



Resilience in In-Home Caregivers of Older Adults during the COVID-19 Pandemic*

Elizabeth Fajardo Ramos^a ■ Martha Lucia Núñez Rodríguez^b ■ Angela Maria Henao Castaño^c

Abstract: Objective: This study aims to identify the resilience level in formal and informal in-home caregivers of older adults in Ibagué during the COVID-19 pandemic. **Methods:** Quantitative, descriptive, cross-sectional study with a convenience sample of 49 formal and informal in-home caregivers of older adults. We administered the Brief Resilient Coping Scale (BRSC), an instrument consisting of four items, to these caregivers. The questionnaire was self-completed and, in some cases, answered by telephone. The data were collected in April 2020. **Results:** 35 women and 14 men participated in this study. The formal (69.4%) and informal caregivers, mostly family (30.6%), were between 18 and 30 years old (65.30%). Their resilience levels were high (16.3%), moderate (61.3%), and low (22.4%). There was a significant association between caregiver type and resilience level ($p \leq 0.05$). Other studied covariates did not show a significant association. **Conclusions:** Due to stressful situations caused by care during social isolation and the risk of death of the elderly by COVID-19, strategies to improve resilience related to emotional, cognitive, and sociocultural interventions in the caregiver should be considered.

Keywords: Resilience; elderly; caregiver; COVID-19; formal caregiver; family

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a MSN. Nurse. Full professor, Universidad del Tolima. Ibagué, Colombia.

E-mail: efajardo@ut.edu.co

ORCID: <https://orcid.org/0000-0002-3484-1620>

b MEd. Cardiorespiratory Nursing Specialist. Nurse. Associate professor, Universidad del Tolima. Ibagué, Colombia.

E-mail: mnunez@ut.edu.co

ORCID: <https://orcid.org/0000-0002-2012-6554>

c PhD in Nursing. MEd. Critical Care Nursing Specialits. Assistant professor, Nursing School, Universidad Nacional de Colombia. Bogotá, Colombia.

E-mail: angmhenao@unal.edu.co

ORCID: <https://orcid.org/0000-0003-4203-0016>

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Resiliencia en cuidadores en casa de adultos mayores durante la pandemia del COVID-19

Resumen: Objetivo: este estudio tiene como objetivo identificar el nivel de resiliencia en cuidadores formales e informales de adultos mayores en el hogar en Ibagué durante la pandemia del COVID-19. **Métodos:** estudio cuantitativo, descriptivo y transversal con una muestra de conveniencia de 49 cuidadores formales e informales de adultos mayores en el hogar. Aplicamos la Escala Breve de Afrontamiento Resiliente (BRSC), un instrumento que consta de cuatro puntos, para estos cuidadores. Ellos mismos completaron el cuestionario y, en algunos casos, lo respondieron por teléfono. Los datos se recopilaron en abril de 2020. **Resultados:** 35 mujeres y catorce hombres participaron en este estudio. Los cuidadores formales (69,4 %) y los cuidadores informales, en su mayoría familiares (30,6 %), tenían entre 18 y 30 años (65,30 %). Sus niveles de resiliencia fueron altos (16,3 %), moderados (61,3 %) y bajos (22,4 %). Hubo una asociación significativa entre el tipo de cuidador y el nivel de resiliencia ($p \leq 0,05$). Otras covariables estudiadas no mostraron una asociación significativa. **Conclusiones:** debido a las situaciones de estrés causadas por la atención durante el aislamiento social y el riesgo de muerte de los adultos mayores por COVID-19, se deben considerar estrategias para mejorar la resiliencia mediante intervenciones emocionales, cognitivas y socioculturales en el cuidador.

Keywords: resiliencia; adulto mayor; cuidador; COVID-19; cuidador formal; familia

Resiliência do cuidador domiciliar da pessoa idosa durante a pandemia da COVID-19

Resumo: Objetivo: o objetivo deste estudo é identificar o nível de resiliência de cuidadores domiciliares formais e informais de idosos maiores no lar em Ibagué, Colômbia, durante a pandemia ocasionada pela COVID-19. **Métodos:** estudo quantitativo, descritivo e transversal, com uma amostra de conveniência de 49 cuidadores domiciliares formais e informais de idosos. Aplicamos a Escala Breve de Enfrentamento Resiliente, um instrumento que consta de quatro artigos, para esses cuidadores. O questionário foi respondido por eles mesmos e, em alguns casos, por telefone. Os dados foram coletados em abril de 2020. **Resultados:** 35 mulheres e 14 homens participaram deste estudo. Cuidadores formais (69,4 %) e cuidadores informais, em sua maioria familiares (30,6 %), tinham entre 18 e 30 anos (65,30 %). Seus níveis de resiliência foram altos (16,3 %), moderados (61,3 %) e baixos (22,4 %). Houve uma associação significativa entre o tipo de cuidador e o nível de resiliência ($p \leq 0,05$). Outras covariáveis estudadas não apresentaram uma associação significativa. **Conclusões:** devido às situações de estresse causadas pelo atendimento durante o isolamento social e ao risco de morte de idosos por causa da COVID-19, devem ser consideradas estratégias para melhorar a resiliência com relação às intervenções emocionais, cognitivas e socioculturais no cuidador.

