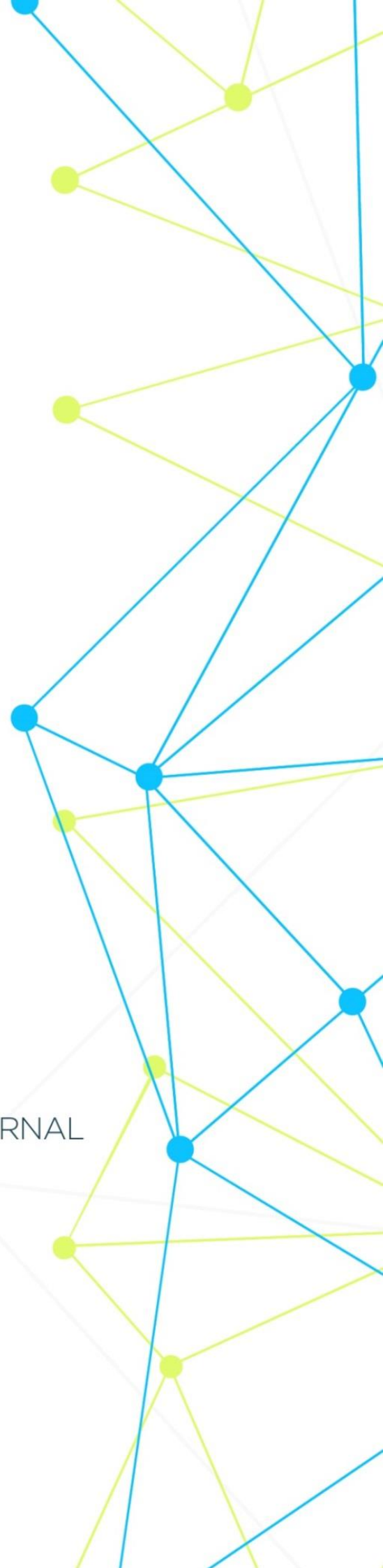


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# **THE ROLE OF MAINTENANCE THERAPY IN COMPARATIVE EFFECTIVENESS OF THE QUALITY AND STRUCTURE OF REMISSIONS IN RECURRENT SCHIZOPHRENIA**

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**Abstract.** The article is devoted to the study of the role of maintenance therapy in the comparative effectiveness of the quality and structure of remissions in recurrent schizophrenia. The introduction of criteria for remission developed in the outpatient population of schizophrenia made it possible to prove the possibility of achieving a deeper and more stable effect, as well as a higher level of social functioning during modern antipsychotic pharmacotherapy. The proposed criteria for remission can be used in the practical work of a psychiatrist as standards for modern long-term antipsychotic therapy, as well as to increase the effectiveness of outpatient therapy for schizophrenia patients. In addition, clinical and functional criteria can be used in comparative therapeutic studies along with the concept of a therapeutic response, and possibly later completely replace it, since they are a more integrative and rigorous assessment standard that takes into account functioning in accordance with the modern biopsychosocial model of schizophrenia.

**Keywords.** Remission, recurrent schizophrenia, maintenance therapy, atypical antipsychotics.

## **Introduction**

Among endogenous diseases, the most favorable form in prognostic terms is schizophrenia with a recurrent type of course. During recurrent schizophrenia, as a rule, several exacerbations (seizures) are observed. Between these conditions, there is no active signs of the disease – a period of remission. During these periods, clinical

signs of the disease sometimes disappear or are minimally presented. At the same time, each new "wave" of positive disorders makes it increasingly difficult for the patient to return to normal life, i.e. worsens the quality of remission. During remissions, negative symptoms become more noticeable in some patients, in particular, reduction of psychoenergetic potential, decreased initiative and desires, isolation, difficulties in formulating thoughts [1, 2, 4, 9].

