ORIGINAL ARTICLE

# SELF-DESTRUCTIVE BEHAVIOR IN PATIENTS WITH SCHIZOPHRENIA SPECTRUM DISORDERS. FEATURES OF PATHOGENESIS AND PATHODYNAMICS

DOI: 10.36740/WLek202208103

**Oleksandr O. Bashynskyi[1], Galyna Ya. Pyliagina[1], Evangelos C. Fradelos[2]**
[1]SHUPYK NATIONAL HEALTHCARE UNIVERSITY OF UKRAINE, KYIV, UKRAINE
[2]UNIVERSITY OF THESSALY, LARISSA, GREECE

## ABSTRACT

**The aim**: To prove the heterogeneity of pathogenetic mechanisms and pathodynamics of self-destructive behaviour (SdB) in patients with schizophrenia spectrum disorders (SSD).

**Materials and methods**: We examined 112 patients with different kinds of SSD: 55 men (49.1%) and 57 women (50.9%), 34.9±8 years old. In 44.6% of patients the features of SdB were present during more than half of disease time (Gr1) – before and after self-injury or suicidal attempt (SI\SA) as well as in acute psychosis exacerbation or in remission. They committed SI\SA mainly in a psychotraumatic situations and due to permanent feelings with a self-destructive content. In 55.4% of patients (Gr2) acute manifestations of SdB with realization of impulsive SI\SA were caused only as secondary symptoms of the severe exacerbation of psychosis. Self-destructive or suicidal ideas disappeared in Gr2 patients after the reduction of acute psychotic symptoms.

**Results**: Psychometric testing by the PANSS confirmed the comparability of these groups. лиnepatients' reaction on a psychological problems, especially family conflicts, the desire to reduce the high level of subjective anxiety or to draw attention to themselves. In 92% of these patients at the moment of examination manifestations of SDB and the same self-destructive motives persisted. While patients of Gr2 committed impulsive SI\SA only by the influence of command pseudohallucinations or delusional ideas at the acute psychosis. At the time of the study (in state without acute psychotic symptoms or in remission) all patients of Gr2 showed no SDB signs. The data according to the Big Five Personality Test fixed substantial distinctions in personal characteristics of patients in Gr1 and Gr2 as well.

**Conclusions**: Our study proved the scientific hypothesis that the pathogenesis and dynamics of SdB in patients with SSD (who committed SI\SA) have essential differences. The research results allowed to describe two types of personal portrait of patients with SSD and SdB who had realized SI\SA. This crucial pathogenetic variances are important to design of the therapy strategies of those patients.

**KEY WORDS:** self-destructive behaviour, self-injury, suicidal attempts, schizophrenia spectrum disorders

Wiad Lek. 2022;75(8 p1):1832-1838

## INTRODUCTION

According to statistical data, the prevalence of schizophrenia approaches 1% internationally. Among the entire spectrum of psychotic disorders, the largest number of suicides is recorded in individuals with schizophrenia, which is 5% of cases in this patient population [1-6], and from 25 to 50% of patients try to commit suicide throughout their lives [7]. Thus, suicidality in schizophrenia is 50-100 times higher compared to the general population level of suicides [8].

However, the issue of pathogenetic correlation between the course of psychopathological symptoms in the schizophrenia spectrum disorders (SSD) and the features of formation, as well as the dynamics of self-destructive behavior (SDB) is not sufficiently covered in modern studies.

It has been hypothesized that the pathodynamics of SDB manifestations in SSD patients is heterogeneous pathogenetic mechanisms. The first of all, it is concerned the process to make decision of self-injury or suicidal attempt (SI\SA) in these patients. They have essential differences that depend heavily on the pathway formation of SDB (suicidal or autodestructive motivation for SI\SA) and personal characteristics of patients, as well as on the features of exacerbation of psychosis, and to a lesser extent on the major symptoms and the type of the disease.

## THE AIM

SSD is spread group of severe chronic psychotic diseases. The SDB with serious life-threat SI\SA so frequent features of them. But the pathogenesis and pathodynamics SDB have essential differences in patients with SSD who had realized SI\SA. The aim of our study was to test this hypothesis.

