

The Impact of Novel Antipsychotic Drugs on Quality of Life Among People Suffering from Schizophrenia

Vlado Jukić, Vesna Barić, Jadranka Čulav-Sumić, Miroslav Herceg, Željko Majdančić and Maja Werft-Čop

Psychiatric Hospital »Vrapče«, Zagreb, Croatia

ABSTRACT

More attention is increasingly being paid to quality of life of people suffering from schizophrenia. The results of numerous clinical trials indicate that novel antipsychotic drugs are as efficient (if not more so) than the conventional drugs. Novel drugs also cause fewer side effects and allow for better quality of life. In order to confirm these thesis we have studied the quality of life of 80 female outpatients in good social remission that have been under psychiatric evaluation for at least six months and were on antipsychotic drugs. Of those 80 outpatients, half were on the conventional medication, while the other half were on the novel antipsychotic drugs. Their life quality was evaluated with the questionnaire »Heinrichs-Hanlon-Carpenter – Quality of life questionnaire«, which is one of the most frequently used QL scales. The results demonstrate that the only difference between the two groups lies in the field of social activity. While leaving the question of different influence of novel and conventional drugs open, the authors are trying to find the possible reasons for such results.

Key words: schizophrenia, antipsychotic drugs, quality of life.

Introduction

In recent years, the view has prevailed that medicine should serve not only to heal the illness, but also to improve the quality of life of those receiving the treatment. The issue of quality of life is particularly important if the patients in question are suffering from chronic illnesses¹.

Among such patients, psychiatric patients, particularly the ones suffering from schizophrenia, stand out because their quality of life has always been substantially lower than the quality of life of other categories of patients²⁻⁴.

This is due to the fact that schizophrenia is a disease, which, among others, enables patients to delude their subjective assessment from the objective reality. The whole array of so-called positive and negative symptoms makes it impossible for the patients to adequately participate in a range of social activities⁵. With time, the disease can totally eradicate the personality. Under the influence of psychopathology, as well as in the state of chronification, the quality of life of these patients is relatively low. Owing to research and development of various antipsychotic drugs in the last fifty years, the treatment of schizophrenic patients has improved so much that many of them can live almost normal lives, if they take their medications regularly⁶. Neuroleptics, or conventional antipsychotics, i.e. antipsychotics of the first generation have made possible the process of de-hospitalization of mental patients, and antipsychotics of the second generation, i.e. novel antipsychotics, made it possible to reintegrate the schizophrenic patients into social environment^{7,8}. Due to new generation of antipsychotics the focus of the treatment has been shifted to the outcome of the illness and on the quality of life^{9,10}. The outcome of the illness and the quality of life of schizophrenic patients, as well as their rehabilitation, while using novel antipsychotic drugs, are severely influenced by various sociotherapeutic and psychotherapeutic actions, which cannot be neglected¹¹.

Owing to the fact that many emphasize the advantages of the new generation of antipsychotics compared to the conventional antipsychotics (which are more difficult to obtain to our patients*), we wanted to verify on our own patients

whether there is a difference between the quality of life of patients taking novel antipsychotics and the quality of life of patients taking conventional antipsychotics. Our hypothesis was that patients taking novel medications have a better quality of life.

Materials and Methods

Two groups of 40 schizophrenic female outpatients were involved in the research. Each group has been in satisfactory social remission for at least six months, under regular psychiatric evaluation, and under regular antipsychotic medications therapy. First group consisted of patients that were treated with conventional antipsychotics, and the second group was treated with novel antipsychotics. The age of the studied patients was between 23 and 67 (Figure 1), and the duration of the disease was between 1 and 34 years (Figure 2). Patients

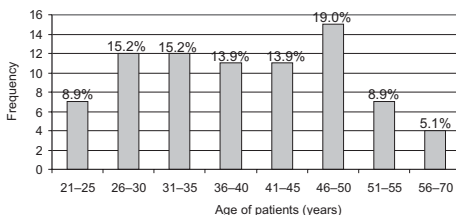


Fig. 1. Age of studied patients.

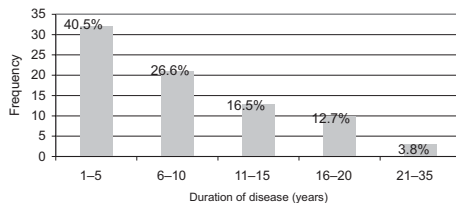


Fig. 2. Duration of disease.