In the absence of the help of relatives and friends, supportive and preventive pharmacotherapy, the patient may find himself in a state of complete inactivity and household neglect. Scientific studies conducted over a number of years have shown that after the first attacks of schizophrenic spectrum diseases, approximately 25% of all patients recover completely, 50% recover partially and continue to need preventive care, and only 25% of patients need constant treatment and medical supervision, sometimes even in a medical hospital.

Supportive therapy: the course of some forms of schizophrenic spectrum diseases is characterized by duration and a tendency to relapse. That is why in all domestic and foreign psychiatric recommendations concerning the duration of outpatient (supportive, preventive) treatment, its terms are clearly stipulated. So, patients who have suffered the first attack of psychosis, as a preventive therapy, it is necessary to take small doses of drugs for two years. In case of repeated exacerbation, this period increases to three to seven years. If the disease shows signs of transition to a continuous course, the duration of maintenance therapy is extended indefinitely.

Modern standards of treatment of schizophrenia suggest the need for differentiated use of antipsychotic drugs. However, many of them are based on a simplified approach, which follows from the idea of the equal effectiveness of all neuroleptics and their difference only in safety and tolerability [3, 5, 6].

On this basis, neuroleptics of choice (atypical antipsychotics), second-line neuroleptics (traditional antipsychotics) and reserve neuroleptics (clozapine) are distinguished.

The main idea of the presented scheme is that the ideal ratio of "efficacy/tolerability" is characteristic of the neuroleptics of choice, whereas this indicator is less effective and optimal for the neuroleptics of the second row and reserve. Despite the attractiveness of this concept, it has a number of serious drawbacks.

They are connected with the "controversy" of some theoretical data that became the basis for its development, and with certain difficulties of its application in clinical practice. For example, the opinion is increasingly expressed about the "preliminary" results of studies indicating the high effectiveness of atypical neuroleptics.

When taking them, side effects often develop that can pose a serious threat to the health of patients, significantly worsen the quality of life, lead to stigmatization and non-compliance with medical recommendations.

The profiles of the selective antipsychotic effect of atypical neuroleptics have not yet been determined. Their comparison has not been carried out for various atypical and typical antipsychotic drugs. All this makes it much more difficult to make a differentiated choice of therapy.

This study is one of the stages of our work aimed at studying remissions in recurrent schizophrenia and the effectiveness of atypical neuroleptics in the treatment of schizophrenic spectrum diseases and the proposal of a new differentiated therapy regimen.

### **Purpose of the study**

To study the role of maintenance therapy with highly patentable typical and atypical neuroleptics in the comparative effectiveness of the quality and structure of remissions in recurrent schizophrenia.

### **Materials and methods**

A cross-sectional study revealed that out of 188 patients (men – 86, 45.7%; women – 102, 54,3%) 59 (31,5%) they met the symptomatic criterion, 49 of them (26.1%) maintained remission for 6 months. 129 (68.5%) patients did not meet the

symptomatic criterion of remission, of which 97 (51.7%) remained stable during the follow-up period.

