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Social support and family functionality in people with mental disorder

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Original article

SUMMARY

Background
When a family member suffers from a mental disorder such as schizophrenia, and a relative takes on the role of caregiver, social support is crucial to successfully facing family functionality and the problems this may cause.

Objective
Determine the factors of social and structural support associated with the perception of family functionality in persons with a mental disorder and in family caregivers.

Material and method
This is a descriptive, correlational, cross-sectional, non-probabilistic study with sequential participation Subjects were divided into two groups: 72 outpatients diagnosed with a mental health disorder, and 66 family caregivers. Three instruments were used: an MOS Questionnaire, an APGAR-Family Questionnaire and a Duke-UNC-11 Questionnaire.

Results
58.3% of patients perceived family functionality (APGAR); 19.4% severe dysfunctionality; and 22.2% slight dysfunctionality. Among relatives, 66.7% perceived family functionality; 10.6% severe dysfunctionality; and 22.7% slight dysfunctionality.
In the structural support report (MOS), a statistically significant difference was observed (t=2.478, gl=136, p=0.014) in the perception of instrumental support among patients ($\bar{x}$=11.68) and relatives, the latter perceiving the least instrumental support ($\bar{x}$=9.91). In functional social support (Duke-UNC-11) no difference (t=1.170, gl=136, p=.244) was indicated between relatives ($\bar{x}$=40.36) and patients ($\bar{x}$=38.07).
The linear regression model showed that patients with the longest period of evolution and diagnosis of schizophrenia predict dysfunctionality, whereas social support predicts functionality (p<.001). Among relatives, longer periods of evolution indicated dysfunctionality while social support predicted functionality (p<.001).

Conclusion
It is clear that in family functionality, social support plays an important role in patients suffering from mental problems and family caregivers. In patients, it was observed that the greater the AS, the higher the degree of family functionality. Among relatives, structural support showed an increased perception of family functionality, which reduces the likelihood of relapses and hospitalization.

Key words: Social support, user, family functionality, caregiver, mental disorder.

RESUMEN

Antecedentes
Cuando algún miembro de la familia presenta un padecimiento mental como la esquizofrenia, y un familiar asume el rol de cuidador, el apoyo social es elemental para afrontar con éxito la funcionalidad familiar y los problemas que ocasionan.

Objetivo
Determinar los factores de apoyo social y estructural asociados con la percepción de funcionalidad familiar en las personas con trastorno mental y los familiares cuidadores.

Material y método
Estudio descriptivo, correlacional, transversal, no probabilístico, de participación secuencial, en dos grupos: 72 pacientes ambulatorios diagnosticados con un trastorno de salud mental y 66 familiares cuidadores. Se utilizaron tres instrumentos: el Cuestionario MOS, el Cuestionario APGAR-Familiar y el Cuestionario Duke-UNC-11.

Resultados
La Funcionalidad familiar (APGAR) es percibida por 58.3% de los pacientes; el 19.4%, disfuncionalidad severa y 22.2%, disfuncionalidad leve. En los familiares, 66.7% percibe funcionalidad familiar; 10.6%, disfuncionalidad severa y 22.7%, disfuncionalidad leve.
En el reporte del apoyo estructural (MOS) se observó una diferencia estadísticamente significativa (t=-2.478, gl=136, p=0.014) en la percepción de apoyo instrumental entre los pacientes ($\bar{x}$=11.68) y los familiares. Estos últimos percibieron menor apoyo instrumental ($\bar{x}$=9.91). En cuanto al apoyo funcional social (Duke-UNC-11) no se indica diferencia (t=1.170, gl=136, p=.244) entre los familiares ($\bar{x}$=40.36) y los pacientes ($\bar{x}$=38.07).
El modelo de regresión lineal mostró que los pacientes con mayor tiempo de evolución y con diagnóstico de esquizofrenia predicen disfuncionalidad; en cambio el apoyo social predice funcionalidad (p<.001). En los familiares, a mayor tiempo de evolución se pronostica disfuncionalidad en tanto que el apoyo social predijo funcionalidad (p<.001).

