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Caregivers of Patients with Schizophrenia: How much They Know and Learn after a Psychoeducational Intervention?

Alejandra Caqueo-Urizar a *, José Gutiérrez-Maldonado b, Cristian Palma-Faúndez a

Abstract

Psychoeducational interventions provide information to patients and their families as well as provide the tools necessary to cope with the disorder. Research in this area have been conducted mainly in developed countries, there are few studies in different socio-cultural and economic contexts. The aim of this study is to assess the effectiveness of a multifamily intervention on the educational component in caregivers of patients with Schizophrenia users of Mental Health Service in Arica, Chile. The results show, as in developed countries, an improvement in the level of knowledge about the disorder after intervention, this improvement was on theoretical and practical aspects related to the course and treatment.

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1. Introduction

Psycho education comes from working with families of patients diagnosed with schizophrenia and one of the first author who made research on this field was George Brown (1972), particularly his concept of Expressed Emotion, coined on the basis of observation of family interaction1. The author argues that the more intolerant, over involved, and critics are hostile family members, more frequent relapses in patients, which is to have located elements to determine specific patterns of behavior among family and patient are involved in relapse and worsening of signs and symptoms of the disorder2.

Psychoeducational interventions provide information about the disorder and its treatment, while providing some strategies to cope with the disorder. Meta-analysis has demonstrated the effectiveness of these interventions in reducing the Expressed Emotion, lower relapse and rehospitalization rates3-5.

Psychoeducation attempt to establish the following principles: the disorder is a brain disease; the pharmacological treatment is essential, the involvement of the family as the main rehabilitation agent, ensure an adequate emotional temperature in the family, looking for a decrease the level of demands on the patient by allowing free expression and facilitating the reintegration into the social environment6.

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There is evidence that better informed people are able to maintain greater adherence to treatment and are more motivated to develop a healthy lifestyle that mitigates the risk factors. However, the term "psycho education" is a concept not clearly defined. Psychoeducational model stands out as a highly systematized approach well-defined goal-oriented teaching techniques to be used at home. The goals of these procedures are providing information about mental illness, resources, services, and increase self-care skills in patients and families. Recognize the right part of assisting the patient and family to know what we know today of his condition and seeks to create a more productive relationship between patients, families and Mental Health professionals also. It seeks to reduce the relapse rate and improve the quality of life of patients and family.

2. Method

2.1 Subjects

The study was conducted at the Ambulatory Mental Health Service in Arica, Chile. Patients attend this outpatient service monthly, seeing the nurse and receiving their medication.

In the event of decomposition, they are sent to the Psychiatric Unit of the Central Public Hospital until they recover from the psychotic state, at which point they are attended at the Mental Health outpatient services. These centers are staffed by a psychiatrist, two psychologists, two social workers and two nurses.

Arica is a city in northern Chile, with a population of slightly under 195,000 inhabitants. The city’s economy depends on fishing, agriculture and mining. Once relatively affluent, the city has been hit by economic recession in the last 20 years, and unemployment rates have risen to 12%.

The extended family is the most common family unit, with several generations living together.

The relatives of the patients of this Ambulatory Mental Health Service were contacted and informed that a family intervention program had been planned. Eighteen expressed an interest in participating (table 1).

<table>
<thead>
<tr>
<th>Table 1 Caregivers’ socio-demographic characteristics</th>
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<tr>
<td><strong>N</strong></td>
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<td>Age</td>
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<td><strong>Marital Status</strong></td>
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<td><strong>Educational Level</strong></td>
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<td>Secondary</td>
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<td>Professional</td>
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<td>Non Educated</td>
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<td><strong>Occupation</strong></td>
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<td>Employer</td>
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<td>No paid work outside the house</td>
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<td><strong>Kinship with the patient</strong></td>
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<td>Father</td>
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<td>Mother</td>
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<td>Spouse/partner</td>
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<td>Brother</td>
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<td>Other</td>
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2.2 Measurement
Participants were administered Knowledge on Schizophrenia Questionnaire an 11-item questionnaire regarding knowledge about schizophrenia was administered to caregivers before and after completing the psycho-educational program. This questionnaire consists of 10 short questions with several options of answer, and a question consisting of a listing of 11 familiar behaviours of which it must be indicated those suitable ones to prevent the relapses. Each correct answer scores with a point, giving rise to a maximum score of 21. The content of the questions makes reference to basic knowledge on schizophrenia: symptoms, course and types of treatment and prevention of relapses.