### **Research results**

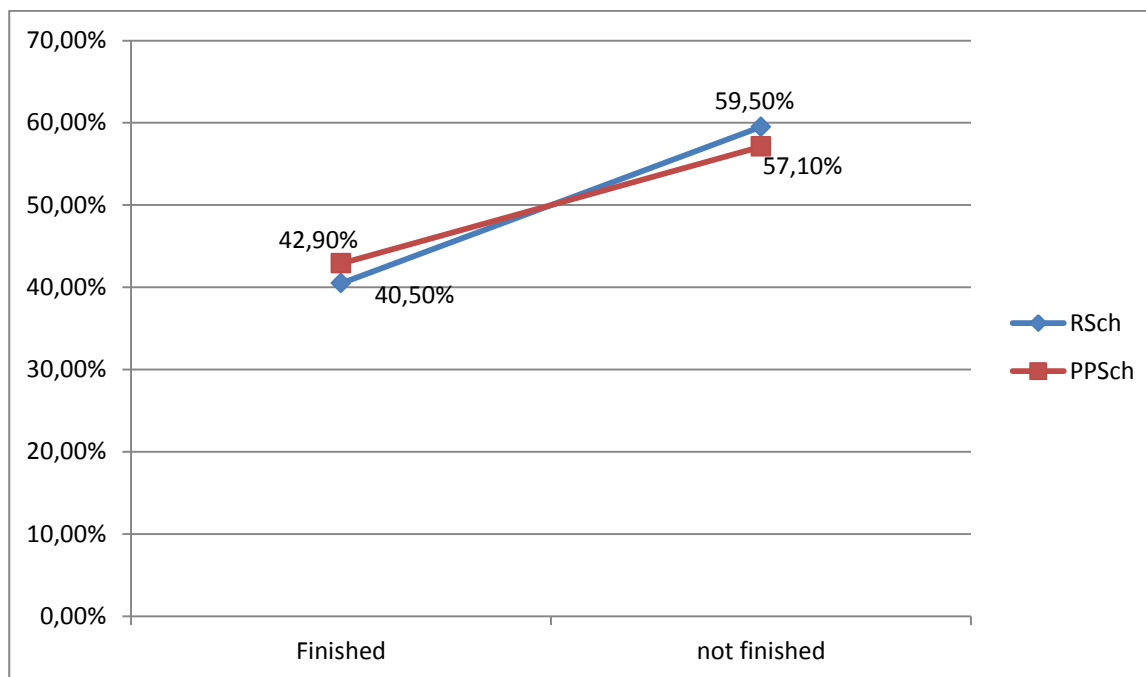
As a result of a cross-sectional study of 188 patients with recurrent schizophrenia in Andijan for compliance with the symptomatic remission criterion, it was revealed that 59 (31.5%) patients met this criterion, while 129 (68.5%) did not meet it.

Subsequently, all patients were monitored for 6 months without changing the therapy regimen, and after this period, only 49 (26.1%) patients who previously met the symptomatic criterion retained remission. While out of 129 patients who did not meet the symptomatic criterion, only 97 (51.7%) remained stable during this period.

The analysis of primary efficacy by the number of patients who dropped out of the study (Kaplan-Mayer method) showed the advantage of therapy with prolonged neuroleptic (risperidone) compared with the control group (Figure 1).

**Figure 1**

**Analysis of primary efficacy by the number of patients who dropped out of the study**



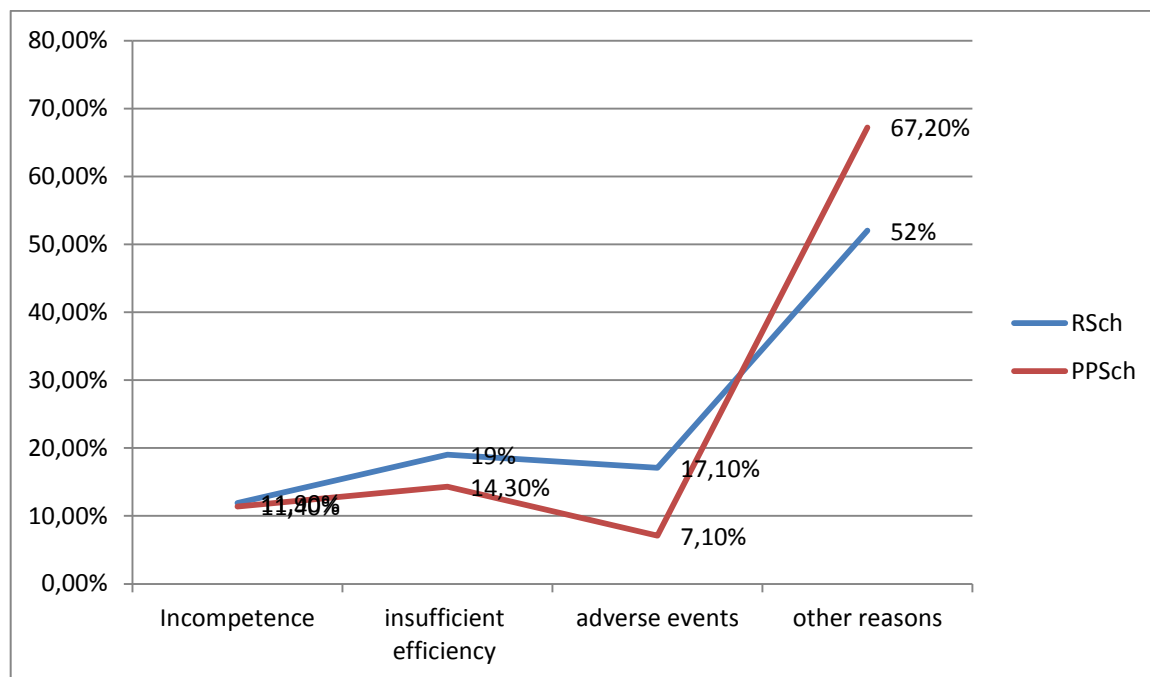
However, it should be noted that the differences between the groups did not reach statistical significance.

