

CLINICAL AND PSYCHOPATHOLOGICAL CHARACTERISTICS OF THE AUTOAGGRESSIVE BEHAVIOR IN PATIENTS WITH THE FIRST PSYCHOTIC EPISODE WITH CONSIDERING CIRCADIAN RHYTHMS

CHARAKTERYSTYKA KLINICZNA I PSYCHOPATOLOGICZNA ZACHOWAŃ AUTOAGRESYWNYCH U PACJENTÓW Z PIERWSZYM EPIZODEM PSYCHOTYCZNYM W KONTEKŚCIE RYTMÓW OKOŁODOBOWYCH

Dmytro I. Boiko, Lilia V. Zhyvotovska, Grigorij T. Sonnik, Andrij M. Skrypnikov

HIGHER STATE EDUCATIONAL INSTITUTION OF UKRAINE "UKRAINIAN MEDICAL STOMATOLOGICAL ACADEMY", POLTAWA, UKRAINE

ABSTRACT

Introduction: The high rate of autoaggressive action in patients with psychotic symptoms manifested during the beginning of active psychopharmacotherapy, and they are often the reason for psychiatric help. The continuous growth of autoaggressive behavior indicates the number of unsolved problems in clinical suicidology.

Aim: The aim of this research was to explore the clinical and psychopathological characteristics of the autoaggressive behavior in patients with the first psychotic episode with considering circadian rhythms.

Material and Methods: There was a research in regional clinical psychiatric hospital and 130 patients were involved in the research with autoaggressive behavior during the first psychotic episodes. Clinical and psychopathological, psychodiagnostic and statistical methods were used. Characteristic clinical manifestations of first psychotic episode is determined by PANSS [1986] and BPRS [1962], level of suicidal risk is determined by Lyuban-Plotstsa's scale [2000], characteristics of biological rhythms is established by Estberg's questionnaire [1986].

Results: Certain psychiatric symptoms were associated with the level of suicide risk in the first episode of psychosis, such as «tension», «hostility», «mannerisms and posturing», «excitement», «suspiciousness», «somatic concern», «anxiety», «depression», «guilt». Circadian rhythms include the level of risk occurrence and severity autoaggressive behavior such as clearly and dimly expressed evening types of daily activity.

Conclusions: Therefore, further research of autoaggression during the first psychotic episode with considering the influence of biological rhythms is a given area of current research in psychiatry aimed to improve the prevention, treatment and rehabilitation.

KEY WORDS: first psychotic episode, autoaggressive behavior, circadian rhythms.

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INTRODUCTION

The first psychotic episode identified as a severe mental disorder in modern research [1, 2]. This category includes patients who had psychotic symptoms firstly and who were not on dispensary previously. The first psychotic episode can be the initial of different nosological forms of mental disorders such as schizophrenia, schizoaffective disorder, organic, vascular, intoxication psychosis may be a member of depressive and manic phase of bipolar affective disorder [3, 4]. However, some scientists believe that the majority of patients with the first psychotic episode deals with diagnostic criteria for schizophrenia and acute polymorphic psychotic disorder [5, 6].

The observation period in patients who has psychotic episode at this moment provides the explore autoaggressive behavior. According to the literature, the high rate of autoaggressive action in patients with psychotic symptoms

manifested during the beginning of active psychopharmacotherapy, and they are often the reason for psychiatric help [7, 8]. There is a high probability of autoaggression which was observed during the first two years after the first episode of psychosis. These recent researches evidence that the greatest risk of autoaggressive behavior observed in the manifest of acute polymorphic psychotic disorder and paranoid forms of schizophrenia can manifest as suicidal, parasuicidal, pseudosuicidal and a suicidal behavior and requires individual assessment in each clinical case to choose preventive treatment approach. The continuous growth of autoaggressive behavior indicates the number of unsolved problems in clinical suicidology [9, 10].

Significant drawbacks in the development of the above problems is the fact that at present not enough attention paid to the impact on the development of biological rhythms of autoaggressive behavior during the initial

