

CLINICAL FEATURES OF MENTAL DISORDERS IN SYNTHETIC DRUG USERS

¹Xushvaktova Dilnoza Hamidullayevna, ²Turayev Bobir Temirpulotovich, ³Shernazarov Farrukh

^{1,2}Assistant of the department of psychiatry, medical psychology and narcology, Samarkand State Medical University

³608 group students of Samarkand State Medical University Faculty of Medicine

<https://doi.org/10.5281/zenodo.10059167>

Abstract. *Currently, the problem of the spread of completely new synthetic compounds imitating drugs that are already known is gaining more and more social importance. Given the almost limitless possibility of changing the chemical structure of synthesized substances, the emergence of new formulas of "designer drugs" contributes to their spread ahead of any attempts to gain national and international control and at great speed.*

Keywords: *synthetic medicine, mental illness, clinical course and clinical form.*

Introduction. Changes in the composition of the use of psychoactive substances (surfactants) over the past decade have been noted, mainly due to the emergence of completely new synthetic drug compounds called "designer" drugs (DNS) [1]. The boundary between synthetic and design is highly conditional.

The term "designer" began to be applied in the 80s of the 20th century to synthetic drug compounds that were not new developments, but were imitations of already known prohibited surfactants, while repeating their effects [2]. Nevertheless, given the almost unlimited possibility of changing the chemical structure of synthesized compounds, obtained by changing the composition of certain drugs, the design of new molecules is ahead of any attempts to take them under national and international control. This allows them to avoid control measures applied to surfactants prohibited under modern legislative conditions, and thus legitimize their distribution at great speed [3]. The ease of use, legality, and availability, strong psychoactive effects, and universal misconception about their health safety make DNS very attractive for consumption in youth environments. This contributes to their prevalence in youth public recreation areas (nightclubs, discos, bars), including the Internet, through various sites, forums and legitimate shops.

Currently, there are many classifications of new synthetic substances based on chemical structure, biological activity, neurochemical and clinical effects [4, 5]. However, among the DNS, which have appeared in recent years and continue to maintain their popularity, two groups occupy the leading positions. In terms of consumption, the first place is occupied by synthetic cannabimimetics (cannabinoids), which have tropicity to the body's endocannabinoid receptors, which are called "smoking mixtures" after "spices" (spice). The second most common group are synthetic cationones, often called "salts" or "bath salts" (bathsalt), which contain amphetamine-like acting substances [6]. Despite the difference in chemical structure, methods of consumption, names, DNS has a high direct psychotic potential on its own and can cause similar pictures of psychotic disorders both in episodic and disposable consumption [7, 8]. The specificity of the clinical picture of psychotic disorders in DNS consumers sometimes requires solving differential diagnostic issues. Numerous clinical observations by domestic and foreign scientists suggest that

people who use DNS develop more intoxication psychoses than traditional drug use, whose clinical manifestations are dominated by specific memory disorders, emotional-voluntary changes, panic attacks, disorders of the thinking process [9, 11, 13]. Such manifestations distinguish these painful conditions from normal intoxication psychoses and require differential diagnosis with schizophrenia psychoses [10]. Some authors suggest a possible initial role for the use of synthetic cannabinoids in the development of the paranoid form of schizophrenia [12] in the presence of genetic predisposition [14].

Currently, there are many classifications of new synthetic substances based on chemical structure, biological activity, neurochemical and clinical effects [15]. However, in Russia, two groups occupy the leading positions among designer drugs, which have appeared in recent years and continue to maintain their popularity. In terms of consumption, the first place is occupied by synthetic cannabimimetics (cannabinoids), which have tropicity to the body's endocannabinoid receptors, which are called "smoking mixtures" after "spices" (spice). The second most common group are synthetic cationones, often called "salts" or "bath salts" (bathsalt), which contain amphetamine-like acting substances [16-19]. Despite the difference in chemical structure, methods of consumption, names, designer drugs themselves have a high direct psychotic potential and can cause similar pictures of psychotic disorders even in episodic and disposable consumption [20-23]. The specificity of the clinical picture of psychotic disorders in designer drug users sometimes requires solving differential diagnostic issues. Numerous clinical observations by domestic and foreign scientists suggest that designer drug users develop more intoxication psychoses than traditional drug use, with specific memory disorders, emotional-voluntary changes, panic attacks, thought process disorders predominating in their clinical manifestations [24-27]. Such manifestations distinguish these painful conditions from normal intoxication psychoses and require differential diagnosis with schizophrenia psychoses [28]. Some authors suggest a possible initial role for the use of synthetic cannabinoids in the development of the paranoid form of schizophrenia [29] in the presence of genetic predisposition.

Of particular importance is the study of the etiological, pathogenetic and clinical aspects of intoxication psychoses due to the prevalence of design drugs [30-32].

