

The role of a psychiatrist in treatment and recovery process of persons suffering from schizophrenia

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Summary

Objectives: Research results indicate that possibility of building a therapeutic relationship in schizophrenia treatment facilitates better functioning, more effective reduction in psychotic symptoms and fulfillment of patients' personal goals. The aim of the present study was to investigate whether patients systematically cooperating with psychiatrists are more scrupulous in complying with doctors' orders and whether their social and clinical functioning is more effective, while compared to noncompliant patients.

Methods: 300 patients suffering from schizophrenia were included in the study. Patients were divided into two groups: experimental group including patients systematically cooperating with their doctors, and control group including non-cooperative patients. Data was collected during single interview with the use of the Questionnaire of Pharmacological Treatment Assessment, Life Satisfaction Scale, Emotions Control Scale, Life Orientation Scale, General Self-Efficacy Scale, The positive and negative syndrome scale for schizophrenia and Sociodemographic Questionnaire.

Results: While compared to non-cooperative patients, patients systematically cooperating with their psychiatrists were more compliant with treatment, had wider knowledge about their treatment and were more satisfied with its effects. They also demonstrated better social functioning, more frequent professional activity and better assessment of their lives in terms of being in control, optimism and life satisfaction.

Conclusions: Results indicate that systematic cooperation with a doctor facilitates better functioning of patients with schizophrenia.

Key words: psychiatrist, recovery, schizophrenia,

Introduction

Manfred Bleuler, describing psychological situation of persons suffering from schizophrenia, underlines the difficulties they have with creating lasting relationships. This has significant impact on lack of feeling safe or even feeling endangered [1]. Lack of social contacts and interpersonal relationships causes feeling of helplessness and being excluded from distribution of goods and benefits arising from social life. Therefore, it is so important to build a bridge between world of schizophrenia and social life of healthy population. A psychiatrist is a natural intermediary in this process as he/she is a primary agent providing help and a central figure in values and needs system of a person suffering from schizophrenia [2].

Research indicate that in case of patients with schizophrenia it is important to start building a therapeutic relationship as soon as during patient's hospitalization so that "pre-relationship" relation can be created between the main agents. It is especially crucial in case of patients with more intense psychotic symptoms and patients with chronic psychosis [3]. This is a slow process which is divided in subsequent phases. In the first phase a patient meets a therapist, in the second a patient makes a decision about collaboration and finally, after almost 6 month of preliminary phase, a slow building of alliance begins. In case of patients suffering from schizophrenia building a good and effective relationship may last even several years [4].

The possibility to build a therapeutic relationship in schizophrenia treatment facilitates better functioning [5, 6], more effective reduction in psychotic symptoms [5] and fulfilment of patients' personal goals [7]. It also increases compliance with medical regimens [8, 9].

Aim of the study

The aim of the present study was to answer the following research questions:

Are patients systematically cooperating with psychiatrists more scrupulous in complying with doctors' orders? Is their social and clinical functioning more effective, while compared to noncompliant patients? Do they assess themselves more positively on the following dimensions: satisfaction, optimism, being in control, self – control of negative emotions?

Material

For the purpose of the current study the following questionnaires were used:

1. Questionnaire of Pharmacological Treatment Assessment – patient's perspective. Tool developed in the Department of Psychiatric Rehabilitation of the Institute of Psychiatry and Neurology in Poland. The questionnaire was used to assess collaboration between a doctor and a patient in the following areas: compliance, knowledge about medications and their administration, ability to identify side effects of pharmacotherapy and illness itself, frequency of visits in a clinic [10];

2. Life Satisfaction Scale, Emotions Control Scale (subjective assessment of the control over anger, anxiety, sadness), Life Orientation Test (assessment of optimism level), Overall Self – Efficacy Scale (assessment of sense of self – efficacy) [11];
3. Socio – demographic Questionnaire – developed by authors;
4. Patients' family or close persons were asked to fulfil the Social Functioning Scale (version for a carer or family) developed by M. Birchwood. The scale was used to assess social functioning of the patients in 7 areas: social engagement/withdrawal, interpersonal behaviour, pro-social activities, recreation and entertainment, independence, employment/ occupation [12];
5. The positive and negative syndrome scale for schizophrenia, developed by Kay, Fiszbein and Opler and compiled by Rzewuska [13].

