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CLINICAL DIFFERENCES IN MANIFESTATIONS OF SELF- DESTRUCTIVE BEHAVIOR IN PATIENTS WITH SCHIZOPHRENIA SPECTRUM PSYCHOTIC DISORDERS

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Abstract

Manifestations of self-destructive behavior (SDB) differ in patients with schizophrenia spectrum psychotic disorders and our study aims to identify these differences through the demonstration of clinical cases. The purpose of the study is to explore clinical differences in manifestations of self-destructive behavior in patients with schizophrenia spectrum psychotic disorders. The study involved 95 patients diagnosed with schizophrenia spectrum disorders. The patients were divided into two groups. The first group (Gr1 PermSDB) included 40 patients (42% of the total number of subjects) with psychiatric disorders, who expressed a constant presence of manifestations of self-destructive behavior throughout the whole disease period or during more than half of this period (both according to the patients and to the medical records). The second group (Gr2 ImpSDB) included 55 patients (58% of the total number of subjects), where the manifestations of self-destructive behavior appeared only at the height of exacerbation of psychopathological symptoms, and this caused the acts of impulsive self-harm. Looking at the examples, we see a difference in motivational statements in different groups of patients: in Gr2, the main factor that motivated patients to harm themselves was the exacerbation of psychotic symptoms. At the same time, the main factors influencing the self-harm in Gr1 were personal experiences related to psychological problems

Keywords: self-destructive behavior, schizophrenia, schizophrenia spectrum psychotic disorders, clinical cases

Introduction

Suicide is a significant health issue. According to the World Health Organization (WHO) about one million people die each year from suicide worldwide. It means that every 40 seconds a person dies from suicide somewhere on the globe, and many other people make non-lethal suicide attempts. According to some estimates, the number of people who make non-lethal suicide attempts is about 10-15 times higher than of those who die from suicide (World Health Organization Preventing Suicide. A Global Imperative. WHO, 2014).

As early as 1911, E. Bleuler described “suicidal tendencies” as “the most serious of all symptoms of schizophrenia” (Bleuler, 1911). In 1919, Kraepelin stated that suicide occurred in both acute and chronic stages of schizophrenia. In 1939, before modern treatments became available, Rennie (Rennie, 1939) noted that 11 percent of 500 patients with schizophrenia died of suicide during the 20-year follow-up period.

One of the important predictors of SDB is usually depressive disorders in patients with psychotic disorders of the schizophrenic spectrum. Studies have shown that the presence of a history of depressive disorders and the presence of a depressive episode are associated with the manifestations of SrPv in patients with schizophrenia who are in both outpatient and inpatient treatment (Balhara, 2012; Large M et al., 2011). More than 50% of patients who have completed suicide attempts have been diagnosed with depressive disorder (Harris, 2015) and the presence of depressive symptoms in patients with schizophrenia may be a trigger for the development of SDB (Carlborg et al., 2010).

Most studies highlight one of the most important factors in the development of suicide actions is the presence of previous suicide attempts (Carlborg et al., 2010). Previous attempts have affected the overall risk of completed suicide during the first 2 years after the suicide attempt (Tidemalm et al., 2018). At the same time, patients with schizophrenia are more prone to suicide by more lethal and fancy methods than in the general population (Hunt et al., 2006).

Significant evidence suggests that schizophrenia reduces life expectancy by approximately ten years (White et al., 2019). Suicide is the leading factor in reducing life expectancy in patients with schizophrenia. Some studies show that the manifestations of self-destructive behavior in patients with psychiatric disorders of the schizophrenic spectrum are quite common (Jokinen et al., 2018). Thus, almost 50% of patients with schizophrenic spectrum disorders commit self-harm (White et al., 2019). A study of self-destructive behavior in patients with psychiatric disorders of the schizophrenic spectrum shows that its manifestations depend on the duration of the disease (Hedegaard et al., 2017), on the plot behind the psychopathological experiences, on their level of social and emotional intelligence (Rutz et al., 2007).

Research Aim

To study clinical differences in manifestations of self-destructive behavior in patients with schizophrenia spectrum psychotic disorders.

Research Methodology

General Description

In recent years, on the clinical bases of the Department of Psychiatry, Psychotherapy and Medical Psychology, Shupyk National University of Healthcare of Ukraine - Territorial Medical Association (TMA) "PSYCHIATRY" a clinical examination, diagnosis, and treatment of 95 patients with paranoid schizophrenia was conducted with informed consent in compliance with the principles of bioethics and deontology.

