



## SCIENTIFIC ARTICLE

# Anxiety, stress and depression in family caregivers of the mentally ill

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### KEYWORDS

Mental health;  
Informal caregiver;  
Anxiety;  
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Stress

### Abstract

**Background:** The current policy guidelines on mental health aim to keep the mentally ill within the community, with the development of social support, including families, hence the emergence of the role of the family caregiver.

**Objectives:** To identify socio-demographic variables influencing anxiety, depression and stress for the informal caregivers of the mentally ill; to determine the influence of family background variables on caregiver anxiety, depression and stress; to analyse the relationship between social support and caregiver overload with caregiver anxiety, depression and stress.

**Material and methods:** Cross-sectional, descriptive and correlational study with 104 caregivers, mostly female (62.5%), aged between 22 and 77 years with a mean age of 52.03 years. The following were used as instruments: the Family Appgar Scale; the Satisfaction with Social Support Scale (ESSS); the Caregiver Overload Scale (ESC); the Anxiety, Depression and Stress Scales (EADS-21).

**Results:** We found that females have higher rates ( $P < .05$ ) of anxiety, depression and stress; participants with less education have more anxiety than those with higher and secondary education ( $P = .001$ ); caregivers living in rural areas have higher levels of depression ( $P = .044$ ) and stress ( $P = .041$ ); those who perceive belonging to families with marked dysfunctions have higher levels of depression ( $P = .0001$ ) and stress ( $P = .000$ ); the higher the overload, the higher the levels of anxiety ( $P = .002$ ), depression and stress ( $P = .000$ ).

**Conclusions:** It is necessary to develop strategies for local and community intervention to promote mental health and prevent mental illness.

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## Introduction

Informal caregivers assume a primary role in society, with significant implications in economic, social and human terms.<sup>1</sup>

This caregiver becomes vulnerable to psychological disorders and may suffer a breakdown due to tension or overload and present symptoms such as stress, frustration, reduced social interaction, anxiety, depression and reduced self-esteem, among others. These factors can lead<sup>2</sup> to physical, psychological, emotional, social and financial problems.

Working with patients and their families<sup>3</sup> is a process that aims to provide the informal caregiver with the support and necessary guidelines to motivate the patient and caregiver and achieve their active participation in the therapeutic process with improvements to the patient's and family's quality of life.

## Material and methods

This research is quantitative, cross-sectional and descriptive-correlational, with a sample of 104 family caregivers, 65 females and 39 males with an average age of 52.03 years. A questionnaire was used on socio-demographic characteristics and the caregiver's family background as well as scales built by other researchers, already translated and verified for the Portuguese population, namely the Scale of Satisfaction with Social Support (ESSS) by Pais-Ribeiro, 1999, the Caregiver Overload Scale (ESC), translated and validated for the Portuguese population by Sequeira (2007, 2010), from the original English version of the "Zarit Burden Interview Scale," the Portuguese version (Augustine & Rebelo 1988) of the Family Apgar Scale by Smilkstein (1978), and the of Anxiety, Depression and Stress Scales (EADS-21) by Lovibond and Lovibond (1995), adapted for the Portuguese population by Pais-Ribeiro et al (2004).

The defined objectives were: to identify socio-demographic and family background variables that influence anxiety, depression and stress in informal caregivers of the mentally ill who attend the outpatient psychiatry consultation and to analyse the relationship between social support and caregiver overload with the informal caregiver's anxiety, depression and stress.

## Results

The mean age is 52.03 years. It is lower for females.<sup>4</sup> In the relationship between age and anxiety, depression and stress, we found no significant statistical differences ( $P > .05$ ). For all three sub-scales, the values show that the variables anxiety and depression increase with increasing age, in contrast to stress which is higher in younger subjects. Age<sup>5</sup> has a negative impact on mood, particularly for perception of depressive symptoms, fatigue and low energy, confusion and lack of mental clarity as well as vigour and perception of health. 81.7% of the respondents are "married/in a civil union", most of whom are female.<sup>4</sup> The patients are mainly pensioners, unemployed but only 4.8% are on sick leave. It is mostly men who are unemployed (16.3%) and retired (12.5%), most of whom are unoccupied (59.0%).

Most caregivers, men/women spend between 9 and 24 hours/day with their family and 24.0% mention accompanying them between 1 and 8 hours per day.

For 32.7% of the respondents have other relatives with psychiatric illness, the majority (54.8%) know their relative's illness and the men claim to have more knowledge than the women. The majority (57.9%) identifies depression, dementia and schizophrenia with an equal percentage (10.5%), and then bipolar disorder, epilepsy and alcoholism/drug addiction, in which women, especially describe depression, dementia and schizophrenia, while men reported depression, epilepsy, bipolar disorder and alcoholism/drugs addiction.

