The meaning of a physician-patient relation for neuroleptic treatment

Aleksandra Małus, Beata Galińska-Skok, Rafał Hykiel, Agata Szulc

Summary

Aim. The aim of the research was to establish correlation between patient's attitude towards neuroleptic treatment and the physician-patient relation.

Methods. The study involved 120 patients with psychosis. The following methods were used: Drug Attitude Inventory (DAI-30), Attitudes towards Neuroleptic Treatment Questionnaire (ANT) and 3 Components of the Attitude (3P).

Results. The patients generally liked their attending physicians, tended to maintain contact with them and assessed their competence favourably. The positive attitude to an attending psychiatrist was connected with a positive attitude to the received drugs and the process of treatment itself.

Conclusions. Patient's attitude towards the physician plays an important role in the process of pharmacotherapy. Psychotic patients with positive attitude towards the physician were also more likely to have a positive attitude towards neuroleptic treatment.

physician-patient relation / attitude / psychosis

INTRODUCTION

Compliance, interpreted as a scope of implementing physician's recommendations by the patient is one of the crucial issues of pharmacotherapy. Research has shown that a lot of patients suffering from psychosis find it difficult to fully implement physicians' recommendations in their treatment. It was estimated that the percentage of patients suffering from psychosis who stop taking drugs vary between 40% and 60% [1, 2, 3, 4, 5], and, according to some other authors, even up to 85% [6, 7, 8]. Pharmacological treatment in psychosis is not similar to the therapy of other long-time diseases. Apart from

Aleksandra Małus[1], Beata Galińska-Skok[1], Rafał Hykiel[1], Agata Szulc[1]: Medical University of Białystok, Department of Psychiatry, Białystok, Poland. Correspondence address: Aleksandra Małus, Department of Psychiatry, Medical University of Białystok, 1 Brodowicza Square, 16-070 Choroszcz, Poland
E-mail: olawaluk@yahoo.com

factors determining every process of treatment, in psychosis the illness itself becomes important and in some cases seriously disturbs or sometimes completely eliminates compliance. "A patient who feels persecuted, threatened and poisoned may have significant reservations to the prescribed drugs" [9] and may, including people around him/her in the system of imaginations and hallucinations, subjectively perceive the physician as a threatening person who acts against the patient.

Defining the level of compliance by establishing how many of all the recommended drugs are taken by the patient is only a partial answer to the problem. A more precise and important question is that of the attitude of the patient to the chosen treatment and the factors favourable for forming a positive attitude to pharmacotherapy.

Upon the basis of the review of literature, it was found that there are approximately 200 different factors determining the scope of patient's implementation of health providers' recommen-

dations [10, 11]. A physician-patient relation seems to be the most important factor among different ones defined as essential in the process of pharmacotherapy [12]; however, few investigations look into this variable in a systematic manner.

To some extent, "a physician himself is an ingredient of every prescription given to the patient" [13]. Balint, who conducted seminars with a group of practicing physicians, concluded that not only the drug itself (pills, syrups, ointments), but also the manner of prescribing them, the entire ambience, in which the drug was recommended, worked [14]. It was concluded that the character of contacts between a physician and patient, and the attitude of the physician to the drug which is being prescribed, influence patient's reaction [13]. A particularly important role in the course of pharmacotherapy was assigned to the messages from the physician connected with the drug, treatment and side-effects. A psychiatrist is, in a way, always an important person for the patient [15], hence, it comes as no surprise that the patient considers his words important.

Rogers and colleagues studied the influence of information provided by the physician to the patient regarding the course of treatment [16]. They reported a positive impact of various information programmes (psycho-education, communication trainings, and negotiation trainings) on the patient compliance [16].

Patient's perception of the doctor is influenced not only by what physicians say but also by the way they convey possessed information. It was established that the style of physician – patient communication is reflected in the quality of relations between them and the efficiency of the treatment [17]. Kind manner of conveying information may, to a substantial degree, influence patient's compliance, broaden his/her insight and improve the attitude to the treatment [18, 19, 20].

A particular role of the physician in the course of pharmacological treatment was proved in experiments analysing occurrence and intensification of the placebo effect. It was shown that the efficiency of a placebo depends on the qualities ascribed to the physician [21]. The efficiency of the placebo was greater in case of contact with a renowned therapist or the one with a high level

of formal qualifications [22]. Even awaiting the contact with the physician itself mattered [23]. Information provided by the physician and those connected with the drug and treatment [23, 24] as well as physician's convictions and belief in the effectiveness of the prescribed procedures were also very important [25].