Of particular importance is the study of the etiological, pathogenetic and clinical aspects of intoxication psychoses due to the prevalence of DNS [33].

A universal misconception about ease of use, legality and availability, strong psychoactive effects, and their safety for health makes "designer drugs" very attractive for consumption in a youth environment [34-36].

The leading place among "designer drugs" is occupied by synthetic cannabimimetics (cannabinoids), which are called "spices", and synthetic cationones, often called "salts", repeat the action of psychostimulants (cocaine and amphetamine) [37].

One of the pressing problems of their consumption is the increase in psychoses. Some authors propose a possible initiatory role of the use of synthetic cannabinoids in the development of the paranoid form of schizophrenia.

The purpose of the study: was to study the peculiarities of the clinical picture of mental disorders in consumers of "designer drugs".

Research materials and methods. The study involved 163 men who were admitted to the sonB men's admissions unit in the period from 2020 to 2023.due to mental disorders developed against the background of poisoning with synthetic drugs.

The presence of mental disorders in patients who developed as a result of the use of synthetic cannabimimetics and "salts" psychostimulants was a criterion for inclusion.

Results and discussions. The age of patients ranged from 17 to 38 years. There were 9,2% of patients under the age of 20, 51,5% from 20 to 29, and 39,3% of patients over the age of 30. 8,6% of patients used drugs regularly for less than 1 year, 56,4% for 1 to 5 years, 23,3% for 5 to 10 years, and 11,7% for more than 10 years.

Before the development of psychosis, almost all subjects switched to "spices" (22,1%), "salts" (58,3%) or their combined use (19,6%).

Depending on the clinical structure of mental disorders, 3 groups are distinguished:

Group 1-28 patients (17,2%) aged 17 to 38 years. It was noted that there was no statistically reliable data on aggravated heredity. In Anamnesis, 57,1% used 2 or more drugs. The use of "designer drugs" was episodic or systemic in nature. All of these patients, according to the application, were regularly admitted to stop the use of drugs.

Group 1 intoxication psychoses developed both in the presence of drug syndrome and in the episodic, even one-time use of designer drugs. The clinical picture was manifested by the development of clearly impressive vibrations, from the often common euphoria to the level of "raptus", visual and auditory hallucinations, acute sensory delirium, the development of various variants of delirium dullness of the mind. The age of the first group of patients ranged from 17 to 29 years, with an average age of $23,8 \pm 1,1$ years.

In Group 1, the duration of drug use for up to a year was observed in 19 patients (26,39%), from 1 to 5 years - 40 (55,56%), from 5 to 10 years - 8 (11,11%) and more than 10 years - 5 (6,94%) patients. The average duration of drug use in Group 1 was $3,3 \pm 0,8$ years. Before the development of psychosis in Group 1, 26 patients (36,11%), "solely" - 35 (48,61%), a combination of which - 11 patients (15,28%) switched to the use of spices.

In Group 1, 20 patients (27,78%) reported hereditary severity of various forms of addiction, suicidal behavior, and Affective Disorders.

This group was characterized mainly by the presence of non-psychotic disorders. 32,1% reported temporary psychotic episodes (acute oral hallucinosis or abortive delirium), which appear at the peak of intoxication and stop almost spontaneously when it ends. The withdrawal symptoms were unclear and manifested by unspecific symptoms (emotional stress, irritability) that stopped within 2-3 days.

This group is defined as a drug addict with temporary abortive psychotic episodes in the form of non-psychotic disorders and/or exogenous type reactions.

Group 2 had 49 patients (30,1%). The age in this group varied between the ages of 25-35. The hereditary severity of various forms of addiction, suicidal behaviors, Affective Disorders was 32.7%. With the use of 2 or more drugs, addiction was found to be 63,3%. Patients were quick to help with acute psychotic conditions. According to the clinical picture, psychoses correspond to the type of exogenous response and are accompanied by impaired consciousness (often by the type of delirium), an abundance of real visual and auditory hallucinations of threatening content, percutor delusional ideas, psychomotor arousal. The severity of the clinical manifestations of this group and the duration of their psychotic states were clearly related to the dynamics of intoxication.

In 73,5% of cases, psychoses were stopped on the first day of hospitalization, after the administration of massive detoxification, sedative (diazepam up to 30 mg/m per day), antipsychotic therapy (haloperidol). The rest of the cases were stopped on 3-5 days of therapy.

This group of mental disorders has been defined as classic intoxication psychoses associated with "designer drug use".

Group 3 was the most numerous, accounting for 86 (52,7%) of patients between the ages of 17 and 26. Heredity in this group was aggravated by mental disorders in 59 patients (68.6%): alcoholism, affective and schizoaffective disorders. At the same time, only 22 patients (25,6%) recorded addiction with the use of 2 or more drugs.

