Connection of Suicidal Behavior with COVID-19: Clinical Cases

Связь суицидального поведения с COVID-19: клинические случаи

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Case report

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ABSTRACT

The spread of the coronavirus infection has led to significant changes in people's lives. Prolonged isolation, fear of infection, frustration, changing the usual stereotype life style, lack of information, loss of revenues, and fear of stigmatization, as well as the disease itself have all influenced people's emotional and physical well-being. The impact of the viral infection itself on the human body, as well as the perception of a new reality, in some cases led to the formation of reactive, organic, or the exacerbation of existing chronic mental disorders. People with mental health problems are most susceptible to environmental influences and react acutely to rapidly changing circumstances. Often in critical situations, in a state of despair, patients see only one way to solve all problems — voluntary retirement committing taking own life. In this article, we present clinical cases that are descriptive in nature and are intended to illustrate the connection between depressive experiences and suicidal behavior amongst patients in a crisis situation when external circumstances were the reason for suicide attempts: loneliness as a result of restrictive measures, fear of infection or the disease itself, and the reason was a mental disorder that debuted earlier or re–emerged as a result of a viral infection. We have presented three clinical cases. All patients suffered from a new coronavirus infection of various severities and were treated in a psychiatric hospital, where they were transferred from an infectious diseases hospital or hospitalized directly in connection with suicidal actions. In each case, attention was paid to the organizational measures carried out, with an emphasis on the need for earlier screening of mental disorders, prevention of suicidal behavior in providing assistance to this contingent, and the development of the interaction between general medical and psychiatric services by the type of integrative care. The study is of interest to a wide range of specialists providing care to patients with COVID-19 or similar pathologies.

АННОТАЦИЯ

Повсеместное распространение коронавирусной инфекции привело к возникновению значительных изменений в жизни людей. Длительная изоляция, страх инфицирования, разочарование, изменение привычного образа жизни, дефицит информации, денежные потери и боязнь стигматизации, а также само заболевание — все эти факторы оказали влияние на эмоциональное и физическое благополучие людей. Воздействие самой вирусной инфекции на организм человека, а также восприятие новой реальности в ряде случаев приводили к формированию реактивных, органических или обострению имеющихся хронических психических расстройств. Лица, имеющие проблемы в области психического здоровья, наиболее подвержены влиянию окружающей среды и остро реагируют на быстро меняющиеся обстоятельства. Часто в критических ситуациях, в состоянии безысходности пациенты видят только один способ разрешения всех проблем — добровольный уход из жизни. В данной статье нами представлены клинические случаи, которые носят описательный характер и направлены на иллюстрацию связи депрессивных переживаний и суицидального поведения пациентов в ситуации кризиса. Когда поводом для попыток самоубийства явились внешние обстоятельства: одиночество в результате

ограничительных мероприятий, страх заражения или сама болезнь, а причиной — дебютировавшее ранее или вновь возникшее вследствие вирусной инфекции психическое расстройство. Нами представлено три клинических случая. Все пациенты страдали новой коронавирусной инфекцией различной степени тяжести и проходили лечение в психиатрическом стационаре, куда были переведены из инфекционной больницы или госпитализированы напрямую в связи с суицидальными действиями. В каждом конкретном случае уделялось внимание проведенным организационным мероприятиям с акцентом на необходимость осуществления более раннего скрининга психических расстройств, профилактики суицидального поведения при оказании помощи данному контингенту, развития взаимодействия между общемедицинской и психиатрической службами по типу интегративной помощи. Исследование представляет интерес для широкого круга специалистов, оказывающих помощь пациентам с COVID-19 или аналогичной патологией.

Keywords: *suicide attempt; COVID-19; new coronavirus infection; mental disorders; psychiatric hospital*
Ключевые слова: *суицидальная попытка; COVID-19; новая коронавирусная инфекция; психические расстройства; психиатрический стационар*