The purpose of this study was to establish whether the attitude of a psychotic patient to a drug and pharmacotherapy is connected with patient's attitude to the attending physician recommending a particular treatment.

MATERIAL AND METHODS

There were 120 patients, involved into the study, 60 women and 60 men, aged 18-65 (with average of 34.47 SD=11.23). All of the patients were provided with psychiatric care at one of the following levels: daily ward, hospital and outpatient clinic. All of them had been diagnosed with psychosis according to the ICD criteria for schizophrenia, schizoaffective disorder. Patients had been receiving an antipsychotic drug in oral form for at least one week and the maximum up to a couple of years prior to the enrolment in the study. Most of them (78%) had been treated with the drug for more than one month. An average drug dosage taken by a person was 330.38 mg of chlorpromazine equivalents. Criteria of exclusion from the study were diagnosis of dementia, organic syndrome and mental deficiency (according to ICD-10). Patients who needed care of another person and patients currently receiving electroconvulsive therapy were also excluded from the study.

All patients meeting research criteria and subjected to treatment at the time of research were asked to fulfill the questionnaires. Participation in the study was rejected by 9 persons: 1 patient of the daily ward, 3 inpatients and 5 outpatients. Two inpatients, in spite of their good will, were unable to answer all questions due to deterioration of their condition.

Inpatients (N=40) were the most seriously ill with exacerbation of the psychotic symptoms. They were contacted by the attending psychiatrist one or a few times a week. More stable patients (N=40) were treated in the daily ward; they were independent enough to reach the medical

institution every day, participate in therapeutic activities and, in the afternoons, cope with daily duties on their own or with family help. These were patients who required more extensive professional care in the form of therapeutic reactions and monitoring of pharmacological treatment. The patients of the daily ward met their psychiatrist for discussion once a week on average. The outpatients (N=40) were the most independent group. They visited their psychiatrist once a month on average. Therapeutic actions in this group were confined to receiving drugs daily. Participants were divided into three separate groups (inpatients, outpatients and patients treated in the daily ward) in order to observe whether their condition and intensity of their contacts with their physicians had influenced patients' attitude toward drug, treatment and attending physician.

Drug Attitude Inventory (DAI), drawn up by Hogan, Awad and Eastwood [26], is a questionnaire for the research on the patients' perception of receiving antipsychotic drugs and patients' own experiences related to the therapy with the use of a given drug. The authors of this method named the attitude, measured in this manner, a patient's subjective response to a neuroleptic.

The research with the use of the DAI indicates a high reliability of the test. The authors stated that it's internal reliability rate was r=0.89 [26]. Robles in his study obtained the reliability rate at the level of r=0.61 p<0.01; Cronbach's Alpha defining the homogeneity of the scale amounts to 0.57 [27].

The Attitude towards Neuroleptic Treatment Questionnaire (ANT) is a comparatively new method of patient's attitude measurement in terms of antipsychotic treatment. The authors of the test are Finnish psychiatrists: Kampman, Lehtinen, Lassila, Leinonen, Poutanen and Koivisto [28]. Instead of focusing upon the subjective condition of the patient, they proposed a more multifaceted measurement of the attitude to treatment, sensitive to subjective sensations of the patient as well as general attitude, expectations concerning the therapy and insight into it.

The psychometric properties of the ANT were measured with the use of the internal compatibility of the scales, and test retest examination (with a two-week interval) and comparing the ANT with DAI-10 [28]. Internal corre-

lation between the statements was in the range between 0.1 and 0.55 in the group of patients suffering from psychosis and from -0.22 to 0.73 in the group of patients suffering from schizophrenia. Homogeneity of the scale expressed in Cronbach's Alpha, between all the statements, amounted to 0.798 [29].

The 3P (The 3 Components of the Attitude) method assessing the attitude of a patient to the attending physician was drawn up in order to describe the attitude of a patient to the treatment in a quantitative manner [30]. The theoretical background of the method was the concept of attitude, borrowed from social psychology, in which attitude was presented as a relatively constant inclination of an individual to adopt certain attitude to a given item [31, 32]. 3 components of attitude were differentiated:

- cognitive – one's own views or views borrowed from other people, and relevant to the subject, assessments, true and false judgments, stereotypes;
- emotional – relatively constant feelings, preferences, negative or positive prejudices to the object of attitude, based upon some individual experiences or other people's experiences;
- behavioural – manifested in certain behaviours in relation to a given subject, stemming from the views of the individual and their emotional attitude [33].