2.3 Procedure
Family members caring for patients with schizophrenia were introduced to the researchers by the head nurse at the Psychiatry Unit, which offers monthly outpatient sessions to each patient. The first author explained the aim of the evaluation and invited family members to take part. After consenting to participate in the study, family members were assessed individually in a private booth. The assessment lasted about twenty-five minutes.

The group receiving family intervention participated in a weekly multifamily psycho-educational program consisting of five modules with a total of 18 sessions.

2.3.1 Psycho-educational family intervention
The psycho-educational family intervention was modified to take account of the characteristics of Latin-American people and a generally low level of education among participants. After considering the traditional models of psycho-educational intervention and the vulnerability-stress model a psycho-educational family intervention was designed 13-19.

The intervention program was held once a week for five months at Public Mental Health centers. Three psychologists led the sessions, each of which lasted approximately one-and-a-half hours. Toward the end of each session, the groups of relatives were offered refreshments in an informal setting in order to increase their social interaction. The program was organized around five modules comprising seventeen sessions; the patient did not attend. The modules addressed the following issues: 1) the family’s experience of schizophrenia: families are encouraged to talk about the difficulties of living with a patient with schizophrenia and to share their experiences with families of other patients; interactions of this kind may help them realize that they are not “the only ones”. 2) psycho-education: psychologists and psychiatrists work together to help caregivers identify the causes, symptoms, signs, medications and side effects of the illness. 3) skills to improve communication: caregivers take part in role plays and discussions that are localized to the Chilean environment, reproducing Chilean customs, eating habits, and activities, and reflecting many aspects of Chilean life today, for example, how to cope with limited economic resources, how to ask for help, and so on. 4) Relatives’ self-care, stressing how important it is for caregivers to take care of themselves: Their ability to care for others depends largely on their own wellbeing. There is much discussion of free time, of how to share the burden, and the need to keep doing other activities. 5) Evaluation of the intervention12.

3. Results
From the questionnaire we obtained a rating, whose highest score is 21. Results showed that the mean score before starting the multifamily intervention was 6.0 (SD 3.8), once the implementation of the program, caregivers was an average of 16.7 (SD 3.3). These data show a significant difference before and after the intervention (table 2).

<table>
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<th>Intervention</th>
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<th>S.D.</th>
<th>t (sig.)</th>
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Before 18 6.0 3.8 9.038 (p<0.001)
After 18 16.7 3.3

To analyze areas of knowledge where carers have improved, we applied a test of Chi / square to each item on the questionnaire. Results are shown in table 3.

| Table 3 Test Chi / square for each item Knowledge on Schizophrenia Questionnaire |
|--------------------------------|--------------------------------|----------------|----------------|
| Correct Answers               | Chi / Square                  | p              |
| 1. Symptoms of schizophrenia and subtypes of it | 1 | 8 | 7.26 | 0.007 |
| 2. What are the reasons of the schizophrenia? | 1 | 5 | 3.20 | 0.074 |
| 3. What is the goal of deinstitutionalization? | 0 | 8 | 10.29 | 0.001 |
| 4. What treatment do you prefer for your relative? | 0 | 18 | 36.00 | <0.001 |
| 5. What are negative symptoms? | 0 | 12 | 18.00 | <0.001 |
| 6. What are hallucinations? | 2 | 5 | 1.60 | 0.206 |

7. From the following list of behaviors, the most suitable points to prevent relapses:
   - 7a. Ensure that spend most time with the neighbor. 18 18
   - 7b. Avoid criticism. 2 | 16 | 21.78 | <0.001 |
   - 7c. Spend all day pending the patient. 3 | 15 | 16.00 | <0.001 |
   - 7d. Attending strictly to the controls. 15 | 18 | 3.27 | 0.070 |
   - 7e. Allow the patient to go to his/her room whenever Hi/She need. 4 | 15 | 13.49 | <0.001 |
   - 7f. Avoid confrontation with the patient 8 | 18 | 13.49 | <0.001 |
   - 7g. Regulate the level of stress within the home 3 | 14 | 13.49 | <0.001 |
   - 7h. Do not let the patient do anything 5 | 18 | 20.35 | <0.001 |
   - 7i. Blaming the patient's condition 18 | 18 |
   - 7j. Minimize discussions, fights, screaming and conflicts. 4 | 18 | 22.90 | <0.001 |
   - 7k. Seeking to take the medication carefully. 14 | 18 | 4.50 | 0.34 |
   - 8. If the patient has a poor interpersonal relationship. What do you think you can expect to happen? 0 | 13 | 20.35 | <0.001 |
   - 9. If the patient do bizarre behavior. Who do you blame? 2 | 15 | 18.84 | <0.001 |
   - 10. - What would be the most appropriate behavior of the family when the patient gets worse? 5 | 17 | 16.83 | <0.001 |
   - 11. - What must exist for a positive outcome of the patient? 3 | 15 | 16.00 | <0.001 |