## MATERIALS AND METHODS

### SETTINGS

We examined 112 inpatients with SSD at Clinical Hospital "Psychiatry" in Kyiv were under our observation: 55 men (49.1%) and 57 women (50.9%), 34.9±8 years old.

The inclusion criteria were informed consent for a research, age as 18 - 50 years, SSD as diagnosis (without

severe negative symptoms, great cognitive-mnestical handicap, verified brain lesion), the clinical manifestations of SDB with realization of SI/SA during the disease course (from 1 month to 5 years before the examination).

All the patients were diagnosed with different variants of SSD according to diagnostic criteria ICD-10: 52 patients (46.4%) had schizophrenia (F.20.0), 27 patients (24.1%) – schizoaffective disorder (F25), 23 patients (20.5%) – acute polymorphic psychotic disorder with symptoms of schizophrenia (F23.1), and 10 patients (8.9%) – schizotypal disorder (F21).

The semi-structured clinical diagnostic interview had done for the all patients. This was verified the diagnosis, as well as to determine the leading clinical syndrome, the features of SDB at the time of exam and its pathway dynamics in the course of the disease, the motivations of SI\SA due to the time of this acts, the personal traits of patients as predictors of SDB.

The Positive and Negative Syndrome Scale (PANSS) [9] and the Big Five Personality Test (BFPT) [10] were used as methods for psychometric research. The PANSS was need to assessment of a severity of psychotic symptoms. The BFPT evaluated personal characteristics of patients concerning the Big Five factors model: namely extraversion, agreeableness, openness, conscientiousness, and neuroticism. In our study we used A. Khromov's adaptation of the BFPT [9] with the following oppositional categories for self-assessment of personality in this version: «Extraversion – Introversion», «Attachment (agreeableness, friendliness) – Detachment (antagonism, separation)», «Control (conscientiousness, self-regulation, integrity) – Naturalness (lack of direction, impulsiveness)», «Emotionality (neuroticism, emotional instability) – Emotional restraint (emotional stability)», «Playfulness (openness, expressiveness, intelligence, creativity) – Practicality (closedness to experience, conservatism)».

According to the significant difference in pathogenetic mechanisms and dynamics of SDB all cohort of the patients with SSD was divided into two groups. The first group (Gr1 PermSDB) included 50 patients (44.6%) who had permanent manifestations of SDB throughout the

**Table I.** The PANSS results in groups (scores ± σ)

| PANSS components | | Gr1 PermSDB, n = 50 | Gr2 ImpSI/SA, n = 62 |
|---|---|---|---|
| **Scales** | **Scale items** | | |
| Negative Scale | Stereotyped thinking | 2.30±1.1 | 3.10±0.9* |
| General Psychopathology Scale | Mannerisms and posturing | 1.56±0.63 | 1.92±0.73* |
| | Unusual thought content | 2.46±1.13 | 3.34±1.46** |
| | Lack of judgement insight | 3.66±1.09 | 4.34±0.77** |
| | Preoccupation | 2.22±0.98** | 1.61±0.68 |

* $p < .05$, ** $p < .01$

**Table II.** The motivations to SI\SA in patients' groups

| Psychological motivations and/or direct disease influence as motivational basis | Gr1 PermSDB, n = 50, abs. (%) | Gr2 ImpSIA, n = 62, abs. (%) |
|---|---|---|
| Desire to reduce the severity of strong anxiety ("… I wanted to reduce anxiety … tension", "…I felt much better after that") | 21 (42%)** | - |
| Desire to attract attention from close people ("…she did not notice me anytime, only after suicide attempt she understood my troubles", "…when I did that they started to pay at least a little-bit more attention to me") | 9 (18%)** | - |
| Desire to overcome troubles and emotional stress of family conflicts ("…I'm fed up with conflicts", "…I can't take these disputes anymore") | 8 (16%)** | - |
| Desire to reject and protest to fact of a mental illness and/or psychiatric diagnosis ("…I don't want to be like mads", "…no one would want to be someone like me", "…what's the point of living like this") | 6 (12%)** | - |
| Imperative pseudohallucinations ("…the voice commanded me to kill myself", "… it was the order to cut open the stomach to exorcise the devil from myself") | - | 46 (74.2%)** |
| Hallucinations and delusional ideas, mainly persecutory delusions and delusions of control ("...the voices accused me all the time", …the voices threatened me that I would not live … that I was already dead", "…I was being watched all time", "…I didn't want to be caught", "…I must to stop them *("the powers of evil", "the chasers", "the enemies"*) because they will obliterate me anyway", "...they drove me, they wanted me to die", etc.) | - | 10 (16.1%)** |
| Delusional ideas of self-reproach ("…I don't want to live after what I've done", "… we have a lot of suicides in our family, it's my fault and I must to die") | 6 (12%) | 6 (9.7%) |