Palavras-chave: resiliência; pessoa idosa; cuidador; COVID-19; cuidador formal; família

Introduction

Formal and informal caregivers of the elderly with different dependency levels exhibit some degree of overload. Currently, when the COVID-19 pandemic threatens many human lives, especially the elderly who, in many cases, require permanent care according to their underlying disease, makes the caregivers' environment and feelings turn into fear and uncertainty. They must also face several challenges related to communication, compassion, and less-than-ideal care environments because of this pandemic (1).

Evidence suggests that two population groups are at an increased risk for severe COVID-19: people over 60 and people with chronic health conditions (chronic heart disease, diabetes, chronic respiratory disease, or cancer) (2). Colombia's coronavirus fatality rate rises daily: 26.62% in 60–69-year-olds, 27.64% in 70–79-year-olds, 13.31% in 80–89-year-olds, and 5.46% among those over 90 years old. In Colombia, 73.03% of the deceased are over 60 years of age (3). In Spain, the number of deceased older adults until April 7 was 5,263 (17.5%) in hospitals and 4,343 (82.5%) in their homes. According to the same report, 13% of older people institutionalized in geriatric and protection centers have died in that country (2).

In China, formal caregivers of older adults with dementia in nursing homes experienced double stress related to fear of infection and concerns about residents' condition. Their anxiety level also increased; they developed signs of exhaustion after one month of total isolation (4).

The caregiver's role varies according to the care receiver's illness. The evidence shows that caregivers of people with dementia have a high burden of care, especially women. Although women reported more time providing care than men, the women's increased burden levels may also be explained by sociocultural differences in women's demands to assume primary care responsibilities. Male caregivers may be less attentive to their emotions, failing to recognize or report distress, or women may apply less effective coping strategies to relieve distress (5). The risk factors experienced by dementia caregivers included stress, challenging and demanding caregiving, frustration, lack of social

support, and negative feelings (mainly sadness and anger). These data suggest that some stages during care can ultimately result in negative emotions (6).

Caregivers' needs include:

- a) implementing tailored interventions to address their demands and those of the patient;
- b) incorporating caregiver input into care plans given the impact of caregiving on their lives;
- c) following up on and reviewing the care plan regularly to support proactive versus reactive care;
- d) considering the implementation of self-managed neighborhood teams involving weekly team meetings and technology to support coordination and overcome continuity problems in care providers and team communication challenges;
- e) providing coordination, follow up, and financial support for respite care;
- f) providing system navigation and an easily retrievable hard copy list of relevant health and community services to support patients and their caregivers, and
- g) offering more patient support to reduce caregiver burden (7).

The caregiver claims to be able to rely on their experience and requires increasing individual strengths because, in many cases, they are family caregivers. Nhongho defines the caregiver's capacity as the "potential of the adult person who assumes the role of primary caregiver of a family member or an important person in a situation of disability" (8). When speaking of family or informal caregivers, reference is made to adult relatives or close friends who assume the responsibilities of caring for a loved one who lives with a chronic disabling disease and participate with him/her in decision-making. They carry out or supervise daily life activities seeking to compensate for the care receiver's existing dysfunctions (9).

It is essential to understand the resilience that formal and informal caregivers of older people are demonstrating now in their homes. Resilience is understood as a person's ability to recover from

adverse situations, stress, threat, or mourning using tools at the individual and social levels, emerging restored from this situation and contributing positively to their sociocultural context (10). Resilience is also defined as “a dynamic process that results in positive adaptation in contexts of great adversity” (11). This concept is not only attributed to individual models of coping with adversity but can be contextualized within families and communities (12). This definition distinguishes three essential components that must be present in the concept of resilience: a notion of adversity or threat to human development, the positive adaptation to adversity, and the process that considers the dynamics between emotional, cognitive, and sociocultural mechanisms.

