last 12	Yes	6	9.1%
months?	No	60	90.9%
Did you fall in the last 12 months?	Yes	10	15.2%
	No	56	84.8%
Were you unable to perform daily activities in the last 15 days due to health problems?	Yes	9	13.6%
	No	57	86.4%
Were you confined to bed in the last	Yes	9	13.6%
15 days?	No	57	86.4%
Reason for hospitalization,	Does not apply	50	75.8%
confinement to bed, and/or	Respiratory problems	11	16.7%
inability to perform activities due to health problems.	Diseases and/or musculoskeletal and cardiovascular problems, and/or external causes	5	7.6%

Note. Aspects = health aspects assessed; AF = absolute frequency. Source: research.

Prevalence of violence and related aspects...

Table 2 shows that the older adult population studied had a predominance of individuals who had not been hospitalized or suffered falls within the 12 months prior to the survey. In addition, there was a low rate of older adults who had been confined to bed or unable to perform daily activities due to health problems within the 15 days prior to the participation in the study. On the other hand, the reasons for hospitalization within

the last twelve months and the inability to perform daily activities and/or having been confined to bed within the 15 days prior to the study were: problem and/or diseases of the respiratory system, such as colds, viruses, and pneumonic processes; musculoskeletal diseases, such as gout and/or spinal problems; cardiovascular problems, such as heart murmur; and falls.

Table 3. Assessment of the perception about the relationships with different individuals in the social environment.

individuals in the social environment.					
Assessment of perception	AF	%			
Relationship with the spouse/partner	NA	21	31.8%		
	Bad	8	12.1%		
	Poor	21	31.8%		
	Great	16	24.2%		
Relationship with the children	NA	1	1.5%		
	Bad	27	40.9%		
	Poor	29	43.9%		
	Great	9	13.6%		
Relationship with the grandchildren	NA	3	4.5%		
	Bad	13	19.7%		
	Poor	32	48.5%		
	Great	18	27.3%		
Relationship with the other individuals	NA	28	42.4%		
living in the home	Bad	26	39.4%		
	Poor	10	15.2%		
	Great	2	3.0%		

Note. Assessment of perception = assessment of the relationships with different individuals in the social environment; AF = absolute frequency; NA = does not apply. Source: research.

Table 4 shows the significant results obtained using Student's *t*-test to check whether there was difference in the total score of the VASS between variables of dichotomous nature, as well as between the items of the instrument. Variables such as sex, being alone most of the day, receiving

retirement income, benefit, and/or pension, having been hospitalized within the 12 months prior to the research, and having been confined to bed within the previous 15 days did not show significant differences according to the total score of the scale.

Table 4. Values of the significant differences between the variables assessed according to the total score of the Vulnerability to Abuse Screening Scale (VASS).

Variables		AF	Р	М	SD	t (p)
Did you fall in the last 12	Yes	10	5.2%	5.70	2.983	3.010
months?	No	556	84.8%	3.36	2.127	(p=0.004)**
Were you unable to perform	Yes	09	3.6	5.33	3.122	2.244
daily activities in the last 15 days due to health problems?	No	57	6.4%	3.46	2.196	(p=0.028)*

Note. AF = absolute frequency; P = percentage; M = mean; SD = standard deviation; t(p) = Student's t-test; * = significant values (p<0.05); ** = very significant values (p<0.01). Source: research.

Pearson correlation coefficients were also calculated to check the covariance between the sociodemographic data and the total score of the VASS, as shown in Table 5. In this table, it is possible to observe the sociodemographic data that had significant indices (p>0.05).

Prevalence of violence and related aspects...

Table 5. Results of the significant correlations between the sociodemographic variables according to the total score of the Vulnerability to Abuse Screening Scale (VASS).

Correlations	VASS total score		
	Coefficient	р	
Age group	0.259	0.036*	
Education	-0.366	0.003**	
Did you fall in the last 12 months?	-0.281	0.022*	
Self-assessment of the relationship with the spouse/partner	-0.417	0.001**	
Self-assessment of the relationship with the children	-0.512	0.000***	

Note. p = significance index; * = significant values (p<0.05); ** = very significant values (p<0.01); *** = highly significant values (p<0.001). Source: research.