The majority (60.6%) accompanied their families for a period of less than 5 years. Of these 51.9% of the relative had never been hospitalized and of the 48.1% who had, 66.0% did so once or twice, with higher values in men.

The caregivers' perceptions about aspects of the relative they accompany reveal values that range between 1 and 5 for every dimension. In terms of behaviour, we obtain a mean of 3.70; knowledge about the disease, a mean of 2.87; positive attitudes, a mean of 3.64; financial overload felt, a mean of 2.40; negative attitudes, a mean of 3.61. The highest values are related to behaviour, positive attitudes and negative attitudes and the lowest values are related to financial overload and knowledge about the disease.

The data show that good perceived family functioning has an effect on overall life satisfaction. In its three functional levels we found that for 65.4%, the perceptions are of functional families, for 26.9% the family is moderately dysfunctional and 7.7% report pronounced dysfunctions.

## Discussion

The results show levels of anxiety, depression and stress in each dimension, which can vary between 0 and 21. Higher values for each sub-scale correspond to more negative emotional states. Anxiety ranges from 0 to 18 with a mean value of 3.34. Depression ranges from 0 to 17 with a mean value of 3.59. For stress, values are higher, ranging from 0 to 18 with a mean value of 6.17.

Informal caregivers are mostly female, which is consistent with several other studies, demonstrating that the majority of informal care is provided by women.<sup>5,6</sup> In this regard<sup>5</sup> this issue states that the prevailing assumption in society is that care is a female domain and<sup>4</sup> the literature is unanimous in noting the predominance of females. Nevertheless, men's participation is currently growing in the role of primary caregivers.

We found the influence of gender on anxiety, depression and stress, with statistically significant differences ( $P < .05$ ) in all dimensions of the scale for both variables. Females have higher averages in all dimensions, meaning they also have higher levels of anxiety, depression and stress. We can affirm that gender influences the respondents' anxiety, depression and stress and there is a higher prevalence of depressive and anxiety disorders among women, with a ratio ranging from 1.5 to 2 times higher than in men.<sup>7-9</sup>

Unaccompanied individuals (single, widowed or divorced) have higher anxiety, depression and stress.

The most representative degree of kinship between the caregiver and the patient is the spouse with 49.0%, followed

by siblings with 15.4% and thirdly, parents with 14.2%. Men especially take care of their spouses, while women are equally distributed in the total sample between different items.<sup>1,4,10,11</sup> The majority 77.9% live with family member to whom they are providing care and of these, 47.1% are female. Conversely, 22.1% report they do not live with the relative for whom they care.<sup>4,10</sup> Most households comprise 3-5 members (55.8%), followed by those which have 1-2 members (35.6%).<sup>1</sup> Most participants have the 1st or 2nd cycles [respectively up to 4 or 6 years of schooling] and only 16.3% attended higher education with differences by gender.

Using the Kruskal-Wallis test we found there are statistically significant differences ( $P = .001$ ) in the anxiety sub-scale, allowing us to state that participants whose education is limited to the 1st, 2nd and 3rd cycle [respectively up to 4, 6 or 9 years of schooling] have more anxiety than those who have higher and secondary education. Post-hoc tests indicated that the differences are between those who have the 1st and 2nd cycles and those with secondary education ( $P = .001$ ).

The majority (67.3%) lives in rural areas and the Mann-Whitney U test reveals no statistically significant difference ( $P = .790$ ) in the anxiety dimension, but there is for depression ( $P = .044$ ) and stress ( $P = .041$ ). Caregivers living in rural areas have higher levels of depression and stress. Only 46.2% live between 10 and 30 km from the psychiatric hospital.

The data show that the unemployed/retired have higher anxiety and depression and stress is higher in individuals who work.<sup>12</sup>

The employment status of the relative reveals that patients are essentially retirees (44.2%), followed by the unemployed (30.8%) with the higher value in men and the employed (20.2%).<sup>13</sup> Interestingly, only 4.8% are on sick leave. This indicates dependency and assumes the lack of autonomy,<sup>12</sup> needing help with daily activities, where the informal caregiver who assumes all of the responsibility for caring. Many caregivers (44.2%) spend 17-24 hours with their relative and for 32.7% of the respondents there are other family members with psychiatric illness.

The majority (54.8%) "knows his relative's condition" with differences between the sexes because men have more knowledge than women.