In general, in both groups there was a relatively equal percentage of patients who completed the study, in the prolonged risperidone group – 59.5%, and in the control group – 57.1%.

Almost the same percentage of patients in both groups dropped out due to incompetence – 11.9% and 11.4%, respectively. Due to insufficient efficacy, 19.0% were eliminated in the prolonged risperidone group, and 14.3% in the control group. In the control group, there was a higher percentage of patients who withdrew from the study due to adverse events - 17.1%, than in the risperidone group - 7.1%, but no statistical differences were found between the groups for this indicator. The percentage of patients who interrupted therapy for other reasons (including voluntarily) was equal to 2.4% in the prolonged risperidone group (Figure 2).

**Figure 2**

**Dropped out due to incompetence**



At the 12th month of the study, the percentage of reduction of the total PANSS score in the prolonged risperidone group was 13.8% ( $p < 0.0001$ ) and in the control group – 6.8% ( $p < 0.05$ ). The intergroup differences at 12 months were already statistically significant ( $p < 0.01$ ).

The transfer of stable outpatient patients to monotherapy with a prolonged atypical antipsychotic was associated with a greater reduction in symptoms and a more significant improvement in social functioning compared to standard antipsychotic therapy, mainly typical neuroleptics, currently used in outpatient psychiatric practice. In the prolonged risperidone group, compared with the control group, the severity of all clusters of PANSS symptoms (positive, negative and general) decreased. This was the main factor that allowed 23.8% of patients to achieve symptomatic remission and 19.0% to keep it until the end of the study. However, the proposed symptomatic barrier for determining remission was achievable mainly for patients with an episodic type of schizophrenia. It is noteworthy that the majority of patients in the risperidone group dropped out in the first half of the study, and in the control group – in the second half. Moreover, the



largest number of patients from the prolonged risperidone group dropped out of the study due to inefficiency (examination of symptoms). And the use of clozapine more often led to the formation of remissions of "poor" productive disorders.

This confirms the data of some studies [7,10,11] that changing therapy is a risk factor for exacerbation, withdrawal from the study and hospitalization. In the group of prolonged risperidone, there was a more pronounced improvement in social and daily functioning, which allowed some patients to change their social status and go to work, and others to more actively help relatives in daily household activities. In addition, compliance with prolonged risperidone therapy was higher than in the control group mainly due to reduction of incompetence and reduction of negative attitude to treatment. It should be noted that the differences between the groups in most of the compared indicators have reached statistical significance.

All this makes it possible to recommend atypical prolonged medications for wider use in outpatient clinical practice in Uzbekistan, since compared with naturalistic (mainly traditional antipsychotic pharmacotherapy) this approach more often ensures the achievement and maintenance of a high level of remissions.

### **Conclusions**

The results of the study indicate a significant difference in the effectiveness of atypical neuroleptics in the maintenance therapy of schizophrenia.

