

Psychoeducation in Spain

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In the United States, an estimated 60 percent of mentally disabled persons live with other family members (1). In Spain, where residential care alternatives are virtually nonexistent, almost all psychiatrically ill patients who live in the community live with their families.

Earlier research has shown that psychoeducational programs for families, combined with treatment and antipsychotic medications for patients, significantly decreases patients' relapse rates and family

members' distress and burden (2). Considering the important role the family plays in the lives of people in Spain, psychoeducational interventions for Spanish families who live with relatives with schizophrenia seem particularly suitable. However, the efficacy of this modality among Spaniards has not been reported. In addition, potential differences in the effects of psychoeducational interventions on mothers and fathers have not been investigated.

This study examined the effects of a low-cost psychoeducational intervention for parents of persons with schizophrenia in Madrid. The research used a repeated-measures design to evaluate the effects of participation in the intervention on parents' acquisition of knowledge about schizophrenia and perceptions of subjective distress and family burden associated with their child's illness. Effects on patients' fathers and mothers were analyzed separately.

Methods

The study was conducted at the Hospital Clinico San Carlos of the Universidad Complutense in Madrid. All patients with a primary diagnosis of schizophrenia admitted to the psychiatric inpatient unit from October 1, 1987, to March 31, 1988, were screened by the two senior authors. Inclusion criteria were a *DSM-III* diagnosis of schizophrenia, age between 18 and 45 years, and residence with parents in the hospital's catchment area. Parents of patients who met inclusion criteria were invited to participate in a psychoeducational course at the hospital. The initial data collection occurred when patients were hospitalized, and the psychoeducational intervention started about one month after hospital dis-

charge. Informed consent for participation in the study was obtained from patients and parents.

The goals of the psychoeducational course were to increase parents' knowledge about schizophrenia and to decrease their subjective distress and family burden. The course, described in detail elsewhere (3,4), consisted of six weekly classes of one and a half hours each. The course was designed to accommodate 30 parents. During the study period, three separate courses were given, accommodating a total of 90 parents. Patients did not attend the classes.

The courses were taught by two members of the research team, a psychiatrist (JMC) and a psychiatric resident (JSF). The class format consisted of an oral presentation of information followed by a discussion period. A programmed text (available on request from the authors) and a set of slides were developed to ensure the consistency of the material presented in separate courses.

Attendance was recorded at each class. Participants' knowledge about schizophrenia and their subjective distress, perception of the social impact of the patient's illness, level of annoyance with the patient's behavior, and expectations for the patient's recovery were assessed before and immediately after the intervention.

Knowledge about schizophrenia was assessed using an instrument designed by McGill and associates (5); possible scores range from -31 to 39, with higher scores indicating greater knowledge of schizophrenia. The somatization, obsessive-compulsive, interpersonal sensitivity, depression, and anxiety subscales of the Symptom Checklist (SCL-90) (6) were used to measure subjective distress. Possible scores on these measures range from 0 to 4, with higher scores indicating more distress.

Parents' perception of the social impact of the patient's illness was measured using five 4-point scales that assessed parents' isolation from relatives, isolation from friends, guilt feelings, amount of leisure time, and financial hardship. Parents' annoyance with the patient's behavior was examined using five 4-point scales that separately assessed parents' un-

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Table 1

Paired comparisons of mean differences between mothers' and fathers' scores on measures of family burden and subscales of the Symptom Checklist-90 (SCL-90) before and after a six-week psychoeducational course

Measure	N couples	Mean difference	SD	t	df	p
Family burden						
Before	20	2.15	6.04	1.59	19	ns
After	18	2.78	6.34	1.86	17	ns
SCL-90 subscale						
Somatization						
Before	25	.58	.69	4.22	24	.001
After	23	.55	.79	3.34	22	.005
Obsessive-compulsive						
Before	25	.39	.85	2.30	24	.05
After	23	.45	.88	2.46	22	.05
Interpersonal sensitivity						
Before	25	.31	.64	2.41	24	.05
After	23	.28	.76	1.76	22	ns
Depression						
Before	25	.49	.72	3.36	24	.005
After	22	.56	.78	3.37	21	.005
Anxiety						
Before	25	.36	.70	2.58	24	.05
After	23	.36	.57	3.03	22	.01

derstanding of the patient's behavior, shame, attribution of laziness to the patient, and perceptions of the patient's dangerousness to self and to others. Parents were asked to rate various aspects of their expectations about patients' recovery on five 4-point scales.

At the end of the concluding class session, parents were asked to rate their satisfaction with the organization and practical usefulness of the course on nine Likert-type items. The maximum scores, indicating the highest level of satisfaction, were 9 on the item about organization and 18 on the item about practical usefulness.

Because a mother and father in the same family may influence each other's responses, the repeated measures were analyzed by computing differences between the mother and father at each time period and computing paired-difference t tests across time periods. Pearson product-moment correlation was used to establish relationships between variables.

Results

Parents of 45 patients agreed to participate in the study. One mother and ten fathers in this group were de-

ceased. The parents of two patients were divorced, and the fathers were absent from the family. Only six fathers and three mothers refused to participate in the study. Thus 41 mothers and 27 fathers participated.