Conclusión
Es evidente que en la funcionalidad familiar el apoyo social juega un papel importante en pacientes que padecen problemas mentales y en los familiares cuidadores. En los pacientes se observó que a mayor AS perciben mayor funcionalidad familiar. En los familiares el apoyo estructural demostró una mejor percepción de funcionalidad familiar, lo que permite disminuir la probabilidad de recaídas y hospitalización.

Palabras clave: Apoyo social, usuario, funcionalidad familiar, cuidador, trastorno mental.

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INTRODUCTION

Families with a relative having a mental disorder such as schizophrenia, bipolar disorder, depression, personality disorder, among others, require that a family member take the role of caregiver. However, the poor social support (SS) and the lack of guidance may be associated with the ineffective handling of the situation of the sick family member.

The SS is a property of the group, in which the subject feels cared for, loved, esteemed as a member of the network with mutual obligations related to the protection made on stressful situations experienced by people.[1] In this respect, Lin (2005) mentions that the SS is the expressive or instrumental provision –either perceived or real– provided by the community, the social networks, as well as the close, reliable relationships. Also, the theory based on the social capital network explores patterns of social life related in terms of intensity and reciprocity.[2,3] Furthermore, family is within the support network in which an individual is part; family is the important piece that is capable of providing unconditional support even considering the vicissitudes this implies.[4] On the other hand, Barrera (1986) conceptualizes *perceived social support* as a cognitive assessment when connected to others, and it is characterized by two aspects perceiving availability and adaptation of support ties.[5]

Other researchers have suggested that SS reduces the negative impact that the disease causes to both the patient and his/her caregivers, finding a lower risk of relapse, particularly when having greater social skills; consequently there is a decrease in the frequency of hospitalizations, symptomatological and emotional stability and, therefore, a favorable quality of life.[6-11]

Social support is what the chronically ill person needs to successfully tackle the problems resulting from the disease, highlighting the role of the primary caregiver, who is the one that contributes the maximum instrumental, affective and emotional support. From this perspective the support networks play an important role in the well-being of caregivers themselves, who are protected against the stress generated by such disease.[12]

In this regard, the SS is a multidimensional construct that consists of two basic areas: 1) the *structural*, consisting of social networks or links either direct or indirect that join together a group of individuals in a kinship or friendship relationship and 2) the *functional* or *expressive*, based on three main foundations: a) The *emotional aspects*, such as empathy, love and trust; b) the *instrumental resources* such as behaviors aimed at solving the problem of the receiving person; and c) the *informational support* relating to the receipt of useful information to address a problem.[13-17]

In a broad aspect, the SS is a process through which social relationships can promote health and well-being in individuals, exerting a buffering effect of support in the community's recovery and integration in order to structure the mechanisms, development and strengthening of the relationships that benefit those living with mental illness.[18-20]

Furthermore, studies conducted[21] on the burden of informal caregivers, including the formal ones, by level of social support related to their poor health status, predict poorer health of relatives of people with schizophrenia and, thus, it may affect family functionality.

Family functionality is a determining factor in the maintenance of health or in the onset of the illness among its members.[22] The term "functionality of family dynamics" involves five aspects: 1) *Adaptation*, explains the ability of using the intra- and extra-family resources in furthering the common good and mutual help in time of need, as well as the assistance of friends or social networks; 2) *Participation*, describes the distribution of responsibilities among family members, jointly sharing the problems and the decision-making about several issues (finance, health care, and personal problems); 3) *Growth*, refers to the emotional and physical maturity, self-realization and reaction of family members regarding mutual support; 4) *Affection*, points out the relationship of care and expression of love, pain and anger that exists between family members; and 5) *Resolution*, represents a commitment or determination for devoting to family or other members sharing time, space and resources (especially economic resources).[23,24]