** $p < .01$.

**Table III.** The BFPT results in groups (scores ± σ)

| Factors and components | | Gr1 PermSDB, n = 50 | Gr2 ImpSI/SA, n = 62 |
|---|---|---|---|
| **Factors** | **overall rate of factors and separate characteristics** | | |
| Extraversion – Introversion | *overall rate* | 48.7±1.25 | 47.7±2.26 |
| | sociability – insularity | 9.9±0.55 | 9.4±1.16 |
| | impression search– avoidance of new experiences | 8.1±1.57 | 8.6±2.75 |
| | attracting attention– avoiding attention | 10.28±0.36** | 9.1±2.45 |
| Attachment – Detachment | *overall rate* | 50.6±0.16 | 54.1±3.01 |
| | warmth – indifference | 10.3±1.67 | 11.2±1.06 |
| | cooperation – rivalry | 10.9±0.95 | 12.3±2.52* |
| | credulity – suspicion | 8.9±1.11 | 7.6±3.58 |
| | understanding – lack of understanding | 10.4±0.4 | 11.2±0.42 |
| Control – Naturalness | *overall rate* | 45±0.3 | 56.7 ± 0.98** |
| | tidiness – untidiness | 8.9±2.93 | 10.9±0.91* |
| | assertiveness – lack of assertiveness | 9.7±1.65 | 11.9±1.60** |
| | responsibility – irresponsibility | 9.5±0.6 | 12.1±1.07** |
| | self-control – impulsiveness | 8.2±1.26 | 10.7±1.77** |
| | prudence – carelessness | 8.9±0.8 | 11±0.02* |
| Emotionality – Emotional restraint | *overall rate* | 56.3±4.56* | 48.8±3.12 |
| | anxiety – nonchalance | 11.4±1.92 | 10.4±2.55 |
| | tension – relaxation | 11.1±1.88 | 9.3±1.70 |
| | depression – emotional comfort | 12.1±1.44* | 9.9±1.46 |
| | self-criticism – self-sufficiency | 11.3±1.9* | 9.6±1.25 |
| Playfulness – Practicality | *overall rate* | 54.1±0.18* | 50.7±2.19 |
| | dreaminess – realisticness | 12.1±0.53** | 9.9±0.56 |

* $p < .05$; ** $p < .01$

all-disease period or more than half of it (both according to the self-information of patients and to medical records). These patients had committed SI\SA (mainly suicidal attempts) due to a sudden exacerbation of suicidal ideation or painful experience with self-damaging content. It was largely depended on psychological causes, but not on the severity of psychotic symptoms.

The second group (Gr2 ImpSI/SA) involved 62 patients (55.4%). They had manifestations of SDB as a secondary symptomatic of the background of the acute psychotic exacerbation rather than on the background of permanent painful self-destructive thoughts and feelings. These patients have done only the impulsive SI\SA exactly caused by the severity of the psychosis, and their self-destructive or suicidal ideas disappeared after the reduction of acute psychotic symptoms.

## DATA ANALYSIS

The survey results consisted of both qualitative and quantitative data. For analysis of the qualitative data, content analysis was performed using manual thematic coding approach. Quantitative analysis was performed using SPSS version 20 (IBM). Due to the fact that data collected was a mix of categorical and nominal data, aside from the descriptive statistics, Pearson's Chi-Square analysis was used. For this analysis, p-values were two-tailed, and a p-value $\propto \leq 0.05$ was considered as statistically significant.

