

# Effects of Family-to-Family Psychoeducation Among Relatives of Patients With Severe Mental Disorders in Mexico City

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**Objective:** This study examined the effects of a three-month Family-to-Family (FTF) Education Program on expressed emotion and subjective knowledge about mental illness among relatives of Mexican patients with severe mental disorders.

**Methods:** A total of 230 relatives of patients with severe mental disorders completed self-reported questionnaires before (pretest) and after (posttest) the FTF program.

**Results:** FTF led to reductions in negative emotional attitudes and improved the understanding of the disorder, regardless of sex or age of the relative.

**Conclusions:** This study supported the evidence-based practice of FTF in a Mexican population and confirmed the importance of providing routine family psychoeducation as an additional component of health care service provision for relatives of people with severe mental illness in the community.

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The relatives of people with mental illness constitute an invisible health care system and are the core long-term care providers of psychiatric patients in the community. As a result of their caregiver role, the relatives of people with mental disorders often experience a variety of burdens and psychological distress (1).

Psychoeducation and family education programs have been proposed as a cost-effective intervention for service users and their families. Psychoeducation is effective for improving patients' treatment adherence and clinical outcome by decreasing the rate of relapse, the length of hospitalization, and the stress and burden experienced by families. It also increases relatives' knowledge about mental illness, their coping strategies, and their quality of life and sense of social support (2). Nevertheless, family education remains a scarce commodity for thousands of caregiving families that need and deserve it.

In recent years, the family caregiver movement has acted decisively to fill this void by creating peer-delivered family education and support programs for caregivers of people with mental health difficulties. For example, the National Alliance on Mental Illness (NAMI) developed a teaching model that trains family members from the NAMI affiliates to conduct a rigorous lecture and discussion course taught by coleader peers without professional supervision (3). The NAMI Family-to-Family (FTF) Education Program for caregivers of people with mental illnesses aims to decrease caregivers' strain caused by caring for their relatives and managing

their own lives, empower them to advocate for their ill relatives, and increase their confidence in and endurance for performing an ongoing supportive role. FTF is a 12-week course taught by family members that helps relatives of persons with mental illness to develop increased empathy and communication skills, enhance their coping and problem-solving capacity, engage in self-care, understand research that promotes recovery, and access supports and services (4). FTF is an evidence-based practice that has been translated and disseminated and that is now available in Mexico, Puerto Rico, Canada, and Italy, and it represents the most commonly used family education model (5). However, more research is needed to explore the specific advantages and drawbacks of the application of this model of family intervention in other cultural settings.

Previous studies indicate that FTF and similar programs confer several benefits to participants, including increased caregiving satisfaction and a decrease in information needs, by expanding the participants' knowledge of the causes and treatments of mental illness and improving their ability to cope with illness-related problems. Furthermore, such programs increase empowerment, decrease subjective burden, and improve coping strategies, family functioning, and anxiety among participants immediately after the FTF course (5–7). However, as far as we know, there are no previous studies exploring the impact of FTF on expressed emotion

(EE), one dimension of the emotional attitude of relatives toward an ill family member.

EE has been used as a construct for understanding the interaction between patients and their caregivers, with a particular focus on negative interactions. High EE is defined as the presence of higher levels of criticism, hostility, or emotional overinvolvement among the caregivers (8). Several studies have investigated the role of EE on the course and outcome of mental disorders. Some findings have shown that regular contact with high-EE family members could have a deleterious effect on the course of a range of mental and general medical disorders in a variety of cultural settings (9) and that EE represents the most consistent predictor of psychiatric relapse across a broad range of disorders (10).

Many family psychoeducation programs for psychiatric disorders with the goal of decreasing the level of EE toward the patient have been created (9,10). However, there is no substantial evidence to associate family psychoeducation with a reduction in EE, and perhaps family psychoeducation programs have limited effects on this target outcome (11). Although FTF is not specifically focused on reducing EE, one of its purposes is to improve both coping strategies and communication skills between family members, which may have a positive impact on the family's emotional environment. Considering that high-EE attitudes in daily interactions between family members and patients could increase the patients' stress level, resulting in symptom exacerbation and—ultimately—relapse (10), it would be interesting to investigate the effects of FTF on relatives' EE. Therefore, this study sought to explore changes in EE and the level of subjective knowledge about mental illness during a three-month FTF psychoeducation program that was based on NAMI's methodology (12). The program was translated into Spanish and was addressed to Mexican relatives of patients with severe mental disorders.