Sample Selection

According to the purpose of the study, all examined patients were divided into two groups. The first group (Gr1 PostSDB) included 40 patients (42% of the total number of subjects) with psychiatric disorders, who expressed a constant presence of manifestations of self-destructive behavior throughout the whole disease period or during more than half of this period (both according to the patients and to the medical records). The self-harm by these patients occurred under the influence of exacerbation of suicidal ideation or painful experiences with self-destructive content, which did not fully depend on the severity of psychopathological symptoms. The second group (Gr2 ImpSDB) included 55 patients (58% of the total number of subjects), where the manifestations of self-destructive behavior appeared only at the height of exacerbation of psychopathological symptoms, and this caused the acts of impulsive self-harm. An essential feature of patients in this group was that after the reduction of acute psychotic symptoms, the manifestations of self-destructive behavior in patients disappeared.

Instruments and Procedures

The patients were diagnosed with psychiatric disorders of the schizophrenic spectrum according to the criteria of the International Classification of Diseases, revision 10, (ICD-10) (Centers for Disease Control and Prevention. International Classification of Diseases, Tenth Revision (ICD-10). <http://www.cdc.gov/nchs/icd/icd10.htm> (accessed 23 Sep 2011).), all of them had manifestations of self-destructive behavior during the disorder. Among the examined, 39 (41%) were diagnosed with schizophrenia (Sch, F20.0), 25 patients (26%) had schizoaffective disorder (SchAD, F25), 20 persons (21%) had an acute polymorphic psychiatric disorder with symptoms of schizophrenia (APPD, F23.1), in 11 patients (12%) schizotypal disorder (SchTD, F21) was diagnosed.

The patients were diagnosed with psychiatric disorders of the schizophrenic spectrum according to the criteria of the International Classification of Diseases, revision 10, (ICD-10), all of them had manifestations of self-destructive behavior during the disorder. All subjects underwent a semi-structured clinical-diagnostic interview which was utilized as a clinical-psychopathological method of study (according to the diagnostic criteria of ICD-10). The interview revealed the leading syndromic structure of the clinical picture and the nature of signs of self-destructive behavior at the time of examination and in the anamnesis, and also the specifics of the self-harming actions for the patient.

Research Results

As a result of the study, as shown in table. 1, among the whole group of examined patients by nosological affiliation.

Table 1

Distribution of Examined Patients in Groups by Nosological Affiliation

Nosological units	Gr1 PermSDB	Gr2 ImpSDB	Total
Sch (F20.0)	13	26	39
SchAD (F25)	9	16	25
APPD (F23.1)	8	12	20
SchTD (F21)	10	1	11
In total	40	55	95

It was found that in the sample the largest number of patients was diagnosed with schizophrenia, on the 2nd place, the number of patients diagnosed with schizoaffective disorder, on the third - acute polymorphic psychotic disorder, and 4 - schizotypal disorder.

As already mentioned, all patients underwent a semi - structured clinical diagnostic interview, during which a study of motivational attitudes in the statements of patients with SDB about their implementation of the suicidal acts was conducted.

Table 3

Distribution of the Examined Patients by Groups, According to the Motivational Attitudes that Preceded the Commission of the Suicide Actions

Motivational attitudes of patients	Gr1 PermSDB	Gr2 ImpSDB
Attempts to reduce the high level of subjective anxiety («... wanted to reduce anxiety... stress ..», «... then it became easier....»)	21	
Efforts and the way to attract attention (... so she didn't notice me, only then she understood... «,»... when I did so they paid attention to me... «)	9	
Impossibility to accept the presence of a mental illness or psychiatric diagnosis («I don't want to live like that», «Who needs me so much?», «What's the point of living like that?»)	2	

Motivational attitudes of patients	Gr1 PermSDB	Gr2 ImpSDB
Attempts to overcome feelings of conflict in the family (... «got conflicts...», «... I can no longer tolerate these quarrels...»)	3	
Influence of imperative pseudo-hallucinations «... I was ordered (told) by voices...».		41
Influence of hallucinatory symptoms and delusions (mostly harassment and influence) («... I was watched... I didn't want to be caught...» and «... I was followed... I got... I wanted to be stopped. I wanted to stop...»)		8
Delusional ideas of self-blame («I don't want to live after what I did» and «I have a lot of suicides, it's my fault»)	5	6

This analysis confirmed differences in each of the groups of examined patients and allowed to distribute patients according to their response (data are given in table 3).