In a paper on quality of life and family functionality in patients with schizophrenia, it is reported that there was no relationship between the family functionality perceived by the patient and by the caregiver. It states that the time of progression, i.e. the number of years in which patients present the disorder, results in perceived family functionality.[25] In another study where the influence of perceived family functionality and the mental health of caregivers and family dependents were analyzed, a statistically negative association between family functionality and mental health of caregivers was found; it was also observed that: the greater the impairment for the progression of the patient's disease, the less family functionality.[26]

Understanding how family functionality is established in both patients and family, and understanding the relationship with disease progression, as well as the structural, functional and social support, will make easier the understanding and well-being of both patients and relatives. Therefore, the following objective is intended:

Objective

Determine the factors of social and structural support associated with the perception of family functionality in persons with a mental disorder and in family caregivers

METHODS AND MATERIALS

Study

This is a descriptive, correlational, cross-sectional, non-probabilistic study with sequential participation.

Sampling

The study included 72 patients and 66 relatives. The sample of patients interviewed had a diagnosis of certain mental disorder in a mental health institution who were grouped regardless they presented any comorbidity to the condition. The conditions they had were as follows: Schizophrenia, bipolar disorder, depressive disorder, personality disorder, obsessive compulsive disorder, attention-deficit disorder and unspecified diagnoses with psychiatric symptoms.

Instruments

Three instruments were used to determine how they perceive support: For structural support the Medical Outcomes Study Social Support Survey[27] was used, a 20-item self-administered study that assesses the structural and functional support, exploring five dimensions: emotional, informative, real, positive social interaction and affection/love, in a five-point scale of frequency. The APGAR Family Functionality Questionnaire[28] that assesses five components of family function: Adaptability, participation or fellowship, growth gradient, affection and resolution. As well as the Duke-UNC-11 *Functional Social Support Questionnaire*,[29] in its original version divided into two scales: 1. affective social support and 2. trust social support, including Likert-type questions, with 1-5 scores.

The internal consistency reliability was obtained using the Cronbach's *Alpha* for each of the measuring instruments mentioned. As for the MOS the score was l of 0.949; the adaptation was made through Kaiser-Meyer-Olkin=.933; total variance of 64.81. As for the instrument of Duke-UNC-11 social support, it reached a value of reliability of 0.904, Kaiser-Mayer-Olkin=.884, total variance of 52.10. The APGAR Scale also showed an acceptable internal consistency with an alpha value of 0.794, Kaiser-Meyer-Olkin =.794, total variance of 55.49.

Procedure

Users and family members who attended the mental health institution were invited to participate voluntarily in the study; those who agreed were requested to give their informed consent and the study information was provided. The instruments were applied before receiving a psychoeducational intervention; questionnaires were self-administered, and explained by previously trained psychologists.

- *Inclusion criteria for the patient*: In order to take part in this study, prior to the application of the instruments it was identified, by the positive and negative symptom scale (PANSS), if users were stable; also, they must have been under psychiatric medical treatment and be in contact with their relatives every day.
- *Inclusion criteria for the relative*: Being in charge of a patient, be responsible for the maintenance and care of the patient and be in contact with the patient every day.
- *Exclusion criteria for both*: Seriously ill or disabled relative, otherwise not meeting the inclusion criteria.

The study was previously ruled by the institutional ethics committee and it complied with international standards of bioethics.

Statistical analysis

It was conducted using descriptive and inferential statistics through the Student's t-test for independent samples. The multivariate analysis through linear regression was used to investigate the factors of social support associated with the functionality. Area of significance was considered with $p<0.05$. The SPSS 12.0 for Windows was used (Chicago, IL, USA).[30]

RESULTS

The distribution of the sample was: 72 patients (52.2%) and 66 relatives (47.8%). The characteristics of the patients were: 63.9% men, average age: 36.9 years, DS±11.69. With regard to schooling, most of them studied from 9 to 15 years (69.4%). Regarding the conditions of the patients, a high percentage (65.2%) had schizophrenia, 10.6% personality disorders, 10.6% bipolar disorder, 6.1% depression, and 4.5% other disorders. The mean duration of the disease is 10 years, DS±11 years (Table 1).