The clinical picture of mental disorders in this group was manifested in 6 people (6,9%) with affective disorders (mainly depressive type). 58 (67,4%) of patients reported affective-delusional cases with various staged delusions, false confessions, delusional disorders, affective and psychomotor disorders. In 19 patients (22,1%), the development of Affective-oneiroid states with impaired self-awareness, hallucinations, fantastic delusional ideas, imaginary-fantastic perception of the environment and catatonic inclusions was observed. In fact, the developmental stereotype of psychosis in this group coincided with the developmental stages of the oneiroid state. It should be noted that if the onset of psychosis is caused by intoxication, then in the future syndromokinesis corresponds to the laws of development of endogenous diseases and is not distinguished clinically from self-developing psychotic states of schizoaffective or affective structure. The duration of such cases ranged from 2 to 4 weeks. In these cases, the therapy strategy was aimed at stopping the schiziform attack. Incisive methods have been used for this: electroconvulsive therapy in 42 (48,8%), forced insulinocomatous therapy in 28 (32,65), "active haloperidol" method in 16 (18,6%) patients. In all cases, psychosis could be stopped. Patients were then prescribed under the supervision of a raypsychiatrist in supportive doses of antipsychotics (usually atypical) and normotimics. In 62,8% of cases, permanent remission has been observed for more than 1 year. Relapses involved drug rehabilitation. At the same time, it should be noted that 5 people (5,8%) have developed recurrent schiziform psychoses in an autochthonous way without exogenous provocation. This group of mental disorders is called schiziform psychosis, which is caused by the use of "designer drugs".

Conclusions: thus, clinical analysis of mental disorders caused by the use of " designer drugs " allows them to be included in the group of substances that cause intoxication psychoses and cause affective and schizoaffective disorders. Therefore, " designer drugs " can be classified not only in terms of the development of drug cases, but also into a special group of drugs that pose social risks with an unprecedented ability to provoke the development of endoform (schiziform) disorders. determines the special relevance of socio-medical measures aimed at combating the spread and use of new synthetic drugs.

The systematics of psychotic disorders in designer drug users is manifested by the image of intoxication psychoses of the type of exogenous-toxic reaction and "schizophrenia-like" psychoses, with their long duration (more than a month), according to ICD-10, the diagnosis can be revised. At the same time, the development of exogenous reaction-type intoxication psychoses and "schizophrenia-like" psychoses did not depend on the presence or absence of a drug syndrome, psychosis could develop with one intake of surfactants.

The relationship of "schizophrenia-like" symptoms in designer drug users with the schizophrenic process is not only clinically significant, it allows a differential approach to the

issues of treatment of psychotic disorders. Thus, we can talk about the excitatory role of designer drugs in the development of endogenous schizophrenia psychosis. At the same time, the further prognosis of the disease is of particular importance, which makes it possible to develop approaches aimed at preventing the development of further attacks, as well as to carry out rehabilitation measures to improve the social adaptation of patients.

REFERENCES

1. Allambergenov A. J. et al. Postcovid syndrome and its neuropsychiatric consequences after covid-19 in patients with alcoholism //European Journal of Interdisciplinary Research and Development. – 2023. – T. 11. – C. 42-46.
2. Abdurazakova Robiya Sheraliyevna, Turaev Bobir Temirpulatovich 2023. Characteristic features of affective disorders in children with autism. Iqro jurnali. 2, 2 (Apr. 2023), 722–727.
3. Asliddinovich M. O. et al. Psychological characteristics of patients with gastrointestinal diseases //IQRO. – 2023. – T. 3. – №. 1. – C. 225-230.
4. Hamidullayevna X. D., Temirpulatovich T. B. Clinical and psychological features of alcoholism patients with suicidal behavior //IQRO. – 2023. – T. 1. – №. 2. – C. 711-720.
5. Holdorovna, I.M. and Temirpulatovich, T.B. 2023. Features of Psychopharmacotherapy in Patients with Severe Mental Disorders. Scholastic: Journal of Natural and Medical Education. 2, 7 (Jul. 2023), 40–46.
6. Holdorovna I. M., Murodullayevich K. R., Temirpulotovich T. B. Problems of consciousness disorder in modern psychiatry //Journal of healthcare and life-science research. – 2023. – T. 2. – №. 10. – C. 20-27.
7. Murodullayevich K. R., Holdorovna I. M., Temirpulotovich T. B. The effect of exogenous factors on the clinical course of paranoid schizophrenia //Journal of healthcare and life-science research. – 2023. – T. 2. – №. 10. – C. 28-34.
8. Murodullayevich K. R., Temirpulatovich T. B., Holierovna K. H. Social assistance in patients with phobic anxiety disorders //Iqro jurnali. – 2023. – T. 2. – №. 2. – C. 408-413.
9. Ochilov U. U., Turaev B. T., Zhumageldiev N. N. Peculiarities of the formation and course of alcoholism in persons with character accentuations and personality disorders //Bulletin of Science and Education. – 2020. – №. 10-4. – C. 88.
10. Temirpulatovich T. B. Depressive disorders in alcohol recipients and its socio-economic consequences during the covid-19 pandemic //Web of Scientist: International Scientific Research Journal. – 2023. – T. 4. – №. 1. – C. 162-168.
11. Temirpulatovich T. B. et al. Alkogolizm bilan kasallangan bemorlarda covid-19 o'tkazgandan keyin jigardagi klinik va laborator o'zgarishlar //journal of biomedicine and practice. – 2023. – T. 8. – №. 1.
12. Temirpulatovich T. B. et al. Clinical Manifestations of Suicidal Behaviors as a Result of Depressive Disorders During Adolescence //Eurasian Medical Research Periodical. – 2022. – T. 8. – C. 55-58.
13. Temirpulotovich T. B. Effects of social factors in children with anxiety-phobic disorders //Journal of healthcare and life-science research. – 2023. – T. 2. – №. 10. – C. 35-41.
14. Temirpulotovich T. B. et al. The Impact Of Medical And Social Factors On Alcohol Abuse In Patients With Alcoholism During The Covid-19 Pandemic //Journal of Pharmaceutical Negative Results. – 2022. – C. 8195-8200.