Below are presented several clinical cases from each of these groups and subgroups to show differences in the manifestations of self-destructive behavior.

Clinical case of a patient from Gr1 PostSDB (Attempts to reduce the high level of subjective anxiety). Patient V., girl, 18 years old, diagnosis: SchtD; anxiety - depressive syndrome with hallucinatory inclusions.

The heredity is not burdened by psychopathological disorders. The patient was ill for about three years. The analysis of anamnestic data (clinical interview data and information from medical records) revealed that the patient in difficult life situations (exams, poor grades, failures in personal life) constantly inflicted cuts on her forearms and thighs. It all started once when she still studied in school, she got a bad grade. She was extremely worried and thought it was unfair because she was prepared and had good grades in this subject, and also she was afraid that at home her folks would quarrel a lot. When the level of anxiety was very high, she wanted to “cut her veins”, but when she began to cut her forearms with a stationery knife, she suddenly felt relieved. After that, very often in stressful situations causing a high level of anxiety, she begins to inflict self-cuts and, in her own words, «... becomes easier... releases...”. Although the self-cuts brought some relief, suicidal thoughts stayed.

Parents noticed some weirdness in the behavior of their daughter (talked to herself, began to communicate less with friends, constantly stayed in her room behind closed doors). Then they saw the cuts and persuaded her to consult a psychiatrist. During the consultation she confirmed suicidal thoughts and also told about “voices in my head... but not voices, but my thoughts...”. In connection with this condition, two times underwent inpatient treatment in a psychiatric hospital.

In the periods between episodes of mental state deterioration (inpatient treatment), acute psychotic symptoms were absent in the clinical picture. At the same time, the patient throughout the disease had manifestations of self-destructive behavior in the form of almost constant suicidal thoughts, which lost their intensity due to improving mental state, but still stayed.

Due to intake of psychopharmacotherapy in inpatient treatment (risperidone 2 - 4 mg, quetiapine 100 - 200 mg, duloxetine 60 mg per day), hallucinatory-delusional symptoms were reduced, depressive symptoms were deactivated. At the re-examination a month later, hallucinatory symptoms were absent, but suicidal thoughts which lost some of their intensity persisted.

Clinical case of a patient from Gr1 PostSDB (Attempts and means to attract attention). Patient G., girl, 20 years old, diagnosis: SchAD, mixed type; depressive - paranoid syndrome.

The heredity is not burdened by psychopathological disorders. The patient was ill for four years; many times underwent inpatient treatment. The analysis of anamnestic data (clinical interview data and information from medical records) revealed that in the periods between psychotic episodes (inpatient treatment) delusional symptoms were absent. However, throughout the disease, the patient showed self-destructive behavior in the form of almost constant suicidal thoughts and statements, which, amidst improving mental state, lost their intensity but remained persistent.

The mental condition of the patient deteriorated about two weeks ago when she told her parents that men at work followed and tried to kidnap and rape her, that she had heard them discuss

it, although each time there were different men. Because of this, she stopped going to work. She stayed at home, did not want to do anything, did not get out of bed for days, citing the fact that they still would find her someday: "... if they (kidnappers) want her so much, they will find... then why do something". She started to show suicidal intentions: "... it's better to kill oneself than to let to defile...". She was hospitalized in a psychiatric hospital.

After the treatment, the delusional symptoms vanished. She explained the reason for the behavior as follows: "... my parents did not pay attention to me, and then they ran around me all day long, like I was a little girl...".

Later, after discharge, the patient, even in the periods of remission (between inpatient treatments), started to talk about suicidal intentions (according to parents) when she needed something.

In the re-examination a month later, residual delusional ideas of persecution remained in the clinical picture of G., suicidal thoughts and statements lost some of their intensity but still persisted.

Clinical case of a patient from Gr1 PostSDB (Inability to accept mental disease or psychiatric diagnosis). Patient S., man, 35 years old, diagnosis: schizophrenia, paranoid form, continuous type, hallucinatory - paranoid syndrome.