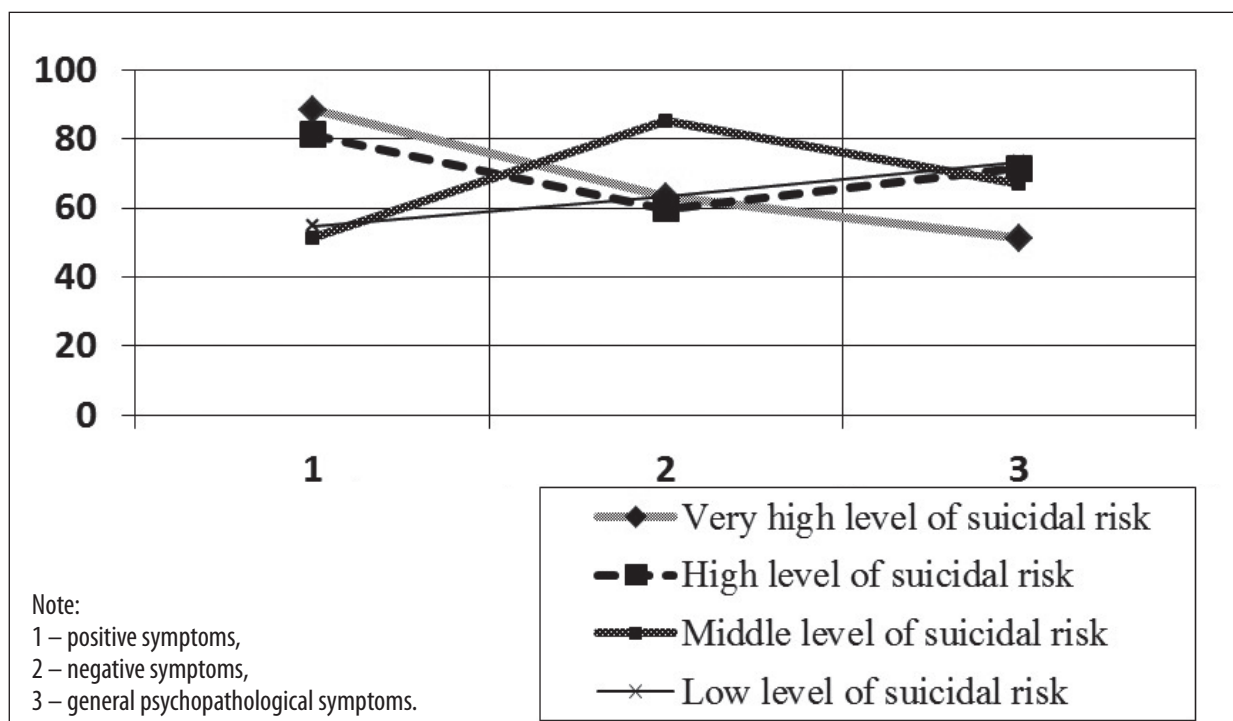


Fig. 1. The distribution of patients with the first psychotic episode by PANSS depending on the level of suicide risk

psychotic episode. Although a number of researches identify that the development of mental disorders is often connected with biorythmological dysadaptation. It was established that there are different relationship between the medical and biological processes and biorythmological features of patients with mental disorders. One of the most investigated is the circadian organization of human physiological functions that is synchronized with the change of day and night (light and dark), which has the properties of self-regulation and is highly sensitive to any stress effects [11]. Research circadian rhythm in patients with different mental disorders detects manifestations of external and internal desynchronization. This is an external desynchronization differences of objective indicators with subjective and inconsistent individual circadian rhythms of physiological functions includes an internal manifestations one. There are scientific works, which have the role of the season, a significant environmental factor that influences the initiation and subsequent dynamics of depressive disorders and the incidence of suicide. Proven correlation seasonal high points of suicidal activity with depression rate, which is the result of chronomedicine aspect of biorythmological disruption in the phase dissonance of circadian rhythms at rhythmogenic centers of suprachiasmatic and paraventricular nuclei, epiphysis and hippocampus [12].

THE AIM

The aim of this research was to explore the clinical and psychopathological characteristics of the autoaggressive behavior in patients with the first psychotic episode with considering circadian rhythms.

MATERIAL AND METHODS

There was a research in regional clinical psychiatric hospital and 130 patients were involved in the research with autoaggressive behavior during the first psychotic episodes. Clinical and psychopathological, psychodiagnostic and statistical methods were used. Clinical and psychopathological method is used for the assessment of patients, and determines clinical features and pathological process.

The methods of statistical analysis of the results of research conducted with the calculations of average size (M), standard deviation (σ). Statistical significance of differences was analyzed by comparing two parameters (Student's t-test), by which determined the significance of differences between the two groups in the average value of any parameter. Characteristic clinical manifestations of first psychotic episode is determined by PANSS [1986] and BPRS [1962], level of suicidal risk is determined by Lyuban-Plotstsa's scale [2000], characteristics of biological rhythms is established by Estberg's questionnaire [1986].

