

Risk of violence and quality of life of hospitalized older adults

Risco de violência e qualidade de vida de pessoas idosas atendidas no ambiente hospitalar

El riesgo de violencia y la calidad de vida de ancianos atendidos en ambiente hospitalario

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ABSTRACT

Objective: to examine for association between risk of violence and quality of life of hospitalized older adults. **Method:** in this multicenter, quantitative, cross-sectional study, conducted with 323 patients attending two university hospitals in Paraíba State, surveyed sociodemographic, risk of violence, and quality of life characteristics. The questionnaire data were analyzed by descriptive and inferential statistics using the Pearson chi-squared test, Spearman correlation test, and multiple logistic regression. **Results:** risk of violence was prevalent in older women with poor quality of life. Older adults with poor quality of life scored 5.24 times higher risk of violence (CI=3.04-9.05; p<0.001). **Conclusion:** a significant association was found between quality of life and risk of violence in older adults.

Descriptors: Nursing; Aged; Health of the Elderly; Quality of Life; Violence.

RESUMO

Objetivo: analisar a associação entre o risco de violência e a qualidade de vida de pessoas idosas no ambiente hospitalar. **Método:** estudo quantitativo, transversal, multicêntrico, desenvolvido com 323 pacientes atendidos em dois hospitais universitários da Paraíba. Foram utilizados instrumentos de caracterização sociodemográfica, risco de violência e qualidade de vida. Os dados foram analisados por estatística descritiva e inferencial, mediante o teste de qui-quadrado de Pearson, correlação de Spearman e regressão logística múltipla. **Resultados:** o risco de violência foi prevalente em mulheres idosas e com baixa qualidade de vida. As pessoas idosas com baixa qualidade de vida apresentaram 5,24 (IC=3,04-9,05; p<0,001) maior probabilidade de apresentar risco de violência. **Conclusão:** foi identificada associação significativa sob o ponto de vista estatístico entre a qualidade de vida e o risco para a violência entre pessoas idosas.

Descritores: Enfermagem; Idoso; Saúde do Idoso; Qualidade de vida; Violência.

RESUMEN

Objetivo: analizar la asociación entre el riesgo de violencia y la calidad de vida de ancianos en el ambiente hospitalario. **Método:** estudio cuantitativo, transversal, multicéntrico, desarrollado junto a 323 pacientes atendidos en dos hospitales universitarios de Paraíba. Se utilizaron instrumentos de caracterización sociodemográfica, riesgo de violencia y calidad de vida. Los datos fueron analizados mediante estadística descriptiva e inferencial, utilizando la prueba de chi-cuadrado de Pearson, correlación de Spearman y regresión logística múltiple. **Resultados:** el riesgo de violencia fue prevalente en ancianas con baja calidad de vida. Los ancianos con baja calidad de vida fueron 5,24 (IC=3,04-9,05; p<0,001) más propensos a estar en riesgo de violencia. **Conclusión:** se identificó una asociación estadísticamente significativa entre la calidad de vida y el riesgo de violencia entre los ancianos.

Descritores: Enfermería; Anciano; Salud del Anciano; Calidad de Vida; Violencia.

INTRODUCTION

According to data provided by the Ministry of Health, the aged Brazilian population consists of 29,374 million people, which accounts for 14.3% of the total population of the country. For both genders, life expectancy in 2016 rose to 75.72 years old: 79.31 for women and 72.18 for men¹. Rapid aging of this population segment generates profound implications and important challenges for society. This process should not be considered as a problem, although it does require attention to discuss the ways to deal with the phenomenon².

According to the World Health Organization (WHO), violence against older adults can be defined as “a single or repeated act, or lack of appropriate actions, occurring within any relationship in which there is an expectation of trust that causes harm or distress to an aged person”^{3:3}. This act reaches high proportions and is an important reason for injuries and deaths in this age group⁴.