Therapy with various atypical neuroleptics introduces significant features into the structure of drug remissions. The use of clozapine more often leads to the formation of remissions of "poor" productive disorders.

The data obtained indicate the need for differentiated use of atypical neuroleptics during remission in patients with schizophrenia. When conducting maintenance therapy of its forms, manifested by psychotic symptoms (continuous paranoid, paroxysmal-progressive, recurrent), the most rational use of clozapine. Such therapy leads to the maximum possible improvement in the condition of patients and prevents the development of repeated exacerbations to the greatest extent.

## References

1. Valikova E. A., Shiryayev O. Yu. Comparative analysis of various treatment regimens for patients with schizophrenia with manifestations of pharmaco-resistance // *Applied information aspects of medicine*. 2017. Vol. 10, No. 1. pp. 80-83.
2. Voronov A. I., Dresvyannikov V. L., Pukhkalo K.V. A new way of treating schizophrenia. The first successes and new tasks // *Academic Journal of Western Siberia*. - 2014. - No. 6. - pp. 66-71.
3. Danilov D. S. Differentiated use of atypical neuroleptics in patients with schizophrenia during remission (results of a comparative study) // *Siberian Bulletin of Psychiatry and Narcology*. 2010. No. 6 (63). pp. 80-88.
4. Ibragimova E. S., Kindarova Z. B. Schizophrenia-symptoms, signs, treatment and its main forms // In the collection: *Science and youth Proceedings of the All-Russian scientific and practical conference of students, young scientists and graduate students*. 2017. S. 342-345.
5. Malin D. I., Ryvkin P.V. Modern approaches to the problem of resistance and intolerance to psychopharmacotherapy in patients with endogenous psychoses. // *Collection. New achievements in the therapy of mental diseases*. Moscow, 2012. pp. 477-483.
6. Potapov A.V. Comparative efficacy, tolerability and effect on the social functioning of prolongation of risperidone (Consta) and olanzapine in the long-term treatment of schizophrenia and schizoaffective disorder (coauthor. Mosolov S.N., Tsukarzi E.E.). // *Modern therapy of mental disorders*. - 2008. - No.2. - pp. 10-18.
7. Potapov A.V. Strategies for dosing and transferring patients to injectable risperidone of prolonged action (co-author. Mosolov S.N.). // *Psychiatry and psychopharmacology*. - 2008. - Vol.10, No. 4. - pp. 22-25.
8. Stupina O. P. The use of forced insulin-comatose therapy in patients with paranoid schizophrenia: clinical, dynamic and rehabilitation aspects : abstract of the dissertation of the Candidate of Medical Sciences. Tomsk, 2005. 23 p.

9. Hirschfeld R. M., Montgomery S.A., Keller M. B. et al. Social functioning in depression: review. *J Clinical Psychiatry* 2010; 61:268-75.
10. Karamatskos E. Subjective well-being of patients with schizophrenia as a target of drug treatment / E. Karamatskos, C. Mulert, M. Lambert, D. Naber // *Current pharmaceutical biotechnology*. – 2012. – Vol. 13(8). – P. 1490-1499.
11. Kinon B. J. Early response to antipsychotic drug therapy as a clinical marker of subsequent response in the treatment of schizophrenia / B.J.Kinon, L. Chen, H. Asher-Svanum, V.L. Stauffer, S. Kollak-Walker, W.Wei Zhou, S.Kapoor, J.M. Kane // *Neuropsychopharmacology*. - 2010 - N 35(2): pp. 581-590.
12. Monteleone P., May M. Circadian rhythm disorders in depression: consequences for treatment and quality of remission. *Medicography* 2009; 31 (2): 132-9.
13. Frank E., Kupfer D. J., Taze M. E., etc. Two-year results for interpersonal and social rhythm in people with bipolar disorder I. *Archaic Generation Psychiatry* 2015; 62:996-1004.