There were 96 (73,8%) investigated women and 34 (26,2%) men, of which 84 patients relate to from 16 to 30 age category (64,6%), 38 patients relate to from 31 to 40 age category (29,2%), 8 patients relate to older than 40 age category (6,2%).

They are distributed for marital status as follows: 47 (36,2%) people are married, 61 (46,9%) are unmarried, 17(13,1%) are divorced, 5 (3,8%) are widowed. They are divided into such groups of people: 63 people (48,5%) study, 19 (14,6%) work, 48 (36,9%) don't work. The investigation was made by Lyuban-Plotstsa's scale which determines the level of suicide risk. It was determined that

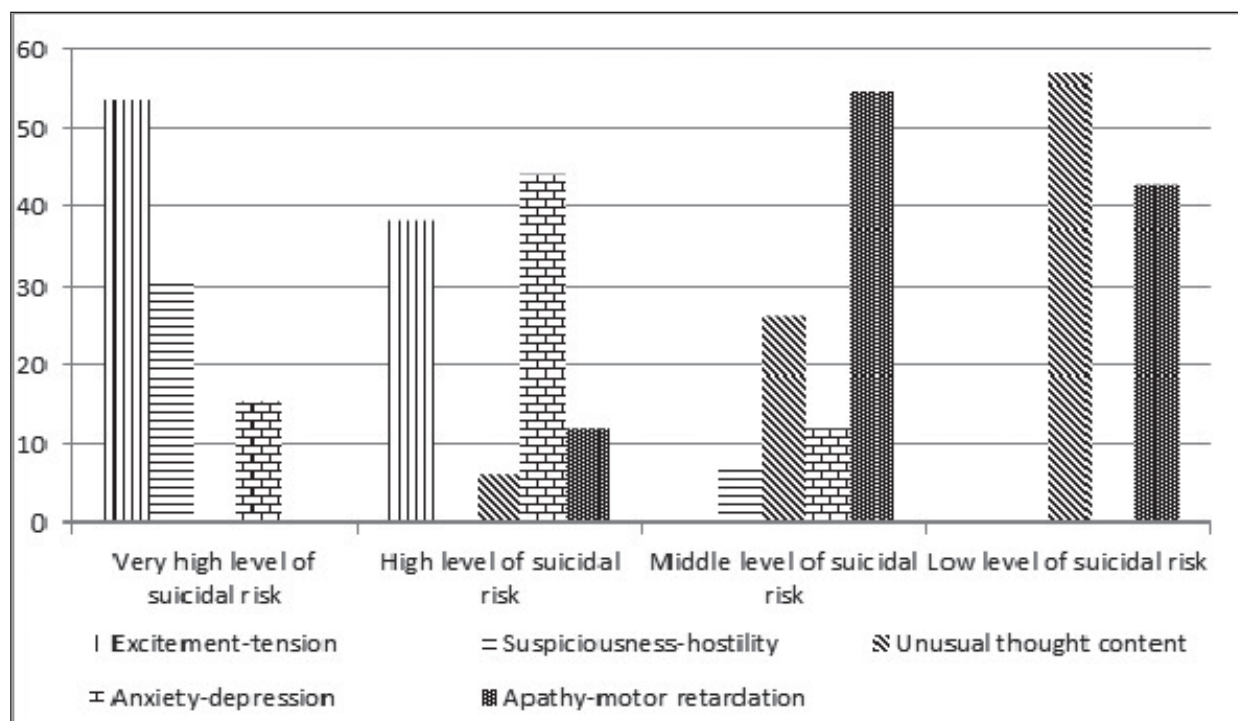


Fig. 2. The distribution of patients with the first psychotic episode by BPRS depending on the level of suicide risk

13 patients were included in the first group and had a very high test indicator (more than 14 points), 68 (53,3%) – in the second group with high test indicator (11-13 points), 42 (32,3%) – in the third group with middle test indicator (7-10 points) and 7 (4,4%) – in fourth group of patients with low test indicator (4-6 points).

RESULTS END DISCUSSION

According to an analysis by the PANSS on subscale positive, negative and general psychopathological symptoms one can conclude that the first group of patients with positive symptoms had $88,4 \pm 0,75$ points, negative ones had $63,1 \pm 0,38$ points, general symptoms were present in $51,3 \pm 0,67$ of points; in the second group of patients with positive symptoms had $81,1 \pm 0,68$ points, negative symptoms represented $59,7 \pm 0,42$ points, general symptoms presented $71,5 \pm 0,41$ points; in the third group there were positive symptoms – $51,3 \pm 0,73$ points, negative symptoms included $85,1 \pm 0,51$ points, general symptoms represented $66,9 \pm 0,31$ points; the fourth group of patients had positive symptoms with $54,7 \pm 0,54$ points, negative symptoms included $63,3 \pm 0,41$ points, general symptoms represented $73,4 \pm 0,36$ points.