In the analysis of items, when we asked about the goal of deinstitutionalization of patients with schizophrenia, before the intervention, 66.7% of caregivers indicated that aim of opening of the hospital was to save Government money, 16.7% said to relieve mental hospitals, 16.7% pointed out the aim of deinstitutionalization is that family take over the treatment. Post-intervention assessment, normalize the patient's life (not previously noted) was chosen by 44.4% followed by the option of saving government money by 27.8%. Family take over the treatment was assessed by 16.7% and relieve mental health was chosen by 11.6% (Figure 1).
Before intervention the answers of a question about the most appropriate treatment for the patient, 88.9% said the drug treatment and 11.1% opt for psychological treatment. After implementation of the program combining both treatments was reported by 100% of the participants (Figure 2).

Regarding the question about what can cause the patient a poor interpersonal relationship, 50% of caregivers said *that the patient becomes lazy*, 27.8% indicated that the *patient will be bored*, 16.7 % said that *nothing would happen* and the patient will *relapse* by 5.6%. After the intervention, caregivers and family members said that the *patient will relapse* at 72.2% (Figure 3).
About the question of who will you blame for unusual behavior in the patient, before family intervention nine caregivers (50%) blame the patient, five carers (27.8%) to the family, two caregivers (11.1%) to the disorder and two (11.1%) others. After the intervention, 15 caregivers (83.3%) blame the disorder, two (11.1%), the patient and one (5.6%) to the family (Figure 4).
When asked the participants about what would be the most appropriate behavior of the family if the patient worsens, before carrying out the intervention, 50% said the *to force him to change his behavior*, 27.8% leave him/her alone, 16.7% ask him/her a lot of questions and 5.6% criticize him/her. After completing the program, 94.4% said the option to *leave him/her alone* (Figure 5).

![Fig. 5 Most appropriate family’s behavior when patient worsens](image)

Finally on the question of the elements that must exist for a positive outcome of the patient, before the intervention, 55.6% indicated the existence of a *high family expectations*, 27.8% a *high level of control and overprotection* and 16.7% greater family and social support. After completing the program, 83.3% of the caregivers, pointed out *family and social support* (Figure 6).

![Fig. 6 Elements that influence in a positive outcome of the patient](image)
4. Discussion

Most studies on family intervention have incorporated educational elements. The intervention program designed for this research consists of five modules which form part of the module II and III are based on the provision of information about schizophrenia. Increase awareness of the disorder is a psychoeducational component that enables the family's commitment to the rehabilitation treatment and decrease the anxiety on caregivers.

It has been suggested that the delivery of knowledge about the disorder is a pre-requisite for further work with families.

Educational content is an essential component within the broader intervention programs. These sessions will facilitate understanding of the disorder and patient to facilitate behavior modification.

Considering the above and from the intervention carried out this one shows a significant improvement on the level of knowledge about schizophrenia on caregivers in this sample. This improvement in on theoretical and practical aspects related to the course and treatment of schizophrenia. Key elements were observed that were acquired in the intervention and influence the way we understand the disorder, that is, take out the caregiver’s blame about the schizophrenia, the objectives of deinstitutionalization and the variables that affect a better prognosis of the patient, all of which allow a better approach and adherence to treatment.

Understanding of patient's behavior and what the family can do should create a better dynamics within the home. Notwithstanding the foregoing, it is noted that other areas such as symptoms and etiology of the disorder, although their improvement after intervention, no changes to the same extent indicating the need to address these issues in greater depth in the design future programs of family intervention. Berkowitz et al. (1984), indicate that families tend to maintain their own version after the educational sessions on the etiological factors of schizophrenia, which could explain the findings in this investigation.

As it happened in this study, many authors have also obtained an increase in knowledge about schizophrenia once the family intervention.

A limitation of the study is that this improvement of knowledge must be related with a non-specific variables like the inclusion in a group therapy, as well as the increase of contacts between family and psychiatric team are part of the therapeutic effect. Likewise, the increased knowledge may be determined by factors such as recognition of the disorder, increased social support and community networks, and greater appreciation of their own needs; specific effects on the caregivers’ feelings of isolation and stigma may also be relevant. The combination of these factors would increase their feelings of capability, and provides a foundation on which to develop effective problem-solving methods.

5. Conclusion

Treatment introduced in its participants a significant improvement in the level of knowledge about schizophrenia, supporting the idea that provides information is an essential element in the family intervention.

Reference