Emotional component was described as decisive because it determined both positive and negative attitudes. Attitudes with zero emotional loads are impossible [31].

The 3P examination involves patient's assessment of his/her attitude to the attending physician. This assessment applies to 3 aspects reflecting 3 components of attitude– emotional, behavioural and cognitive. Each of them is viewed on the scale including the opposite poles of positive and negative references which describe the attitude of a patient to the attending physician along with the assigned digital scales of 1 to 5 points.

The measurement of internal compatibility expressed in Cronbach's Alpha in the group of patients with psychosis (N=120) was 0.74 [30].

ANOVA was used to assess the statistical significance of differences for the analysed variables. The equality of the variation error for the

variables was assessed with the use of Levene's test. Spearman's rho co-efficient was used in order to calculate the correlation between the variables. All the results were found to be statistically significant with the level of significance $p<0.05$.

RESULTS

An average attitude of the patient to an antipsychotic drug measured with the use of the DAI was 11.63 (Tab. 1). An average attitude of the patient to a drug and treatment measured with the use of the ANT was 802.42 (Tab. 2).The most positive attitude to a drug and treatment in both tests was declared by the patients treated in the daily ward and outpatients while the worst attitude to a drug was presented by outpatients. However, these differences did not reach the level of statistical significance.

Table1. The patient's attitude towards drug, DAI scores

place	(N)	average	standard deviation (SD)	minimum	maximum
daily ward	40	11.05	11.626	-12	26
hospital	40	9.35	14.474	-24	30
outpatient clinic	40	14.5	9.432	-6	28
all institutions	120	11.63	12.114	-24	30

Table 2. The patient's attitude towards neuroleptic treatment, ANT scores

place	(N)	average	standard deviation (SD)	minimum	maximum
daily ward	40	827.5	178.365	480	1170
hospital	40	779.5	232.742	230	1120
outpatient clinic	40	800.25	120.586	500	1150
all institutions	120	802.42	182.577	230	1170

N number of patients in the group

Average results showing the overall attitude of the patients to their attending physicians in separate institutions were calculated. The scores included the level of liking the attending physician (emotional component), tending to contact him (behavioral component) and assessing their actions as competent (cognitive component) (Tab. 3 – *next page*).

Our results revealed a positive attitude of the patients to the physicians taking care of them (12.31). The patients liked their attending physicians (4.01), tended to have contact with them (4.00) and positively assessed their competence (4.30). The patients' attitude to the attending physicians did not differ significantly in different facilities ($p>0.05$).

In order to establish a connection between patient's attitude to the attending physician and patient's attitude towards neuroleptic and treatment, the Spearman's rho was calculated between the 3P test scores as well as DAI and ANT scores. The correlation between the separate scales of the 3P test and DAI and ANT scores were also analysed (Tab. 4 *next page*).

The positive attitude to the attending physician correlated with the positive attitude to the received drug (rho=0.186 $p<0.05$). The positive attitude to the attending physician was connected with the positive attitude to the process of treatment (rho=0.263 $p<0.01$).

Among the aspects of the attitude to the physician, which were reflected in the attitude of a patient to a drug and treatment, the smallest importance was that of cognitive component, namely, whether a person assessed the physician as competent. The emotional and behavioural components appeared to be much more important. Liking an attending physician and tendency to establish and maintain contact with them was connected with the positive attitude to the received drug and the whole process of treatment.

DISCUSSION

Patients taking part in the research independent of the place of treatment and the intensiveness of the contacts with the attending physician declared a positive attitude to the physician.

