

Minor psychiatric disorders among family caregivers of users of Psychosocial Care Centers: prevalence and associated factors

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Abstract *This study aimed to identify the prevalence of the manifestation of Minor Psychiatric Disorders and its associated factors among 537 family caregivers of people living with psychological distress attended at 16 Psychosocial Care Centers (CAPS) located in the 21st health region of the state of Rio Grande do Sul. Considering a hierarchical theoretical model, the analysis adopted a Poisson regression to calculate the adjusted prevalence ratios. The prevalence of Minor Psychiatric Disorders found in the studied population was 42.1% (N = 226 CI: 38%-46,3%). Factors associated with these disorders were being female (PR: 1.54), having a close relationship with the user, especially fathers/mothers (PR: 2.00), low schooling, within a prevalence ratio of PR: 1.85 in the lowest stratum, presence of health problems (PR: 1.24); reporting neurological problems (PR: 3.02), low performance in the evaluation of the quality of life in the physical (PR: 1.84) and environmental (PR: 1.95) aspects, dissatisfaction with family relationships (PR: 1.56), lack of family support (PR: 1.25) and feeling of burden, with a prevalence ratio of PR: 2.61 among individuals with higher level of burden.*

Key words *Minor Psychiatric Disorders, SRQ20, Relatives, Caregivers, Community mental health services*

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Introduction

In the reorganization of care practices promoted by the psychiatric reform movements in the country in the 1980s, relatives of users of community mental health services became essential allies in the care and socialization of individuals in psychological distress¹.

However, despite the evidence concerning the contribution of this partnership for a better prognosis among users, several studies^{2,3} have documented negative repercussions of routine care in the lives of relatives.

The emotional repercussions are highlighted, since the advance of research in this field shows that many relatives end up experiencing feelings of depression and anxiety².

When not meeting all the criteria of mental illness, as per the International Classification of Diseases (ICD-10), these anxiety and depression conditions are classified as Minor Psychiatric Disorders (MPD), a process that refers to health conditions including non-psychotic psychiatric symptoms and other symptoms such as insomnia, fatigue, irritability, depression, anxiety, forgetfulness, difficulty concentrating, and somatic problems⁴.

Until then, national studies on this outcome have evidenced a high prevalence of Minor Psychiatric Disorders among family caregivers of individuals in psychological distress when compared to the results of the general population⁵⁻⁷.

In this sense, considering that relatives are a unit whose difficulties must also be addressed, it is imperative to identify which characteristics influence the occurrence of these disorders, as this can be an essential step towards establishing practices that prevent or interfere with this outcome.

Some authors^{6,7} who conducted studies to this end show that several factors, such as health problems, burden, and lack of support, have been relevant to the study of the theme. However, they also point out the incomplete nature of the analyzed variables and the need to include, especially, data about the care provided and the individuals who are assisted by these family members.

In this sense, this study sought to include in its investigation the variables previously studied, and information about time in caregiving activity, daily time devoted to care activities, diagnosis of the assisted user, and level of user dependence.

Thus, it is hoped that this study may contribute to the increasing understanding of the following research question: What is the prevalence

and what are the factors associated with the manifestation of Minor Psychiatric Disorders among family caregivers of individuals in mental distress using Psychosocial Care Centers?

Methods

This is a cross-sectional study conducted with relatives of users of Psychosocial Care Centers in the municipalities covered by the 21st health region of the state of Rio Grande do Sul in 2016.

This health region consists of 22 municipalities, eleven of which are home to 23 CAPS. Of these, four are intended for the specific care of alcohol and other drugs' users (AD), three are intended for the care of children and adolescents and 16 CAPS I and II serve adult patients with several mental health demands.

In this study, we chose to include all CAPS I and II in the region mentioned above, excluding AD services, since according to the coordinators of these services, in a considerable proportion of cases, AD CAPS users choose not to involve their relatives in the treatment. This information is in line with the results of a study conducted with alcohol users in Paraná⁸, where only 16.6% of abusive users agreed to involve their relatives in the research.

