EFFECTIVENESS OF THE INTEGRATED LONG-TERM PROGRAM OF MANAGEMENT OF PATIENTS AFTER FIRST PSYCHOTIC EPISODE IN 5-YEAR FOLLOW-UP

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SUMMARY

The Early Intervention Centre (First episode clinic, FEC) that provides specific service programs to this particular target group of patients with early psychosis opened in November 2000 as a day clinic at the Moscow Research Institute of Psychiatry. To date, FEC programs consistent with the developed model have been established in 30 regions across Russia. 5-year follow-up data are available for 114 patients who received such care in the FEC. In more than 30% of cases complete remission was maintained over the 5 years. The number of relapses increased on the 2nd and 3rd years, but later decreased more than by one half. The relapses were mostly treated in day clinic or outpatient settings and did not require hospital admissions. More than 73% of the patients maintained their social achievements with no losses. By the end of the 5th year only 1/5 of the cases were formally recognized as unemployable due to psychiatric disability. Significantly better clinical and psychosocial outcomes have been shown in comparison with a control group of patients, treated in routine psychiatric services.

Key words: schizophrenia - early intervention – effectiveness

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Background

Programs focused on multi-disciplinary management of patients with first psychotic episodes within Early Intervention Centers have proved to be effective in the improvement of clinical and social outcomes mostly related to 2-3 years of follow-up (Birchwood et al., 1998; De Haan et al, 2003; Harrigan et al, 2003; Malla et al, 2002, 2004; Marshall & Lockwood, 2004; McGlashan, 1998; McGorry et al, 1996, 2002; Norman et al, 2005). It has been demonstrated that early intervention contributes to achieving earlier remissions and allows the prevention of social loss. However, there is a lack of evidence of the effectiveness of such interventions during the prolonged period of 5 years.

The integrated program in the Early Intervention Service (First Episode Clinic (FEC)), established in Moscow Research Institute of Psychiatry in 2000 is based on the following principles:

- Services within the least restrictive approach, both in the in-patient settings and at the following treatment stages
- Primary use of atypical neuroleptics as pharmacotherapy of first choice using minimum effective doses; and on-going dose adjustment based on thorough observation of changes in the patients' condition.
- Combining biological treatments with a consistent program of psychosocial interventions at the earliest possible stages of treatment. Psychosocial treatment includes psycho-education with the elements of problem solving techniques and social skills training, individualized family intervention, and supportive therapy. Psychosocial treatment in FEC

begins at the earliest possible stage of treatment after controlling the acute psychotic manifestations. Various types of psychosocial treatment are prescribed to patients according to the indications. Each intervention is planned with the consideration of relevant goals and with the indication of appropriate timelines for achieving these goals.

- Long-term follow up with individualized case management and comprehensive maintenance therapy.
- Polyprofessional team services (including psychiatrist, psychotherapist, psychologist, and nurses).

Admission criteria for the FPEC include the diagnosis of schizophrenia or other schizophrenia spectrum disorders, according to ICD-10 (World Health Organization, 1992), with the duration of the illness less than 5 years since the first manifestation, and not more than three relapses since the onset of the condition. Upon referral to the clinic, decision on the possibility of admission for each patient was made according to the established service policy for day hospitals (Gurovich & Sarkisyan, 1979; Gurovich et al, 1984). Persons with sub-acute psychotic conditions were accepted for the program, and in cases of acute psychotic manifestations patients were admitted after controlling the acute symptoms through inpatient treatment in a psychiatric hospital.

The aim of our study was to evaluate the effectiveness of the integrated treatment of patients with early psychosis in comparison with care provision in a traditional mental health system in a 5-year naturalistic setting.

Methods

The study was carried out as a prospective, longitudinal investigation of first episode patients within an integrated program in FEC (main group, n=114, female -44%, mean age=30.75 ±9.28) and in routine care (control group, n=119, female -64%, mean age=7.02±12.63) during 5-year follow-up. The effectiveness was evaluated by comparison of clinical (rates of relapses and complete remissions, adherence to therapy, setting of the relapse treatment) and social parameters (alterations in social status, social functioning) and in both groups as well as comparative pairwise analysis (33 pairs matched by age, gender, level of education, and type of the onset patients) was performed in order to confirm the overall results.