Social psychology indicates that the main component of an attitude, determining the direction of action, is the emotional component. As regards the results of the 3P test which indicate

that liking a physician and tendency to contact them aid in the process of treatment, it is worth considering what it means that a patient likes a physician.

bring about successful cooperation [35]. Liking may be a spontaneous reaction to someone's attractiveness or may result from the fact of forming an association with something already liked

Table 3. The patient's attitude to the attending physician, obtained in 3P

scope of the test	place	(N)	average	standard deviation (SD)	minimum	maximum
overall result of the 3P test	daily ward	40	12.65	2.095	8	15
	hospital	40	11.93	2.566	5	15
	outpatient clinic	40	12.35	2.032	8	15
	all institutions	120	12.31	2.245	5	15
emotional component	daily ward	40	4.15	0.736	3	5
	hospital	40	3.98	0.974	2	5
	outpatient clinic	40	3.90	1.008	1	5
	all institutions	120	4.01	0.912	1	5
behavioural component	daily ward	40	4.05	0.986	2	5
	hospital	40	3.88	1.114	1	5
	outpatient clinic	40	4.08	0.829	3	5
	all institutions	120	4.00	0.979	1	5
cognitive component	daily ward	40	4.45	0.714	3	5
	hospital	40	4.08	0.971	2	5
	outpatient clinic	40	4.38	0.897	1	5
	all institutions	120	4.30	0.875	1	5

N number of patients in the group

Table 4. Correlations between the patient's attitude to a drug and treatment (the overall DAI and ANT scores) and the attitude to the physician (3P), with particular subscales of the 3P test separated

test	scope of the 3P test	ratio of correlation (Spearman's rho)	level of significance (p)
DAI	overall result of the 3P test	0.186*	0.042
	emotional component	0.186*	0.042
	behavioural component	0.195*	0.032
	cognitive component	0.084	0.364
ANT	overall result of the 3P test	0.263**	0.004
	emotional component	0.290**	0.001
	behavioural component	0.183*	0.046
	cognitive component	0.159	0.082

* $p<0.05$, ** $p<0.01$

According to the psychologists of emotion, a person is inclined to like another person if he/she perceives that person as somehow similar to oneself [34, 35]. This liking is also strengthened by a substantial frequency of contacts with a person, especially if these contacts are pleasant and

by a given person [35]. Liking a person is stimulated by praise and compliments. It is also a kind of deal because an individual is inclined to like those who like him/her [35].

Liking a physician by a patient is, thus, a complex issue. It might also be a circular phenome-

non: liking a physician may lead to a successful cooperation and effective treatment, and thus, patient's satisfaction will most likely lead to liking the physician. Liking the physician may be related to a growth in trust and, frequently, adopting a submissive attitude by the patient, since "people prefer to say 'yes' to people who they like and know" [35].

Tendency for the contact is, in turn, connected with the possibility of meeting one's own needs. Frequently, an initial decision concerning where to seek help is unconscious. People's influence plays an important role especially when people are similar and indicate effectiveness of a particular solution. Patients who are satisfied with cooperation with the physician will advertise his/her services and attract more people in need thanks to their praise. Remaining in contact with the physician does not, however, have to be a guarantee of an effective and satisfying treatment. Maintaining a therapeutic relation may only result from the first choice according to the words of Leonardo da Vinci that it is easier to say 'no' at the beginning than at the end. It may also result from the force of pressure of an authority or individual personal qualities of a patient, particularly submissiveness and dependency.

The cognitive component of the attitude of patients to the attending physician was not significantly related to the attitude to the drug and treatment; however, at the level of qualitative analysis of the results it was possible to observe the significance of the competence of the treating person for therapeutic relation. The most frequently chosen item in DAI test, selected by 106 people out of 120, enrolled in the research (88.3%) was the following statement: "it is the physician that decides when I should stop taking the drug". Choosing this test replay proves acceptance of the decisive role of a physician in the course of treatment, and indirectly informs about certain hierarchy in the contacts between a physician and patient.

The physician – patient relation is the asymmetrical. This relation is perceived differently by the physician and the patient. The asymmetrical character of this relation may have influence on forming mutual attitudes of the people participating in the relation.

The different character of perception of therapeutic relation by people co-participating in it,

patients and physicians, was reflected in the research of Ziarko and colleagues [36]. With the use of modification of the ACL test, patients and physicians assessed the desired qualities of a physician working on a closed ward [36]. The profiles, drawn up on the basis of the replies of the patients and physicians, were significantly different. The patients emphasised the need of feeling that they were being looked after, care and cordiality from a psychiatrist; they expected readiness to establish close, partner contact. What mattered for the patients were also vitality, attractiveness and appearance of the physicians working with them. In turn, the questioned professionals emphasised the importance of such qualities, as: active attitude, trustworthiness, calm, decisiveness, imagination, attentiveness, resoluteness, foresight and self-control [36].