A sample was calculated to define the number of participants. For prevalence, the sample calculation considered an estimated frequency of 50% with a 5-point margin and alpha (α) of 5%, which required $N = 384$. For association, using a sample power of 80%, a significance level of 5%, a ratio of unexposed/exposed of 1, a Relative Risk of 1.3, and considering the prevalence of 40% in unexposed, an indicative sample of $N = 536$ was obtained. Then, 30% of individuals were added to the highest N indicated ($N = 536$) to cater for losses and confounding factor control. Thus, we intended to apply the questionnaire to 697 relatives of users of Psychosocial Care Centers.

Considering the disparity in the number of inhabitants per municipality, we took into account the proportionality of individuals assisted by the services to make the sample representative of the population of family caregivers of CAPS users from the 21st Health Region of Rio Grande do Sul, in order to define the number of relatives to be investigated with each CAPS.

The selection of respondents was by simple random sampling. From the lists of service users, after a draw, the relatives were identified and contacted, and were invited to participate in the

study if they met the inclusion criteria. The interviews were conducted at the services. Inclusion criteria were being of legal age, and being involved in CAPS user care activities. The exclusion criterion was being a formally hired caregiver. The percentage of losses in the universe of relatives was 22.5%, related to refusals and difficulties in answering the questionnaire. Thus, the final population accessed by this study was 537 relatives who were submitted to a pre-structured form.

The collection was performed by 24 previously selected and trained interviewers. Data quality control was carried out by coding the collection instruments and review by supervisors when receiving the questionnaires. Data was entered in the Stata 11 statistical package (Stata Corp., College Station, United States), and inconsistencies were evaluated and corrected as necessary.

The outcome of this study was the presence of Minor Psychiatric Disorder, which was obtained through the Self-Reporting Questionnaire (SRQ-20) scale. This instrument was proposed by the World Health Organization to detect Minor Psychiatric Disorders, developed by Harding et al.⁹ and validated for Brazil by Mari and Williams¹⁰.

The scale consists of twenty questions with yes/no answers, and according to Harding et al.⁹, the cutoff point, number of positive questions that determine the presence of a Minor Psychiatric Disorder, can vary considerably, from 5/6 to 10/11, depending on the cultural context in which it is applied, which includes local and time-related contexts. This study assumed the cutoff points of the Brazilian validation¹⁰, which found sensitivity and specificity of 83% and 80%, respectively, when applying cutoff 6 for men and 8 for women.

Besides the scale, this study included variables about sociodemographic data, work, health conditions, quality of life, family relationships, characteristics of the individual care, support, care-related aspects, and burden.

Scales were used to provide more robust and consistent data for the analyses developed for some of the above aspects. Aspects for which scales were used include characteristics of the cared individual, quality of life, and burden.

We employed the WHOQOL-bref scale to assess the quality of life, which consists of 26 questions divided into four realms: physical, psychological, social relationships, and environmental¹¹. The results were transformed into scores from 0 to 100 and, as per the adapted version¹², values between 0 (zero) and 40 (forty) were considered

as “region of dissatisfaction”, 41 (forty-one) to 70 (seventy), as a “region of partial satisfaction”, and above seventy-one (71) as a “region of satisfaction”.

The Lawton and Brody Instrumental Activities of Daily Living (IADL) assessment scale was used¹³ to measure the level of dependence of individuals assisted by relatives. The scale ranges from 0 to 16 points. The following cutoff points were used to categorize the results as per the adapted version¹⁴: 0-5, severe or total dependence; 6-11, moderate dependence; and 12-16, mild dependence, or independent.

The Zarit Burden Interview (ZBI) Scale¹⁵ was used to assess and classify the burden on relatives. The scale score ranges from 0 to 80 points, and we employed the cutoff points proposed by Herbert et al.¹⁶ for the classification of the level of burden, namely: intense burden (61-88 points), moderate burden (41-60 points), mild burden (21-40 points) and no burden (scores below 21 points).