Significance of differences between the means was assessed with Student's t-test and one way analyses of variance (ANOVA). In case of non-parametric variables Mann-Whitney U test was used. Consistency of independent nominal variables was assessed with χ^2 test. Significance level was set at $p < 0.05$.

Method

300 patients suffering from schizophrenia diagnosed according to ICD-10 were included in the study.

I – experimental group. The group included 150 patients that fulfilled the following criteria: age between 25 and 55 years, diagnosis of schizophrenia, outpatient treatment and care conducted by one psychiatrist for at least 3 years, regular contact with a psychiatrist at least once a month, intensity of psychotic symptoms not higher than moderately severe (PANSS) at the moment of the interview, no organic changes in the brain basing on the medical records, frequent contacts with family or other close persons.

II – control group. The group included 150 patients with diagnosis of schizophrenia that fulfilled the following criteria: outpatient treatment conducted by several psychiatrists for at least 3 years, without easily identifiable psychiatrist in charge and irregular contact with a clinic. Other criteria, such as age social-demographic and clinical characteristics, were similar to those in the experimental group.

Families and other close persons as well as psychiatrists also participated in the study.

Results

Social – demographic and clinical characteristics of the groups

There were significant gender and education differences between the groups. Moreover, in the experimental group 29% did not have disability degree certificate while compared to 17% in the control group. 37% of the patients in the experimental group was working whereas in the control group it was only 9%. In the past 6 months

prior to the interview, patients in the experimental group visited a psychiatrist 7 times on average and those in the control group only 1 time (Table 1).

Table 1. **Socio-demographic and clinical characteristics (N = 300)**

| Socio-demographic and clinical characteristics | Experimental group N = 150 | Control group N = 150 |
|---|----------------------------|-----------------------|
| Gender | | |
| Females | 89 (59%) | 67 (45%) |
| Males | 61 (41%) | 83 (55%) |
| Age (mean) | 41 lat | 40.6 lat |
| Civil status | | |
| Single | 112 (75%) | 118 (79%) |
| In relationship | 38 (25%) | 32 (21%) |
| Education | | |
| primary | 25 (16.7%) | 48 (32%) |
| secondary | 85 (56.7%) | 71 (47.3%) |
| higher | 40 (26.6%) | 31 (20.7%) |
| Duration of illness (mean) | 15.9 lat | 14.7 lat |
| Number of hospitalizations (mean) | 7 | 7 |
| Lack of disability degree certificate | 43 (29%) | 26 (17%) |
| Employment | 56 (37.3%) | 14 (9.3%) |
| Number of visits at a psychiatrist (past 6 months) (mean) | 7 | 1 |

Assessment of pharmacological treatment – patient’s perspective

The results indicate that patients in the experimental group had significantly greater knowledge about doses of the medicine they used, while compared to the control group. Majority of the patients in steady relationship with a psychiatrist positively assessed effectiveness of their medication – “majority helps” and “all help”. Patients in this group declared medication intake on the level of 75% and none of the subjects showed a tendency to discontinue the medication, in the contrary to the control group. Detailed data is presented in table 2.