## METHODS

This was a quasiexperimental prospective study with assessments at the beginning (pretest) and at the end (posttest) of the FTF intervention. This study was developed in accordance with the Code of Ethics of the World Medical Association and was approved by the Ethics Committee of the National Institute of Psychiatry Ramon de la Fuente Muñiz, Ministry of Health, Mexico.

FTF consists of 12 weekly sessions, each lasting three hours, and is usually offered twice a year in various locations in Mexico City. Information about these courses is disseminated through various media (for example, radio, Internet, and posters in mental health resources) in order to reach the general population. Some relatives may hear about FTF groups from recommendations by mental health professionals or from other relatives who previously attended an FTF course. So relatives who are interested in attending FTF arrive in various ways.

All instructors are relatives of a person with mental illness who have completed the FTF psychoeducational intervention. Each instructor receives a certificate to teach the

“Familia a Familia” course after attending a specific training workshop about how to teach each FTF class and effectively work with the course participants (6). The workshop is led by the Mexican association “Voz Pro Salud Mental” and is based on a Spanish translation of the FTF teacher's manual (12) (unpublished manual, NAMI, Programa de Educación “Familia a Familia” Manual de Instrucción, 4a ed, 2011). The FTF courses are free and are organized by volunteers of Voz Pro Salud Mental, and material costs are covered by sponsorship, funding, or donations.

Before the beginning of the course, the instructors contacted via telephone all relatives who were interested in the FTF program to begin the registration procedure. Relatives who met the following inclusion criteria were invited by the research team to participate in this study: being a relative or a caregiver of a person with mental illness with whom he or she has regular contact (>30 hours a week), provided the family member had been diagnosed as having a psychotic, mood, anxiety, borderline personality, or obsessive-compulsive disorder (with or without a co-occurring substance abuse or use disorder) according to *DSM-IV-TR* or *ICD-10* (considering that FTF content addresses those particular diagnoses). All the information regarding the patients was provided by their relatives, given that the patients did not attend the FTF groups.

Every participant signed an informed-consent form and was assessed by the research team at the pretest and posttest. Participants' subjective knowledge about mental illness (understood as knowledge based on one's own experience) was assessed by a general questionnaire designed specifically for this study. This measure has shown an internal consistency (Cronbach's  $\alpha$ ) of .84 in a previous pilot study (unpublished data, Rascón-Gasca ML, García S, Alcántara H, et al., 2013). It consists of 16 items, including 15 multiple-choice questions about overall knowledge regarding mental disorders (causes, main symptoms, and standard treatments) and specific questions on various topics addressed throughout the group sessions (including illness acceptance process, coping strategies, communication skills, problem-solving strategies, self-care, and crisis/relapse management), to assess changes in the acquired learning during the intervention. In addition, one question consists of a 10-point visual analog scale to assess the caregiver's subjective knowledge about the mental disorder of the ill family member (“How much do you think you know about the problem/illness of your ill family member?”), for which higher scores indicate a greater subjective knowledge of the mental disorder. EE status was assessed by using the Family Questionnaire (FQ; 13), which comprises 20 items equally distributed into two subscales (criticism and emotional overinvolvement), with each item scored on a 4-point scale. The internal consistency (Cronbach's  $\alpha$ ) of the scores obtained for the two subscales in our sample was .74 for criticism and .72 for emotional overinvolvement.

The data analysis was done by using a paired *t* test to compare differences between the pretest and posttest assessments in EE variables and results on the subjective-knowledge scale.