Thus, the independent variables included in the study were: gender (male; female); age group (18-40 years; 41-50 years; 51-60 years; 61 years and over); marital status (single; with partner); relationship with the user (others; sister/brother; son/daughter; spouse; father/mother); schooling (9 years of study or more; 5-8 years of study; 0-4 years of study); paid work (yes; no); per capita income (1 minimum wage or more; 0.5-1 minimum wage; up to 0.5 minimum wage); health problems (yes; no); neurological problems (no; yes, and does not use psychotropics; yes and uses psychotropics); physical activities (yes; no); primary caregiver (no; yes); division of care (sharing care; not sharing care); time in the care activity (0-1 year; 1-5 years; 6-10 years; more than 10 years); daily time in the care activity (0-8 hours; more than 8 hours); user diagnosis (anxiety; depression; bipolarity; schizophrenia; intellectual disability; alcohol/drugs); level of user dependence (independent; partially dependent; dependent); quality of life – physical realm (satisfied; partially satisfied; dissatisfied); quality of life – psychological realm (satisfied; partially satisfied; dissatisfied); quality of life – realm of relationships (satisfied; partially satisfied; dissatisfied); quality of life – environmental realm (satisfied; partially satisfied; dissatisfied); satisfaction with family relationships (satisfied; dissatisfied); CAPS support (yes; no); family support (yes; no); feeling of burden (no burden; mild to moderate burden; moderate to intense burden; heavy burden).

The analyses were conducted with the Stata 11 statistical package (Stata Corp., College Station, United States). Proportional distribution and 95% confidence intervals (95% CI) for categorical variables were verified. In the crude analysis, the prevalence of minor psychiatric disorders was calculated for each independent variable, and the chi-square test for heterogeneity was used to identify statistically significant differences between groups ($p < 0.05$).

The adjusted analysis aimed to control possible confounding factors and was performed by Poisson regression, with the calculation of adjusted prevalence ratios. Wald's test was used to test heterogeneity.

The regression models took into consideration a hierarchical theoretical model, adapted from the model proposed by Treichel *et al.*⁷, and included the variables at six levels. The first included the following variables as distal determinants: gender, age group, marital status, relationship with the user, schooling, paid work, and per capita income. The second level variables were health problems, neurological problems, and physical activity. At the third level, variables were primary caregiver, division of care, time in the care activity, daily time in care, user diagnosis, and level of user dependence. The fourth level variables were quality of life – physical realm, quality of life – psychological realm, quality of life – realm of relationships, quality of life – environmental realm, and satisfaction with family relationships. At the fifth level, variables were CAPS support and family support, and the sixth-level variable was feeling of burden.

The input of the variables in the adjusted analysis was level by level. All variables were kept in the model and adjusted to those of the same level and previous levels.

The study was submitted and approved by the Ethics Committee of the Faculty of Nursing of the Federal University of Pelotas, following the Human Research Norms and Regulatory Guidelines – Resolution CNS 466/2012. Ethical principles were ensured through the informed consent; guarantee of the right not to participate in the research and anonymity. In the case of immediate need for care identified during the interview situations, such as the risk of suicide or the presence of psychotic symptoms, the subjects were referred to professionals from the service where the interview was taking place.

Results

In total, 537 family members were interviewed, of which 63.3% were female. The mean age was 51.1 years (SD = 13.3), ranging from 18 to 92 years. Among respondents, 38.5% reported having up to 4 years of study, while 35.2% reported having studied between 5 and 8 years, and 26.2% nine years of study or more. Regarding income, 37.7% reported per capita income of up to 0.5 minimum wage, 41.2% reported per capita income of up to 1 minimum wage and 21% per capita income over one minimum wage. Also, 59.7% of respondents had a partner, and 31% had paid work. The distribution of the studied population concerning sociodemographic data can be observed in Table 1.

The categorization proposed in this study evidenced that the screening of Minor Psychiatric Disorders among respondents was 42.1% (N = 226 CI: 38%-46.3%). Table 2 shows the proportion found for the outcome as per the characteristics studied. We can still observe the crude and adjusted prevalence ratio for each stratum, as well as their respective p-values.

In the crude analysis, 16 of the 24 variables included in the model were associated with the outcome ($p < 0.05$), namely, gender ($p = 0.0006$); relationship with the user ($p = 0.0270$); schooling ($p = 0.0038$); per capita income ($p = 0.0040$); health problems ($p = 0.0055$); neurological problems ($p = <0.0001$); physical activities ($p = 0.0265$); daily time in care ($p = 0.0100$); level of user dependence ($p = 0.0087$); quality of life – physical realm ($p = <0.0001$); quality of life – psychological realm ($p = <0.0001$); quality of life – realm of relationships ($p = <0.0001$); quality of life – environmental realm ($p = <0.0001$); satisfaction with family relationships ($p = <0.0001$); family support ($p = 0.0042$); feeling of burden ($p = <0.0001$).