Table 2. Assessment of pharmacological treatment (N = 300)

| | Experimental group | Control group | Statistics | p |
|---|--------------------|---------------|------------------|-----------|
| Diagnosis | | | | |
| – not known | 40 (26.7%) | 50 (33.3%) | $\chi^2 = 1.5$ | n.s. |
| – known | 110 (73.3%) | 100 (66.7%) | | |
| Medication names | | | | |
| – not known | 12 (8%) | 13 (8.7%) | $\chi^2 = 5.3$ | n.s. |
| – 1 name known | 52 (34.7) | 35 (23.3%) | | |
| – 2 names known | 55 (36.7) | 64 (42.7%) | | |
| – 3 names known | 22 (14.7%) | 30 (20%) | | |
| – 4 names known | 8 (5.3%) | 7 (4.7%) | | |
| – 5 and more names known | 1 (0.7%) | 1 (0.7%) | | |
| Medication dosage | | | | |
| – not known | 25 (16.7%) | 63 (42%) | $\chi^2 = 26.03$ | p = 0.000 |
| – 1 name known | 121 (80.7%) | 85 (56.7%) | | |
| – 2 names known | 2 (1.3%) | 1 (0.7%) | | |
| – 3 names known | 0 | 1 (0.7%) | | |
| – 4 names known | 2 (1.3%) | 0 | | |
| Effectiveness | | | | |
| – none | 3 (2%) | 12 (8%) | $\chi^2 = 17.1$ | p = 0.004 |
| – some | 6 (4%) | 11 (7.3%) | | |
| – partially | 24 (16%) | 40 (26.7%) | | |
| – majority | 51 (34%) | 35 (23.3%) | | |
| – all | 66 (44%) | 52 (34%) | | |
| Intake | | | | |
| – no intake | 0 | 4 (2.7%) | $\chi^2 = 23.05$ | p = 0.000 |
| – intakes 25% | 1 (0.7%) | 3 (2%) | | |
| – intakes 50% | 2 (1.3%) | 21 (14%) | | |
| – intakes 75% | 29 (19.3%) | 23 (15.3%) | | |
| – intakes 100% | 118 (78.7%) | 99 (66%) | | |
| Identification of drug induced symptoms | | | | |
| – none | 81 (54%) | 83 (55.3%) | $\chi^2 = 0.88$ | n.s. |
| – 1 symptom | 38 (25.3%) | 38 (25.3%) | | |
| – 2 symptoms | 16 (10.7%) | 16 (10.7%) | | |
| – 3 symptoms | 10 (6.7%) | 7 (4.7%) | | |
| – 4 symptoms | 4 (2.7%) | 4 (2.7%) | | |
| – 5 symptoms | 1 (0.7%) | 2 (1.3%) | | |

n.s. – not significant

Social functioning

The results regarding assessment provided by close persons showed that the groups differed significantly in terms of all areas of social functioning (Table 3).

Table 3. **Assessment of social functioning – mean values (N = 300)**

| | Experimental group | Control group | Statistics | p |
|------------------------------|--------------------|--------------------|------------|-------|
| Overcoming isolation | 117.6 (SD = 13.33) | 97.16 (SD = 11.17) | t = 14.4 | 0.000 |
| Interpersonal bonds | 117.4 (SD = 19.84) | 102.4 (SD = 17.12) | t = 6.99 | 0.000 |
| Social contacts | 109.5 (SD = 15.87) | 98.4 (SD = 26.6) | Z = -9.25 | 0.000 |
| Recreation and entertainment | 97.5 (SD = 16.74) | 82.2 (SD = 13.94) | t = 8.6 | 0.000 |
| Realized self – reliance | 106.2 (SD = 17.79) | 95 (SD = 23.04) | t = 2.1 | 0.000 |
| Potential self – reliance | 108.8 (SD = 16.11) | 97.8 (SD = 12.82) | t = 6.5 | 0.000 |
| Employment and social roles | 103.5 (SD = 9.81) | 97 (SD = 7.32) | t = 6.3 | 0.000 |

t – Student's t-test, Z – Mann-Whitney U test, SD – standard deviation

Psychological determinants of self and own life assessment

The results indicate that patients systematically collaborating with a psychiatrist described themselves and their lives as being more satisfactory. They assessed themselves as having more optimistic attitude towards life and more effectively coping with problems, while compared to the control group (Table 4).