# RESULTS

## TESTING DATA BY THE POZITIVE AND NEGATIVE SYNDROME SCALE

Table I presents data of the psychometric study of the clinical characteristics in both groups of patients using the PANSS. This table does not present data on the Positive scale because there were no statistical differences concern the severity of productive psychotic symptoms in the groups. Mostly, it was connected this fact due to time of the diagnostic exam. The study was carried out with patients who were in a state of recovery from acute psychotic episode, when the patients regained the ability to productively analyze their experiences and behavior, as well as to fill out tests.

We found out the statistically significant differences in groups on separate items of the Negative Scale and General Psychopathology Scale. According to the Negative Scale significantly higher rates were fixed only on the item «Stereotypical thinking» in Gr2 ImpSI/SA (p=.016).

The absence of significant differences in the Positive and Negative Scales in general confirmed the similarity and comparability of the patients' groups with SSD.

Therefore, the results on the General Psychopathology scale were of great importance. Statistically significant differences were recorded in the groups on the three items of this scale. In Gr2 ImpSI/SA, there were significantly higher scores on the following items: «Mannerisms and posturing» (p=.049), «Unusual thought content» (p=.008) and «Lack of judgement insight» (p=.002 as the most pronounced statistical difference).

All of them indicated the severity of SSD in this group. Whereas in patients of Gr1 PermSDB, a statistically higher score was recorded only on the item «Preoccupation» (p = .000). Such results in Gr1 PermSDB can also be associated with significant influence of the psychological component in the mental state of these patients in general and the development of SDB the diseases course.

An interesting result was that the level of impulsivity (by PANSS) did not have a significant difference in the groups (2.44±1.17 in Gr1 PermSDB and 2.32±0.78 – in Gr2 ImpSI/SA, p= .677) at the time of the study. These data concern the idea that, despite the strongly impulsive SI/SA in acute psychotic experience in patients of Gr2 ImpSI/SA, impulsiveness and uncontrollable emotional engagement are not common for them in the remission.

## CONTENT ANALYSIS DATA OF SI/SA MOTIVES

The heterogeneity of the dynamics of SDB in patients with SSD was confirmed by the analysis of the motivations for SI/SA among the patients in both groups. It was carried out by content analysis of the patients' answers to the question: "Why did you commit this self-harm (SI/SA)?". Table II presents the results of this analysis with examples of patients' statements confirming particular motivation for SI/SA. All the patients described their motivations in retrospect by the time of making a self-destructive or suicidal decision.

This was unpredictable but according to data imperative pseudohallucinations prevailed among all examined patients (41.1%) as the motivations for SI/SA. And this motivation registered only in Gr2 ImpSI/SA (p=.000).

These patients committed SI/SA exclusively by the influence of imperative pseudohallucinations that was the main reason to make a self-destructive decision and to commit of SI/SA.

Persecutory and control delusions in combination with commentary hallucinations as well were the second most common motivational reason for SI/SA in Gr2 ImpSI/SA. But these occurred 4.6 times less often – only in 16.1% of patients. And only in 6 patients of this group (9.7% of cases) SI/SA was motivated by delusional ideas of self-reproach, while the influence of hallucinatory symptoms was largely absent.

The suicidal tendencies or another self-destructive motivation in patients of Gr1 PermSDB were more diverse comparing with Gr2 ImpSI/SA. It had mainly associated with personal psychological problems and actualized in the psychotic exacerbation as the basis for SI/SA. Most often, the direct motivational reason for SI/SA in patients of this group was the need to reduce the high level of subjective anxiety (42% of cases) and the desire to attract attention, although it was recorded among patients in this group 2,3 times less often (18% of cases). The cases of SI/SA in Gr1 PermSDB that was due to the severity of self-reproach delusional ideas (12%) can also be attributed to the psychological mechanism of the gradual increase in self-destructive tendencies in psychosis. In general, this subgroup with self-reproach motivational ideas accounted 10.7% of all examined patients with SSD including 9.7% of patients in Gr2 ImpSI/SA. However, in Gr1 PermSDB combination of self-reproach delusional ideas and suicidal ideation were present in a reduced form during the period of psychotic remission in contrast to patients of Gr2 ImpSI/SA, who almost didn't have delusional symptoms or any manifestations of SDB after the relief of acute psychosis.