In the adjusted analysis, the following variables lost their strength of association: per capita income ($p = 0.1632$); physical activities ($p = 0.368$); primary caregiver ($p = 0.997$); daily time in care ($p = 0.638$); level of user dependence ($p = 0.336$); quality of life – psychological realm ($p = 0.0970$); and quality of life – realm of relationship ($p = 0.6996$).

Thus, the following variables were associated with the outcome: gender ($p = 0.001$); relationship with the user ($p = 0.0197$); schooling ($p = 0.0013$); health problems ($p = 0.049$); neurological problems ($p = <0.0001$); quality of life – physical realm ($p = 0.0013$); quality of life

Table 1. Sociodemographic characteristics of the studied population.

Variables	N	%
Gender		
Male	197	36.7%
Female	340	63.3%
Age group		
18-40 years	136	25.3%
41-50 years	107	19.9%
51-60 years	123	22.9%
61 years and over	171	31.8%
Marital status		
Single	216	40.2%
Living with a partner	321	59.8%
Relationship with user		
Others	79	14.7%
Sister/brother	74	13.8%
Son/daughter	72	13.4%
Spouse	131	24.4%
Father/mother	181	33.7%
Schooling		
9 years of study and over	141	26.3%
5-8 years of study	189	35.2%
0-4 years of study	207	38.5%
Paid work		
Yes	169	31.5%
No	368	68.5%
Per capita income		
1 minimum wage and over	108	21.0%
0.5-1 minimum wage	212	41.2%
Up to 0.5 minimum wage	194	37.7%

– environmental realm ($p = 0.0051$); satisfaction with family relationships ($p = <0.0001$); family support ($p = 0.043$) and feeling of burden ($p = <0.0001$).

Female subjects had a 54% higher prevalence in the screening for Minor Psychiatric Disorders.

Higher prevalence ratios for showing the outcome were found among the strata that indicated closer family ties, with father/mother and sister/brother were those with the highest prevalence ratio for outcome screening (twice and 2.04 times higher, respectively).

Less-educated individuals had a higher prevalence ratio in the screening for Minor Psychiatric Disorders. Compared to subjects with nine years of schooling or more, those with 5-8 years of schooling had a 59% higher prevalence of outcome manifestation. Similarly, illiterates or individuals with up to 4 years of schooling had an 85% higher prevalence.

Having a health problem was a marker of a 24% higher prevalence ratio for the manifestation of Minor Psychiatric Disorders. Likewise, individuals reporting neurological problems had 2.28 higher prevalence to show the outcome when not using psychotropics and 3.02 times higher if they reported taking psychotropics.

Dissatisfaction with the physical realm of the quality of life measure was associated with a higher risk of manifesting Minor Psychiatric Disorders. Compared to individuals satisfied with the realm mentioned above, dissatisfied subjects had an 84% higher prevalence ratio for outcome screening.

Likewise, individuals dissatisfied with the environmental realm of the quality of life measure had a higher prevalence for the screening of Minor Psychiatric Disorders. Compared to satisfied individuals, those partially satisfied had a 95% higher prevalence of the outcome, and among the dissatisfied ones, the prevalence was 2.02 times higher.

Regarding family relationships, individuals who were dissatisfied with their family relationship had a 56% higher prevalence for positive screening for Minor Psychiatric Disorders. In the family context, individuals with no support from their family to care for the user had a 25% higher prevalence for the manifestation of the outcome.

A higher prevalence for positive screening for Minor Psychiatric Disorders was found the higher the level of burden of the investigated subjects. Compared to non-burdened individuals, those with mild burden had a 2.08 higher prevalence for showing the outcome. Similarly, individuals with moderate burden had a 2.61 higher prevalence, and individuals with severe burden had 2.97 times higher prevalence.

Discussion

The prevalence of Minor Psychiatric Disorders in the study population was 42.1% ($N = 226$ CI: 38%-46.3%). This prevalence is close to those found in other studies conducted with similar populations. In populations of family caregivers of users of Psychosocial Care Centers, studies such as Tomasi et al.⁵, Quadros et al.⁶ and Treichel et al.⁷ found prevalence rates of 41%, 49%, and 46.9%, respectively. In this sense, considering population-based studies previously conducted in the country^{17,18}, this study corroborates the perspective that family caregivers are a risk population for the manifestation of Minor Psychiatric Disorders.