DISCUSSION

Female older adults (n=38) prevailed in the sample of the present study, accounting for 57.6% of the population studied. This profile can be commonly found in studies addressing aging, since there has been a predominance of female respondents in the age group assessed. For some authors, this fact seems to occur due to increased longevity of women compared to men, as well as due to the fact that this population is more prevalent in health and community centers for older adults. 11-12

The data concerning the homes, in turn, indicate a contemporary phenomenon called "multigenerational homes", which can be characterized as an intervening factor in violence, both in the sense of protecting older adults against the risk of being a victim or the other way around. 13-15

The prevalence found in the present study was low compared to the prevalence found in the international studies cited, in which these estimates ranged from 15 to 35%. 16-19 However, this prevalence falls within the average found in national studies, ranging from 10 to 21%. 13,20.22

The results shown in Table 4 seem to indicate that the population assessed may have possessed a satisfactory health status, given that the fact of suffering multimorbidities and falls is very common among older adults, which can lead to disabilities and dependence. In turn, the non-occurrence of hospitalization or inability to perform daily activities seems to support the abovementioned assertion. ²³⁻²⁴

It is possible to ascertain that there were unfavorable assessments concerning relationships with children and other individuals who lived in the home with the commonly older adults, being spouses, and/or boy/girlfriends partners of children and/or grandchildren, caretakers, domestic employees, and other types of household helpers. It was also observed that there was negative covariance between the measures of self-assessments of the relationships with children and spouses/partners and the total score of the VASS.

Older adults' perceptions about their interpersonal relations can be directly related to good health, quality of life, and successful development.²⁵ On the other hand, they may also indicate mistreatment contexts. It is noteworthy that the greatest fear of older adults is staying alone, especially when suffering from any disease, although this phenomenon is relatively common in this population.²⁶ However, this fear was not observed among the older adults of the present study, since more than 78% of the participants did not stay alone throughout the day.

It is also worth noting that the falls, albeit not significantly, were negatively correlated according to the score. Such result is not in accordance with what the literature suggests; since the falls were related to violence and/or mistreatment against older adults.²³

CONCLUSION

The population studied had fully experienced aging and had their rights minimally guaranteed by the individuals who were close to them. However. measurement of the self-assessments to check evidence of violence was not one of the most reliable strategies. This is due to the fact that objective measures of violence are difficult to obtain. Violence itself is a difficult construct to be identified, except in the cases of highly intense physical violence which can commonly be detected through examination of corpus delicti, resulting in the need of medical treatment. Nevertheless, the occurrence of mistreatment at home, performed by a family member and/or an individual that lives in that home, may not be clearly recognized by physicians and/or other health professionals.

There are also methodological limitations in the strategy of the self-assessment used by the instrument, including the possibility of perceptions or memories about the situations

experienced being divergent or unreal, lack of interest and/or unwillingness on the part of the respondent to report the occurrence of situations that may indicate violence, and the pressures exerted by social desirability.

REFERENCES

- 1. Lima-Costa MF, Veras R. Saúde pública e envelhecimento. Cad Saúde Pública [Internet]. 2003 June [cited 2014 Aug 19];19(3):700-701. from: Available http://www.scielo.br/scielo.php?script=sci_ar ttext&pid=S0102-311X2003000300001&lng=en.
- 2. Veras R. Envelhecimento populacional contemporâneo: demandas, desafios e inovações. Rev Saúde Pública [Internet]. 2009 June [cited 2014 Aug 19];43(3):548-554. Available from: http://www.scielo.br/scielo.php?script=sciarttext&pid=S0034-89102009000300020&lng=en.
- 3. Oliveira WF de. Violência e Saúde Coletiva: contribuições teóricas das ciências sociais à discussão sobre o desvio. Saude soc [Internet]. 2008 Sept [cited 2014 Aug 19];17(3):42-53. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-12902008000300006&lng=en.
- 4. Gaioli CCLO, Rodrigues RAP. Ocorrência de maus-tratos em idosos no domicílio. Rev Latino-Am Enfermagem [Internet]. 2008 June [cited 2014 Aug 19];16(3):465-470. Available from:

http://www.scielo.br/scielo.php?script=sci_ar ttext&pid=S0104-11692008000300021&lng=en.