Ninety-three percent of the fathers and 73 percent of the mothers attended more than four of the six classes in the course. Parents' satisfaction with the course was indicated by mean±SD scores of 6.96±1.01 on the measure rating organization and 13.16±2.79 on the measure rating practical usefulness.

For all parents, mean±SD scores on knowledge about schizophrenia were 16.27±7.20 before the psychoeducational intervention and 22.73±6.93 after the intervention, a significant difference (t=4.62, df=55, p<.001). Mothers and fathers did not differ significantly from each other on change in knowledge. Measures of subjective distress before the intervention did not differ significantly from measures after the intervention for the sample as a whole. However, as Table 1 shows, mothers' and fathers' scores differed significantly on the somatization, obsessive-compulsive, depression, and anxiety subscales of the SCL-90 both

before and after the intervention.

The educational intervention had no significant effects on parents' perceptions of the social impact of the patient's illness, annoyance with the patient's behavior, or expectations about recovery, although changes in these scores indicated some improvement in these areas. The mothers' mean±SD score on the measure of social impact (3.89±3.26) was higher than the fathers' score (3.17±2.21) before the intervention, a nonsignificant trend. Fathers' mean±SD score on the measure of annoyance decreased from 6.22±2.49 before the intervention to 4.65±2.12 after the intervention, compared with a decrease from 5.70±2.59 to 5.59±2.37 for the mothers, although the difference between fathers' and mothers' change in scores was not statistically significant.

The fathers' mean±SD score of 8.38±2.79 on the measure of expectations about recovery was initially higher than the mothers' mean score of 7.33±2.78, but the mothers' mean score increased by .35 after the intervention, compared with an increase of only .02 in the fathers' mean score. However, the difference in the change in scores was not significant.

Correlation analysis revealed a positive association between annoyance and social impact for both mothers and fathers (r=.311, p<.001), a negative association between annoyance and recovery expectations (r=.145, p<.06), and a negative correlation between social impact and recovery expectations (r=-.255, p<.001). A single measure of family burden was derived from scores on the measures of annoyance, social impact, and expectations about recovery, but no significant differences between measures for mothers and fathers before or after the intervention were found. However, a postintervention trend indicated that mothers perceived a higher level of burden, compared with fathers.

Discussion

The results suggest that parents of patients with schizophrenia in Spain can be engaged and retained in a psychoeducational intervention. Samples in most other studies of such interventions comprise a smaller num-

ber of participants and include other relatives besides parents.

The high attendance rate of parents in this study may be related to the cultural appropriateness of using a family-oriented intervention with a Spanish sample. Indeed, the family is the most valued institution among Spaniards (7). Psychoeducation not only acknowledges the family's interest in the patient but fosters the family's involvement in treatment.

The high rate of participation of fathers in the study intervention is particularly noteworthy. In this study, 25 of 27 fathers who enrolled in the psychoeducational course attended more than four of the six classes in the program. In comparison, fathers' participation in other psychoeducational programs has been minimal (8). The high rate of fathers' participation in this study may be related to obligations entailed in the traditional role of husband and father in Spain (9), which include protecting and providing for one's family.

Other possible explanations for the fathers' attendance include the increased availability of fathers in this sample and the high status of the physician presenters. Many of the fathers in this study were unemployed or retired and thus may have more readily attended the psychoeducational course. In addition, fathers may have attended the course as a sign of respect for the medical doctors who presented the course material.

The significant increase in parents' knowledge about schizophrenia after the psychoeducational intervention is not surprising. However, the lack of change in measures of subjective distress, social impact of the patient's illness, annoyance, expectations of recovery, and overall family burden may warrant further study. The questionnaires developed to measure these variables may not have been sensitive enough to indicate subtle changes associated with participation in the intervention. In addition, the six-week period between the pre- and postintervention measures may not have allowed enough time for change to occur. Findings from controlled studies of psycho-

educational interventions using similar measures are inconsistent (2).

The significant differences between mothers and fathers in subjective distress, although not unexpected, are worth noting. Gender differences in subjective distress have been found in patient and nonpatient populations (10). Compared with fathers, mothers perceived a higher level of social impact of the patient's illness before the intervention, a finding that may reflect mothers' increased role in care of their mentally ill children. At postintervention, fathers indicated a greater decrease in level of annoyance than mothers, and mothers indicated a greater increase in expectations of recovery. These findings suggest that the educational intervention affects fathers and mothers differently.

The lack of a control group in this study raises questions about the validity and generalizability of the findings. In analyses of pre- and postintervention differences, parents served as their own controls. The experience of answering the same questionnaires twice—before and after the intervention—may influence subjects' scores. This issue does not arise in use of validated and standardized measures such as the SCL-90 subscales and the instrument measuring knowledge acquisition, but other measures, such as the measure of family burden developed for this study, may be affected by test-retest variability.

Conclusions

As in other studies of psychoeducational interventions, the psychoeducational course described in this paper increased parents' knowledge about schizophrenia. However, a more intensive individualized approach may be needed to change parents' perceptions of subjective distress and burden. Mothers' and fathers' level of acquired knowledge and perceptions of subjective distress and family burden may vary significantly before and after psychoeducation. The applicability of these findings to Hispanic minority groups in the United States, who may share some cultural features with the Spanish study sample, is an area for further study.

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