Heredity is without psychopathology. Mental disorders first appeared 2 years ago. Mental illness debuted in the form of acute hallucinatory-delusional symptoms, it was the first time S. was treated in a psychiatric hospital. According to the anamnesis, he was treated inpatient several times. During the deterioration of the mental state in the clinical picture of the patient to the fore came hallucinatory - delusional symptomatic with delusional ideas of influence and verbal pseudo-hallucinations.

About a year ago, he made a suicide attempt. During the conversation, he explained his action: "... for what anybody would need such a person... I'm sick ...".

Amidst psychopharmacological treatment, the condition improved. Upon re-examination months later - hallucinatory - delusional symptoms ceased to be actual. At the same time, the manifestations of self-destructive behavior in the form of suicidal statements persisted, however without affective intensity.

Clinical case of a patient from Gr1 PostSDB (Trying to overcome the experiences of family conflict). Patient S., woman, 35 years old, diagnosis: schizoaffective disorder, mixed type, affective - paranoid syndrome.

Heredity is without psychopathology. Mental disorders first appeared five years ago. Mental illness debuted in the form of affective-delusional symptoms, it was when S. was treated in the mental hospital for the first time. According to the anamnesis, then she was treated inpatient several times. During the deterioration of the mental state, to the fore in the clinical picture of the patient came affective - delusional symptomatic with delusional ideas of enrichment and psychomotor arousal. About a year ago have made a suicide attempt. During conversation, explained her actions: "... I'm sick and tired of conflicts ... ", "... can't take anymore these quarrels ... ".

Amidst psychopharmacological treatment, the condition improved. Upon re-examination months later - hallucinatory - delusional symptoms ceased to be actual. At the same time, the manifestations of self-destructive behavior in the form of suicidal statements persisted, however without affective intensity.

Clinical case of a patient from Gr2 ImpSDB (Influence of imperative pseudo-hallucinations). Patient O., woman, 42 years old, diagnosis: schizophrenia, paranoid form, continuous type, hallucinatory - paranoid syndrome.

Heredity is without psychopathology. Mental disorders first appeared six years ago. Mental illness debuted in the form of acute hallucinatory-delusional symptoms, it was when O. was treated in the mental hospital for the first time. According to the anamnesis, she underwent inpatient treatment 8 times. During the deterioration of the mental state, to the fore in the clinical picture of the patient came hallucinatory delusional symptomatic with verbal pseudo-hallucinations of imperative nature and delusional ideas of persecution.

During the period of aggravation of her mental condition six months ago, O. executed a self-harm action by stabbing herself in the heart. The patient explained how it happened: "A voice told me to do it, and I did".

In the course of given study (with the mental state improved amidst onset of the treatment – deactivation of the acute psychotic state), the patient clearly described the hallucinatory-delusional

symptoms in her condition, but categorically denied the presence of suicidal thoughts or any other manifestations of self-destructive behavior at the time of re-examination.

Clinical case of a patient from Gr2 ImpSDB (Influence of hallucinatory symptoms and delusional ideas (mainly of persecution and influence)). Patient K., woman, 32 years old, diagnosis: schizophrenia, paranoid form, continuous type, hallucinatory - paranoid syndrome.

Hereditary psychopathological problems on the paternal line (mother's sister had schizophrenia). Mental disorder first appeared three years ago. Mental illness debuted in the form of acute hallucinatory-delusional symptoms, it was when K. was treated in the mental hospital for the first time. According to the anamnesis, she underwent inpatient treatment 4 times. During the deterioration of the mental state, to the fore in the clinical picture of the patient came hallucinatory delusional symptomatic with verbal pseudo-hallucinations and delusional ideas of persecution. During the period of aggravation of her mental condition six months ago, O. harmed herself by jumping out from the second-floor window. The patient explained her actions as follows: "... They followed me... they wanted to hurt me... it's better to die than to be in their hands".

In the course of given study (with the mental state improved amidst onset of the treatment – deactivation of the acute psychotic state), the patient clearly described the hallucinatory-delusional symptoms in her condition, but categorically denied the presence of suicidal thoughts or any other manifestations of self-destructive behavior: "... I'm better now ... I understand that nobody looks for me ... I don't want to do anything bad to myself ...".

Clinical case of a patient from Gr2 ImpSDB (Delusional ideas of self-accusation). Patient K., woman, 32 years old, diagnosis: APPD with symptoms of schizophrenia, hallucinatory - paranoid syndrome.