A similar research, related to patient's expectations towards the person of a physician, was conducted by Marmurowska-Michałowska and colleagues [37]. The raised question was: What should a physician (psychiatrist) I would like to be treated by be like? [37]. Among 16 words taken from the ACL (possessing expertise, discrete, patient, communicative, trustworthy, compassionate, caring, approachable, with a pleasant appearance, exact in speech, precise, open to my comments and requests, experienced, understanding, female, male), the questioned chose 5 and put them in the list from the most important to the least important. The conclusions drawn upon the basis of the research indicated that the qualities of the greatest importance in terms of choosing a therapist were related to professional qualifications (possessing expertise, experienced) and to the humanistic aspect of relation (approachable, patient, discreet, trustworthy) [37].

The data obtained thanks to these experiments confirmed that the quality of a therapeutic relation is perceived differently by both parties participating in the contact [36, 37, 38]. This difference was metaphorically described by Jarosz: "the distance between a physician and a patient is usually different than between a patient and a physician" [39].

CONCLUSIONS

The results of the research referred to hereinabove show that physician–patient relation is

connected with the attitude of a patient to a drug and the process of treatment, and is an important element of the process of pharmacotherapy. In various programmes and trainings directed at the improvement of the attitude of a patient suffering from psychosis to the drug and treatment, the actions aimed at the improvement of the physician – patient relations ought to be included.

REFERENCES

1. Serban G, Thomas A. Attitudes and behaviors of acute and chronic schizophrenic patients regarding ambulatory treatment. Am J Psychiat.1974; 36: 991–995.

2. Kane JM, Borenstein M. Compliance in the long-term treatment of schizophrenia. Psychopharmacol Bull. 1985; 1: 23–27.

3. Weiden P, Rapkin B, Mott T, Zygmunt A, Goldman D, Horvitz-Lennon M, Frances A. Rating of Medication Influences (ROMI) scale in schizophrenia. Schizophrenia Bull. 1994; 20(2): 297–310.

4. Lacro JP, Dunn LB, Dolder CR, Leckband SG, Jeste DV. Prevalence of and risk factors for medication nonadherence in patients with schizophrenia: a comprehensive review of recent literature. J Clin Psychiat. 2002; 63: 892–909.

5. Novak-Grubic V, Tavcar R. Predictors of noncompliance in males with first-episode schizophrenia, schizophreniform and schizoaffective disorder. Eur Psychiat. 2002; 17: 148–154.

6. Davis J, Andriukatis S. The natural course of schizophrenia and effective maintenance drug treatment. J Clin Psychopharm. 1986; 6: 2–10.

7. Kissling W. The current unsatisfactory state of relapse prevention in schizophrenics psychosis. Clin Neuropharmacol. 1991; 14(2): 33–44.

8. Weiden PJ, Olafson M. Cost of relapse in schizophrenia. Schizophrenia Bull. 1995; 21: 419–429.

9. Marmurowska-Michałowska H. Współpraca w leczeniu z pacjentami chorującymi na schizofrenię. Badania nad schizofrenią. 2004; 5: 286–292.

10. Haynes RB, Taylor DW, Snow JC, Sackett DL. An annotated and indexed bibliography on compliance with therapeutic and preventive regimens. In: Haynes RB, Taylor DW, Snow JC, Sackett DL, editors. Compliance in Health Care. Baltimore: The Johns Hopkins University Press; 1979. p. 337–474.

11. Fenton WS, Blyler CR, Heinssen RK. Determinants of medication compliance in schizophrenia: Empirical and clinical findings. Schizophrenia Bull. 1997; 23(4): 637–651.

12. Frank AF, Gunderson JG. The role of the therapeutic alliance in the treatment of schizofrenia. Relationship to course and outcome. Arch Gen Psychiat. 1990; 47(3): 228–236.

13. Hollender MH. Psychologia w praktyce lekarskiej, Warszawa: Wydawnictwo Lekarskie PZWL; 1975.

14. Balint A. The doctor, his patients and the illness, Lancet; 1955.

15. Kępiński A. Rytm życia, Kraków: Wydawnictwo Literackie; 2001.

16. Rogers A, Day J, Randall F, Bentall RP. Patients' understanding and participation in trial designed to improve the management of anti-psychotic medication. Soc Psych Psych Epid. 2003; 38: 720–727.

17. Trzebna H. Styl komunikacji lekarza z pacjentem a efektywność leczenia. Przegląd Psychologiczny. 1993; (32): 785–791.