* Atypical antipsychotics olanzapin and risperidon are available to our patients at the expense of the health insurance only if the »disease is refracteous to conventional antipsychotics or if the conventional antipsychotics cause unbearable side effects«.

involved in the study have been selected by random selection. Each patient that came to control examination in the period between 1st of July and 1st of October 2002, and fulfilled the given criteria was included in the study. Since our patients are still treated with conventional drugs 2–3 times more often than with novel antipsychotics, each second or third patient that was treated with conventional antipsychotics was included in the study¹³. Only female patients were involved in the study because psychiatrists that carried out the research work on hospital wards that treat only women, and continue to care for the same patients afterwards as outpatients.

The research was conducted in the following manner: the psychiatrist would conduct a structured interview, followed by the examination, and then filled out the questionnaire for the quality of life according to »Heinrichs-Hanlon-Carpenter – Quality of life questionnaire«¹⁵. The comparison of the studied groups was made by analysis of significance with t-test.

Results

The results of the study are shown in Figures 3 and 4 and Table 1. As can be seen from the Figure 3, the studied patients have mostly taken flufenazin (67.5% of cases), when taking conventional antipsychotics, and of the novel antipsychotics (Figure 4), olanzapin was the mostly used.

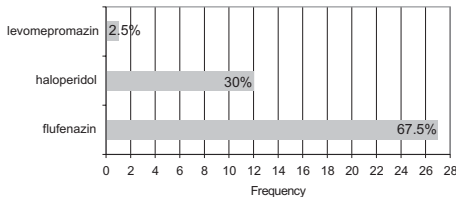


Fig. 3. Ratio of classic antipsychotics in therapy.

The results of analysis according to »Heinrichs-Hanlon-Carpenter – Quality of life questionnaire« are given in Table 1. Statistically significant difference was found only in the category of Social activity, while other categories did not exhibit statistically significant differences. Social activity was better in the group using the novel antipsychotics.

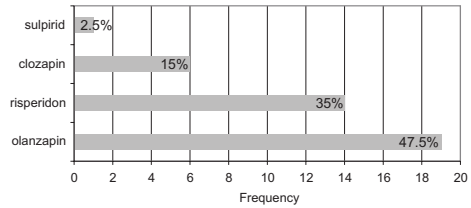


Fig. 4. Ratio of new generation antipsychotics in therapy.

Discussion

Numerous studies show that the important benefits of novel antipsychotics is their influence on improving the quality of life of schizophrenic patients. Because of this, and in line with tendencies of insistence on the quality of life of (schizophrenic) patients, advantage is given to the group of novel antipsychotics over conventional ones¹⁶. Wishing to test the hypothesis that novel, atypical antipsychotics are better than the conventional, we have tested and compared the quality of life of two groups of patients that were selected in such a manner that this hypothesis can be verified.

As we can see from Table 1 containing obtained results, our hypothesis, based on the suggestions of numerous studies, was not proven.

Only one parameter that points to quality of life according to »Heinrichs-Hanlon-Carpenter – Quality of life questionnaire«, was improved by using novel instead of conventional antipsychotics

TABLE 1
 RESULTS OF ANALYSIS USING »HEINRICHS-HANLON-CARPENTER – QUALITY OF LIFE QUESTIONNAIRE« BETWEEN FEMALE PATIENTS USING CONVENTIONAL ANTIPSYCHOTICS AND FEMALE PATIENTS USING NOVEL ANTIPSYCHOTICS

No.	Items	t	p
1.	Rate intimate relationships with household members	–.841	0.4
2.	Rate intimate relationships	–1.62	0.1
3.	Rate active acquaintances	–1.35	0.1
4.	Rate level of social activity	–2.09	0.03
5.	Rate involved social network	–1.61	0.1
6.	Rate social initiatives	–1.56	0.1
7.	Rate social withdrawal	–1.73	0.08
8.	Rate sociosexual relations	0.31	0.7
9.	Rate of extent of occupational role functioning	0.02	0.9
10.	Rate level of accomplishment	–1.36	0.1
11.	Rate degree of underemployment	–0.55	0.5
12.	Rate satisfaction with occupational role functioning	0.21	0.8
13.	Rate sense of purpose	–1.68	0.09
14.	Rate degree of motivation	–1.73	0.08
15.	Rate curiosity	–1.79	0.07
16.	Rate anhedonia	–1.74	0.08
17.	Rate time utilization	–1.21	0.2
18.	Rate capacity for empathy	–1.38	0.1
19.	Rate capacity for engagement and emotional interaction with interviewer	–0.96	0.3