As for the relatives, most of them were women (81.8%) with an average age of 57 years, DS±12.4 years, which means that they are between 45 and 69 years; 75.8% with schooling of more than nine years: 32.3% of 9-15 years and 43.5% over 15 years. In relation to paid work, 58.8% said they had no work activity. 61.5% refers to a patient-mother relationship; Table 1.

Here are the results of the analysis comparing the perception of family functionality and support among family members and patients.

Family functionality (APGAR)

Among patients, 58.3% perceived family functionality; 19.4% severe family dysfunctionality; and 22.2% slight dysfunctionality. Among relatives, 66.7% perceived family functionality; 10.6% severe dysfunctionality; and 22.7% slight dysfunctionality. There is a statistical difference

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Table 1. Characteristics of the study sample

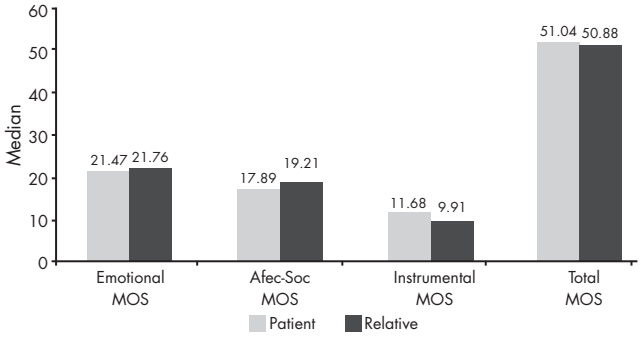
Characteristics	Patients n=72 (%)	Relatives n=66 (%)
Gender		
• Men	63.9	18.2
• Women	36.1	81.8
Age		
• 15-25	16.7	1.5
• 26-35	31.9	9.1
• 36-45	33.3	9.1
• 46-55	9.7	25.8
• 56-85	8.3	54.5
	$\bar{x}$=37 years ±12 years	$\bar{x}$=57 years ±12 years
Schooling (years)		
• 1 a 3	–	6.5
• 4 a 8	1.4	17.7
• 9 a 15	69.4	32.3
• Over 15	29.2	43.5
Diagnosis		
• Squizofrenia	62.7	
• Bipolar disorder	17.5	
• Depression disorder	11.9	
• Personality disorder	13.4	
• Others	4.5	
Time of progression		
• 1-5 years	26.4	
• 6-9 years	13.9	
• 10-14 years	19.4	
• 15-20 years	22.2	
• 21-60 years	18.1	
	$\bar{x}$=10 to 14 years DS=10.8 years	
Related to the patient		
• Mother		61.5
• Brother/sister		15.4
• Father		13.8
• Partner		6.2
• Son/daughter		1.5
• Friend		1.5

(t=2.014, gl=136, p=0.046) between the perception of relatives ($\bar{x}$=7.42) and of patients ($\bar{x}$=6.49).

Relatives start perceiving dysfunctionality from the fifth year of the disease's progression; and patients from the seventh year.

Comparison of structural support (MOS)

As for the structural support (MOS) the comparison between the group of relatives and patients only shows that there is a statistical difference in the instrumental support (t=-2.478, gl=136, p= 0.014), relatives perceive less instrumental support ($\bar{x}$=9.91) (see Graph 1).



Graph 1. Comparison of structural functional support (MOS) between patients and relatives.