Protective factors for resilience are recognized as influences that modify, improve, or alter a person’s response to some hazard that predisposes him/her to a non-adaptive outcome. Among the conditions that promote resilience are social support, the assessment of stressors, the style of coping used during care (13), and emotional intelligence. The latter is understood as the people’s ability to recognize, understand, and regulate their own emotions and those of others, discriminate between them, and use the information to guide thoughts and actions (14-15). Resilience internal factors reported in the literature are having a positive attitude, spirituality, and religiosity. The external factors include the theoretical premise that resilience is an ecological process expressed and affected by multilevel attachments involving families, schools, and communities (16).

Resilience is a multifaceted response to the caregiver’s role and is influenced by many interrelated factors (17). It is associated with developing skills such as control over memories of a traumatic situation, integrating memory and emotion, regulating trauma-related emotions, controlling symptoms, self-esteem, internal cohesion, establishing safety signs, understanding the impact of trauma, and achieving a positive meaning (18). Likewise, resilience positively affects physical health, improves survival and mental health, and significantly reduces the risk of developing depression, anxiety, and stress (19).

Resilience research has shown that as people age and develop, they tend to learn to deal more effectively with negative emotions in stressful situations. It has also been shown that more resistant people tend to extract positive coping strategies from difficult situations (20).

The study of resilience in formal and informal in-home caregivers of older people arises from observing their situation of confinement and social isolation and what the process of assisting a care-dependent person implies. This role poses difficulties in daily activities, with negative psychological aspects when dealing with life-threatening conditions.

Methods

This descriptive cross-sectional study has a quantitative approach. It has a sample of 49 formal and informal in-home caregivers of older people in Ibagué; they were selected for convenience and decided to participate after understanding the study’s nature and objectives. Initially, the researchers interviewed the participants face-to-face and, in some cases, by telephone call, after following the research protocol and signing the informed consent. The following instruments were used to collect the information:

- A sociodemographic information protocol designed for this study to collect data about gender, age, time as a caregiver, comorbidity of the care receiver, and caregiver type
- The Brief Resilient Coping Scale (BRCS) by Sinclair and Wallston (21-22), which assesses individuals’ ability to cope with stress adaptively. It has a one-dimensional measure made up of four items. The original version presented a Cronbach’s alpha coefficient (as an internal consistency measure) of .69, a test-retest correlation coefficient of .71, and good adjusted goodness of fit index ($\chi^2 = 2.13$, $p = .03$, $CFI = .99$, $SRMR = .02$, and $RMSEA = .01$). The items were scored on a Likert-type scale from 1 (does not describe me at all) to 5 (describes me very well). Final scores ranged between 4 and 20. For this study, we used Limonero’s translation (23).

- The Barthel index as a measurement instrument for the person’s ability to carry out ten basic daily life activities, obtaining a quantitative estimate of the dependency level. The activities are rated differently, assigning 0, 5, 10, or 15 points. The global range can vary between 0 (total dependence) and 100 points (independence) (24).

We carried out the analysis of the information through the BRCS variables. The qualitative variables were presented as the distribution of absolute and relative frequencies, and the quantitative ones as measures of central tendency, *SD*, and variation. The groups’ normality was tested with the Kolmogorov-Smirnov test. We performed the Student’s t-test when both groups presented data with normal distribution and the Mann-Whitney or Kruskal-Wallis test when asymmetric. For all analyses, we considered a significance level of $\leq .05$. The information was processed through *SPSS* (Statistical Package for the Social Sciences) 22.0. The study was carried out in April 2020 and approved by the ethics committee and Resolution 8430/1993, which regulates research in Colombia (25).

Results

Firstly, we studied sociodemographic variables. There were 35 female (71.4%) and 14 male (28.6%) caregivers of working age; 69.4 % were formal caregivers (healthcare professionals) and 30.6% informal caregivers (family). This distribution corresponds to a visible phenomenon in the Colombian context that explains reduced birth rates, smaller households, and family verticalization that have decreased the number of formal caregivers in some socioeconomic levels (26).

Among older adults’ comorbidities, non-transmissible chronic diseases are in the first place, followed by neurological diseases. The Barthel index showed 30.6% of older adults with severe dependence. Regarding time as a caregiver, we found that 30.6% have performed this task for 1 to 2 years. We tried to establish a relationship between the caregiver’s sociodemographic characteristics, the degree of dependency of the older adult receiving care, and

the caregiver’s resilience level, finding no statistical significance (see Table 1).