Table 2. Prevalence and prevalence ratio for Minor Psychiatric Disorders as per independent variables in family members of CAPS users.

	N	Prevalence	Crude PR / 95%CI	P-value	Adjusted PR / 95%CI	P-value
Gender						
First level						
Male	197	31.98%	1	0.001	1	0.001
Female	340	47.94%	1.49 (1.18-1.89)		1.54 (1.18-2.01)	
Age group						
18-40 years	136	39.71%	1	0.067	1	0.167
41-50 years	107	51.40%	1.29 (0.98-1.70)		1.05 (0.77-1.44)	
51-60 years	123	44.72%	1.12 (0.84-1.49)		0.93 (0.67-1.30)	
61 years and over	171	36.26%	0.91 (0.68-1.21)		0.75 (0.53-1.07)	
Marital status						
Single	216	40.74%	1	0.606	1	0.893
Living with a partner	321	42.99%	1.05 (0.86-1.29)		0.98 (0.78-1.23)	
Relationship with user						
Others	79	24.05%	1	0.027	1	0.019
Sister/brother	74	41.89%	1.74 (1.08-2.80)		1.68 (1.04-2.71)	
Son/daughter	72	43.06%	1.79 (1.11-2.87)		2.04 (1.26-3.30)	
Spouse	131	43.51%	1.80 (1.16-2.80)		1.96 (1.26-3.13)	
Father/mother	181	48.62%	2.02 (1.32-3.07)		2.00 (1.29-3.10)	
Schooling						
9 years of study and over	141	29.08%	1	0.003	1	0.001
5-8 years of study	189	46.56%	1.60 (1.18-2.16)		1.59 (1.15-2.18)	
0-4 years of study	207	46.86%	1.61 (1.19-2.16)		1.85 (1.33-2.59)	
Paid work						
Yes	169	39.64%	1	0.443	1	0.414
No	368	43.21%	1.08 (0.87-1.35)		0.90 (0.72-1.14)	
Per capita income						
1 minimum wage and over	108	27.78%	1	0.004	1	0.163
0.5-1 minimum wage	212	42.45%	1.52 (1.08-2.15)		1.18 (0.83-1.66)	
Up to 0.5 minimum wage	194	48.97%	1.76 (1.25-2.46)		1.36 (0.96-1.94)	
Second level						
Health problems						
No	180	33.33%	1	0.005	1	0.049
Yes	357	46.50%	1.39 (1.10-1.76)		1.24 (1.00-1.54)	
Neurological problems						
No	261	20.69%	1	<0.001	1	<0.001
Yes and does not use psychotropics	115	50.43%	2.43 (1.80-3.28)		2.28 (1.67-3.10)	
Yes and uses psychotropics	161	70.81%	3.42 (2.64-4.42)		3.02 (2.25-4.06)	
Physical activities						
Yes			1	0.026	1	0.368
No			1.28 (1.03-1.61)		1.10 (0.89-1.36)	
Third level						
Main caregiver						
No	79	35.44%	1	0.217	1	0.997
Yes	458	43.23%	1.21 (0.88-1.67)		0.99 (0.68-1.45)	
Sharing care						
Yes	292	39.73%	1	0.226	1	0.634
No	245	44.90%	1.13 (0.92-1.37)		0.94 (0.74-1.29)	

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Table 2. Prevalence and prevalence ratio for Minor Psychiatric Disorders as per independent variables in family members of CAPS users.