**TABLE 1. Comparison of pretest and posttest scores for expressed emotion and subjective knowledge about mental illness among 230 participants in Family-to-Family psychoeducation**

Variable	Pretest			Posttest			Pretest vs. posttest			
	Range	M	SD	Range	M	SD	t	df	p	d <sup>a</sup>
Expressed emotion										
Criticism <sup>b</sup>	10–37	23.3	5.7	10–33	21.0	5.5	7.2	229	<.001	.40
Emotional overinvolvement <sup>b</sup>	13–37	23.9	5.1	10–40	21.8	5.3	6.9	229	<.001	.41
Total score <sup>c</sup>	24–66	47.1	9.4	20–70	42.8	9.4	8.1	229	<.001	.46
Subjective knowledge about mental illness <sup>d</sup>	0–10	4.2	2.5	0–10	6.8	1.8	–15.8	229	<.001	1.5

<sup>a</sup> The following formula was used to calculate Cohen's d effect sizes:  $d = \frac{\bar{X}_{\text{pre-test}} - \bar{X}_{\text{post-test}}}{S_{\text{pre-test}}}$ . Interpretation of effect sizes: d=.2, small; d=.5, medium; and d=.8, large

<sup>b</sup> Possible scores range from 10 to 40, with higher scores indicating higher levels of criticism or emotional overinvolvement.

<sup>c</sup> Possible scores range from 20 to 80, with higher scores indicating higher levels of expressed emotion.

<sup>d</sup> Possible scores range from 0 to 10, with higher scores indicating greater subjective knowledge of the disorder.

The original sample comprised 291 relatives of patients with mental illness who had attended FTF and had completed a pretest assessment. However, 61 (21%) relatives were excluded from the analyses because of missing data or a missing posttest or if class attendance was below 80%. The final sample thus comprised 230 relatives belonging to 21 different FTF groups that were conducted at several locations in Mexico City from 2007 to 2014. Each FTF group was conducted by a different instructor and was composed of different relatives.

## RESULTS

The mean  $\pm$ SD age of the 230 participants was  $52 \pm 12.0$  years (range 20–92 years); 145 (80%) were females, 130 (57%) were parents (95 [41%] mothers and 35 [15%] fathers), 56 (24%) were siblings, 15 (6%) were offspring, and eight (4%) were spouses or unmarried partners. A total of 140 (45%) ill family members had a psychotic disorder; 65 (29%) had an affective disorder; 14 (6%), an anxiety disorder; and three (4%), a personality disorder. Approximately 35 (15%) did not specify a diagnosis and reported that the patient had a “mental disorder/psychiatric problem” or other unspecified mental problems, such as addiction, isolation, “madness,” or nervousness.

As shown in Table 1, levels of EE and its components (criticism and emotional overinvolvement) significantly decreased at posttest. Subjective knowledge about mental illness significantly increased at the end of the FTF intervention, showing a large effect size. These changes were consistent across gender and age of the relatives, as well as across patients' diagnosis. [More information about Mexican FTF participants is available in the online supplement to this brief report.]

## DISCUSSION AND CONCLUSIONS

To the best of our knowledge, this was the first study investigating the effect of the FTF education program on EE and subjective knowledge about mental illness in a Mexican population. Overall, our findings showed that FTF influenced the reduction of negative emotional attitudes and improved the understanding of the disorder among almost

all the relatives who completed the course, regardless of their sex or age. These findings support the importance and benefits of providing family psychoeducation to caregivers of people with severe mental illness (14,15). Consistent with previous studies, our findings indicate that relatives reported greater fulfillment of their information needs (6,7) and a reduction of negative emotional attitudes toward the patient after completion of the course (8,11).

This study supports the evidence-based practice of FTF in our cultural setting and the importance of providing routine family psychoeducation as an additional component of health care service provision for caregivers in the community (5–7). Findings have shown that the involvement and participation of relatives in FTF can improve their understanding of mental illness and encourage positive interactions with their ill family member in the cultural context in which this psychoeducation program was conducted.

Some limitations of this study must be considered. First, the follow-up assessments were conducted only at the end of the intervention, making it impossible to know if the effect of FTF was maintained in the long term. Second, a self-report measure was used to assess EE. Even if the FQ is a questionnaire with excellent psychometric properties in relation to interview procedures (13), it does not include the positive aspects of the construct, which partly restricted the interpretation of the results. Third, the measure of subjective knowledge about mental illness is in the process of validation; therefore, conclusions about this construct should be taken with caution. Fourth, the lack of a control group was a limitation when drawing conclusions about the effectiveness of FTF. Although the nature of this study is descriptive, it would be essential to include a control group in further studies. Finally, it would be important for future studies to add more detailed information about the course and stage of the patients' illness because levels of EE and relatives' knowledge about mental illness are constantly changing during illness and recovery periods.

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