5. Machado WCA, Figueiredo NMA, Miranda RS, Shubert CO. Domestic Violence Against The Elderly: Reflections on Assistance And Nursing Care. J Nurs UFPE on line [Internet]. 2013 Dec [cited 2014 Aug 19];7(12):6936-6941. Available from: http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/view/4 094/pdf_4184. doi: 10.5205/reuol.2950-

6. Correia TMP, Leal MCC, Marques APO, Salgado RAG, Melo HMA. Perfil dos idosos em situação de violência atendidos em serviço de emergência em Recife-PE. Rev bras geriatr gerontol [Internet]. 2012 Sept [cited 2014 Aug 19];15(3):529-536. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1809-98232012000300013&lng=en.

7. Minayo MCS. Violência contra idosos: relevância para um velho problema. Cad Saúde Pública [Internet]. 2003 June [cited

Prevalence of violence and related aspects...

2014 Aug 19];19(3):783-791. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-

- 311X2003000300010&lng=en.
- 8. Sanches APRA, Lebrão ML, Duarte YAO. Violência contra idosos: uma questão nova?. Saude soc [Internet]. 2008 Sept [cited 2014 Aug 19];17(3):90-100. Available from: http://www.scielo.br/scielo.php?script=sciarttext&pid=S0104-
- 12902008000300010&lng=en..
- 9. Schofield MJ, Mishra GD. Validity of self-report screening scale for elder abuse: Women's Health Australia Study. Gerontologist [Internet]. 2003 Dec [cited 2014 Aug 19];43(1):110-120. Available from: http://www.ncbi.nlm.nih.gov/pubmed/12 604752.
- 10. Maia RS. Adaptação Transcultural para o Português/Brasil do Instrumento Vulnerability to Abuse Screening Scale (VASS). Rio Grande do Norte. Dissertação [Mestrado em Psicologia] Universidade Federal do Rio Grande do Norte; 2014.
- 11. Ferreira CL, Mata ANS, Santos LMO, Maia RS, Maia EMC. Velhice e projetos de vida: um estudo com idosos residentes no município de Natal/RN, Brasil. Estud interdiscip envelhec [Internet]. 2010 Dec [cited 2014 Aug 19];15(2):165-175. Available from: http://www.seer.ufrgs.br/index.php/Rev Envelhecer/article/view/11455/11548.
- 12. Ferreira CL, Santos LMO, Maia EMC. Resiliência em idosos atendidos na Rede de Atenção Básica de Saúde em município do nordeste brasileiro. Rev esc enferm USP [Internet]. 2012 Apr [cited 2014 Aug 19];46(2):328-334. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0080-62342012000200009&lng=en.
- 13. Moraes CL de, Apratto Júnior PC, Reichenheim ME. Rompendo o silêncio e suas barreiras: um inquérito domiciliar sobre a violência doméstica contra idosos em área de abrangência do Programa Médico de Família de Niterói, Rio de Janeiro, Brasil. Cad Saúde Pública [Internet]. 2008 Oct [cited 2014 Aug 19];24(10):2289-2300. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-
- 311X2008001000010&lng=en.
- 14. Santos Ivanilza Etelvina dos, Dias Cristina Maria de Souza Brito. Homem idoso: vivência de papéis desempenhados ao longo do ciclo vital da família. Aletheia [Internet]. 2008 June [cited 2014 Aug 19];(27):98-110. Available from:

23586-1-ED.0712201329

http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1413-03942008000100008&lng=pt.