	N	Prevalence	Crude PR / 95%CI	P-value	Adjusted PR / 95%CI	P-value	
Third level	Time in the care activity						
	0-1 year	63	50.79%	1	0.289	1	0.172
	1-5 years	173	39.31%	0.77 (0.56-1.05)		0.74 (0.53-1.02)	
	6-10 years	122	38.52%	0.75 (0.54-1.05)		0.74 (0.52-1.04)	
	Over 10 years	171	44.44%	0.87 (0.65-1.17)		0.80 (0.51-1.97)	
	Daily care time						
	0-8 hours	186	33.87%	1	0.010	1	0.638
	Over 8 hours	290	46.21%	1.36 (1.07-1.72)		1.06 (0.82-1.36)	
	User diagnosis						
	Anxiety	35	34.29%	1	0.391	1	0.056
	Depression	176	38.64%	1.12 (0.68-1.84)		1.83 (1.15-2.90)	
	Bipolarity	69	46.38%	1.35 (0.80-2.28)		1.53 (0.90-2.60)	
	Schizophrenia	169	44.38%	1.29 (0.70-2.11)		1.59 (1.00-2.54)	
	Intellectual disability	38	52.63%	1.53 (0.88-2.65)		2.13 (1.23-3.68)	
Alcohol/Drugs	21	52.38%	1.52 (0.82-2.82)		2.29 (1.13-4.63)		
Level of user dependence							
Independent	90	54.44%	1	0.008	1	0.420	
Partially dependent	187	43.32%	0.79 (0.61-1.02)		1.00 (0.76-1.32)		
Dependent	260	36.92%	0.67 (0.52-0.86)		0.85 (0.63-1.16)		
Fourth level	Quality of life (Physical realm)						
	Satisfied	276	22.83%	1	<0.001	1	0.001
	Partially satisfied	227	58.59%	2.56 (2.01-3.27)		1.68 (1.25-2.24)	
	Dissatisfied	34	88.24%	3.86 (3.01-4.96)		1.84 (1.28-2.65)	
	Quality of life (psychological realm)						
	Satisfied	297	24.24%	1	<0.001	1	0.097
	Partially satisfied	210	59.05%	2.43 (1.93-3.06)		1.23 (0.96-1.58)	
	Dissatisfied	30	100%	4.12 (3.37-5.04)		1.39 (1.02-1.91)	
	Quality of life (relationships realm)						
	Satisfied	291	29.55%	1	<0.001	1	0.699
	Partially satisfied	210	52.38%	1.77 (1.42-2.20)		0.91 (0.72-1.13)	
	Dissatisfied	36	83.33%	2.81 (2.24-3.54)		0.91 (0.68-1.22)	
	Quality of life (environmental realm)						
	Satisfied	150	14.67%	1	<0.001	1	0.005
	Partially satisfied	355	50.14%	3.41 (2.29-5.10)		2.02 (1.32-3.09)	
	Dissatisfied	32	81.25%	5.53 (3.63-8.43)		1.95 (1.14-3.34)	
	Satisfaction with family relationships						
	Satisfied	418	32.54%	1	<0.001	1	<0.001
Dissatisfied	119	75.63%	2.32 (1.95-2.76)		1.56 (1.27-1.93)		
Fifth level	CAPS support						
	Yes	346	41.62%	1	0.767	1	0.187
	No	191	42.93%	1.03 (0.83-1.23)		0.86 (0.69-1.07)	
	Family support						
Yes	295	37.29%	1	0.004	1	0.043	
No	242	47.93%	1.28 (1.05-1.56)		1.25 (1.00-1.55)		

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Table 2. Prevalence and prevalence ratio for Minor Psychiatric Disorders as per independent variables in family members of CAPS users.

	N	Prevalence	Crude PR / 95%CI	P-value	Adjusted PR / 95%CI	P-value
Sixth level	Feeling of burden					
	No burden	247	17.81%	1	<0.001	1 <0.001
	Mild burden	185	52.43%	2.94 (2.17-3.97)		2.08 (1.50-2.89)
	Moderate burden	77	75.31%	4.22 (3.14-5.69)		2.97 (2.09-4.21)
	Heavy burden	28	96.43%	5.41 (4.10-7.14)		2.61 (1.72-3.98)
Total	537	42.1%				

In the adjusted analysis, being female was associated with the outcome. This result corroborates previous findings by Treichel *et al.*⁷, who also found a higher risk of manifestation of Minor Psychiatric Disorders in women mental health caregivers than in men in the same situation.

Besides the gender variable, the sociodemographic variables that were associated with the outcome were the relationship with the user and schooling. These findings corroborate previous findings by Treichel *et al.*⁷ in the sense that closer relationships and lower schooling levels contribute to the higher likelihood of manifesting Minor Psychiatric Disorders. Lower schooling was also associated with the outcome in the study by Quadros *et al.*⁶.