Table 1. Sample characteristics

Item	Frequency	Percentage
Gender		
Female	35	71.4
Male	14	28.6
Age		
18-30 years old	32	65.30
31-43 years old	9	18.4
44-56 years old	5	10.2
57-68 years old	2	4.1
More than 68 years old	1	2
Care receiver diseases		
High blood pressure	8	16.3
Diabetes mellitus	5	10.2
Cancer	7	14.3
Alzheimer’s disease	2	4.1
Arthritis	3	6.1
Parkinson’s disease	3	6.1
Kidney failure	4	8.2
Stroke sequels	4	6.8
Intellectual disability	2	4.1
Neurological diseases	6	12.2
Osteomuscular diseases	5	10.2
Barthel index dependence level		
Total dependence	7	14.3
Severe dependence	15	30.6
Moderate dependence	9	18.4
Slight dependence	12	24.5
Independence	6	12.2
Time as a caregiver		
1-2 years	15	30.6
3-4 years	11	22.4
5-6 years	10	20.4
More than 7 years	13	26.5

Caregiver's relationship with the care receiver		
Mother	4	8.2
Son	9	18.4
Wife	1	2
Another relative	1	2
Caregiver	34	69.4

Source: Own elaboration.

Regarding the BRCS, the mean was 14.39 and the variance 6.95, with a Cronbach's alpha of .69 for four items. The caregiver resilience level indicates that it is moderate in 61.2% of the participants. However, it should be considered that caregivers are mostly formal; therefore, they do not have a family relationship with the older adult they take care of. Table 2 lists the results of the different resilience levels.

Table 2. Caregiver resilience levels

Resilience level	Frequency	Percentage
Low resilience	11	22.4
Moderate resilience	30	61.2
High resilience	8	16.3
Total	49	100

Source: Own elaboration.

An attempt was made to identify a relationship between gender and resilience levels, finding that 70% of women have a moderate resilience level, while in men, it reaches 30%. These data coincide with studies aimed at evaluating resilience by gender. It is striking that the study by González, Arriata, and Valdés (27) found that women require external support to be resilient (Table 3).

Table 3. Caregiver resilience levels and gender

Gender	Low resilience	Moderate resilience	High resilience	Total
Female	7	21	7	35
	63.60 %	70.00 %	87.50 %	71.40 %
Male	4	9	1	14
	36.40 %	30.00 %	12.50 %	28.60 %

Source: Own elaboration.

The relationship between caregiver type (formal and informal) and the caregiver resilience level had a significance level of $p < .05$. In other words, a relationship is established between caregiver type and resilience level, considering that, in this study, 69.4% were formal caregivers (professional) of working age that have been serving as such for 1–2 years (Table 4).

Table 4. Correlation between resilience level, gender, and caregiver relationship

		Resilience level	Gender	Caregiver type
Resilience level	R.	1	-.156	-.241
	Sig. (bilateral)		-.156	* .055
Gender	R.	-.156	1	.188
	Sig. (bilateral)	.284		.196
Caregiver type	R.	-.241	.188	1
	Sig. (bilateral)	* .055	.196	

Note. *Statistical significance $p < .05$ (bilateral)

Source: Own elaboration.

Discussion

The present study finds a significant association between caregiver type (formal and informal) and resilience levels. Formal or professional caregivers exhibited a moderate resilience level. These results are like other studies that found that the act of caring, even if assumed by a professional caregiver, involves an emotional burden when empathizing with the cared person. Such studies highlight the relevance of approaching care from the ethical principles of respect for autonomy, beneficence, and non-maleficence (28).

New bioethical and philosophical approaches to the elderly's crucial social value in different societies are proposed from research and reflection. In the best scenario, these approaches will help recognize their intrinsic value as human beings to grant them their owed respect and a context that does not make them fear the future (29).

These combined elements reflect the need for formal caregivers, duly trained and empowered,

who achieve higher resilience levels (30). On the other hand, being a professional caregiver helps face tense situations differently, compared to informal caregivers (especially family members) who show many risk factors such as increased caregiver burden and low resilience (31).

A severe dependence level due to the care receiver's pathologies, the heavy physical, psychological, and emotional demands of the act of caring, and any changes in the caregiver's dimensions cause anguish. However, this condition significantly reduces when promoting resilience (32-34). Literature focuses on informal or family caregivers' resilience, especially when taking care of people with dementia (35) and Alzheimer's disease (36-37), and their high depression, anxiety, hopelessness, emotional burden, stress, and anguish levels.

Adopting the role of caregiver and being able to accept the situation in everyday life has been described from qualitative research by family caregivers, based on broad categories ranging from "the onset of symptoms" to "the need for the person not to lose their essence" and "restoring hope" (38). These remarks show the importance of the time elapsed from the moment the caregiver role is assumed for the mental development of passive coping strategies focused on the problem, such as problem avoidance, wishful thinking (39), and higher resilience levels (40).