and that's social activity ($t = -2.09$; $p = 0.03$). Although there is no statistically significant difference in parameters of retreat from surroundings, life plans and goals, motivation, curiosity and anhedony, it seems that tendency of novel antipsychotics to improve these elements of quality living can be perceived. Other studied parameters of quality of life (relationship with household members, relationship with other people, active acquaintances, social surrounding taking care of the patient, social initiative, psychosexual relations, working activities, achievements, inadequate employment, degree of satisfaction with own functioning, usefulness of time, capacity

of engagement and emotional interaction with interviewer with questionnaire) do not differ in two studied groups of patients.

How does one comment these results? It is obvious that the answer can't and shouldn't be one-sided unambiguous. It would be too early and rather pretentious to discard the thesis that novel antipsychotics improve the quality of life of schizophrenic patients when compared with conventional antipsychotics. But, considering results, this thesis can not be neglected – results of this research show that there is no significant difference in the quality of life of schizophrenic pa-

tients whether they use novel or conventional antipsychotics.

Let's consider, however, other alternatives.

Novel antipsychotics have been in use for three or four years in our country. Because of their high price, which can be many times higher than the price of conventional antipsychotics, Croatian health insurance controls their prescription¹⁷. By the decision of Croatian health insurance risperidon and olanzapin are reserved for schizophrenic patients that are refracterous to therapy by conventional antipsychotics or react to conventional antipsychotics with very strong side effects, and klozapin is treated as a reserve antipsychotic medication. Probably because of this decision, but also because of widespread habit of prescribing conventional antipsychotics, more than half of schizophrenic patients in Croatia are still on conventional antipsychotics¹³. Conventional antipsychotics are practically prescribed to all schizophrenic patients who respond well on them, and have fewer side effects¹⁸. Indirectly, it could be inferred that »better« patients, i.e. patients with less severe illness, are prescribed conventional antipsychotics more often. Therefore, novel antipsychotics, although they significantly improve the quality of life, in spite of their efficiency could not in such a group considerably improve the quality of life, although they did succeed in bringing satisfactory social remission.

Moreover, patients using novel antipsychotics have been treated for shorter time then patients using conventional antipsychotics. In order to finish the study

in given time, we have insisted on social remission for at least six months while they were on their medicamentation, just to obtain sufficient number of patients taking novel antipsychotics. This leaves the possibility open that long-term therapy with novel antipsychotics could bring the quality of life of schizophrenic patients to level higher than the one achieved by conventional antipsychotics.

There is one other possibility, i.e. explanation of eventual future proof that novel antipsychotics do not have any significant advantages in regard to improving the quality of life over conventional antipsychotics. This is the fact that in recent years more and more attention is paid to the quality of life of the patients, which has coincided with introduction of novel antipsychotics^{19,20}. Simply put, during the previous time when the conventional antipsychotics were introduced more attention was paid to calming patients and removal of psychotic symptoms, whereas today more attention is paid to quality of life.

To conclude, we can say that this study has not confirmed the hypothesis that novel antipsychotics have any advantages over conventional antipsychotics with regard to the quality of life, apart from social activity parameter. However, bearing in mind that novel antipsychotics were prescribed to patients who did not primarily respond well to conventional antipsychotics, and that the duration of the therapy was relatively short, which could indicate more severe form of illness, and that the treatment was not sufficiently long, obtained results will have to be verified in future studies.

REFERENCES

1. HERRMAN, H., G. HAWTHORNE, R. THOMAS, Soc. Psychiatry. Psychiatr. Epidemiol., 11 (2002) 10. — 2. JUKIĆ, V., M. VELDIĆ, L. MUŽINIĆ-MASLE, Psychiat. Danub., 2 (1988) 145. — 3. JUKIĆ,

V., Bogoslovna smotra, 4 (1996) 691. — 4. JUKIĆ, V., J. BAMBURAČ, G. DODIG, M. JAKOVLJEVIĆ, Coll. Antropol., 21 (1997) 251. — 5. AMERICAN PSYCHIATRIC ASSOCIATION: DSM-IV-TR: Diagnostic and