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Also according to the WHO, violence can manifest itself in the following forms: physical, psychological/emotional, sexual, financial or negligence, whether intentional or not. In turn, negligence and physical violence constitute the main reasons for hospitalizations⁵. Therefore, health services are privileged spaces that can detect signs or situations of violence due to the proximity between family members and aged people in this environment and to the wide coverage that the service can offer, requiring trained and informed health professionals to take the necessary measures and provide better quality of life to older adults⁶.

Quality of life is defined by the WHO as “the individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns”^{7,8}. This is an umbrella concept that includes physical health, psychological status, independence level, social relations, personal beliefs and their relationships with the environment. It refers to a subjective evaluation contained in a given cultural, social and environmental context, which should be prioritized in health care together with this population segment.

However, violence against older adults in health care still presents weaknesses due to the professionals' difficulty finding its indicative signs accurately, which can be similar to those of unintentional injuries⁸. In addition, when it comes to Nursing as the science that provides health care for this population segment, it is essential that there is responsibility, focus and attention in providing integrality to aged people through health care, carrying out prevention measures and appropriate interventions in each situation⁹.

As Nursing is a science that provides health care to older adults in various segments and contexts, Forensic Nursing can add from specialized care for cases of violence, promoting professional training in the care of aged people in situations of violence, identifying confirmed and/or suspected cases, reporting to the correct instances and implementing appropriate interventions¹⁰.

Thus, conduction of this study is justified by the need to structure an updated national framework on issues related to violence against older adults (VAOA) and the possible repercussions on their quality of life and longevity; in addition to guiding health professionals regarding care and directing the attention to the signs indicative of violence. The objective of this study was to analyze the association between risk of violence and Quality of Life in older adults treated in hospital environments.

METHOD

This is a quantitative, cross-sectional and multicenter study developed between June 2019 and February 2020 with aged people treated at a university hospital in Campina Grande, identified in this study as UH-CG, and at a university hospital in João Pessoa, called UH-JP.

The study population consisted of 1,259 older adults. The sample was calculated according to the number of individuals admitted to each sector in July, August and September 2018 at UH-JP (n=774) and in October, November and December 2018 at UH-CG (n=385). These months were chosen because they would be the collection months in the respective services in the following year. A 5% sampling error and 60% expected frequency of the phenomenon were adopted, for a final sample of 323 participants.

As for the inclusion criteria, individuals aged at least 60 years old who were receiving hospital care in the aforementioned sectors were included in this research, excluding those who were in terminal stages, with severe communication difficulties, clinical conditions that precluded participation or serious cognitive impairment. Cognitive impairment was assessed through diverse information provided by the professionals from the sector and through an observation by the researcher, according to the knowledge acquired in the training for data collection.

At UH-JP, the collection sectors were the Medical Clinic, the Surgical Clinic, the Infectious-Contagious and Parasitic Diseases Unit, and the Geriatrics and Psychogeriatrics outpatient services. In turn, at UH-CG, collection was conducted in the following sectors: A Surgical, B Neumonology, and C and D for the female and male Medical Clinics. These sectors were chosen because they normally have prevalence of older adults undergoing treatment in relation to other areas of the hospital.

Three four-hour training sessions were held at each meeting with participation of 24 undergraduate students, nine graduate students and five professionals, all members of the institution's Forensic Nursing Studies and Research Group.

For data collection, the participants were approached in the aforementioned sectors and, after accepting the Free and Informed Consent Form, the instruments were applied in an appropriate place, which would preserve the interviewee's confidentiality and privacy. In situations where the aged person was bedridden, the companion was asked to leave to avoid bias in the study and to promote a more comfortable environment for the interviewee, as the questions were related to the risk of violence. Each interview lasted between 30 and 40 minutes.

During the meetings, the sociodemographic characterization instrument developed by the authors was used, with the following variables: gender, age, marital status, knowing how to read and write and housing arrangement and income; as well as the *Hwalek-Sengstock Elder Abuse Screening Test (H-S/EAST)* and the *World Health Organization Quality of Life - Old Mode (WHOQOL-OLD)* questionnaire.