In addition to the documented factors, the family caregiver's typical profile is a woman over 57 years of age, stay-at-home spouse, relative in the first degree of consanguinity, economically dependent, and with a low education level (41-42). The caregiver's age is a variable of great interest in this study because most of them were adults of working age and professional caregivers who received compensation for this activity; this group showed a moderate resilience level. Besides, research that has characterized resilience at different stages of the life cycle, supported by psychology, reports that adults are the most resilient group regarding their emotional regulation and problem-solving skills (27), added to self-esteem and emotional intelligence, which have been well-documented as modulating factors of resilience (43). These factors could directly impact how caregivers face

challenging situations that require early identification and treatment of patients' emotional and physical needs (44).

The caregivers' context during the COVID-19 pandemic has changed, adding another stressor to their daily activities. Altogether, human talent specialized in geriatric care should be present in all settings, starting with primary care units (which have not been given enough attention, while high budgets are allocated mainly to hospitals and clinics). Even though the significance of hospital care services is recognized, efforts to promote health, especially for older adults and their caregivers, are no less important (45).

Nurses have made vital contributions to knowledge construction with their medium-range theories to address care in life-threatening situations such as the one currently faced. These theories identify resilience threatening factors, either in the caregiver or in the elderly, to obtain better responses from each person facing adversity and, thus, strengthen their capacities, guaranteeing better results in daily interventions (46-47). This pandemic has highlighted the priority of giving primary care the possibility of strengthening external resilience protective factors with well-designed social support programs (48-49).

The main limitation of the study is the use of non-probabilistic sampling. However, this study focuses on the professional caregiver resilience who, despite being paid, may be at risk of developing occupational burnout during this pandemic and in other stressful situations (50).

Conclusions

Resilience is a dynamic process over time and results from the combination and interaction between internal and external factors, such as the family, social, and cultural environments, which facilitate overcoming risk and adversity constructively and promote new resilience factors in previous stages.

It is crucial to learn from the experiences after the outbreaks of this disease, older adult care during the COVID-19 pandemic (as it has tested the caregiver's resilience level and coping strategies), and the health systems' ability to establish

more effective care procedures, from health promotion, focused on caring for the caregiver when an additional stressor becomes part of their daily life.

Caregivers of older people are generally subjected to chronic stress, even more so in pandemic times due to the social isolation and risk of death of older adults caused by COVID-19. This situation has considerable repercussions on physical and emotional health, which in most cases affect caregivers' resilience level, hence the need to design and implement specific interventions to strengthen the spiritual, emotional, cognitive, and socio-cultural dimensions.

The literature repeatedly shows that informal caregivers are mostly women, stay-at-home moms, daughters, or wives of the person receiving care. Due to reduced birth rates, smaller households, and family verticalization, the number of formal caregivers in some social levels has decreased, clearly showing the feminization of care for older adults.

Formal caregivers must face multiple stressors at both work and personal levels, giving them a high emotional burden affecting their adjustment to the work environment, just like informal caregivers. However, the specific role of caring as an occupation (receiving a salary and meeting a schedule), added to the current pandemic situation, makes the work differ considerably from the one carried out by informal caregivers. This situation can affect caring for the elderly and the resilience level, which requires more robust support systems in this new scenario. Women's resilience level is significantly higher; however, they require external support from a strong family network to become resilient.

Caregivers' resilience levels are not directly related to age ranges. There is only a significant difference between caregivers aged 19–24 years who report high resilience scores and adults aged 46–55 years who reported low levels. The study results contribute to clinical trials that explore strategies to strengthen caregivers' resilience.

The COVID-19 pandemic made visible the need to strengthen caregivers' external resilience

protective factors by designing and implementing relevant social support programs according to the country or world conditions.

Research during this pandemic must contemplate different variables that caregivers have and know the role that resilience plays at present, in which lifestyle and family dynamics are no longer the same. Adults are the most resilient group regarding emotional regulation and problem-solving skills. These skills are critical in events older adults must face, such as losing loved ones, the appearance of illnesses, disabilities, loss of autonomy, retirement, and financial losses. Such situations could make people design new life guidelines and strategies to overcome crises. Self-esteem, emotional intelligence (documented as resilience modulating factors), and how this contingency could be managed are crucial factors in maintaining a good emotional condition and can directly impact how caregivers face challenging situations that require early identification and treatment of the elderly's emotional and physical needs.

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Conflict of interest

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