## TESTING DATA BY THE BIG FIVE PERSONALITY TEST

The analysis of the results of the BFPT (adapted by A. Khromov) showed that the personal characteristics of patients in Gr1 PermSDB and Gr2 ImpSI/SA were qualitatively different in all five factors. Table III includes both those factors and individual characterological features that had a statistically significant difference, and those that had unreliable differences, but with a pronounced tendency towards significant difference – with a difference of at least 0.5 points.

Thus, the overall indication on the factor «Extraversion – Introversion» was higher, although not significantly, in Gr1 PermSDB, as well as the characteristic «sociability». The essential difference was recorded in this group only by the characteristic «attracting attention» (p=.002). A higher but unreliable indicator by the characteristic «avoidance of new experience» was fixed in Gr2 ImpSI/SA, led to the conclusion that patients in this group were more introverted, reserved, had avoid new contacts. These features might be associated with the specific features of the formation of negative symptoms due to the course of SSD.

The results of the factor «Attachment – Detachment» in Gr1 PermSDB revealed a significantly lower value of the indicator in terms of the characteristic «cooperation – rivalry» (p=.013). Moreover, the overall indicator of this factor and the results on other personality characteristics with a difference of 0.5 points or more, despite the lack of statistical significance, were lower in Gr1 PermSDB.

These data made it possible to conclude that patients in this group have such personal characteristics as indifference, rivalry, a tendency to suspicion and lack of understanding of the interests of others. Characteristic «credulity» was the only unreliable, but prevailing in patients of Gr1 PermSDB, which demonstrated a higher level of suspicion in patients of Gr2 ImpSI/SA.

The overall indicators of all other factors showed a statistically significant difference in the groups of patients.

In Gr2 ImpSI/SA the scores were significantly higher in the overall indicator of the factor «Control – Naturalness»

(p=.000), characterizing the volitional regulation of human behavior, and in all its individual characteristics: «assertiveness» (p=.000), «responsibility» (p=.000), «prudence» (p=.020), «tidiness» (p=.026) and, importantly, «self-control» (p=.006). These results indicated that patients of this group were more capable of controlling and realizing their behavior than patients of Gr1 PermSDB, who were more prone to commit thoughtless actions. In particular, they were characterized by impulsiveness. These features were important from the point of view of clinical manifestations of SDB with impulsive SI/SA at the height of the combination of acute psychosis and painful psycho-traumatic experiences.

The combination of the results presented above with significantly higher values of the overall indicator of the factor «Emotionality – Emotional restraint» (p=.024), as well as scores for the characteristics «depression» (p=.013) and «self-criticism» (p=.041) in Gr1 PermSDB confirmed the conclusions about a higher level of emotional instability (neuroticism) and a lower level of behavior control in patients of this group as the basis for the progredient dynamics of SDB compared to Gr2 ImpSI/SA. In addition, in this group the severity of anxiety and tension exceeded the data recorded in Gr2 ImpSI/SA, although not significantly.

In Gr1 PermSDB, significantly higher values of the overall indicator were also obtained for the factor «Playfulness – Practicality» (p=.013) and for the characteristic «dreaminess» (p=.000). These data indicated that patients of this group were more characterized by infantile personality traits: a frivolity, a tendency to dive down into fantasies, fictional experiences with avoidance pragmatic understanding of real situation when experiencing difficulty in daily duties.

## DISCUSSION

There were prove deep-rooted the similarity and comparability of the both patients' groups in terms of clinical characteristics and the course of SSD at the study by PANSS. There were no significant differences in the positive and negative psychotic symptoms in the groups excepting of the symptom of stereotypical thinking. Statistically significant differences were recorded only on the General psychopathology Scale.

The first step in the confirmation of the scientific hypothesis about diverse nature and the clinical dynamics of SDB manifestations in this cohort of patients had been done in the analysis of disease course by clinical interview. This data in Gr1 PermSDB had proved significant influence of the psychological component in the diseases course and the development of SDB (and by PANSS too) - both during the period of psychotic exacerbation and at the stage of psychosis remission. Such pathodynamics of SDB worsened the general mental state and complicated the disease course in this cohort of patients. In contrary the manifestations of SDB in Gr2 ImpSI/SA were almost completely disappeared by the study time and had practically no effect on their mental state in the remission.