Heredity is without psychopathology. Ill for six months. An analysis of the anamnestic data (clinical interview data and information from medical records) revealed that the mental state changed about a month ago, when the circle of friends narrowed SchAD. Relatives began to notice that the patient was talking to herself. Later, the mental state deteriorated. On the eve of hospitalization, she locked herself in a room and did not want to let anyone in. Relatives knocked out the door and found that the patient had inflicted self-cuts on both forearms. She was hospitalized first in the emergency room, then in a mental hospital. Mental state at the time of admission was determined by the presence of acute psychotic symptoms – she denied hallucinatory symptoms, but judging by her behavior they cannot be ruled out. When asked why she harmed herself, answered "... I am to blame for the war, I don't shouldn't live ...".

Amidst psychopharmacological treatment, the condition improved. Upon re-examination months later - hallucinatory - delusional symptoms ceased to be actual. Residual delusional ideas of self-blame remained. At the same time, she actively denied the desire to harm herself, and regretted what she had done.

Discussion

Based on the literature (Ambrumova et al., 1980; Pylyagina, 2017) we can assume that the manifestations of SDB differ in patients with psychotic disorders. In addition to the above group, we can also talk about patients who have manifestations of SDB not only during the exacerbation of psychopathological symptoms, but also in remission. It is possible to note that SDB differs at patients of the psychotic register in an acute state and in a state of remission. During the exacerbation of SDB in these patients is due to the nature of the actual psychotic experiences and is characterized by a special brutality and sophistication. It is then that the most common self-amputations, self-castration, enucleation of the eyes are performed. While in periods of remission, CPR reflects personality changes caused by the disease (Sevryukov et al., 2016).

Analyzing the global data on the manifestation of SDB, we found that suicide mortality exceeds the annual global mortality rate from killings and military conflicts (Hawton et al., 2009). The frequency of suicide attempts is even higher, which is 10-20 times higher than the frequency of completed suicides. In the literature, this phenomenon is called the "iceberg phenomenon", where completed suicides are just the tip of the iceberg, and suicide attempts are the underwater part. However, only one in four cases of suicide attempts leads to contact with the occupational health

system and can be taken into account in statistics (Diekstra et al., 1993).

In turn, researchers identify risk factors for suicide. The most common of these are mental disorders, aggression, impulsivity, previous suicide attempts, suicidal family history, family problems, social isolation, problems at work and serious somatic diseases (González-Navarro et al., 2012). According to some other researchers, up to 90% of people who commit suicide have a mental disorder (Mehlum, 2010) and the risk of suicide in people with mental illness is 35 times higher than in the general population (Polozhiy, 2011). It is believed that the presence of mental disorders is one of the factors that are most often associated with the risk of suicide (Page et al., 2009).

At the same time, according to research, patients who committed suicide in general hospitals were more likely to have mental disorders associated with stress and personality disorders, while the vast majority of patients who committed suicide in psychiatric hospitals had disorders spectrum of schizophrenia and affective disorders (Oiesvold et al., 2012).

Conclusions

Looking at these examples, we see a difference in motivational statements in different groups of patients: in Gr2, the main factor that motivated patients to harm themselves was the exacerbation of psychotic symptoms. After the relief of the acute psychotic state, the manifestations of self-destructive behavior were either completely removed or significantly reduced in intensity and did not significantly affect behavior of the patients. At the same time, the main factors influencing the self-harm in Gr1 were personal experiences related to psychological problems - they, to a greater extent, caused an exacerbation of psychopathological symptoms and became the basis for the suicidal decision.

In the course of the study we found some significant differences in the pathogenetic development and dynamics of self-destructive behavior in patients with schizophrenia spectrum psychotic disorders, which significantly affect the nature of their implementation of suicidal acts. Thus, there are two main groups: those with psychotic disorders who had some manifestations of self-destructive behavior during the entire period of the disease or more than half of this period and performed the trial under the influence of exacerbation of suicidal or self-destructive pain often on the background of personal traumatic factors and to some extent, regardless of the severity of psychopathological symptoms (Gr1 PermtSDB- in current study); as well as patients with psychotic disorders, in whom the manifestations of self-destructive behavior were secondary and appeared only at the height of exacerbation of psychopathological symptoms, which caused the implementation of impulsive suicidal acts (under the influence of imperative pseudo-hallucinations), while after the reduction of acute psychotic symptoms (Gr2 ImpSDB).

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