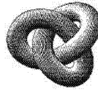

Revista de Cercetare si Interventie Sociala

ISSN: 1583-3410 (print), ISSN: 1584-5397 (electronic)

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Revista de cercetare și intervenție socială, 2020, vol. 68, pp. 261-270

https://doi.org/10.33788/rcis.68.18

Published by:
Expert Projects Publishing House

On behalf of:
„Alexandru Ioan Cuza" University,
Department of Sociology and Social Work
and
HoltIS Association

REVISTA DE CERCETARE SI INTERVENTIE SOCIALA
is indexed by Clarivate Analytics (Social Sciences Citation Index),
SCOPUS and CROSSREF

Social Intervention as an Adjuvant Therapy for Patients with Schizophrenia

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Abstract

Schizophrenia is one of the most debilitating psychiatric disorders due to its medical, social, professional and relational disability. With the lack of any progress made in the pharmaceutic treatment of this disorder in the last twenty years, developing adjuvant therapies to help patients live a normal professional and social life comes with great importance. Our study was conducted on 88 participants, which were recruited during an acute episode of schizophrenia at the Socola University Hospital, Iasi, Romania. These patients were randomly assigned to two experimental groups: one group received a social intervention consisting of one year of Behavioral Family Management (BFM), and the other group received the Supportive Family Management (SFM) intervention. The results of our study showed that the social intervention, whether it was behavioral or supportive, dramatically decreased the scores on the BPRS (Brief Psychiatric Rating Scale). At baseline our patients had mean score of 84.4 (SD=12.3). After 12 months of social intervention the mean scores for BPRS were 38.8 (SD=11.6) for the BFM group and 37.7 (SD=10.5) for the SFM group. The results of our study suggest that a more holistic approach in treating schizophrenia is needed. Working with

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the families of the patients in various forms of therapy might help not only with the decrease of schizophrenia's symptoms, but also help patients to interact better with their families, colleagues and friends and therefore increase the quality of life of this at risk population.

Keywords: schizophrenia, social intervention, family therapy, adjuvant treatment, psychiatric disorders.

Introduction

Schizophrenia is considered the most severe and invalidating psychiatric disorder due to its long-term evolution and also to its medical, social, professional and relational disability. The calculated annual cost for this disorder is being estimated at 65 billion dollars without including the enormous social and psychological costs of patients and their families. In terms of psychiatric assistance, epidemiological studies in developed economies show that schizophrenia accounts for about 40% of hospitalized cases in psychiatric units, demonstrating the severity of evolution and negative social implications, and arguing for a comprehensive therapeutic and rehabilitation approach (van Os & Kapur, 2009).

Over the last twenty years few psychiatric disorders have suffered such big changes in the potential treatment as schizophrenia. However, the problem is that these changes have gone rather unnoticed in the medical world possibly because these changes have not arisen from breakthroughs in research on genetics, receptors, anatomy, or even from new discoveries in neuropharmacology (Wu, Lizheng & Birnbaum, 2006).

Therefore, the new developed pharmaceutical treatment, consisting of a new generation of antipsychotics, has not led to a demonstrated substantially increase in the observed effectiveness of this treatment. Furthermore, these new developed drugs did not have a much better tolerability compared to the older pharmaceutical treatment (Ganguli & Strassnig, 2006). In addition, when a clinical comparison of the older treatment with the newer one was made, it has been showed that, in practice, some older drugs such as perphenazine are as efficacious as the newer ones (Tiihonen et al., 2006). But perhaps the most alarming results come from the clinical trials of the National Institute of Mental Health. These clinical antipsychotic trials measured the intervention effectiveness of the new developed drugs. The results of this study showed that 74% of patients with established symptoms of schizophrenia discontinued their medication within 18 months. The second part of their results showed that there was no overall difference in the effect of the drug between perphenazine and the newer atypical antipsychotics (Lieberman *et al.,* 2005).

