

Risk for violence and social support in the elderly: a cross-sectional study

Risco de violência e apoio social em idosos: estudo transversal
 Riesgo de violencia y apoyo social a adultos mayores: estudio transversal

Ana Carolina dos Santos¹  <https://orcid.org/0000-0001-9563-1785>

Jéssica Barreto Pereira¹  <https://orcid.org/0000-0002-1274-6024>

Rafael da Costa Santos¹  <https://orcid.org/0000-0001-8293-340X>

Gleyci Karine Nascimento de Araújo-Monteiro¹  <https://orcid.org/0000-0002-4395-6518>

Renata Clemente dos Santos¹  <https://orcid.org/0000-0003-2916-6832>

Gabriela Maria Cavalcanti Costa²  <https://orcid.org/0000-0003-4466-6886>

Rafaella Queiroga Souto¹  <https://orcid.org/0000-0002-7368-8497>

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Descriptores

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Corresponding author

Rafaella Queiroga Souto
 E-mail: rafaellaqueiroga7@gmail.com

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Paula Hino
 (<https://orcid.org/0000-0002-1408-196X>)
 Escola Paulista de Enfermagem, Universidade Federal de São Paulo, SP, Brazil

Abstract

Objective: To analyze the risk for violence and its relationship with social support among elderly persons enrolled in the Family Health Strategy.

Methods: A prospective, cross-sectional observational study, developed according to the STROBE tool, conducted in the city of Recife (PE), between 2016 and 2017, with elderly adults enrolled in an urban Family Health Unit. The instruments used for sociodemographic characterization were: Hwalek-Sengstock Elder Abuse Screening Test, and the Medical Outcome Study: Social Support Scale (MOS-SSS). Descriptive and inferential statistics were used for analysis.

Results: Violence against the elderly was more prevalent among those who were: men, more than 70 years old, literate, without paid employment, living alone, and receiving an income higher than one time the minimum wage. Material support, emotional/informational support facets, and social interaction showed significant correlation ($p < 0.000$) with the risk for violence. In the regression model, emotional/informational support showed a protective factor (odds ratio 0.952; 95% confidence interval 0.91-0.98; p -value 0.007) for the risk for violence.

Conclusion: The elderly individual with deficient social support is more vulnerable to the risk for violence. However, the emotional/informational support facet is shown as a protective factor against the risk for violence.

Resumo

Objetivo: Analisar o risco de violência e sua relação com o apoio social entre idosos cadastrados na Estratégia Saúde da Família.

Métodos: Pesquisa observacional transversal prospectiva, elaborada conforme preconiza a ferramenta STROBE, realizada na cidade de Recife (PE), entre os anos de 2016 e 2017, com pessoas idosas cadastradas em uma unidade de Saúde da Família, da zona urbana. Foram utilizados os instrumentos *Hwalek-Sengstock Elder Abuse Screening Test* e *Medical Outcome Study: Social Support Scale* para caracterização sociodemográfica. A análise foi realizada utilizando-se estatística descritiva e inferencial.

Resultados: A violência contra a pessoa idosa prevaleceu entre os homens, com mais de 70 anos, alfabetizados, sem relacionamento, que não realizavam trabalho remunerado, moravam sozinhos e com renda própria superior a um salário mínimo. As facetas apoio material, apoio emocional/informacional e interação social apresentaram correlação significativa ($p < 0,000$) com o risco de violência. No modelo de regressão, o apoio emocional/informacional demonstrou fator de proteção (razão de chance de 0,952; intervalo de confiança de 95% de 0,91 -0,98; p -valor de 0,007) para ocorrência do risco de violência.

¹Universidade Federal da Paraíba, João Pessoa, PB, Brazil.

²Universidade Estadual da Paraíba, Campina Grande, PB, Brazil.

Conflicts of interest: nothing to declare.

Conclusão: Os idosos com déficit de apoio social são mais vulneráveis ao risco de violência. Porém, destaca-se a faceta apoio emocional/informacional como fator protetivo diante do risco de violência.

Resumen

Objetivo: Analizar el riesgo de violencia y su relación con el apoyo social entre adultos mayores registrados en la Estrategia Salud de la Familia.

Métodos: Investigación observacional transversal prospectiva, elaborada acorde a lo que preconiza la herramienta STROBE, realizada en la ciudad de Recife (Pernambuco), entre los años de 2016 y 2017, con adultos mayores registrados en una unidad de Salud de la Familia, de la zona urbana. Se utilizaron los instrumentos *Hwalek-Sengstock Elder Abuse Screening Test* y *Medical Outcome Study: Social Support Scale* para la caracterización sociodemográfica. El análisis se realizó utilizando estadística descriptiva e inferencial.