Results of this research make it possible to conclude that the prevalence of certain symptoms in a particular form of behavior that is among the investigated first and second groups dominated positive symptoms ($88,4 \pm 0,75$ points and $81,1 \pm 0,68$ points, respectively), in patients of the second group negative symptoms dominated ($85,1 \pm 0,51$ points) and the fourth group of patients included general psychopathological symptoms ($73,4 \pm 0,36$), as shown in figure 1.

It is established by BPRS that in the first group of investigated patients among in 7 patients (53,8%) dominated the indicator of «excitement-tension» ($17,2 \pm 0,41$ points), 4 (30,8%) was «suspiciousness-hostility» ($22,3 \pm 0,57$ points), 2 (15,4%) was «anxiety-depression» ($16,8 \pm 0,37$ points); 26 (38,2%) of the second group was found the indicator of «excitement-tension» ($18,3 \pm 0,36$ points), 30 (44,1%) was «anxiety-depression» ($15,7 \pm 0,33$ points), 4 (5,9%) was «unusual thought content» ($15,9 \pm 0,58$ points), 8 (11,8%) had «apathy-motor retardation» ($16,2 \pm 0,32$ points); the third group included 11 patients (26,2%) which were the indicators of «unusual thought content» ($18,4 \pm 0,73$ points), 5 (11,9%) had «anxiety-depression» ($20,7 \pm 0,64$ points), 3 (7,1%) had «suspiciousness-hostility» ($18,2 \pm 0,74$ points), 23 (54,8%) had «apathy-motor retardation», ($20,7 \pm 0,45$ points); the fourth group included 3 patients (42,9%) in whom «apathy-motor retardation» was dominated ($21,1 \pm 0,65$ points), 4 (57,1%) had «unusual thought content» ($17,3 \pm 0,25$ points).

Consequently, most patients from the first group prevailed «excitement-tension» had indicator (53,3%), in addition a significant proportion was «suspiciousness-hostility» indicator (30,8%), in second group had «anxiety-depression» (44,1%), in a third group included «apathy-motor retardation» (54,8%), there were «unusual thought content» (57,1%) in the fourth group, as shown in figure 2.

We had conducted a correlation analysis depending on suicide risk in the investigated groups of patients from certain psychopathological symptoms which were defined by BPRS. It was established that in the first group of patients relationship is very deep with such indicators