On the other hand, the idea of psycho-social intervention as a potential intervention in patients who suffer from schizophrenia is gaining popularity. Scientific evidence now supports the notion of psycho-social intervention for several psychological problems: childhood mental and physical trauma (Read, *et al.,* 2005), copying to high level of everyday stresses (Myin-Germeys, Delespaul & Van, 2005), hallucinogenic drugs addictions (Hall, 2006), along with several other psychological and social disorders (Bentall, 2004).

Regarding the specificity of schizophrenia, working with families of the patients with the purpose of improving how to manage and reduce high expressed emotion is already well established as a method to reduce relapse rates in schizophrenic patients (Pilling, *et al*., 2002). The available data from the literature shows that cognitive behavior therapy makes a significant beneficial difference in the treatment of schizophrenia. More specific, the randomized trials show that cognitive behavior therapy reduces both positive and negative symptoms during therapy and its beneficial effect is continued after the intervention is stopped (Turkington, Kingdon & Weiden, 2006). This evidence warrants a change in the approach to schizophrenia treatment: social interventions might play an important role in reducing the symptoms of schizophrenia and might increase the quality of life of the patients and their families. However, despite the fact that psychosocial and cognitive therapies are now included in clinical practice guidelines in the developed countries, for example the guidelines produced by the National Institute for Health and Clinical Excellence in England, considerable problems remain when trying to implement these new treatments in developing countries such as Romania. Furthermore, even if social interventions for schizophrenic patients are available, it has been showed that only a minority of patients and families have access to them (Green *et al.,* 2003).

In the beginning of the research into social intervention in schizophrenia, pairs of social workers were meeting family members for 10 or more sessions (Lieberman *et al*., 2005). The treatment consisted of simple, brief interventions with families mixed with cognitive therapy with individual patients and it produced visible improvements and may, at least in the first part of the treatment, still be implemented today (Turkington *et al.,* 2006).

Methodology

Participants

This study was conducted on 88 patients, between 2017-2018. All the patients were recruited during an acute episode of schizophrenia at the Socola University Hospital, Iasi, Romania. We selected our participants if they met the following criteria: (1) The presence of schizophrenia disorder according to DSM-IV-TR (American Psychiatric Association); (2) Age between 18 and 55 years; (3) The possibility of a face to face contact with the home family, at least 4 hours per week for the next year; (4) Existence of the study participation agreement signed by both the patient and a family member. In the same time, we also had some exclusion criteria: (1) Pregnancy; (2) Epilepsy; (3) Drug or alcohol addiction. The patients were then randomly assigned to one of the two social interventions: Behavioral family management (BFM) and Supportive Family Management (SFM). During the study, the patient followed pharmacological maintenance therapy at the standard dose (4-6 mg) of risperidone.

Behavioral Family Management (BFM): patients in this group received training in family communication and problem solving. More details of this intervention can be found in Family Care of Schizophrenia (Faloon, Boyd & McGill, 1984). This social intervention helped with identifying family strengths and family weaknesses in communication and problem solving and helped families work toward development of new strategies and skills for dealing with specific difficulties. The technique was a behavioral classic approach with constructive feedback and discussion. The therapist encouraged the expression of positive and negative feelings, effective listening, communication of desires for behavioral changes in others, and reciprocal conversation. A structured, individualized problem-solving method was developed within each family, for each specific situation, which focused on identifying the problem, clear stipulation of the final goal, listing of alternative solutions and the advantages and disadvantages of each and implementation of the each solution to deal with unforeseen consequences. The sessions focused especially on difficulties actually encountered by the family in regard to the patient's illness and treatment (medication, the lack of compliance, problematic behaviors related to schizophrenia or disagreements between parents about the patient's best care). Families also routinely completed weekly homework exercises for a continued refinement of their new developed skills. The intervention was performed weekly for the first 13 weeks, followed by once every other week for the next 13 weeks and then once a month until one year of intervention has been fulfilled.