H-S/EAST intends to identify the risk of violence in older adults. Translated and adapted for the Brazilian context, this instrument contains affirmative questions, to which scores are assigned, with the exception of questions 1, 6, 12 and 14, corresponding to negative answers¹¹. Stratification for increased risk of violence was done according to the result of three or more points in the final score. This variable was defined as the dependent variable of the study.

WHOQOL-OLD is an instrument developed by the WHO to assess Quality of Life in older adults. This instrument consists of 24 questions arranged in facets related to past, present and future activities, autonomy, sensory functioning, intimacy, death and dying, and social participation. Each facet consists of four questions with answers on a scale from 1 to 5, whose positive result is according to the higher scores, that is, the higher the result, the better the quality of life¹². This variable was analyzed according to the median, where ≤ 85 points mean low Quality of Life and higher scores indicate high Quality of Life¹³.

The data were tabulated and analyzed in a statistical software program, with previous review by two typists. Normality was determined through the Kolmogorov-Smirnov Test, verifying non-normality between the variables. Thus, the analysis was conducted using descriptive (absolute and relative frequency) and inferential (*Pearson's Chi-square Test*, *Spearman's Correlation Test* and *Adjusted Multiple Regression Model*) statistics.

The criterion adopted to include the variables in the regression model was $p < 0.2$, according to the bivariate association analysis. The regression model chosen was of the hierarchical type, gradually removing the variables with higher p-values; and significance of the final model was considered with a value below 0.05. It is noted that a 5% significance level ($p\text{-value} < 0.05$) was adopted for all the tests.

This study is part of the project entitled "Instrumentalization of Forensic Nursing in the face of care for hospitalized older adults", approved by the institution's Research Ethics Committee, in accordance with Resolution No. 466/2012.

RESULTS

The results found in the association analysis are presented in Table 1.

TABLE 1: Association between risk of violence and sociodemographic variables among older adults in hospital environments. Paraíba, Brazil, 2019-2020.

Variables	Risk of violence		p-value*	Valid sample/ Missing
	Yes n (%)	No n (%)		
Gender				
Male	67 (53.2)	59 (46.8)	0.004	322/1
Female	135 (68.9)	61 (31.1)		
Age (years old)				
≤ 70	103 (60.9)	66 (39.1)	0.486	322/1
> 70	99 (64.7)	54 (35.3)		
Knows how to read and write				
Yes	131 (59.8)	88 (40.2)	0.115	322/1
No	71 (68.9)	32 (31.1)		
Marital status				
No partner	104 (67.1)	51 (32.9)	0.109	321/2
Has a partner	97 (58.4)	69 (41.6)		
Housing arrangement				
Lives alone	21 (60.0)	14 (40.0)	0.723	322/1
Lives with relative(s)	181 (63.1)	106 (36.9)		
Income				
Up to 1 minimum wage	114 (61.0)	73 (39.0)	0.439	322/1
More than 1 minimum wage	88 (65.2)	47 (34.8)		
Quality of Life				
Low	114 (83.8)	22 (16.2)	< 0.001	316/7
High	87 (48.3)	93 (51.7)		

**Pearson's Chi-square test.*

Between the sociodemographic variables and risk of violence, it was verified that 135 older adults at risk were female (68.9%), with statistical significance ($p=0.004$). With regard to the association between risk of violence and quality of life, 114 of the aged individuals in the “at risk” category showed low quality of life (83.8%) and a respective statistically significant association ($p<0.001$).

Table 2 presents the analyses related to the risk of violence.

TABLE 2: Variables associated with the risk of violence in older adults by means of multiple logistic regression. Paraíba, Brazil, 2019-2020.