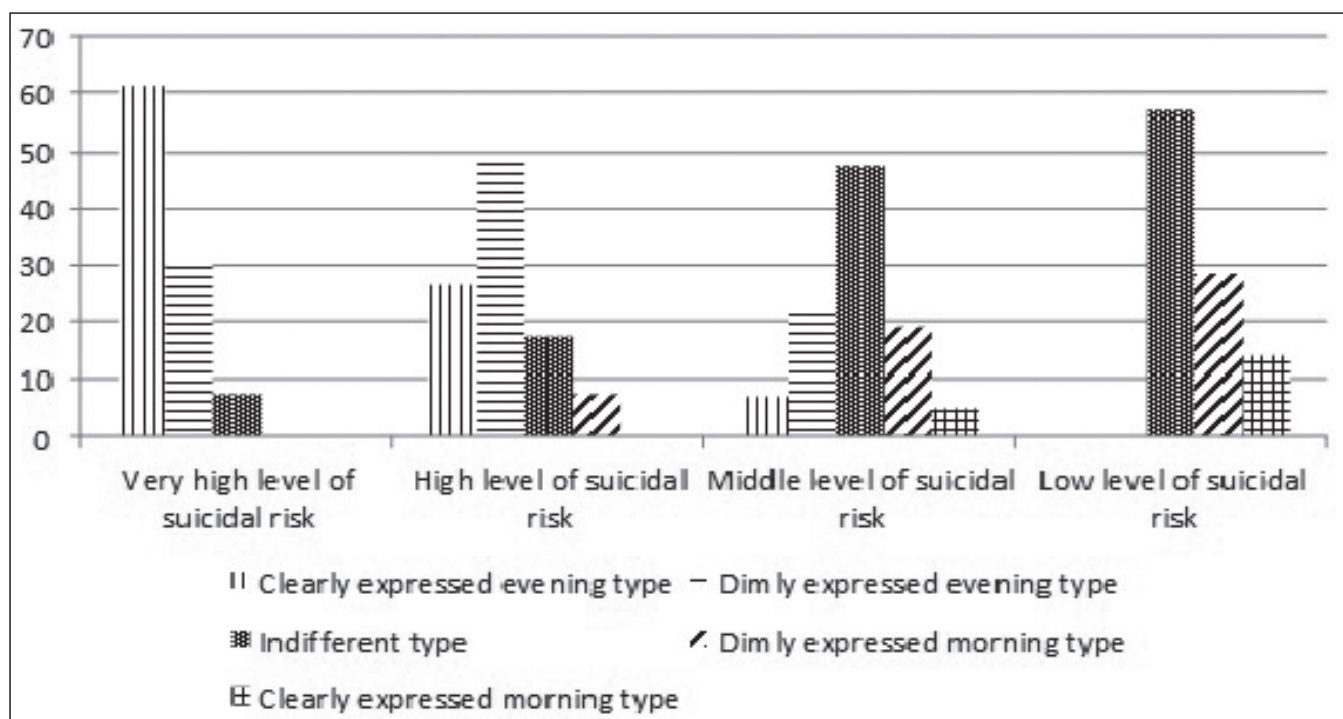


Fig. 3. The distribution of patients with the first psychotic episode by Estberg's questionnaire depending on the level of suicide risk

as «tension» ($r=0,237$, $p\leq 0,01$), «hostility» ($r=0,181$, $p\leq 0,05$), «mannerisms and posturing» ($r=0,243$, $p\leq 0,01$), «excitement» ($r=0,263$, $p\leq 0,01$), «suspiciousness» ($r=0,197$, $p\leq 0,05$); in the second group there was established that relationship is deep with «somatic concern» ($r=0,201$, $p\leq 0,005$), «anxiety» ($r=0,194$, $p\leq 0,05$), «depression» ($r=0,237$, $p\leq 0,01$), «guilt» ($r=0,256$, $p\leq 0,01$). In the third and fourth groups there was not established statistically significant relationship.

We used an Estberg's questionnaire to explore circadian rhythms by means of which it was determined the type of daily activity. Among patients in the first group 8 of them (61,5%) had clearly expressed evening type, 4 (30,8%) presented dimly expressed evening type, 1 (7,7%) included indifferent type. In second groups of 18 patients (26,5%) there were clearly expressed evening type, 33 (48,5%) had dimly expressed evening type, 12 (17,6%) included indifferent type, 5 (7,4%) presented dimly expressed morning type. It was marked that in 3 patients (7,1%) of the third group clearly expressed evening type, 9 (21,4%) had dimly expressed evening type, 20 (47,6) included indifferent type, 8 (19,0%) presented dimly expressed morning type, 2 (4,9%) clearly expressed morning type. 4 patients of the fourth group (57,1%) had indifferent type, 2 (28,6%) included dimly expressed morning type, 1 (14,3%) had clearly expressed morning type, as shown in figure 3.

After analyzing relationship of the patients between risk of autoaggressive behavior and type of daily activity there was established that a clear positive correlation observed between type of daily evening activity (clearly and dimly expressed) and increased levels of suicidal risk ($r = 0,231$, p

$\leq 0,01$). Thus, in patients with very high suicidal risk there was marked clearly evening type of daily activity (61,5%) compared to other groups (26,5% in the group with high risk level, 7,1% in the group with an middle risk level) in a group of high suicidal risk that was middle expressed evening type (48,5%) compared with 30,8% in the group with very high suicidal risk level, 21,4% of patents were in the group with an middle risk level.

CONCLUSIONS

Consequently, certain psychiatric symptoms were associated with the level of suicide risk in the first episode of psychosis, such as «tension», «hostility», «mannerisms and posturing», «excitement», «suspiciousness», «somatic concern», «anxiety», «depression», «guilt». Circadian rhythms include the level of risk occurrence and severity autoaggressive behavior such as clearly and dimly expressed evening types of daily activity. Therefore, further research of autoaggression during the first psychotic episode with considering the influence of biological rhythms is a given area of current research in psychiatry aimed to improve the prevention, treatment and rehabilitation.

This research is included in psychiatry, narcology and medical psychology department's Higher State Educational Institution of Ukraine "Ukrainian Medical Stomatological Academy scientific research by «Clinical and psychopathological research and optimization treatment, rehabilitation and prevention events at different mental disorders with considering geliometeofactors and biological rhythms» (№ 0115U000839).

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ADDRESS FOR CORRESPONDENCE**Dmytro Boiko**

Medychna St., 1, 36013 Poltava, Ukraine

tel.: +380500143648

e-mail.: bojko998@gmail.com

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