The results of the analysis of the motives of self-destructive or suicidal decision-making in both groups confirmed the hypothesis of the study about the fundamentally different pathogenetic nature of the formation and dynamics of SDB in patients with SSD.

In general, among patients of Gr1 PermSDB the psychogenesis of SDB and its dynamics with all motivational options for SI/SA was formed as a stress reaction to a psycho-traumatic influence. Various personal painful experiences triggered essential increase in the level of psychological frustration in these patients, which in turn caused exacerbation of the psychotic process in them. The combined influence of psychological (intensification of psycho-traumatic experiences) and psychopathological components (exacerbation of a psychosis) acted as "vicious pathological circle" in these patients. Thus, this reciprocal influence significantly exacerbated suicidal or self-destructive intentions in them that they had make subsequent direct suicidal (self-destructive) decision and commit of SI/SA at the height of the distress. The problems, which patients of Gr1 PermSDB experienced as the basis of suicidal or self-destructive intentions at the time of making a concerning decision before commitment SI/SA, remained in 92% of patients (46 people) at the time of examination as persistent or periodic suicidal thoughts regardless of the pharmacotherapeutic treatment.

Controverse results were fixed in Gr2 ImpSI/SA. In this group SDB arose exactly as a secondary symptomatology in period of the psychosis exacerbation. Only acute psychotic symptoms (imperative pseudohallucinations, paranoid-hallucinatory syndrome with persecutory delusions, delusions of control and self-reproach mainly) directly caused self-destructive decision and immediately dramatic realization of SI/SA in these patients.

The analysis of data obtained by the BFPT made it possible to compile a characterological portrait of two different types of patients with SSD and manifestations of SDB according to each of the examined groups.

Patients of Gr1 PermSDB had clinical manifestations of SDB during more than half of the disease period that clearly caused by personal psychological problems and/or actual psycho-traumatic effects. This was personal motivational basis for realization the life-threatening SI/SA in most cases in this group. And these peculiarities to them hadn't strong dependence on the severity of psychosis or of its dynamics. However, these patients were characterized by a high level of psychotic anxiety and/ or depression, strong tension, a tendency to self-criticism and delusional self-deprecatness. Neuroticism were significantly more expressed in these patients (compared to patients of Gr2 ImpSI/SA) especially a tendency to experience intense anxiety for minor reasons with a constant expectation of trouble threatening them, as well as impulsiveness in their actions due to difficulties in controlling their emotions and impulsive urges, including suicidal ideas. In stressful situations, such patients tend to easily get depressed (including psychotic depression) and desperate, which often potentiated their impulsive adoption of a suicidal decision before SI/SA. These pa-

tients had features of egocentricity, indifference, difficulty in understanding others, while being ready for conflicts, rivalry and lack of cooperation abilities. They were characterized by irresponsibility and lack of determination. At the same time, they were more typified by infantile personality traits such as credulity and dreaminess. The combination of these personal and morbid characteristics was the basis for patients of Gr1 PermSDB that they felt helpless in conflicts and crisis situations, unable to cope with life challenges. Taking into account the fact that we are talking about patients who suffered from SSD, then all of the above personality characteristics in each of the specific cases acquired a «psychotic coloring» with a tendency to immerse in painful experiences and the formation of appropriate motives for the implementation of SI/SA. Such personality traits, of Gr1 PermSDB patients contributed to a significant exacerbation of the manifestations of SDB in psycho-traumatic circumstances and dramatically erase the risk of life-threatening SI/SA. The predominantly psychogenic exacerbation of the psychotic state, according to the principle of a pathological vicious circle, make worse the personality stress-vulnerability, contributing to an increase in the level of impulsiveness and a decrease in the ability to adaptive emotional self-regulation, which, in turn, worsened the general mental state, the primary disease course and the degree of socio-psychological maladjustment in these patients.

Prolonged experience fluctuating by severity but permanently present manifestations of SdB in patients of Gr1 PermSDB confirmed the thesis that such patients need not only medication to stop the psychosis episode and prevent SI/SA. But also, they are obviously requiring an individualized complex therapy combining adequate psychopharmacological intervention and long-term psychotherapeutic support. The responsibility of psychotherapy in this cohort of patients is to help resolve their psychological problems, especially intra-family conflicts. The psychotherapy should take into account the specifics of their personal characteristics as predictors of SdB: a combination of pronounced emotional instability, sociability and a tendency to attract attention, egocentricity, dreaminess and separateness too.