- statistical manual of mental disorders: Revised fourth ed. (APA, Washington, DC, 2000). — 6. HELLEWELL, J. S., CNS Drugs, 7 (2002) 457. — 7. CHAN, G. W., G. S. UNGVARI, D. T. SHEK, J. J. LEUNG, J. J. DAGGER, Soc. Psychiatry Psychiatr. Epidemiol., 4 (2003) 196. — 8. M. KULENOVIĆ, Coll. Antropol., 20 (1996) 221. — 9. SALEEM, P., J. P. OLIE, H. LOO, Int. Clin. Psychopharmacol., 1 (2002) 1. — 10. GLYNN, S. M., S. R. MARDER, R. P. LIBERMAN, K. BLAIR, W. C. WIRSHING, D., A. WIRSHING, D. ROSS, J. MINTZ, Am. J. Psychiatry, 5 (2002) 829. — 11. VUKŠIĆ-MIHALJEVIĆ, Ž., N. MANDIĆ, Coll. Antropol., 25 (2001) 213. — 12. SEVEY S., K. NATHANSON, C. SCHECHTER, G. FULOP, Schizoph. Bull., 4 (2001) 643. — 13. JUKIĆ, V., M. HERCEG, in print. — 14. PINKNEY, A. A., G. J. GERBER, H. G. LAFAVE, Acta Psychiatr. Scand., 833 (1991) 86. — 15. HEINRICHS, D. W., T. E. HANLON, W. T. CARPENTER, Sschizophr. Bull., 3 (1984) 388. — 16. SAMELE, C., J. VAN OS, K. MCENZIE, A. WRIGHT, C. GILVARRY, C. MANLEY, R. MURRAY, Soc. Psychiatry Psychiatr. Epidemiol., 12 (2001) 573. — 17. VORUGANTI, L., L. CORTESE, L. OWYEU-MI, V. KOTTEDA, Z CEROVSKY, S. ZIRUL, A. AWAD, Schizophr. Res., 2–3 (2002) 201. — 18. RITSNER, M., A. PONIZOVSKY, J. ENDICOTT, Y. NECHAMKIN, B. RAUCHVERGER, H. SILVER, I. MODAI, Eur. Neuropsychopharmacol., 1 (2002) 31. — 19. MELTZER, H. Y., S. BURNETT, B. BASTANI, Hosp. Community Psychiatry, 41 (1990) 892. — 20. REVICKI, D. A., L. A. GENDUSO, S. H. HAMILTON, D. GANOCZY, C. M. BEASLEY Jr., Qual. Life Res., 5 (1999) 417.

V. Jukić

Psychiatric Hospital »Vrapče«, Bolnička cesta 32, 10000 Zagreb, Croatia

ZNAČENJE ATIPIČNIH ANTIPSIHOTIKA U KVALITETI ŽIVOTA SHIZOFRENIH BOLESNIKA

S A Ž E T A K

Kvaliteti življenja shizofrenih bolesnika poklanja se sve veća pozornost. Rezultati niza kliničkih studija ukazuju na činjenicu da su novi, atipični antipsihotici jednako ili čak učinkovitiji od klasičnih, no da imaju znatno manje nuspojave i da je kvaliteta življenja bolesnika koji uzimaju nove antipsihotike znatno bolja od kvalitete življenja bolesnika koji su na klasičnim antipsihoticima. Želeći na vlastitim pacijentima provjeriti ovu postavku, ispitali smo kvalitetu življenja 80 shizofrenih bolesnika koje su najmanje šest mjeseci, uzimajući redovito antipsihotike, bili pod redovitim psihijatrijskom ambulantnom kontrolom i u stanju socijalne remisije. U ovom istraživanju, 40 bolesnika uzimala je klasične, tipične antipsihotike, dok ih je 40 bilo na novim, atipičnim antipsihoticima. U istraživanju smo primijenili upitnik za kvalitetu življenja prema »Heinrichs- Hanlon-Carpenter – Quality of life questionnaire«. Nađeno je da se promatrane skupine glede kvalitete življenja razlikuju samo u segmentu socijalne aktivnosti. Ostavljajući otvoreno pitanje razlike utjecaja tipičnih i atipičnih antipsihotika na kvalitetu življenja shizofrenih bolesnika, autori traže moguće razloge dobivenih rezultata.