- 15. Souza JAV de, Freitas MC de, Queiroz TA de. Violência contra os idosos: análise documental. Rev bras enferm [Internet]. 2007 June [cited 2014 Aug 19];60(3):268-272. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-71672007000300004&lng=en.
- 16. Dong X, Simon MA. Is Greater Social Support a Protective Factor against Elder Mistreatment?. Gerontology [Internet]. 2008 July [cited 2014 Aug 19];54(6):381-388. Available from: http://www.ncbi.nlm.nih.gov/pubmed/18 600021.
- 17. Dong X, Simon MA. Gender Variations in the levels of Social Support and Risk of Elder Mistreatment in a chinese community population. J Appl Gerontol [Internet]. 2010 July [cited 2014 Aug 19];29(6):720-739. Available from: http://jag.sagepub.com/content/29/6/72 0.full.pdf.
- 18. Dong X, Simon MA. Is Impairment in Physical Function Associated with Increased Risk of Elder Mistreatment? Findings from a Community-Dwelling Chinese Population. Public Health Rep [Internet]. 2010 Sep-Oct [cited 2014 Aug 19];125(5):743-753. Available from:

http://www.ncbi.nlm.nih.gov/pubmed/20873291.

- 19. Dong X, Beck T, Simon MA. associations of gender, depression and elder mistreatment in community-dwelling a Chinese population: The modifying effect of support. Archf Gerontol social Geriatr [Internet]. 2010 Mar-Apr [cited 2014 Aug 19];50(2):202-208. Available from: http://www.ncbi.nlm.nih.gov/pubmed/19 398133.
- 20. Duque AM, Leal MCC, Marques APO, Eskinazi FMV, Duque AM. Violência contra idosos no ambiente doméstico: prevalência e fatores associados (Recife/PE). Ciênc saúde coletiva [Internet]. 2012 Aug [cited 2014 Aug 19];17(8):2199-2208. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1413-81232012000800030&lng=en.
- 21. Apratto Júnior PC. A violência doméstica contra idosos nas áreas de abrangência do Programa Saúde da Família de Niterói (RJ, Brasil). Ciênc saúde coletiva [Internet]. 2010 Sept [cited 2014 Aug 19];15(6):2983-2995. Available from:

Prevalence of violence and related aspects...

http://www.scielo.br/scielo.php?script=sc i_arttext&pid=S1413-

81232010000600037&lng=en.

22. Melo Victor Lopes de, Cunha Juliana de Oliveira Carneiro da, Falbo Neto Gilliatt Hanois. Maus-tratos contra idosos no município de Camaragibe, Pernambuco. Rev Bras Saude Mater Infant [Internet]. 2006 May [cited 2014 Aug 19];6(Suppl 1):s43-s48. Available from: http://www.scielo.br/scielo.php?script=sc

http://www.scielo.br/scielo.php?script=sc i_arttext&pid=S1519-

38292006000500006&lng=pt.

23. Ribeiro AP, Souza ER de, Atie S, Souza AC de, Schilithz AO. A influência das quedas na qualidade de vida de idosos. Ciênc saúde coletiva [Internet]. 2008 Aug [cited 2014 Aug 19];13(4):1265-1273. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1413-

81232008000400023&lng=en.

24. Vecchia RD, Ruiz T, Bocchi SCM, Corrente JE. Qualidade de vida na terceira idade: um conceito subjetivo. Rev bras epidemiol [Internet]. 2005 Sept [cited 2014 Aug 19];8(3):246-252. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1415-

790X2005000300006&lng=en.

25. Carneiro RS, Falcone E, Clark C, Prette ZD, Prette AD. Qualidade de vida, apoio social idosos: relação depressão em com habilidades reflex sociais. **Psicol** crit 2007 2014 [Internet]. [cited Aug 19];20(2):229-237. **Available** from: http://www.scielo.br/scielo.php?script=sc i_arttext&pid=S0102-

79722007000200008&lng=en&tlng=pt.

26. Miranda LM de, Farias SF. As contribuições da internet para o idoso: uma revisão de literatura. Interface (Botucatu) [Internet]. 2009 June [cited 2014 Aug 19];13(29):383-394. Available from:

http://www.scielo.br/scielo.php?script=sc i_arttext&pid=S1414-

32832009000200011&lng=en.

Submission: 2014/08/21 Accepted: 2015/07/25 Publishing: 2015/08/15

Corresponding Address

Rodrigo da Silva Maia Rua Seridó, 754 / Ap. 902 Bairro Petrópolis CEP 59020-010 — Natal (RN), Brazil