Patients of Gr2 ImpSI/SA according to the BFPT had significant differences in the specifics of personality characteristics out of the psychotic episodes in comparison with Gr1 PermSDB. These patients showed introverted personality traits to a greater extent. They were more reserved and closed, relying more on their own strengths and desires. They were characterized by the desire to be independent and self-reliant, more oriented towards internal experiences than reactive immersion in situational problems, and significantly more aimed at avoiding new experiences compared to patients of Gr1 PermSDB. But, it possible, these features may have been caused by growing of negative symptoms of the psychotic process. They were more assertive, responsible, cautious, more capable to control their actions out of the psychotic exacerbation. Based on the test data these patients were more responsive, tolerant and patient with others. Patients of Gr2 ImpSI/SA had responsibility and greater obligation in everyday affairs, had more focused on cooperation, and generally followed the rules of behavior and no desire to violated them (in particular, in a hospital). In a state of remission they were significantly more emotionally stable, realistic, able to adapt to the requirements of reality, and maintain self-control in adverse situations compared to patients of Gr1 PermSDB. Such personality traits in patients of Gr2 ImpSI/SA contributed to the fact that in the state of remission they were not characterized by manifestations of SDB, and the implementation of SI/SA was only due to the acute psychotic state. Therefore, the manifestations of SDB in patients of Gr2 ImpSI/SA did not have a significant impact on the disease course, in spite of the presence of SI/SA in the past.

The absence of personal impulsiveness as well as manifestations of SDB in psychosis remission in Gr2 ImpSI/SA have indicated that active psychopharmacological treatment to the relief of the acute psychosis and regular maintenance therapy to prevent psychotic episode with SDB signs recurrence is quite effective in this cohort of patients. And the psycho-correctional support of such patients should be aimed at psycho-educational work in order to maintain effective compliance.

### LIMITATIONS

This study presents results of a survey in a cohort of SSD patients with SDB who committed SI/SA. Despite the large sample size, the cases cannot be seen as representative of all concrete nosological kinds of SSD or variants of disease courses.

## CONCLUSIONS

The study proved the scientific hypothesis that the nature and the dynamics of manifestations of SDB in patients with SSD (who had committed SI/SA) have essential qualitative differences. We distinguished and studied two deeply diverse pathogenetic types of the formation and dynamics of SDB in our study. Underlying these two types were qualitative differences in the specifics of the formation of suicidal or self-destructive motivation for SI/SA and the personal characteristics of patients, that certainly otherwise interconnection on psychosis features in the period of its exacerbation.

The analysis of psychometric testing data using the PANSS confirmed the comparability of these groups of patients.

The content analysis of the motivations for SI/SA showed that their fulfillment in Gr1 PermSDB was due to the need to reduce the high level of subjective anxiety, as well as reaction on psychological problems, especially family conflicts or/and the desire to draw attention to themselves. In 92% of these patients at the moment of examination, despite the time lag between the moment of Si/SA and cessation of psychosis, manifestations of SDB and the same self-destructive motives persisted. Whereas patients of Gr2 ImpSI/

SA committed impulsive SI/SA in the acute psychosis with the influence of command pseudohallucinations or acute delusional ideas. At the time of the study, i.e. in remission, all patients of Gr2 ImpSI/SA showed no SDB signs.

The test data by the BFPT recorded a significant difference in personal characteristics among patients of Gr1 PermSDB and Gr2 ImpSI/SA so made it possible to compile a characterological portrait of two different types of patients with SSD and manifestations of SDB. Patients of Gr1 PermSDB were characterized by a combination of marked emotional instability, extroversion, as well as being withdrawn and conflictive, with a tendency to attract attention, infantile features of irresponsibility, daydreaming and egocentrism. These personal traits accounted for the persistence and pathogenetic significance of the SDB manifestations in the dynamics of the disease. The testing results of the personal traits of Gr2 ImpSI/SA patients showed their ability to better control their emotions and follow the rules of behavior in psychotic remission.