INTRODUCTION

The WHO officially announced the COVID-19 pandemic on March 11, 2020. Due to the need to prevent the spread of the disease worldwide, appropriate restrictive measures were taken. In Russia, from March 30, 2020, a non-working day regime was announced. It was assumed that the complete isolation would last no more than a week, but the restrictions were not lifted until May 11. From the point of view of reducing the spread of COVID-19, isolation was justified, but the measures taken affected the country's economy and citizens' welfare, as well as their mental health. This is how the quarantine period is described in the literature: prolonged isolation, fear of infection, frustration, boredom, inadequate information, loss of revenues, fear of stigmatization, and most importantly fear for one's life and the lives of loved ones [1, 2]. All of the above favored ground for the development of new, and the aggravation of existing mental disorders. Since the beginning of the pandemic, and indeed afterwards, a large number of studies have appeared concerning the impact of COVID-19 on mental health. There are two poles of thought in the modern literature: some authors report an increase in requests for psychiatric help, whilst others report a sharp decline in the period of self-isolation [3–5]. When comparing the lockdown period and the one following it, we can say that the lowest rates of requests for psychiatric help fell during the months in which more stringent social distancing measures were applied [6]. So, when compared with similar periods in 2019, during the lockdown period, the number of requests decreased by 37.5%, and after it by 17.9% [7]. The volume of inpatient psychiatric care also decreased during the period of strict restrictive measures [7]. According to the analytical data of the Federal State Statistics Service of Russia, the number of visits to dispensaries and outpatient psychiatric care offices decreased in 2020 [8].

Thus, during the period of self-isolation, the appeal for psychiatric help decreased due to the fear of people leaving home. However, the decrease in the number of requests does not mean that help was not needed. Most authors agree that the current situation led to the development of certain mental disorders, among which asthenic, anxiety, and depressive disorders were the most prevalent. Such symptoms are both a consequence of exposure to a viral infection, and a person's reaction to the disease [9].

In addition, during the first wave of the pandemic in the spring of 2020, many complained of slow reactions, difficulties in maintaining the usual pace of activity, sleep disorders, and increased anxiety. The first recommendations on maintaining mental health suggested informing the population that such a condition is a normal response by the body to an emergency [10, 11]. In contrast to 2019, in 2020, the most common reasons for urgent psychiatric consultations were aggressive behavior and adjustment disorders with anxiety and depressive mood [12]. One of the identified features was a noticeable increase in neurotic, stress-related, and somatoform disorders in men who had not previously consulted psychiatrists [3].

Patients with personality/behavior disorders more often than others pointed to the connection between psychological well-being and COVID-19, and the reasons for their problems were the changes resulting from a lockdown in the healthcare system [3]. According to domestic data, the growth of depressive symptoms is due to various fears and is mediated by non-constructive ways of coping with stress [13]. Data on the increase in the sale of antidepressants and tranquilizers in Russia for the period 2020–2021 compared to previous years indirectly confirm the relevance of the problem of depression during the pandemic [14], although statistics on the frequency of depression of various genesis were underestimated due to a decrease in the treatment of the population as planned.

Symptoms of anxiety during the pandemic were often observed in the framework of adaptation disorders, generalized anxiety disorders, somatoform disorders, including panic attacks [11]. The course of somatogenically provoked depression parallels the severity of the underlying disease (psychosomatic parallelism) [15]. The authors proposed to involve internists who own screening diagnostic tools with automated conclusions (scales, mobile applications to smartphones, etc.) in the diagnosis of such disorders [16].

Suicidal mood is associated with a high level of stress, and for the development of thoughts about suicide, it is not necessary to have a real threat, it is enough to have the fear of the possibility of infection, or the fear of dying from an incurable disease or losing your relatives for this same reason [13]. Many authors, both in our country and abroad, have pointed to an increase in suicidal mood in general [17]. However, according to international studies, there was no increase in the number of completed suicides [18]. In the literature, suicides committed in unusual ways, for delusional reasons or group ones are more often described [19, 20]. The presented cases, being common, demonstrate the dynamics of suicidal behavior, the reason for which was external circumstances: restrictive measures, the threat of infection or the disease itself, due to a mental disorder that debuted earlier or during the quarantine period. The cases are described with details of tactics in the general medical and psychiatric network and features of interaction between internists and psychiatrists. The purpose of the report was to demonstrate cases of late detection of mental disorders in patients in the outpatient and inpatient network that were risk factors for suicidal behavior.

The selection of clinical cases was carried out as part of a retrospective analysis of patients with coronavirus infection who were consulted by a psychiatrist about self-harming behavior. The author selected patients who had not been observed by a psychiatrist for mental disorders before the pandemic and had not previously been found to have suicidal or autodestructive behavior, for whom psychiatric care was provided for the first time in their lives.

CLINICAL CASE 1

A 35-year-old patient was hospitalized in an infectious hospital with incised wounds on both forearms, which he inflicted on himself for suicidal purposes. At the time of self-injury, he was on outpatient treatment with a diagnosis of COVID-19. Anamnestic information: He had not previously applied to psychiatrists, his heredity is not burdened with mental illnesses, he grew up and developed without peculiarities, attended kindergarten, went to school on time, graduated from 11th grade, studied "good" and "excellent". Higher education, engineer. After training, he worked as a middle manager. Married for seven years, has a preschooler son.