Table 4. **Psychological factors of self assessment and assessment of own life – mean values (N = 300)**

| | Experimental group | Control group | Statistics | p |
|--------------------------|--------------------|------------------|------------|-------|
| Anger control scale | 19.15 (SD = 5.64) | 19 (SD = 7.14) | F = 0.015 | n.s |
| Depression control scale | 17.7 (SD = 4.77) | 18.3 (SD = 5.98) | F = 1.09 | n.s |
| Anxiety control scale | 18.3 (SD = 5.73) | 18.3 (SD = 6.66) | F = 0.002 | n.s |
| Being in control | 25 (SD = 5.16) | 20.3 (SD = 5.64) | F = 11.78 | 0.000 |
| Optimism | 29.9 (SD = 6.58) | 23.3 (SD = 7.19) | F = 59.4 | 0.000 |
| Life satisfaction | 20.3 (SD = 6.6) | 15.8 (SD = 5.91) | F = 39.28 | 0.000 |

F – ANOVA, n.s. – not significant, SD – standard deviation

Intensity of psychotic symptoms

The results indicate that there is a significant statistical difference between the groups in intensity of positive symptoms of schizophrenia and in mean global scale score (Table 5).

Table 5. Intensity of psychotic symptoms – mean values (N = 300)

| Schizophrenia symptoms | Experimental group | Control group | Statistics | p |
|------------------------|--------------------|------------------|------------|-------|
| Positive | 12.9 (SD = 2.9) | 13.5 (SD = 1.49) | t = -2.88 | 0.004 |
| Negative | 11.5 (SD = 2.6) | 11.7 (SD = 1.7) | t = -0.56 | n.s |
| Global score | 56.3 (SD = 8.8) | 58.2 (SD = 5.2) | t = -2.29 | 0.02 |

t – Student's t-test, n.s. – not significant, SD – standard deviation

Discussion

The study group included more females than males which is in line with the tendency of more rapid return to environment identified in females. Males have longer hospitalizations and gradually complete subsequent phases of treatment and inpatient rehabilitation [14]. However, detailed analyses showed significant differences in the proportions of females and males – more females were included in the experimental group identified on the basis of regular contact with a psychiatrist. Consequently, greater number of females in outpatient treatment seems to result from their more rapid return to community after experiencing a psychotic crisis. Many factors that differentiate recovery process in females and males may contribute to this phenomenon. Predominantly, it seems that it is more common for females to experience full sense of illness, despite of ongoing psychotic process and its exacerbations [15]. In the state of remission males also tend to uncover, describe how they feel and talk about themselves less frequently than females. They prefer anonymity and thereby peace and quiet. Their demand for support provided by others also decreases to the level that is below the one before development of the illness [16]. Jakubik i Piaskowska in their research on alienation personality underline that females with schizophrenia are much more ready and open to receive help from others, while compared to males experiencing this illness [17]. These gender related factors may contribute to increase in tendency for seeking help from a psychiatrist and easier creation of a relationship with him/her. Another important factor that may have impact on this proportion may be a fact, observed in studies of Mueser et al., that females usually achieve higher level of social adaptation than males and even demonstrate higher level of social abilities [14]. Due to these differences, in spite of the lack of differences in the course of the illness, females return to their premorbid activities more rapidly and quit them less frequently. The consequence of these abilities is also receiving greater social support that females can exercise from their community, which is crucial in crisis situations. Females' social competencies facilitate more effective stress reduction, which results in shorter hospitalizations and motivates to full exploration of possibilities that outpatient treatment provides. The level of collaboration during treatment is also lower in males than females suffering from schizophrenia [14].

It is worth noting that the group which collaborated systematically had definitely more achievements in social-professional areas, while compared to control group.