The majority (60.6%) has accompanied his relative for less than five years in which women report less time being accompanied than men.<sup>1</sup> The majority (51.9%) had never been hospitalized. In the perception of caring, the most valued items are linked to behaviour, to positive attitudes and negative attitudes.<sup>14,15</sup> Since the illness of a family member triggers changes in the roles and structure of the family itself, forcing it to develop new family dynamics, which includes the act of caring,<sup>16</sup> the family influences its members' health behaviour, and each individual's state of health also influences family functioning.

Given that a perceived good family functionality causes an effect on overall life satisfaction,<sup>17</sup> in our study 65.4% have functional families, 26.9% ranks their family as moderately dysfunctional and (7.7%) reported them with pronounced dysfunctions. In the context of the informal caregiver, the support of extended family group and friends is highlighted, because only then can a sense of social com-

parison, sharing problems, failures, interests, experiences and ideas be developed.<sup>18</sup>

The data regarding the relationship between anxiety, depression and stress and family functionality, show that on the anxiety scale there are no significant differences ( $P = .201$ ), but for depression and stress ( $P = .000$ ), these are highly significant. Therefore, the participants who perceive their families with pronounced dysfunctions have higher levels of depression and stress. We found that for depression the differences lie between those with pronounced dysfunctions and the functional ones ( $P = .006$ ) and between the moderately dysfunctional ones and the functional families ( $P = .011$ ); for stress between those with pronounced dysfunctions and the functional families ( $P = .020$ ) and between the moderately dysfunctional and the functional ones ( $P = .000$ ).

The higher the perceived overload, the higher the levels of anxiety, depression and stress manifested. These differences are highly significant statistically ( $P = .000$ ) for the dimensions of depression and stress and rather significant ( $P = .002$ ) for anxiety.

We found that the differences are located towards anxiety among the group without overload and with intense overload ( $P = .002$ ) for depression, they are located between the group without overload and with slight overload ( $P = .000$ ) and no overload and intense overload ( $P = .000$ ) and for stress, they are located between the group without overload and slight overload ( $p=0.003$ ) and between the group without overload and intense overload ( $P = .000$ ).

The results of the relationship between socio-demographic variables (age and sex), family functioning, perceived social support, caregiver overload and anxiety, depression and informal caregiver stress, with regards to anxiety, we note that the correlations between this subscale and the independent variables range from the smallest ( $r = -0.067$ ) in overall social support and a reasonable correlation ( $r = 0.441$ ) in satisfaction with friends. For depression, we note that the correlations between this with the independent variables are negligible, for age ( $r = -0.092$ ), perception of self-efficacy ( $r = -0.096$ ) and global social support ( $r = 0.096$ ) and for the others, they range from weak ( $r = -0.196$ ) for the (dummy) variable, gender and good ( $r = -0.674$ ) for impact of caregiving. The results for the stress, correlations range between weak ( $r = -0.121$ ) for age ( $r = -0.164$ ), for intimacy ( $r = -0.114$ ), for perception of self-efficacy and reasonable correlations ( $r = 0.495$ ) for impact of caregiving. There only were no statistical significant for age ( $P = .111$ ) and for perception of self-efficacy ( $P = .124$ ). To sum up the results obtained, we can state that for anxiety, the predictors found were satisfaction with friends, impact on caregiving and family functioning and depression, and for stress we found impact on caregiving and satisfaction with friends.<sup>19</sup>

## Conclusion

Females predominate; they are 52 years old; the spouse is the caregiver; they are married/in a civil union; they live in rural areas; they have a 1st and 2nd cycle education; they are retired or unemployed; they provide 17-24 hours of daily care; they know the disease and accompany the patient

for five years or less; they are functional families without overload and low levels of social support.

Age, marital status and employment status do not influence the levels of anxiety, depression and stress, but gender and overload influence the levels of anxiety, depression and stress for informal caregivers of the mentally ill. Academic qualifications influence the level of anxiety. Place of residence and family functioning influence the informal caregiver's depression and stress.

### What we know about the theme

Individuals with better social support have a lower risk of developing depressive episodes. Weak social support has repercussions on difficulties in adjusting and, therefore, more likely to cause depressive symptoms. Anxiety disorders, depression and stress, expressed by informal caregivers of the mentally ill, emerge as a major negative impact on the performance of the caregiver role. They are due not only to the act of caring for the sick, but also due to the characteristics of mental illness.

### What we get out the study

- This study demonstrated that this reality implies the need to think of types of assistance that will promote maintaining quality of life, and not overburden the family and the caregiver in order to decrease their physical and psychological vulnerability.
- This research provided a better understanding of the factors that interfere with anxiety disorders, depression and stress in informal caregivers of the mentally ill.

### Conflicts of interest

The authors declare that there are no conflicts of interest.

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