As in the studies by Quadros *et al.*⁶ and Treichel *et al.*⁷, although income was associated with the outcome in the crude analysis, when inserted into the model, this variable lost the strength of association.

Having health problems has been documented as one of the factors associated with positivity in the SRQ-20^{6,7}. Thus, it can be pointed out that the results corroborate the literature in this regard. Dissatisfaction with the physical realm of the quality of life measurement scale was strongly associated with the emergence of Minor Psychiatric Disorders among the studied population. However, worth noting is that although the relationship between health problems and Minor Psychiatric Disorders has been systematically documented, especially in family caregivers, its direction remains unclear.

While in the study by Tomasi *et al.*⁵, 26% of family members reported having neurological problems, in this study, 51% of respondents reported these problems. In the adjusted analysis, these situations were strongly associated with the manifestation of Minor Psychiatric Disorders, es-

pecially in cases where, besides reporting having a neurological problem, respondents were using some psychotropics. It is noteworthy that 30% of family members accessed by the study used any of these drugs. Thus, it is necessary to pay attention to two crucial aspects: the existence of an essential portion of family members who are already sick and undergoing treatment, and the possibility of interference of the action of psychotropics on symptoms used to screen for Minor Psychiatric Disorders in the scale used in this study.

One of the main demands of previous studies on the subject was the need for information about the care provided and especially about the individual under the care of relatives studied^{6,7}. In this sense, this study counts as a strong point the clustering of a set of variables that contribute to the expansion of investigations regarding these aspects.

However, while variables such as daily time in care and level of dependence of the user evidenced strength of association with the outcome in the crude analysis, after adjustment, these variables were not associated with the manifestation of Minor Psychiatric Disorders among relatives studied. In the crude analysis, individuals who provided more than 8 hours of daily care had a 36% higher prevalence ratio in the emergence of the outcome. However, this variable lost association strength in the adjusted analysis. This fact may be related to the division of care burden into objective and subjective aspects. A longer time spent in care shows a higher objective burden; however, it may not translate the subjective elements, previously pointed out in the literature as essential markers of burden and emotional illness¹⁵.

Regarding the level of dependence of the care user, it is noteworthy that although this variable had shown association with the outcome in the

crude analysis, this association occurred opposite to the direction expected. While based on the previous studies⁵ that showed higher burden and risk of emotional illness as per the greater level of dependence of the cared individual, in this study, in the crude analysis, the higher the level of user dependence, the lower the risk of relatives manifesting psychiatric disorders.

In their study, Treichel et al.⁷ indicate a strong association between dissatisfaction with the quality of life and the manifestation of Minor Psychiatric Disorders. In this sense, by taking the quality of life as a sophisticated understanding that takes into account a set of values related to different aspects, this study sought to divide satisfaction with the quality of life among the four realms proposed by the World Health Organization to study the quality of life through the WHOQOL-BREF¹⁹ instrument. In the crude analysis, all realms of the WHOQOL-BREF scale were strongly associated with the outcome, in the sense that the lower the satisfaction with the realm, the higher the risk of manifesting Minor Psychiatric Disorders. However, in the adjusted analysis, only the realms related to physical health and environment were associated with the outcome.

Dissatisfaction with family relationships was an essential marker of the presence of Minor Psychiatric Disorders in this study. It is noteworthy that previous studies²⁰ have already documented worse outcomes in quality of life among family caregivers with worse family functioning. Thus, we can highlight that this finding points to an essential interface of care within the family context, and family functionality may be affected by care relationships. In this sense, the results of this study envisage the need for the perspectives of family functioning to be taken into account when addressing the services for the follow-up of assisted individuals, as well as for monitoring the repercussions of care in their lives and the establishment of the care plan of the individual in psychological distress and relatives involved in the therapeutic plan.

Still, regarding family relationships, lack of family support was associated with the manifestation of Minor Psychiatric Disorders, a result that corroborates the perspective pointed out by Quadros et al.⁶ that social support is a protective factor regarding the outcome. In their study, the authors cite that feelings of support from loved ones can improve adaptation to particular stress circumstances and reduce the effect of stress-producing events so that they can have fewer consequences even if they are not avoided.