Patients in experimental group had higher education, less frequently received disability degree certificate and more often were in employment. They also visited a psychiatrist much more frequently. While analyzing socio-demographic characteristics it is worth noticing that steady collaboration with a psychiatrist may have alleviated the costs of the illness in the experimental group. It may have contributed to better functioning on employment market, decrease in tendency to patients getting disabled and achieving higher level of education. It may obviously be assumed that patients in better collaboration with a psychiatrist had higher competencies for coping with illness. This assumption has been partially confirmed by demographic structure of the experimental group which was dominated by females who have better skills for coping with a psychosis and its consequences.

The assessment of the pharmacological treatment effectiveness is based not only on the effectiveness of the medication but also on the factors related to compliance and patient's collaboration with a doctor. Lack of compliance is an effect of schizophrenia's chronicity, a need to continue the treatment after hospitalization, non – satisfactory course of treatment, lack of social stabilization and lack of therapeutic bond between a patient and a therapist [18, 19]. In their analyzes, Kane and Leucht, proposed classification levels of cooperation with a psychiatrist. It is assumed that a patient stays compliant with medical orders when he/she skips < 20% of medication. The level between 20% and 80% of non-compliance with medical orders is considered a partial lack of collaboration in this respect. The level of 80% or more is considered a non-compliance with medical orders [20]. In the analyses conducted in the current study significant difference were found between the two groups in regard to compliance with medical orders. In the experimental group there were no patients who would completely discontinue treatment, contrary to the control group. Subjects in the experimental group declared medication intake on the level indicating good collaboration in this respect. They declared that they did not take 25% of prescribed medication on average. It needs to be noted that there are very few patients in clinical practice who have never experimented with medication dosage or its complete discontinuation. It seems to be a natural step of the illness on the way to achieve insight. Research indicate that in outpatient treatment, 28% to 80% of patients decide to discontinue their treatment. More than a half of the patients with diagnosed schizophrenia takes different medication dosages at different times of the day than prescribed [18, 21]. Consequently, in the current study patients in the experimental group achieved relatively satisfactory result. It needs to be underlined that this result was accompanied by significantly better orientation in the level of medication dosage taken. In this case it was probably also important that patients in the experimental group had much higher sense of effectiveness of the medication taken than patients in the control group. Just like in many cases in schizophrenia treatment, also here, one fact causes another which has important consequences. Lack of collaboration with a psychiatrist contributes to accumulation of problems with adequate self assessment of psychopathology and therefore results in lack of adequate treatment. Unsatisfactory treatment contributes to decrease in patient's motivation to collaborate, analyze own problems or even discuss pharmacotherapy

and own health situation. There is an evident difference between the groups in compliance level. Summing up, it can be concluded that regular visits paid to the same psychiatrist and for a longer time period significantly differentiate the two groups in terms of compliance and knowledge on medications taken. Simultaneously, it should be noted that patients in both groups had significant knowledge about their illness. However, another clinical fact is interesting. Despite significant differences in the level of compliance between the experimental and control groups, number of hospitalizations was on the same level in both groups. Of course the reason of the hospitalizations in both groups was not clear. It could have been exacerbation of the symptoms or e.g. scheduled hospitalizations planned to change the treatment, or the effect of gaining an insight, when a patient educated in prodromal symptoms monitoring seeks help in psychiatric hospital for preventive reasons. This prevention is known as “control over illness” and may result in behaviours considered as realization of the crisis plan as taught [22]. However, unambiguous research findings should be underlined – lack of compliance is the cause of symptoms exacerbation and rehospitalisations. Symptoms relapse during one year is observed in 16% of compliant patients and in up to 74% of non-compliant patients [21].

Compliance with medical orders depends on the complex factor of collaboration between a patient and a psychiatrist [23]. Research findings indicate that it may be the most significant of the factors influencing the level of collaboration outside a psychiatric hospital and in outpatient treatment [24].