Resultados: La violencia contra la persona mayor prevaleció entre los hombres mayores de 70 años, alfabetizados, sin relaciones, que no realizaban trabajo remunerado, vivían solos y con ingresos propios superiores a un salario mínimo. Los aspectos apoyo material, apoyo emocional/de información e interacción social presentaron correlación significativa ($p < 0,000$) con el riesgo de violencia. En el modelo de regresión, el apoyo emocional/de información demostró un factor de protección (razón de probabilidad de 0,952; intervalo de confianza del 95 % de 0,91-0,98; p-valor de 0,007) para la ocurrencia de riesgo de violencia.

Conclusión: Los adultos mayores con déficit de apoyo social son más vulnerables al riesgo de violencia. Sin embargo, se destaca el aspecto de apoyo emocional/de información como factor de protección ante el riesgo de violencia.

Introduction

Aging is a complex and subjective process and, sometimes, places the subjects at risk due to the impairment and deterioration of physical and mental faculties, resulting in increased mortality. Consequently, aging has become the focus of public and social policies, recognizing the impacts of this process on the health care system, especially the gradual increase in hospitalizations, the cost of repeated and prolonged hospitalizations, and the mobilization of professionals and equipment for interventions.⁽¹⁻³⁾

Biological changes resulting from the senescence process may be related to the social singularities of each person, which are peculiarities resulting from cumulative effects, such as deficient conditions in education, housing, income, leisure, work, social and health support.⁽⁴⁾

Aging is still a target of stereotypes and prejudices, influenced by culture and living conditions, and often associated only with a period of increased frailty. Also, the onset of disabilities to perform self-care in the family environment may result in the emergence of episodes of violence, making this phenomenon commonplace in the relationship with the aggressor family member.⁽⁵⁾

The law No. 10,741, of October 1, 2003⁽⁶⁾ defines violence against the elderly individual as “the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results

in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation”.

The most common types of violence against the elderly individual are: structural (related to poverty, allowing the person die in a situation of food insecurity), interpersonal (part of everyday life, family, community, and relationships), institutional (generated by health professionals, social assistance, and institutions in general), and symbolic (contempt and belittling).⁽⁷⁾

Functional dependence (disability), poor physical and mental health, and cognitive impairment are risk factors for violence against the elderly person. Regarding protective factors, studies show that higher levels of social support and greater integration into a social network environment reduce the risk for violence.^(8,9)

Social support, in simultaneous approaches, can be understood as a type of aid provision that is based, on one hand, on exchanges, obligations, and reciprocity patterns between individuals, groups, families, and institutions, with significant meanings for the individuals involved within their respective daily experiences and contexts. On the other hand, giving, receiving, and returning support are actions influenced by economic, social, political, and cultural issues, which affect and transform modern societies.⁽¹⁰⁾

Although the link between social support and the risk for violence among the elderly is recognized, the development of research assessing the re-

relationship between social support and the risk for violence outcome, using standardized instruments, is still incipient.

Thus, this study aimed to analyze the risk for violence and its relationship with social support among elderly person enrolled in the Family Health Strategy.

Methods

This was a prospective, cross-sectional observational study, guided by the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) tool, conducted in the city of Recife (PE), from March of 2016 to March of 2017.

The participants in this investigation were individuals aged 60 years or older, enrolled in one of the three teams that constitute a Family Health Unit (FHU). The unit was chosen due to its location near the Federal University of Pernambuco, enabling fulfillment of the social responsibility obligations of the university with the surrounding community.

The population was composed of 1,209 individuals. The sample size calculation was performed using the finite population correction formula for epidemiological studies, with a confidence coefficient of 92% and a power of error of 8%, obtaining a sample of 159 elderly person.

Data collection was performed using random sampling. The proportionality between the three groups of the FHU was determined, and, for every five individuals on the list of each group, one was selected and invited to respond to the study, excluding those with severe hearing or visual deficits and/or those in palliative care. The assessment was conducted by the researcher in an observational mode, or by means of information obtained from the responsible caregiver. The interview occurred at a previously scheduled day and hour, in the participant's home, with an average duration of 30 minutes, conducted by two undergraduate nursing students, trained by the research team and accompanied by a Community Health Agent (CHA). At the time, the research objectives were explained, as well as the ethical compliance that guaranteed data

confidentiality, followed by the signing of the Terms of Free and Informed Consent form.

The sociodemographic characterization of the participants was obtained by means of a developed instrument to provide information regarding: age, marital status, literacy, living arrangement, work, and income.