The feeling of burden was strongly associated with positive screening for Minor Psychiatric Disorders, both in the crude and adjusted analysis, and the p-value found for this association was $p < 0.0001$. It is noteworthy that the higher the level of burden observed, the greater the risk of manifesting these disorders. We can point out that the burden variable has been repeatedly cited by studies in the field of mental health as a trigger of negative repercussions in the lives of family caregivers²¹. However, while recurrent in this context, it is not an easy aspect to be addressed. Some authors mention, for example, that for some caregivers, the burden is inherent in care activities and is linked to their responsibility to care for "sick relatives"²². Thus, it is evident that, in general, the need for back-up and support, and not the absence of burden is among the expectations of these caregivers.

Expanding this understanding may help in interpreting the results of this study. While the importance of each variable should be considered individually, the multivariate analysis seems to suggest that the aspects that have effectively influenced the outcome in the studied sample are related to situational and supportive and family organization conditions.

From the viewpoint of situational conditions, aspects such as the presence of physical injury and more unsatisfactory performance in the quality of life in the physical and environmental realms indicate a less favorable environment for the necessary adaptations from the mental or physical illness of a family member. Regarding family support and organization, noteworthy is the need for reorganizing family structure and routine is one of the points frequently mentioned in the literature as one of the significant challenges faced by family groups from living with the psychological distress of one of its members^{23,24}. Authors such as Santin and Klafke²⁴ state that depending on the sick member's position in the family, the moment of definition of caregivers can both gather and deteriorate tensions between relatives.

Thus, we should reflect on the role of mental health services concerning these situations. It is noteworthy that within the care process, in general, only one relative is incorporated into the patient's therapeutic project and is a reference for care actions that transcend the space assisted by the service²³. This factor may contribute to the perpetuation of unhealthy practices for intrafamily relationships, such as the transfer of responsibilities to a single individual, favoring the feeling of burden²⁵. An alternative to facilitate

the change of this paradigm may be the establishment of practices that involve and value all relatives of the individual in psychological distress. Initiatives in this direction have been taking place since the 1980s in other parts of the world, such as Finland, through the “Open Dialogue”, and converge on better prognoses between individuals in psychological distress and their families²⁵⁻²⁷.

From the perspective of the “Open Dialogue” approach, every social network of the individual in psychological distress, that is, his family, friends, and significant relationships, is included in the treatment. These subjects are present at all meetings without any decision being made outside of them. Studies on the prognosis of this model have pointed to a direct relationship between the successful results of the method and the perspective that this practice ensures psychological continuity at all stages of treatment, focusing on the dialogue between the people involved in the situation, valuing the joint construction of understandings and solutions²⁵⁻²⁷. In this sense, further studies are suggested to advance research in the area, in order to investigate the impact of the implementation of therapeutic actions that include all family and an affective group of individuals in psychological distress in the manifestation of Minor Psychiatric Disorders.

It should be noted that this is a cross-sectional study with simultaneous exposure and outcome evaluation. Thus, its reading should be performed considering reverse causality as a limitation. However, the results of the adjusted anal-

ysis suggest that the associations found between the variables and the outcome are not random, even if it is not possible to know their meaning.

Conclusion

The prevalence of Minor Psychiatric Disorders found in the population studied was close to those previously found in family caregivers of people in psychological distress in the country. This finding reinforces the idea that this is a population at risk for emotional and mental illness and points to the need for monitoring it through screening, prevention, and intervention of these situations.

Factors associated with Minor Psychiatric Disorders in the study population were being female; close relationship with the user, especially fathers/mothers; low schooling; health problems; reporting neurological problems; poor performance in assessing quality of life in the physical and environmental realms; dissatisfaction with family relationships; lack of family support and feeling of burden.

While previous studies show the need to include variables about the characteristics of care and the individuals assisted by caregivers, after adjustment, this study found no association of the manifestation of Minor Psychiatric Disorders with these variables. On the other hand, the results of this study showed that support and family organization stand out among the factors that influence the outcome.

Collaborations

CAS Treichel worked on the elaboration and design of research, data analysis and interpretation, and drafting of the manuscript. VMR Jardim, E Tomasi and LP Kantorski worked on the elaboration and design of the research and data analysis and interpretation. MM Oliveira and VCC Coimbra worked on the drafting and critical review of the manuscript.

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