He considered himself ill for about three months, when, against the background of his wife's "infidelity", and depression of mood, motor inhibition appeared. It became hard to work, he was sluggish in the morning, could not do anything, and locked himself in. He continued to work, but at work he lost his initiative, made mistakes and miscalculations. At home, the relationship did not work out. The condition worsened against the background of self-isolation, when he was forced to stay at home all the time with his family (wife and son). There was irritability, anxiety for himself and for his future. After one of his colleagues fell ill with COVID-19, the patient was tested, which showed a positive result. With a slight deterioration of the somatic condition (loss of sense of smell, general slight malaise and weakness), anxiety appeared, which reached its highest point by the time of hospitalization. Against the background of anxiety, thoughts began to arise that "everything will end soon", he began to consider himself doomed, began to see the future in "black tones". The "last straw" was the suspicion that the wife did not break off her relationship "on the side". After that, the patient realized that no one needed him and there was no point in fighting because "there is no way out anyway, because he was already sick" and "decided not to wait." He inflicted incised wounds on his forearms and "went to die in the bathroom", turned on the water so that "no one would hear anything". The ambulance was called by his wife, who went into the bathroom.

In the infectious diseases hospital, which was previously a multidisciplinary hospital (it had changed its profile during the pandemic), the patient received surgical assistance in the form of suturing wounds. After examination by a psychiatrist at the infectious diseases hospital, the patient was transferred to a psychiatric hospital with a department for the treatment of patients with a new coronavirus infection with the diagnosis: "Mixed anxiety and depressive reaction due to adaptation disorder. Anxiety-depressive syndrome. F43.25 Suicide attempt". Related: "Coronavirus infection, COVID-19, virus identified."

Indications for the transfer were persistent suicidal tendencies, low mood, lack of plans for the future, as well as the lack of prospects (from

the patient's point of view) of continuing life, since he considered himself terminally ill. In addition, the patient expressed thoughts that "he will die in agony from lack of air, and this is very scary." Having assessed all possible risks and predicting a possible unfavorable outcome for the patient, the psychiatrist made the only decision in this situation to transfer to a psychiatric hospital (the patient agreed with this decision). Further management of the patient on an outpatient basis was not possible due to his suicide risk, as well as the self-isolation regime, which prevented both the patient from visiting psychiatric and psychotherapeutic services at the place of residence, as well as active dispensary monitoring of the patient at home.

Against the background of treatment of coronavirus infection in a psychiatric hospital, the patient was assisted according to the protocol of management of a patient with neurotic, stress-related, and somatoform disorders (F40, F41, F43, F44, F45, F48).

CLINICAL CASE 2

A 78-year-old patient was hospitalized in an infectious hospital for the treatment of a new severe coronavirus infection. At the time of hospitalization, the condition was of moderate severity, temperature 38.2°C, breathing difficulties, heart rate — 90 per minute, BH — 20. According to the results of the computed tomography, the lung lesion area was 20% (CT-1 picture) [21]. According to anamnestic data, she has been suffering from hypertension for a long time, type 2 diabetes mellitus. She has not taken antihypertensive therapy for a long time. Lived alone. Until the moment of hospitalization, she took care of herself completely. She went to the store, pharmacy, and walked on her own. Previously, she had not applied for psychiatric and psychotherapeutic help. She was hospitalized at the insistence of a local general practitioner due to the severe course of COVID-19. She behaved calmly at the department. On the 14th day from the start of inpatient treatment, she turned to the attending physician with complaints of pronounced weakness, decreased mood, anxiety, sleep disorders (difficulty falling asleep, frequent awakenings). On this occasion, she was consulted by a psychotherapist. During the examination, she said: "I thought when I was lying awake at night that I would die. It got better in the morning, so I decided that I would live some more." At the time of the examination, she was emotionally labile, but suicidal tendencies or psychoproductive symptoms were not detected. The diagnosis was made: "Organic asthenic disorder, F06.6". Against the background of therapy correction, the condition with positive dynamics, sleep stabilized, appetite appeared, became more active, mood improved.