Variables	OR	CI	p-value*
Gender			
Female	1.67	1.01-2.76	0.044
Male	1.00	-	-
Quality of Life			
High	1.00	-	-
Low	5.24	3.04-9.05	<0.001

Adjusted R^2 : 0.195; OR: Odds Ratio; CI: Confidence Interval; * Significance of the test.

All the variables that obtained $p<0.2$ in the bivariate analysis, presented in Table 1 (gender, knowing how to read and write, marital status and quality of life), were included in the model. Only the “gender” and “quality of life” variables remained in the final model with significance, inferring that aged women and those with low quality of life present, respectively, 1.67 (CI=1.01-2.76; $p=0.044$) and 5.24 (CI=3.04-9.05; $p<0.001$) more chances of risk of violence (Table 2).

Table 3 reveals the results of the correlation analysis, indicating a negative and statistically significant correlation between the Quality of Life facets and risk of violence.

TABLE 3: Correlation between the scores for risk of violence and Quality of Life in the older adults. Paraíba, Brazil, 2019-2020.

Quality of Life variables	Risk of violence score	
	Correlation coefficient	p-value*
Past, present and future activities	-0.359	<0.001
Autonomy	-0.344	<0.001
Sensory functioning	-0.247	<0.001
Intimacy	-0.338	<0.001
Death and dying	-0.241	<0.001
Social participation	-0.315	<0.001
Quality of Life total score	-0.484	<0.001

*Spearman's correlation test.

The higher coefficient between the past, present and future activities stands out ($r=-0.359$; $p<0.001$). Regarding the total score, this inversely proportional relationship is also verified, as the higher the Quality of Life level, the lower the risk of violence and vice-versa ($r=-0.484$; $p<0.001$).

DISCUSSION

The “gender” variable presents some discrepancy in the literature that investigates the same theme. Corroborating the data presented, the female gender is the main target or the risk of violence, predominating as a social event present in all life stages of women^{4,5,14,15}. However, in other studies analyzed, higher risk or even actual cases of violence were prevalent in the male gender^{6,8}.

In females, the risk of violence starts earlier due to the social stigma related to women's position as housewives, making them more susceptible to suffering physical and sexual violence in the domestic environment^{4,8}; differently from what happens with men, who have been socially active for longer and show greater vulnerability to the external risks and/or types of violence than to domestic ones, the latter occurring at more advanced ages when compared to women of the same age¹⁰.

It was observed that aged people with low quality of life were five times more likely to be at risk of violence, highlighting females as the main individuals affected^{4,5,14,15}.

Regarding the Quality of Life assessment facets, “past, present and future activities” portrays satisfaction with achievements made and future hopes related to aging. A number of authors revealed that aged people showed low expectations for the future and presented regret/sadness when commenting on their previous years of life, which can be related to loss of autonomy and to the presence of depressive feelings, making them more vulnerable to the different types of violence¹⁶.

Autonomy refers to the decision-making right and can reduce self-esteem and independence and, consequently, result in lower Quality of Life level among older adults^{13,17}. The limitations imposed by age in the physical and psycho-emotional aspects, insufficient information and lack of financial independence are factors that can significantly affect this facet, minimizing it and making this aged person dependent, which can worsen quality of life and increase the risk of violence, translated into abandonment and/or negligence¹⁴.

Regarding intimacy, it evaluates the ability for personal and intimate relationships. According to a study carried out in a municipality from Santa Catarina, the mean rates of this variable in individuals without depression were higher from a statistical point of view when compared to aged people who had depressive symptoms. In view of this, the greater the degree and forms of intimacy throughout aging (whether in the social, sexual or family aspect), the better the quality of life and the lower the risks of loneliness and depression, aspects that predispose to the risk of violence¹⁷.

According to authors that analyzed similar correlations, it was possible to identify an association between the “death and dying” variable - perceptions that the aged person expresses about death - and presence of chronic diseases¹⁶. Thus, it is possible to infer that the greater the longevity degree, the greater the feeling of proximity to death and the respective disabilities that diseases can produce, including dependence and loss of autonomy over their own lives, leaving them more fearful about the future¹⁸.