18. Falloon IR. Developing maintaining adherence to long-term drug-taking regimens Schizophrenia Bull. 1984; 10: 412–417.

19. Kemp R, Hayward P, Applewhaite G, Everitt B, David A. Compliance therapy in psychotic patients: randomised controlled trial. Brit Med J. 1996; 312: 345–349.

20. Svensson B, Hansson L. Therapeutic alliance in cognitive therapy for schizophrenic and other long-term mentally ill patients: development and relationship to outcome in an in-patient treatment programme. Acta Psychiat Scand. 1999; 99: 281–287.

21. Dolińska B. Placebo. Siła sugestii. Przegląd Psycholgiczny. 1999; 42(1-2): 241–257.

22. Lesse S. Anxiety. Its components, development, and treatment. New York-London: Grune & Stratton; 1970.

23. Pentony P. Models of influence in psychotherapy. New York-London: The Free Press; 1981.

24. Evans FJ. Expectancy, therapeutic instructions, and placebo response. In: White L, Tursky B, Schwartz GE, editors. Placebo theory research and mechanisms. New York-London: The Guilford Press; 1985. p. 215–228.

25. Freund J, Krupp PP, Goodenough D, Preston LW. The doctor-patient relationship and drug effect. Clin Pharmacol Ther. 1972; 13: 619–637.

26. Hogan TP, Awad AG, Eastwood T. A self-report scale predictive of drug compliance in schizophrenics: reliability and discriminative validity. Psychol Med. 1983; 13: 177–183.

27. Robles G, Avarado VS, Agraz FP, Barreto FR. Evaluación de actitudes al medicamento en pacientes con esquizofrenia: propiedades psicométricas de la versión en español del DAI. Actas Esp Psiqulatri. 2004; 32(3): 138–142.

28. Kampman O, Lehtinen K, Lassila V, Leinonen E, Poutanen O, Koivisto AM. Attitudes towards neuroleptic treatment: Reliability and validity of the Attitudes towards Neuroleptic Treatment (ANT) questionnaire. Schizophr Res. 2000; 45: 223–234.

29. Kampman O, Lehtinen K, Lassila V. The reliability of compliance assessments performed by doctors and patients dur-

ing neuroleptic treatment: a comparison of compliance rat-ings. Acta Psychiat Scand. 2001; 104: 99–304.

30. Małus A. Psychologiczne aspekty leczenia farmakologiczne-go w psychozach, doctoral dissertation, Medical University of Białystok, 2008.

31. Wojciszke B. Postawy i ich zmiana. In: Wojciszke B. Psych-ologia. Podręcznik akademicki. Jednostka w społeczeństwie i elementy psychologii stosowanej. Gdańsk: Gdańskie Wydawnictwo Psychologiczne; 2000. p. 79–106.

32. Bańka A. Społeczna psychologia środowiskowa. Warszawa: Wydawnictwo Naukowe Scholar; 2002.

33. Mika S. Psychologia społeczna. Warszawa: Wydawnictwo Naukowe PWN; 1982.

34. Byrne D. An introduction to personality. A research approach. Englevood Cliffs: Prentice-Hall Inc.; 1966.

35. Cialdini R. Wywieranie wpływu na ludzi. Gdańsk: Gdańskie Wydawnictwo Psychologiczne; 1996.

36. Ziarko B, Twardowska M, Podbielski Z. Idealny lekarz psy-chiatra – wyobrażenia pacjenta i lekarza. Badania nad schizofrenią. 2001; 3: 285–292.

37. Marmurowska-Michałowska H, Olajossy-Hilkesberger L, Hawryluk A, Dubas-Ślemp H, Kozak G. Jaki powinien być lekarz psychiatra według osób chorych na schizofrenię paranoidalną i osób zdrowych? Badania nad schizofrenią. 2004; 5: 304–312.

38. Wittorf A, Jakobi U, Bechdolf A, Muller B, Sartory G, Wagn-er M, Wiedemann G, Wolwer W, Herrlich J, Buchkremer G, Klingberg S. The influence of baseline symptoms and insight on the therapeutic alliance early in the treatment of schizo-phrenia. Eur Psychiat. 2009; 24: 259–267.

39. Jarosz M. Lekarz psychiatra i jego pacjent. Warszawa: Wydawnictwo Lekarskie PZWL; 1990.