Social functioning of patients suffering from schizophrenia

In the current study social functioning of the persons suffering from schizophrenia was analyzed on the bases of the results received from persons that were closest to the patients and who assessed their everyday life. The results allow to conclude that there were significant differences between the two groups in the level of social functioning. In patients’ families opinions, experimental group functioned much better than control group in all analyzed areas. Social functioning of the persons suffering from schizophrenia is a result of multifaceted factors related to the course of the illness and its personal and social consequences. In the area of social consequences, stigmatization, lack of social support and isolation from the community seem to be extremely important. This social isolation is experienced as loneliness, isolation from other significant persons and feeling of being excluded from important life areas which are often remembered as crucial and engrossing [17]. It is extremely important for these patients to have a close person. In a social network of persons suffering from schizophrenia a psychiatrist automatically takes this significant place. Kepinski underlined that a psychiatrist is often the only person who protects a patient from schizophrenic loneliness and therefore has a chance to modify his/her social functioning [25].

Personal functioning of patients suffering from schizophrenia

In schizophrenia the illness process and its long-term consequences cause disturbance of the sense of identity. The negative consequences of this process include: inadequately low assessment of the possibilities of coping with different difficulties, lack of feeling of being a subject of own actions and lack of feeling of their continuity and repetition in lifetime. This results in pessimistic attitude towards the effects of own actions and weakens social and professional functioning. The effect of such problems with self identity is ambiguous assessment of own life and life satisfaction [26].

The image of the life situation of the patients suffering from schizophrenia may have negative impact on the attempts to change own life situation. Research indicates however that specifically developed social support network, built of persons significant for a patient, may become a source of such changes [27]. Professionals undoubtedly belong to this group and a person of psychiatrist has special meaning [28].

Following this line of reasoning, in the current study meaning of collaboration with a psychiatrist for different personal dimensions of the patients was analyzed. The results once again confirmed earlier findings that long-term collaboration with a psychiatrist positively differentiates patients who have such experiences from those that do not. These differences regard predominantly resourcefulness, optimism and life satisfaction of the patients suffering from schizophrenia. Patients who collaborate with a psychiatrist regularly and for a long time have more optimistic attitude towards their lives than those from the control group. Optimism is a life attitude that can be enhanced by benefits resulting from social support that is mobilized in this way. Optimistic life attitude activates social support network according to the rule that help is more eagerly provided to those who demonstrate optimistic life attitude and optimism towards future. Therefore discretionary optimism increases availability of social support and in the research it is being considered as one of many benefits resulting from this optimistic attitude [29]. Optimism enhancement is related to benefits noticed in coping in everyday life. Research indicates that such life attitude fosters composure towards unexpected events, lower anxiety intensity, self-esteem and use of adaptative ways of coping [30]. Optimism is associated with active, problem oriented and emotions oriented strategies of coping with difficult situations and is inversely related to avoidance strategies [31]. Therefore optimistic life attitude stimulates development of social support network and is also being stimulated itself to consolidate as one of identity dimensions.

Having pessimistic vs. optimistic life attitude may be associated with social consequences of schizophrenia considered as demoralization. The meaning of demoralization includes sense of helplessness towards illness, hopelessness, low self-esteem, depression, irritability and pessimistic attitude towards future. This image of demoralization of patients suffering from schizophrenia is a result of applying non-adaptative strategies of coping with social exclusion and stigmatization with mental illness [32]. Thus, breaking down social discrimination and consequences of patients' demoralization resulting from having schizophrenia is possible thanks to support and distanced care provided by a significant person, i.e. a psychiatrist.

Conclusions

The current study, conducted in the group of 300 patients suffering from schizophrenia and their families, showed that patients systematically collaborating with psychiatrists, while compared to the controls:

- are more rigorous in compliance with medical orders, have greater knowledge on their treatment and are more satisfied with its effects;
- demonstrate better social functioning and are more professionally active;
- demonstrate more positive assessments of themselves and their lives in terms of being in control, optimism and life satisfaction. No statistically significant differences were found in regard to coping with difficult emotions.

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