15. Temirpulotovich T. B. Effects of social factors in children with anxiety-phobic disorders //Journal of healthcare and life-science research. – 2023. – Т. 2. – №. 10. – С. 35-41.
16. Temirpulotovich T. B. Somatoform variant post-traumatic stress disorder //Journal of healthcare and life-science research. – 2023. – Т. 2. – №. 9. – С. 45-52.
17. Turaev B. the course of the disease during the covid-19 pandemic in patients with alcoholism //Science and innovation. – 2022. – Т. 1. – №. D8. – С. 130-134.
18. Turaev Bobir Temirpulotovich 2023. Socio-demographic, personal and clinical characteristics of relatives of alcoholism patients. Iqro jurnali. 1, 2 (Feb. 2023), 685–694.
19. Turaev Bobir Temirpulotovich 2023. Ways to prevent negative disorders in schizophrenia. Iqro jurnali. 1, 2 (Feb. 2023), 35–44.
20. Turgunboyev Anvar Uzokboyevich, Turaev Bobir Temirpulotovich, Kholmurodova Hulkar Holierovna 2023. Clinical and psychological analysis of the risk of second admission of patients with psychoses of the schizophrenia spectrum to a psychiatric hospital. Iqro jurnali. 2, 2 (Apr. 2023), 380–387.
21. Usmanovich O. U. et al. Detection of adrenaline and stress conditions in patients using psychoactive substances with hiv infection //CUTTING EDGESCIENCE. – 2020. – С. 42.
22. Тураев Б. Т., Жабборов Х. Х., Жумагелдиев Н. Н. Гендерные различия депрессивной симптоматики у больных параноидной шизофренией //Volgamedscience. – 2021. – С. 459-460.
23. Тураев Б. Т., Икромова П. Х., Жабборов Х. Х. Тревожно-депрессивные расстройства в период беременности //Volgamedscience. – 2021. – С. 460-461.
24. Тураев Б. Т., Очилов У. У., Алкаров Р. Б. Socio-demographic characteristics of somatized depression //Новый день в медицине. – 2020. – №. 2. – С. 231-233.
25. Тураев Б. Т., Очилов У. У., Икромова П. Х. Частота и структура неврологических нарушений у больных подросткового возраста с психическими расстройствами //Volgamedscience. – 2021. – С. 462-463.
26. Тураев Б. Т., Очилов У. У., Кубаев Р. М. Распределение тревоги и депрессии при аффективных расстройствах соматизированной депрессии //Medicus. – 2020. – №. 3. – С. 58-60.
27. Тураев Б., Хаятов Р. Рекуррент ҳамда биполяр типдаги депрессиялардаги аффектив бузилишлар соматизацияланишиниг клиник психопатологик хусусиятлари //Журнал вестник врача. – 2020. – Т. 1. – №. 2. – С. 95-99.
28. Тураев Б., Хаятов Р. Клинико-психопатологические свойства соматизации аффективных расстройств при рекуррентных и биполярных депрессиях //Журнал вестник врача. – 2020. – Т. 1. – №. 2. – С. 95-99.
29. Хаятов Р. Б. и др. Аффективные расстройства у больных алкогольной зависимостью как фактор риска развития суицидального поведения //Достижения науки и образования. – 2019. – №. 11 (52). – С. 96-98.