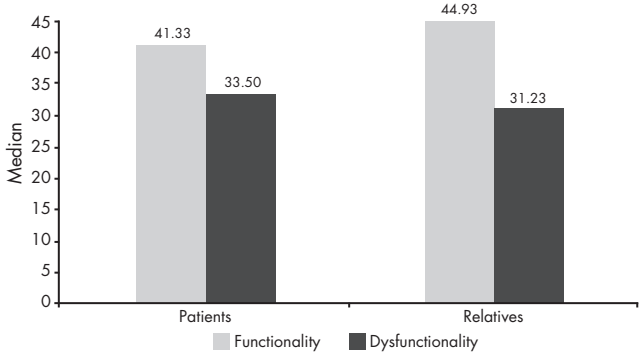
Comparison of functional social support (Duke-UNC-11)

With regard to functional social support (Duke-UNC-11), the comparison results show that there is no difference (t=1.170, gl=136, p=.244) between functional social support perceived by the relatives ($\bar{x}$=40.36) and by the patients ($\bar{x}$=38.07). Also, as seen in Graph 2, there is no difference in the perception of family functionality (t=1.762, gl=84, p=.082) and dysfunctionality (t=-702, gl=50, p=.486) from both groups.

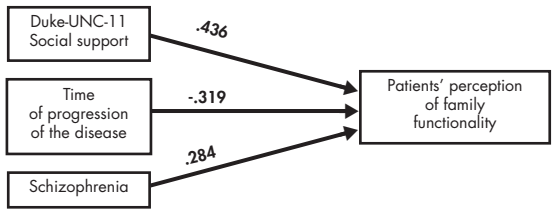
Social and structural support factors associated with the perception of family functionality

Additionally, a linear regression model to establish the relationship between the presence of family functionality and the perception of different forms of support was evaluated.

Such model showed that patients with the longest period of evolution and diagnosis of schizophrenia predict dysfunctionality; whereas social support (Duke) predicts functionality (p<.001). As for the relatives, the greater duration of the patient's disease predicts dysfunctionality; and social support (Duke) predicts functionality (p<.001) (Figures 1 and 2).



Graph 2. Comparison of social support (DUKE - UNC-11) between patients and relatives regarding functionality.



Linear regression models:
→ Standardized coefficient p<.05, F= 12.839, gl= 66, p<.001, r^2= .379

$\hat{y}$ = 2.221 + .113*xSocial support* - .079*xt.evolution* + 1.608*xschizophrenia*

Figure 1. Linear regression model to identify factors associated with the family functionality of patients.

DISCUSSION

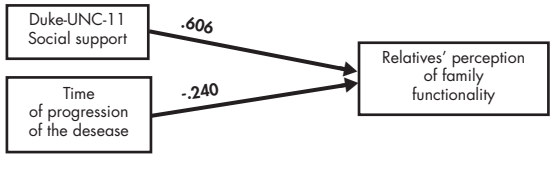
As mentioned by Rodríguez-Sánchez,[31] this paper suggests that family functionality is an important variable to be taken into account in the assessment of patients and relatives. Likewise, social support for the patient's condition also shows that the diagnosis is significant, since the results indicate that this influences the functionality.

The distribution of responsibility, maturity and mutual support are factors that can contribute to family functionality, as they give rise to the commitment of all family members.[21,22]

Regarding the structural functional support (MOS), the perception of greater instrumental support in patients allows them to face the problem of supplies such as food, shelter, clothing, etc., as these authors suggest.[13-16]

In conclusion, social support plays an important role both in patients who suffer from mental health problems and in their relatives (caregivers), as it has the effect of increasing emotional well-being, stability and control that makes them feel better, perceiving their environment in a positive way and reducing the likelihood of negative effects,[5,32] and, especially, improving the quality of life of patients.[6-8,10]

Supporting time is substantial for the development of the disease. Therefore, participation in psycho-educational courses should be encouraged with the purpose of helping the family to maintain a social support network, even in patients, with the aim of reducing their family dependency.[3]



Linear regression model:
→ Standardized coefficient p<.05, F= 18.944, gl= 59, p<.001, r^2= .399

$\hat{y}$ = 2.378 + .144*xsocial support* - .086*xt.evolution*

Figure 2. Linear regression model to identify factors associated with the Family Functionality of relatives.

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