Risk for violence was identified in this population by means of the Hwalek-Sengstock Elder Abuse Screening Test (H-S/EAST) instrument, composed of 15 questions. For each affirmative answer one point was assigned, except for items 1, 6, 12, and 14, in which one point was attributed for a negative answer. A score of three or more points indicates increased risk for violence.⁽¹¹⁾

The MOS-SSS was used to assess to what extent the person relied on support from others to face different situations in his/her life. This scale has 19 items divided into five dimensions of social support: material, with four questions; affective, with three; emotional, with four; information, with four; and positive social interaction, with four questions. Due to the better quality of adjustment in the model, the version using four domains (emotional/informational support, social interaction, material support, and affective social support) was chosen. These 19 items required responses to a five-point Likert scale: one for never, two for rarely, three for sometimes, four for almost always, and five for always.^(12,13)

In parallel to the data collection step, data were double-entered by independent researchers into statistical analysis software, and eventual disagreements were reviewed and corrected. The data were then analyzed using descriptive statistics (measures of central tendency and dispersion; absolute and relative frequency) and inferential statistics (Pearson's chi-square test, Spearman's correlation test, Mann-Whitney's comparison test, and multiple logistic regression model), using a significance level of 5% ($p < 0.05$).

The research was submitted to the Research Ethics Committee of the Universidade Federal de Pernambuco and approved under opinion 1413599/16 (CAAE: 51557415.9.0000.5208). All recommendations and ethical principles for research involving human beings were respected and

followed, according to resolution 466/12, established by the National Health Council.⁽¹⁴⁾

Results

The sample showed a prevalence of individuals who: had a mean age of 71.6 years, were literate (66.7%), female (76.7%), were not in an intimate relationship - single, widowed or divorced - (66%), were without paid employment (79.3%), had an income of up to one time the minimum wage (71.1%), and were living with someone (86.2%).

Table 1 presents the association between the sociodemographic variables and the risk for violence. From a statistical point of view, no significant association was found, but risk for violence prevailed among those who were: male (64.9%), greater than 70 years old (61.6%), not in an intimate relationship (61.9%), literate (62.3%), who did not have paid employment (62.7%), living alone (68.2%), and had an income of more than one time the minimum wage (65.2%).

Table 1. Risk for violence according to sociodemographic characteristics (n=159)

Variables	Risk for violence		p-value*
	With risk	Without risk	
Sex			0.524
Female	72(59.0)	50(41.0)	
Male	24(64.9)	13(35.1)	
Age, years			0.764
Up to 70	51(59.3)	35(40.7)	
More than 70	45(61.6)	28(38.4)	
Marital status†			0.583
In a relationship	31(57.4)	23(42.6)	
Not in a relationship	65(61.9)	40(38.1)	
Level of education			0.492
Literate	66(62.3)	40(37.7)	
Illiterate	30(56.6)	23(43.4)	
Paid employment			0.183
Yes	13(48.1)	14(51.9)	
No	79(62.7)	47(37.3)	
Without information	4(66.7)	2(33.3)	
Housing arrangement			0.420
Living alone	15(68.2)	7(31.8)	
Living with someone	81(59.1)	56(40.9)	
Income, minimum wage			0.426
Up to one	66(58.4)	47(41.6)	
More than one	30(65.2)	16(34.8)	

Results expressed as n (%).

*Pearson's chi-square test; †in a relationship: married/living together; without relationship: single/widowed/divorced.

Table 2 presents the correlation test between the score of risk for violence against the elderly person and the facets of social support. A correlation was found with material support (r=-0.311; p=0.001), emotional/informational support (r=-0.311; p=0.001), and social interaction (r=-0.190; p=0.017), showing that as material and informational social support and social interaction increased, the risk for violence decreased.

Table 2. Risk for violence and the domains of social support

Variables	Risk for violence score	
	Correlation coefficient	p-value
Material support	-0.311	0.001
Affective support	-0.148	0.065
Emotional/informational support	-0.311	0.001
Social interaction	-0.190	0.017

Spearman's correlation test

A test comparing the facets of social support in relation to the risk for violence was performed, finding that there was a significant difference between the means of the facets of material support (p-value 0.004) and informational support (p-value 0.007), with the risk for violence indicating that the risk was predominant among the elderly with less support. These variables were then inserted into the multiple logistic regression model of the risk for violence. Informational support was the variable that remained in the final model and showed an association with the risk for violence, suggesting that this support was configured as a protective factor for the risk (odds ratio 0.952; 95% confidence interval 0.91-0.98; p-value=0.007) (Table 3).

Table 3. Variables associated with the risk for violence by means of multiple adjusted logistic regression

Variable	OR	CI95%	p-value*
Emotional/informational support	0.952	0.91-0.98	0.007

*Test significance; Adjusted R²: 0.067; OR - Odds ratio; 95%CI: 95% confidence interval

Discussion

The development of a study that only assesses one geographical setting limits possible generalizations regarding social support and the risk for violence among the elderly, although it gives visibility to the phenomenon and encourages future investigations in other population contexts. The shortage of stud-

ies using instruments aimed at assessing the facets of social support and its relationship with the risk for violence against the elderly restricted the understanding of the relationship between the phenomena in other contexts, and the desired theoretical deepening.