Results

Compared to the routine care over 5-year follow-up, patients who have been treated in FEC were more compliant with the therapy regimen: 48% in the FEC group vs. 12% in the control group. More patients of the main group maintained the condition of complete remission (46.5% vs. 36.7%, $p\ge0.05$).

Moreover, during the follow-up period the patients in the FEC group were more likely to show helpseeking behavior and self-referred to services during the earlier stages of the exacerbation, therefore the relapse rates were decreased (mean=0.18, SD=0.45 and mean=0.59, SD=0.82, respectively, p≤0.001) and 70.4% of patients were treated in outpatient settings. Symptomatic control of the illness contributed to social recovery in patients within integrated care. The results also indicated significant differences between social indicators in the two groups. Outcome indicators signifying a person's ability to maintain her/his premorbid social status were twice as high in the FEC group as in the control group. Conversely, the proportion of people who lost their pre-morbid social achievements in the control group was clearly higher in the control group with the ratio 2.4:1 when contrasted with the FEC group. By the 5th year, only 19.3% of the cases of the FEC group were formally recognized as unemployable due to psychiatric disability compared to 41.3% in the control group ($p \le 0.001$).

The results of pairwise analysis reaffirmed the following findings (Table.1). Moreover, the psychotic symptoms of the FEC group were controlled within a shorter time than in patients treated within routine care.

Table 1. The results of pair-matched comparison of two groups in 5-year follow-up observation

Variables		group 1	group 2	Р
Number of relapse	1 year	0.35 <u>+</u> 0.54	0.50 <u>+</u> 0.82	p>0.05
	2 year	0.64 <u>+</u> 0.73	0.52 <u>+</u> 0.78	p>0.05
	3 year	0.26 ± 0.51	0.76 <u>+</u> 1.07	p<0.001
	4 year	0.32 ± 0.53	0.41 ± 0.70	p>0.05
	5 year	0.20 ± 0.47	0.47 <u>+</u> 0.61	p<0.001
Duration of psychotic symptoms during relapses (in days)		38.96 <u>+</u> 24.16	96.5 <u>+</u> 62.8	p<0.001
Adherence to ther	apy 1 year	97.05%	73.52%	p<0.05
	2 year	79.41 %	61.76 %	p>0.05
	3 year	70.58 %	26.47%	p<0.05
	4 year	61.76 %	17.64%	p<0.05
	5 year	64.07%	17.64%	p<0.05
Duration of medication therapy during in 5 years (in month)		14.44 <u>+</u> 7.06	6.31 <u>+</u> 5.2	p<0.05
Average period of time between the symptom occurrence and service admission (in days)		20.61 <u>+</u> 11.4	78.86 <u>+</u> 46.2	p<0.001
Social status	Social position remain stable	73.52 %	37.05%	p<0.05
Social positions lost		26.48%	52.95%	p<0.05
Unemployable due to psychiatric disease		17.64 %	47.05%	p<0.001

Conclusions

The results of a 5-year outcome evaluation with comparable groups of patients demonstrated significant advantages of the service model - the First Episode Clinic - in comparison with traditional mental health services. These advantages are represented by improving the quality of remissions, maintaining treatment compliance, reducing the number of reoccurring relapses and hospital admissions, and reducing the duration of time needed for controlling psychotic manifestations. The model is also superior to the traditional services in

achieving higher social outcome indicators, such as minimizing social loss and maintaining the patients' pre-existing social status.

Long-term treatment of patients with first psychotic episodes in FEC and routine care showed discordant dynamics of clinical and social parameters in 5-year follow-up with their gradual deterioration in the traditional care system. This suggests that management of patients after first episode of psychosis via an integrated long-term program could have a greater positive impact on the unfavourable course of schizophrenia.

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