Supportive Family Management (SFM): supportive family management was defined in the same manner as in its guide (Hatfield, 1991; Bernheim & Lehman, 1985). This social intervention provides the patient and families with detailed information about the illness, treatment plan and services. We also gave families

descriptions and explanations of community resources and facilitated linkage to the available community services. A second aspect of this intervention was providing direct advice concerning management of crises and day-to-day patient difficulties particularly focused on patients' target symptoms and the related family issues. Brief family therapy techniques were also allowed when indicated but the main focus was supporting the family and making the family understand that their day to day caring of the patients counted. Families were also directly referred to other sources of help when needed. In contrast to BFM, there was no attempt to teach and systematically alter the families' communication patterns and problem solving by use of a broad behavioral training approach. Changes in these skills however, may have resulted from therapist's model of appropriate communication and problem solving or helping families handle crises in a more effective manner. The SFM's intervention included multiple group meetings with the same frequency as the AFM group, which is described above.

Results

At baseline

Before the social intervention there was no significant difference between the two experimental groups regarding any of the psychiatric evaluation tools used in this paper: the Behavioral Family Management group (BFM) vs. the Supportive Family Management group (SFM). The demographic characteristics of the two groups can be seen in *Table 1*.

Table 1: Demographic data of the two experimental groups

	BFM (n=48)	SFM (n=40)
AGE mean (SD)	31.3 (8.3)	27.1 (6.4)
Gender (men-women)	31 - 17	30 - 10
Marital status (married-not married)	10 - 38	5 - 35

After the social intervention

All patients enrolled in this study, regardless of the intervention group, presented lower scores on the BPRS scale after one year compared to the baseline. The exact values of this comparison can be seen in *Table 2*.

Table 2: A comparison of the scores obtained by the patients at the Brief Psychiatric Rating scale before the intervention and after intervention (with distinct values for the two experimental groups)

	At baseline	BFM group	SFM group
Somatic concern	5.5	3	3
Anxiety	5.5	2	3
Depression	5.1	2	3
Suicidality	6	3	3
Guilt	5.5	2	2
Hostility	5.5	1	2
Elevated mood	1.5	5	6
Grandiosity	5.5	5	6
Suspiciousness	6.4	2	2
Hallucinations	6.2	1	1
Unusual thought content	6.3	2	3
Bizarre behavior	6.4	3	2
Self-neglect	5.5	3	4
Disorientation	6 .5	1	1
Conceptual disorganization	6.4	2	2
Blunted affect	6.3	1	2
Emotional withdrawal	6.3	2	2
Motor retardation	4.5	4.5	4.5
Tension	6 .5	2	2
Uncooperativeness	5.5	3	3
Excitement	6.5	4	4
Distractibility	6.2	4	4
Motor hyperactivity	5.6	5.5	5.4
Mannerism and Posturing	4.6	4.5	4.4
Total score BPRS - mean (SD)	84.4 (12.3)	38.8 (11.6)	37.7 (10.5)
BPRS psychosis scale	19.2 (2.2)	2.3 (1.4)	2.5 (1.0)

Discussion

When we designed our study, we had several well-defined goals. The first one was to evaluate the efficacy of other therapeutic methods complementary to the classic medication in the treatment of schizophrenia. Therefore, we evaluated, through a well validated instrumented for measuring symptoms of schizophrenia (BPRS), our sample of patients at baseline and after 1 year of continuous social intervention with the help of their family. We used a BPRS cutoff score of 39 which showed a sensitivity of 85.71 percent and a specificity of 86.11 percent. The results of our study clearly show that social intervention with the help from the patient's family can be an efficient complementary therapy, along with the medical treatment. At baseline our sample of patients had a mean of the BPRS total score of 84.4. After 12 months of social intervention the total score has dramatically decreased: 38.8 for BFM group and 37.7 for the SFM group.

