

# Evaluation of frailty and social support of the elderly in the context of social vulnerability: a study in rural area

## Abstract

**Background:** With the increase in longevity, the prevalence of frailty in the elderly leading to significant impacts social, family, and financial, health, which makes it necessary to focus on the context of the elderly and their care demands.

**Objective:** Evaluate the frailty and the social support of elderly registered in basic social services in rural areas.

**Methods:** Cross-section, descriptive and quantitative study. Participated in the study, people aged 60 or more years registered in a Reference Center for Social Assistance. It was used a questionnaire to identify basic, Edmonton Frailty Scale, Genogram, and Ecomapa. The data were analyzed descriptive and univariate. All ethical principles were respected and the research was approved by the Federal University of São Carlos (Number Opinion: 1505133).

**Results:** There was a predominance of women participants (70%), with an average age of 68.2 ( $\pm$ SD:6.8). In relation to frailty, 46.6% of respondents were not frail. As regards the social support of the elderly with the family and the community, it was observed that the majority of elderlies reside only with the spouse (33.3%) and had external relationship with family and church (53.3%).

**Conclusion:** The study identified the need for evaluations, investigations and interventions in rural area, in particular the elderly enrolled in the basic social service. There is a gap in the literature about the studies with elderly people in rural areas and in the context of vulnerability. It is evidenced the need for redirecting public policies with a view to integrated care.

**Keywords:** frailty elderly, social support, social vulnerability

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Fernanda Karoline Generoso,<sup>1</sup> Isabela Thaís Machado de Jesus,<sup>2</sup> Marisa Silvana Zazzetta<sup>1</sup>

<sup>1</sup>Department of Gerontology, Federal University of São Carlos, Brazil

<sup>2</sup>Graduate Program Nursing, Federal University of São Carlos, Brazil

**Correspondence:** Isabela Thaís Machado de Jesus, Federal University of São Carlos, Brazil, Tel +551634112081, Email isabela.machado1@gmail.com

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**Abbreviations:** EFS, edmonton frail scale; CRAS, reference center of social assistance; IPVS, paulista index of social vulnerability

## Introduction

Individuals living in larger contexts of social vulnerability, with worse financial conditions, lower level of education, less access to health services and lack of social support, tend to have a more frailty health condition.<sup>1</sup> Population studies socially vulnerable elderly sectors gain particular relevance when it is necessary to know the situation of older persons registered in basic social services and redirect public policies for integrated care to the elderly, as a form of assistance and social support to the families.

## Materials and methods

Cross-section, descriptive and quantitative study. The elderly respondents were residents of a rural area, located in a district in the State of São Paulo in Brazil. Participated in this study 30 elderly with 60 years or more, registered in a Reference Center for Social Assistance (CRAS). All elderlies resided in an area of high social vulnerability, identified second São Paulo Social Vulnerability Index (IPVS), based on socio-economic and demographic dimensions.<sup>2</sup> Active search was carried out in homes of the elderly and all the interviews occurred at home. Data collection was carried out from July

to september 2016, from monday to friday during business hours. A questionnaire was used to characterize sociodemographic, Edmonton Frailty Scale (EFS) to identify the level of frailty, Genogram to check people who the elderly residents and Ecomapa to check the amount of external relationship. The data were analyzed by statistical program Statistical Package for the Social Science version 15.0, descriptive and univariate form. All ethical principles were respected and the research was authorized by the ethics of Research Committee of the University (Number Opinion: 1505133, April 18, 2016, CAAE: 55016716900005504).

## Results and discussion

Of the 30 elderly participants, 21 were of the female gender (70%) and 9 male (30%) with average age equal to 68.2 years ( $\pm$ SD: 6.81), mostly referred as white color (56.6%). In relation to the marital status, 60% were married, with regard to religion, the majority were Catholics (83.3%), 56.6% the participantes were retired, there was a prevalence of low educational level (73.3%). Among the results of characterization is that schooling in the brazilian context is reflected by aspects of social inequality and schooling a limiting factor for the survival and quality of life of the population.<sup>3</sup> In addition, elderly people with low schooling may have mental health problems, chronic conditions Table 1, as well as social exclusion, less access to information and unfavourable socio-economic conditions.<sup>4</sup>

**Table 1** Distribution of sociodemographic variables, level of frailty and social support identification of elderlies enrolled in the CRAS, São Carlos, SP, 2016, (n=30)

Variables	Categories	N (%)
Gender	Female	21(70)
	Male	9(30)
Age	60-69	20(66.6)
	70-79	8(26.6)
	80-89	2(6.6)
Ethnicity	White	17(56.6)
	Black	6(20)
	Brown	7(23.3)
	Married	18(60)
Marital status	Widower	9(30)
	Single	1(3.3)
	Separated	1(3.3)
	Divorced	1(3.3)
Religious	Catholic	25(83.3)
	Gospel	4(13.3)
	No have	1(3.3)
Current Occupation	Retirees	13(43.3)
	No retirees	17(56.6)
	Illiterate	7(23.3)
Schooling	1 – 4 years	22(73.3)
	5 years or more	1(3.3)
	No Frail	14(46.6)
Level of frailty	Apparently vulnerable	7(23.3)
	Mild	4(13.3)
	Moderate	2(6.6)
	Severe	3(9.9)
Live with	Spouse	10(33.3)
	Son	6(20)
	Grandson	5(16.6)
	Alone	3(10)
External relationship	Others	6(20)
	Family house and Church	16(53.3)
	Family house and Service of health	14(46.6)

As for the evaluation of frailty, there was indicative of the elderly not frail in a proportion of 46.6%. Elderlies who are in a situation of social vulnerability are suffering, in addition to the clinical factors

influences, social issues as minors financial conditions, education, access to health services and lack of social support may be closure to the development of frailty accompanied by physical, functional and comorbidities.<sup>5</sup> In vulnerableregions, where the population is the user of social services, accessibility in service is punctual and specific manner, in search of troubleshooting.<sup>6</sup> Such aspects include other issues such as family structure, relationship, and social support that this elderly person receives. It highlights the need for monitoring of frailty because may result in adverse outcomes such as falls, hospitalization, institutionalization, and death.<sup>7</sup>

To identify the family composition of the elderly in this study, through the Genogram, it was possible to identify that 33.3% of elderlies lived with a spouse, followed by 20% who lived with the son. In this study also checked the external relationships elderlies, it was evidenced that 53.3% of elderlies reported that the main external relationship were visits to the homes of family and church. The highest percentage of elderly living only with the spouse in rural areas may be associated, in the brazilian context, the migration of adults to the cities in search for a better job opportunity and more satisfactory living conditions.<sup>8</sup> With regard to external relationships, in this study, can verify relation with family members. Such data reflect the importance of map what families need to be strengthened and oriented to provide support for the elderly according to its peculiarities, being the social support to help source of resources obtained by social relations. As a limitation of the study, highlight the transversal cut did not establish causality between the explanatory and outcome variables. The sample size may limit the generalization of the results since in active search a large number of expected losses and refusals.

## Conclusion

This study made it possible to evaluate the frailty and the social support of the elderly in the rural area, considering the context of high social vulnerability. Although it wasn't presented frailty between elderlies and presented social support, the results should arouse attention to public managers to the need to meet the frailty as a way to aid the implementation of actions directed to the long-term care, enabling advances in decision making in primary care services.

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## Conflict of interest

The author declares no conflict of interest.

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