## RECOMMENDATIONS

Based on the study, the development of therapeutic programs for patients with SSD should take into account the essence and the dynamics of the SDB manifestations. Thus, patients of Gr1 PermSDB require an individualized complex therapy combining adequate psychopharmacological intervention and long-term personal psychotherapy as possible. For Gr2 ImpSI/SA patients, for whom the signs of SDB did not have a significant impact on the disease course, treatment should be aimed at long-term adequate psychopharmacotherapy, that need for preventing a relapse into acute psychosis. This is need implementation psycho-corrective and psycho-educational measures to maintain adequate therapeutic compliance as well.

## REFERENCES


1. Nordentoft M., Mortensen P.B., Pedersen C.B. Absolute risk of suicide after first hospital contact in mental disorder. Arch Gen Psychiatry. 2011; 68(10): 1058-64. doi:10.1001/archgenpsychiatry.2011.113.
2. Dutta R., Murray R.M., Allardyce J. et al. Mortality in first-contact psychosis patients in the U.K.: a cohort study. Psychol Med. 2012; 42(8): 1649-61. doi: 10.1017/S0033291711002807.
3. Dutta R., Murray R.M., Allardyce J. et al. Early risk factors for suicide in an epidemiological first episode psychosis cohort. Schizophr Res. 2011;126(1-3):11-9. doi: 10.1016/j.schres.2010.11.021.
4. Palmer B.A., Pankratz V.S., Bostwick J.M. The lifetime risk of suicide in schizophrenia: a reexamination. Arch Gen Psychiatry. 2005; 62(3): 247-53. doi: 10.1001/archpsyc.62.3.247.
5. Dutta R., Murray R.M., Hotopf M. et al. Reassessing the long-term risk of suicide after a first episode of psychosis. Arch Gen Psychiatry. 2010;67(12):12-30. doi: 10.1001/archgenpsychiatry.2010.157.
6. Khaustova E.A. Shyzoaffektyvnoe rasstroistvo: sovremennыe podkhodы k dyahnostyke y terapyy [Schizoaffective disorder: modern approaches in diagnostic and therapy]. Psykhyatryia, psykhoterapyia y klynycheskaia psykholohyia, 2020; 11 (1): 177-188. doi: 10.34883/PI.2020.11.1.017 (in Ukrainian)
7. Lopez-Castroman J., Olié E., Courtet P. Stress and Vulnerability: A Developing Model for Suicidal Risk. In: Cannon K. Suicide: Phenomenology and Neurobiology. Springer, Cham. 2014; 26: 12-30.
8. Bertelsen M., Jeppesen P., Petersen L. et al. Suicidal behaviour and mortality in first-episode psychosis: the OPUS trial. Br J Psychiatry. 2007; 51: 140-146. doi: 10.1192/bjp.191.51.s140.
9. Kay S., Fiszbein A., Opler L. The positive and negative syndrome scale (PANSS) for schizophrenia. Schizophr Bull. 1987; 13(2): 261-276. doi: 10.1093/schbul/13.2.261.
10. Khromov A.B. Pyatifaktornyy oprosnik lichnosti [the Big Five Personality Test]: Uchebno-metodicheskoye posobiye Izd-vo Kurganskogo gos. Universiteta, 2000, 78p.



**ORCID and contributionship:**

*Oleksandr O. Bashynskyi: 0000-0001-7154-2737* [B-D,F]
*Galyna Ya. Pyliagina: 0000-0003-0169-1256* [A,D,E]
*Evangelos C. Fradelos: 0000-0003-0244-9760*[E,F]



**Conflict of interest:**

*The Authors declare no conflict of interest.*



## CORRESPONDING AUTHOR

**Galyna Ya. Pyliagina**
Shupyk National Healthcare University of Ukraine
9 Dorohozhitska St., 04112 Kyiv, Ukraine
tel: +38 067 902 5831
e-mail: gpil.doctor@gmail.com



**Received:** 07.04.2022
**Accepted:** 26.07.2022


**A** - Work concept and design, **B** – Data collection and analysis, **C** – Responsibility for statistical analysis, **D** – Writing the article, **E** – Critical review, **F** – Final approval of the article