The condition began to worsen again in the fourth week. Shortness of breath grew, chest pains appeared, complained of lack of air, became anxious, fussy. It was further examined, according to the results of computed tomography, the degree of changes was critical (CT-4) [21]. After the appearance of the above symptoms, on the 22nd day from the start of hospitalization in the evening, the patient, with a suicidal purpose, inflicted cuts to her neck and told the doctor that she "did not want to live anymore." She was transferred to the intensive care unit for further treatment and observation, and a psychiatrist on duty was called. On examination, she was conscious, oriented correctly in her own personality. She correctly indicated the current year and month, she made a mistake with the date. She understood that she was in the hospital, in the intensive care unit. The mood background was lowered. She entered into conversation reluctantly, answered questions in monosyllables, was easily irritated and angry. She said, "two days ago I had already told my daughter on the phone not to be offended at me if I did something bad to myself." She called her state of health the reasons for the attempt at suicide, saying, "It doesn't get any better, everything hurts! I could walk before, I lived alone, I did everything myself, and here! I can't even get up without shortness of breath! They can't find the cause of my pain in my stomach and chest! And they don't want to let me go home! I decided that at least I would leave!". She did not express delusional ideas, she did not detect deceptions of perception in her behavior. She was quickly exhausted, kept her attention with difficulty, easily distracted from the conversation. Her thinking was concrete, rigid, and she was extremely fixated on her well-being. Without gross intellectual and mnestic decline. Without criticism of his condition and suicidal actions. There was also no visible intellectual and mnestic decline, as well criticism of her condition and suicidal actions. The diagnosis was made: "Other specified mental disorders due to damage and dysfunction of the brain and physical illness F06.8. Suicide attempt." Related: "Coronavirus infection, COVID-19, virus identified."

The psychiatrist on duty decided to transfer the patient to a psychiatric hospital. Indications for transfer, as in the first case, were persistent suicidal tendencies, low mood, lack of plans for the future. Despite this, the patient signed a consent for hospitalization in a psychiatric hospital, but was sure that "it would not help her." She was passively submissive, reluctantly obeyed doctors' orders. She received help according to the management protocol for a patient with a diagnosis of "F06.8 Other specified mental disorders caused by damage and dysfunction of the brain or somatic disease." However, the severe course of the new coronavirus infection, as well as the presence of concomitant pathology, led to a fatal outcome at 5 weeks from the start of inpatient treatment.

CLINICAL CASE 3

The patient is 34 years old. He had not previously come to the attention of psychiatrists, and did not turn to narcologists for medical help. At the time of self-harm, he was quarantined due to a positive test for COVID-19. From anamnesis: grew up and developed without peculiarities, went to school on time, studied "well" and "satisfactorily". Graduated from a technical college. He did not work in his specialty. Previously, he worked as a salesman, tried to be a private entrepreneur, and at the time of the lockdown announcement he worked as a warehouse manager, and did not lose his job. Married, no children.

His mental state has worsened since the detection of COVID-19, and therefore he had to take sick leave. The somatic condition did not suffer. Two days after the start of the forced sick leave, he began to complain of dissomnic disorders, and anxiety appeared. Being at home, he constantly monitored the performance of the warehouse, found "flaws" in the work, felt guilty in front of colleagues for "wrong leadership". He shared his concerns with his wife, who at first listened to the patient, then reacted to such conversations with irritation. According to the patient, on the third day of forced isolation, when his wife was in the next room, he was lying on the bed and hitting himself on the temple with a mug, "for the first time there was a desire to commit suicide." He told his wife about it, she offered to see a doctor, but he refused medical help. Ten days later, in front of his wife, he tried to squeeze out his eyes, "so as not to suffer, he wanted to die." His wife called an ambulance for psychiatric help. When examined by an ambulance doctor, it was concluded that his mood was lowered, and suicidal intentions were confirmed. Delusions, and deceptions of perception could not be identified. The emergency psychiatric doctor decided to hospitalize the patient in a psychiatric hospital with a department for the treatment of patients with a new coronavirus infection. Such a decision was justified in connection with patient's mental state, whose abandonment without specialized care could lead to a deterioration in mental state.