Although the risk for violence predominated in male elderly, the literature shows elderly women as more vulnerable.^(15,16) Being aged greater than 70 years was also a risk factor, showing that the older the elderly person, the greater the likelihood of violence.^(16,17)

Decreased social cycle of the elderly person is a factor that contributes to increased vulnerability and, consequently, increased risk for violence, which can be explained by the prevalence of risk in people not in an intimate relationship, and those who lived alone.^(18,19)

Regarding education level, the risk for violence in the literate person was prevalent. These data diverge from other studies, which show education as a contributor for the elderly to develop more autonomy, and less predisposed to suffer violence. Also according to the literature, low income is a risk factor for violence against the elderly, which diverges from the findings found in our research, which places the person with an income above one time the minimum wage in a place of greater vulnerability to situations of violence.^(8,20,21)

A higher risk for violence was identified against the elderly who were not engaged in paid employment. This may be related to the tendency of the elderly to be more likely to be frail and, consequently, to be excluded from the labor market. Such exclusion, in addition to leading to increased financial dependence, culminates in increased risk for this person to suffer from violence.⁽²²⁻²⁴⁾

Meeting the health demands designed for the elderly in a comprehensive manner involves providing a quality aging experience, well-being, and sense of belonging throughout the process, subsidizing reconfigurations and family support network, community and health services, leading to social support becoming a protective factor for outcomes that weaken this process, such as violence against the elderly.⁽²⁵⁾

The greater the social support, the lower the risk for violence against the elderly.^(23,26) This relation-

ship was also found in this study, in which an inversely proportional association was found between social support and the risk for violence against the elderly. Other data reveal that higher levels of social support can mitigate the risk for violence against the elderly.^(9,19,27)

Social support is also an indicator of positive health outcomes for the elderly as a whole, given that low levels of social support may express potential threat to healthy aging, allowing the elderly to become more vulnerable to experiencing some type of violence.^(27,28)

Understanding social support with the use of an instrument with reliable psychometric properties indicates the need to deepen the dimensions and facets that compose it. The MOS-SSS proposes the assessment of social support in four domains: material support (related to support in practical activities), emotional/informational support (associated with having people with whom one can share intimate concerns and fears), social interaction (related to having someone with whom one can share moments of joy) and affective support (feeling loved in one's relationships).⁽²⁹⁾

The H-S/EAST instrument, which was cross-cultural adapted, measures the risk for violence from three domains: potential abuse (direct questions related to types of violence), violation of personal rights or direct abuse (items on third-party ownership of material and financial resources or third-party decision-making about the elderly person's finances), and characteristics of vulnerability (items related to the elderly person's social support for shopping, autonomy, ability, and feeling of sadness).⁽¹¹⁾

Material support was negatively correlated with the risk for violence in this study, indicating that the greater the support received from family members for activities, the lower the risk for violence. This social support domain is closely related to the third facet of the HS-EAST regarding vulnerability characteristics, as the MOS-SSS classifies social support as the support received by the elderly for work and financial activities, and for medical follow-up.⁽³⁰⁾

Positive or negative social interaction regarding one of the dimensions of social support may indicate lack or absence of activities to be developed with the elderly individual related to community

living spaces for the development of culture, leisure, and interaction. The lack of these resources may favor the occurrence of psychological distress of the elderly, as well as situations of risk for violence.⁽³¹⁾

The emotional support dimension is related to the ability to have a social support network capable of satisfying one's emotional demands. In research developed in Uberaba (MG) to measure the association between elderly social support and health conditions, the need to recognize the macro- and micro-social emotional support networks was indicated.⁽³²⁾ Likewise, studies indicate that the existence of social support is associated with mental health in the elderly. Thus, increased social support tends to improve mental health in the elderly, and this relationship is also expressed in susceptibility to violent outcomes.^(4,10,33,34)

In this study, the emotional/informational support showed association with the risk for violence against the elderly, inferring that such support is useful as a protective factor for the risk for violence. Sharing distress, having someone to listen when you need to talk, and having someone to trust are aspects that help the elderly individual to feel safer and more confident. Studies show that elderly people who suffer violence receive low social support, of which the emotional/informational support is the lowest supported.^(23,33-35)

Conclusion

Among the elderly, social support emerged as a factor that influences a reduction in the risk for violence, indicating that material and informational social support, and social interaction facets, had a role in this reduction. Moreover, emotional/informational support can be configured as a protective factor for the risk for violence against the elderly.

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Collaborations

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