The results from our study are in concordance with those found in the literature. The results from the available clinical trials show that psychoeducational family intervention reduces symptoms and relapse risk in patients who suffer from schizophrenia (Pharoah *et al.,* 2006). Furthermore, the benefic effects of family intervention on the patient's symptoms of schizophrenia are some of the most substantial and consistent empirical effects found in the literature achieved by any type of intervention in the mental health domain (McFarlane *et al.,* 2003). However, despite this well proven efficacy of family psychoeducation, very few studies have been made to understand why this type of treatment is so effective (Barbato & D'Avanzo, 2000). The studies that tried to uncover the mechanism of this powerful benefic effect showed that apart from psychodynamic approaches, there is a remarkable consistency in the efficacy of various forms of the treatment (McFarlane *et al*., 2003). In addition, these authors suggest that common factors may be, in part, responsible for the observed treatment's benefic effect.

Furthermore, the main factor that all family psychoeducational interventions have in common is the attempt to establish a positive therapeutic alliance between the family and the patient. As a matter a fact, the establishment of a positive alliance has been pointed out as a central component of an effective and efficient family social intervention (Lehman *et al.,* 1998). In addition, research also shows that the establishment of a positive alliance plays an important role in the positive outcome of both individual therapy and other various family treatments (Martin, Garske & Davis, 2000).

The second objective of our study was to evaluate how the two methods of social intervention applied to patients with serious problems at the relational level, problems determined by their mental health, would respond after 12 months of treatment. Both social interventions (BFM and SFM) demonstrated a powerful potential in reducing symptoms of schizophrenia. Furthermore, future studies should investigate how these social interventions not only reduce symptoms of

schizophrenia but also improve social relationship along family members, help with the patient's ability to solve problems and aid to improve the general quality of life of these individuals. These findings are important from the perspective of encouraging the design of different social programs for intervention, to help patients with different forms of schizophrenia in recovery and reintegration into the socio-familial environment.

The results of our study support that the objectives of our study have been materialized. The need to adopt supportive therapeutic social interventions along with pharmacological therapy results from the definition of schizophrenic disorder itself: Schizophrenic disorders are mental illnesses characterized by hallucinations, delusions, thought and disorganized behavior (Lysaker & Buck, 2008). They last at least six months and cause socio-professional, family and personal dysfunction. If work integration is more difficult for these patients, reintegration into the social, family environment is mandatory given the significant deterioration of social relationship and family communication during the phases of this disease.

Therefore, the complex process of recovery, in its medical, professional and social stages, aims at the reintegration of these suffering individuals. However, the educational - or socio - professional rehabilitation implies an improvement of the psychiatric services, with a joint effort with the general medicine services and the social services. These institutions should provide the means necessary to ensure a high efficiency of these rehabilitation interventions.

Conclusion

Thus, the results of our study suggest that it may be important for clinicians to engage relatives early in this type of family treatment to prevent the escalation of psychotic symptoms. Furthermore, beside the proven effect of social intervention in reducing the symptoms of schizophrenia, it may also be important to engage family in these social interventions to decrease negative family interactions and family burden.

References

Barbato, A., & D'Avanzo, B. (2000). Family interventions in schizophrenia and related disorders: A critical review. *Acta Psychiatrica Scandinavica, 102,* 81-97. DOI: 10.1034/j.1600-0447.2000.102002081.x

Bentall, R.P. (2004). *Madness explained: psychosis and human nature*. London: Penguin.

Bernheim, K.F., & Lehman, A.F., (1985). *Woking with families of the mentally ill.* New York: W.W. Norton & Company.

Faloon, I.R.H., Boyd, J.L., & McGill, C.W. (1984), *Family care of schizophrenia*. New York: Guilford Press.

Ganguli, R., Strassnig, M. (2006). Are older antipsychotic drugs obsolete? *BMJ*, *332*, 1346-7. DOI: 10.1136/bmj.332.7554.1346

Green, A.L., Canuso, C.M., Brenner, M.J., Wojcik, J.D. (2003). Detection and management of comorbidity in patients with schizophrenia. *Psychiatric Clinics of North America*, 26, 115–139. DOI: 10.1016/S0193-953X(02)00014-X

Hall, W. (2006) Is cannabis use psychotogenic? *Lancet,* 367, 193-5. DOI: 10.1136/bmj.332.7554.1346

Hatfield, A.B. (1991). *Coping with mental illness in the family. A Family guide*. Maryland. Maryland department of health and mental hygiene, Mental hygiene administration and national alliance for the mentally III, pp. 1-30.