Despite the absence of somatic symptoms, it was necessary to comply with epidemiological requirements. The patient was taken to a psychiatric hospital voluntarily. In the emergency department, he was conscious,

and orientation of all types was preserved. The mood background was lowered. The voice was quiet, the speech slow. He said: "I stopped sleeping in the last few days, there are no thoughts in my head, I even knocked myself on the forehead to put my head in its place. I got my wife whining. I'm worried about my job, it wasn't all good there anyway, and now I'm afraid they won't be able to cope without me. Anxiety appeared, I didn't want to live." He speaks about suicidal thoughts more willingly, reports information in more detail: "Well, they just appeared. I even hit myself on the temple while lying down to commit suicide. I also squeezed out my eyes." He found it difficult to answer questions about the reasons for choosing such methods, however, he said that both times "his wife was in the next room or nearby." About the use of narcotic substances, he reports extremely reluctantly, with irritation, "there were some I don't remember," and he tries to change the subject. Thinking is slow in pace. Intellectually-mnestically, it seems to be reduced. He interprets proverbs literally, he cannot explain the figurative meaning: "It's clear enough here, the forest is being cut down — chips are flying." He confirmed his consent to treatment and hospitalization. He claimed that he understands, "the stupidity of his actions" but "I can't do anything." Diagnosis: "Non-psychotic depressive disorder due to a mixed disease, (perinatal, intoxication genesis), anxiety-depressive syndrome F 06.3". Related: "Coronavirus infection, COVID-19, virus identified."

In a psychiatric hospital, against the background of treatment of coronavirus infection, the patient was assisted according to the management protocol of a patient with organic (affective) mood disorders, including symptomatic mental disorders (F06.3; F06.4).

DISCUSSION

According to the literature, self-isolation plays an important role in the formation of suicidal behavior [1–5, 7], which can be traced in each of the presented cases. The presence of anxiety and sleep disorders accompany patients with COVID-19, and also often precede suicidal actions [4, 5, 7, 9], which was also reflected in all three patients.

In all the cases presented, suicidal actions were preceded by fear of death from an "incurable" disease due to the lack of reliable information about COVID-19 and fear of stigmatization, which was also reported by other authors [19, 22]. According to research, due to fear of stigmatization, patients often refuse specialized care, hide the fact of a new coronavirus infection, and also mask their suicidal actions [22]. Patients with affective disorders are more likely to commit suicide [3, 5, 22], and stress-related disorders during the pandemic were more common for men who had not previously sought psychiatric help [3]. The onset of psychogenic depressive disorder (clinical case 1) proceeds with anxiety symptoms, which later give way to indifference and apathy [23].

Many researchers emphasize the need to provide specialized care to patients after they attempt suicide and the effectiveness of psychiatric intervention in the early post-suicide period to prevent repeated attempts at such [24–27]. The doctors of the infectious diseases hospital and ambulance were guided by similar motives when transferring patients from a multidisciplinary hospital (cases 1, 2) and hospitalization directly to a psychiatric hospital (case 3). However, there is another point of view about the need to include a psychiatrist in a multifunctional team to assist patients with COVID-19 for timely intervention and prevention of mental disorders and their consequences in the form of attempts at suicide [28, 29].

Be that as it may, careful monitoring of the mental state of patients with COVID-19 and persons in quarantine is necessary [30]. The improvement of the legislative framework, and the introduction of training programs for primary care specialists in the diagnosis of anxiety-depressive symptoms will bring the provision of psychiatric care closer to the population [31, 32]. These measures can contribute to reducing the risk factors of suicidal behavior.

CONCLUSION

In clinical case 1, it can be said that the disorder itself that occurred in the patient was not directly related to a coronavirus infection. However, the attempt at suicide was provoked by the deterioration of the somatic state. Clinical case 2 illustrates a situation when, against a background of long-term treatment for coronavirus infection, asthenic symptoms and deterioration of the somatic state, the patient decided to inflict life-threatening injuries (from her point of view, fatal) to stop the torment. In addition, in this case, it should be noted that there was insufficient alertness of non-psychiatric medical workers regarding the possible occurrence of mental disorders in patients with COVID-19, especially if such disorders (insomnia and anxiety) have already occurred in the clinic of the disease. For a patient (clinical case 3) who had not previously suffered from mental disorders, they then suffered a lockdown period and further restrictions, as it seemed, without tangible consequences. When directly infected with COVID-19, despite the mild course of the disease, this led to pronounced mental disorders that further led to self-harming actions. In each of the presented cases, anxiety and dissomnic disorders were present in the clinical picture, which were the first symptoms of incipient mental disorders. The surrounding picture of the world during the period when patients performed suicidal actions was characterized by a violation of the usual stereotype changing the ordinary

way of life, a feeling of loneliness, uncertainty, and the inevitability of death as a result of infection with a new coronavirus infection. Due attention from non-psychiatric specialists to the listed symptoms and timely referral to mental health specialists, the risk of suicidal behavior in patients could be reduced. Verifying the effectiveness of this assumption requires additional research.

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