This fear is probably related to functional dependence, which tends to install as a result of the pathology, requiring a caregiver. The literature also indicates that the more comorbidities and disabling factors in older adults, the higher the risk of in-hospital negligence and abandonment and the lower the Quality of Life^{8,10}. Furthermore, if an older adult is under the responsibility of a caregiver, the risk of violence is also present due to the stress and overload situations faced by this professional.

As for social participation, understood as the inclusion and coexistence of an aged person in community activities, a national study showed a greater risk of violence in older adults who stayed longer in the family environment, given that the rates of violence against this population segment are perpetrated by their own family members, reasserting other data discussed in the current study⁸.

Regarding sensory functioning, impairment of the senses coincides with the senescence process, in which physiological declines reflect significant harms for older adults, especially in activities of daily living, autonomy, personal interactions and low quality of life¹⁹. In fact, such repercussions predispose to the risk of violence, mainly due to functional dependence and to the caregivers' misunderstanding about sensory decline.

In the meantime, while violence against older adults is configured as a public health problem, affecting the social, environmental and political spheres, it is necessary to expand the theoretical framework to health professionals regarding the identification of risks of violence and/or of violence itself. As Nursing is the profession that has contact and interaction for a longer period of time with the patients, knowledge of forensic sciences can contribute to identification, recognition and intervention in concrete cases.

Therefore, this specialty can act not only in the isolated occurrence of violence, but also in the promotion of positive attitudes towards aging, violence prevention through dialogue and information for older adults and families, in addition to the perception of early suspicions that can arise during screening or consultation with these individuals. Therefore, Forensic Nursing has much to add and intervene so that promotion of Quality of Life is implemented in the aforementioned facets, in a comprehensive way and at all health care levels¹⁰.

In addition, given the complexity surrounding VAOA, it is essential that there is also an interdisciplinary and intersectoral approach, with integrated public policies that enable communication between bodies related to the protection of aged individuals and that culminate in guarantee of rights and improvement in the quality of life of this population segment with increasingly emerging needs.

The potential of Nursing in relation to the theme is highlighted, as it is the nurses' duty to welcome and obtain diverse information taking into account the users' context. Allied to qualified listening, nurses' scrutiny can early detect the risks for situations of violence.

It is up to the professionals to act on the prevention of these problems through guidelines on the care to be provided to older adults. Through the diverse information collected in the Nursing history, it is possible to outline Nursing diagnoses and interventions converging on fighting against maltreatment and on planning actions with the aged person's family. To such end, it becomes necessary that nurses have in their training the ability for the processes of identification, notification and referral of victims and critical reasoning aimed at solving the problem. Such actions characterize part of comprehensive care for people, in terms of the principle advocated by the Unified Health System (*Sistema Único de Saúde, SUS*).

Study limitations

As limitations, the absence of comparative studies that analyze the variables related to the risk of violence and quality of life can be reported, as well as the difficulty to properly work with all the confounding variables due to the relational interference between them.

CONCLUSION

The risk of violence was present in female older adults and in those with low Quality of Life, indicating a significant association between these variables. In addition, it was possible to identify a significant negative association between the risk of violence and the Quality of Life facets.

Nurses enjoy a privileged role in terms of identifying the risk of violence and handling it together with the victims after its consummation. For effective prevention, promotion and recovery regarding this theme, better training and specialization of these professionals is necessary, as well as of the multiprofessional team to understand and effectively and timely intervene in the problem.

Given the low number of recent research studies on the subject matter discussed, surveys with a broader focus in more regions of the country are necessary to stimulate the production of new and updated public policies aimed at improving older adults' Quality of Life and securing their rights, in addition to better grounds and direction for the health professionals who will take care of aged people, with quality of life and longitudinality of aging preserved.

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