Lehman, A.F., Steinwachs, D. M., Buchanan, R., Carpenter, W. T., Dixon, L. B., & Fahey, M. (1998). Translating research into practice: The Schizophrenia Patient Outcomes Research Team (PORT) treatment recommendations. *Schizophrenia Bulletin, 24*, 1-10. DOI: 10.1093/schbul/sbp130

Lieberman, J.A., Stroup, T.S., McEvoy, J.P., Swartz, M.S., Rosenheck, R.A., Perkins, D.O., *et al.* (2005). Effectiveness of antipsychotic drugs in patients with chronic schizophrenia. *The New England Journal of Medicine,* 353, 1209-23. doi: 10.1056/NEJMoa051688

Lysaker, P.H., & Buck, K.D. (2008). Is recovery from schizophrenia possible? An overview of concepts, evidence, and clinical implications. *Primary Psychiatry, 15*, 60-65. DOI: 10.1097/YCO.0000000000000407

Martin, D. J., Garske, J. P., & Davis, M. K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 68,* 438- 450. DOI: 10.1037/0022-006X.68.3.438

McFarlane, W. R., Dixon, L., Lukens, E., & Lucksted, A. (2003). Family psychoeducation and schizophrenia: A review of the literature. *Journal of Marital and Family Therapy, 29*, 223–246. DOI: 10.1111/j.1752-0606.2003.tb01202.x

Myin-Germeys, I., Delespaul, P., & Van, O.J. (2005). Behavioral sensitization to daily life stress in psychosis. *Psychological Medicine, 5*, 733-741. DOI: 10.1017/S0033291704004179

Pharoah, F., Mari, J., Rathbone, J., Wong, W. (2006). Family intervention for schizophrenia. *Cochrane Database of Systematic Reviews, 4*. DOI: 10.1002/14651858.CD000088

Pilling, S., Bebbington, P., Kuipers, E., Garety, P., Geddes, J., Orbach, G., et al. (2002). Psychological treatments in schizophrenia: I. Meta-analysis of family intervention and cognitive behaviour therapy. *Psychological Medicine, 32*, 763-82. DOI: 10.1017}S0033291702005895

Read, J., van Os J., Morrison, A.P., Ross, C.A. (2005). Childhood trauma, psychosis and schizophrenia: a literature review with theoretical and clinical implications. *Acta Psychiatrica Scandinavica, 112*, 330-350. DOI: 10.1111/j.1600-0447.2005.00634.x

Tiihonen, J., Wahlbeck, K., Lönnqvist, J., Klaukka, T., Ioannidis, J., Volavka, J., et al. (2006). Effectiveness of antipsychotic treatments in a nationwide cohort of patients in community care after first hospitalisation due to schizophrenia and schizoaffective disorder: observational follow-up study. *BMJ*, *333*, 224-227. DOI: 10.1136/bmj.38881.382755.2F

Turkington, D., Kingdon, D., Rathod, S., Hammond, K., Pelton, J., Mehta, R. (2006). Outcomes of an effectiveness trial of cognitive-behavioural intervention by mental health nurses in schizophrenia. *British Journal of Psychiatry, 189*, 36-40. DOI: 10.1192/bjp.bp.105.010884

Turkington, D., Kingdon, D., Weiden, P.J. (2006). Cognitive behavior therapy for schizophrenia. *The American Journal of Psychiatry, 163*, 365-73. DOI: 10.1176/appi.ajp.163.3.365

van Os, J. & Kapur, S. (2009). Schizophrenia. *The Lancet*, *374*, 635-645. DOI: 10.1016/S0140-6736(09)60995-8

Wu, E., Lizheng, S., Birnbaum, H. (2006). Annual prevalence of diagnosed schizophrenia in the USA: a claims data analysis approach. *Psychological Medicine*, *36*, 1535-1540. DOI: 10.1017/S0033291706008191