

Risk Factors for Mental Health Disorders Related to the Covid-19 Pandemic

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Abstract

Objective: During the COVID-19 pandemic, many countries go through a period of so-called “self-isolation” or quarantine, during which people are forced for a long time not to see their loved ones, not to visit places of importance to them and experiencing constant anxiety and uncertainty due to changing living conditions. This has had a very negative impact on most people’s mental state.

Research Materials and Methods: There is the review of the international studies evaluating the prevalence of mental and behavioral disorders, self-harming behavior, acts of family violence, and problematic substance use in the COVID-19 pandemic.

Results: Analyzing data from many countries around the world, the World Health Organization (WHO) notes that the fear, loneliness, isolation, stress and anxiety experienced by all people during the COVID-19 pandemic can cause great mental health problems and countries need to be prepared for them.

Conclusion: The review of the studies evaluating the prevalence of mental and behavioral disorders, self-harming behavior, acts of family violence and problematic psychoactive substance use in the COVID-19 pandemic show that depression, drug and alcohol addiction, self-harm and suicidal behavior are expected to increase, requiring increased preparedness by mental health services.

Keywords: *Anxiety; COVID-19; Pandemic; Psychoactive Substances; Quarantine; “Self-Isolation”; Stress*

Introduction

The World Health Organization (WHO) declared a Coronavirus Pandemic (COVID-19) in March 2020, recognizing it as a global threat to humanity. According to official data [28], cases of COVID-19 have been reported in 216 countries, zones or territories. The global number of confirmed cases is well above seven million, with more than 500 000 confirmed deaths.

In addition to the coronavirus pandemic declared by the head of the World Health Organization (WHO), a so-called “bad news pandemic” can be claimed to have spread. Moreover, the fear virus, which spreads around the world following the wave of COVID-19 pandemic, is as dangerous as its biological brother, the consequences of which will be reflected in the mass culture of many peoples.

Purpose of the Study

Purpose of the work is to assess the impact of psychosocial risks associated with the COVID-19 pandemic on the level of mental and behavioral disorders, self-harming behavior, acts of family violence, and problematic psychoactive substance use.

Research Material and Methods

There is the review of the international studies evaluating the prevalence of mental and behavioral disorders, self-harming behavior, acts of family violence, and problematic substance use in the COVID-19 pandemic.

Limitations of the Study

Due to the fact that official state statistics on the spread of non-medical use of psychoactive substances during the COVID-19 pandemic in the Republic of Belarus and the Russian Federation at the time of preparation of this article (May 2020) were not available, the assessment of the current drug situation was possible only on the basis of a study of the volume of sales of alcoholic beverages taken from open sources.

Results and Discussion

Main reasons for the spread of anxiety in society

The experienced psychological distress is caused by many different factors. Fears and concerns about our own health and that of our loved ones, as well as fears about the negative social and economic impact of the pandemic, are heightened by the impact of the global media on the crisis, leading to an increased risk of developing anxious and depressive symptoms [8,9].

Prolonged intensive anxiety leads to the formation of such mental disorders as adjustment disorders, generalized anxiety disorder, panic disorder. These include eating disorders (anorexia or bulimia), sleep disorders (insomnia, daytime sleepiness) and sexual dysfunctions. Compulsive search for "signs of infection" leads to the development of somatoform disorders - persistent painful feelings in physically healthy people. Mental exhaustion, the burden of problems, the off-season lead to the formation of depression, from its mild forms, often perceived as a general malaise, to severe, when a person cannot eat, sleep or get out of bed. The most obvious signs of depression are bad moods, lack of joy and loss of strength. If these signs last longer than two weeks, you should seek specialist help from a psychologist, psychotherapist or psychiatrist. Escapism (the desire to escape from problems), idleness and myths about the healing properties of alcohol lead to increased consumption, abuse and provoke drinking. And the abuse starts unnoticed. First it is a can of beer or "a bottle of wine so as not to hurt your head" on weekends, then starts drinking in the evenings "to relieve stress", and there and before drinking (with the desire to "chill" in the morning and a strong, uncontrolled urge to alcohol) is not far away. It has been established and published many times that alcohol consumption reduces the protective properties of the body and complicates the course of coronavirus infection, and the use of alcohol-containing antiseptics "for internal disinfection" and is dangerous for life (unfortunately, such patients, with and without the virus, are already entering the toxicology and intensive care departments).

A special role of anxiety plays in the development of cardiovascular pathology and lies at the heart of the psychosocial risk factor for arterial hypertension [16]. Prolonged strong anxiety, including against the background of positive results of virus testing, perceived as a lethal danger, provokes hypertensive crises and contributes to vascular disasters: insult and myocardial infarction, which may become the real cause of death (even in the times of the Great Plague, a popular rumor was that "half died of fear"). The course of already existing diseases becomes more complicated, ischemic attacks and arrhythmias develop more often.

Restrictive measures and their impact on the daily lives of the general population and their social relationships

Physical distance, telecommuting, school closures and other restrictive measures have had a significant impact on the daily lives of the general population and their social relationships [23,24,26]. In particular, quarantine measures expose both adults and children to negative psychological effects, including post-traumatic stress symptoms [22]. Indeed, social isolation and loneliness are largely associated with ill-health and depression [12,17] and are considered a major risk factor for suicidal thoughts and behavior [2].

A serious threat in terms of mental health problems, with the risk of increased suicides in particular, is the increased unemployment [13].

A difficult problem is the temporary transfer of education to remote forms [23]. Many older teachers are sceptic of “distance education”. But the world does not stand still, and this form of education is largely the future. All the more so because, with well-established feedback and quality control, graduates of distance education are not inferior to those who attended full-time education. Thus, being in self-protection is a great opportunity for education, retraining and self-development.

The side-effect of absolutely necessary anti-epidemic measures can be the increase of isolation, emotional isolation and distrust to other people. Restrictions on movement, combined with other stressors associated with a pandemic, can exacerbate interpersonal family conflicts. Family conflict, especially conflict between parents and children, is the most common risk factor for adolescent suicide [21].

There are also peculiar, not previously described, violations of social communication that require professional reflection, such as “a false sense of anonymity” under the mask regime. A closed face worsens non-verbal communication, and it becomes difficult to understand what emotions a person experiences. Subtle, weak emotions such as dislike, irritation become difficult to perceive, and strong emotions such as anger are sometimes too late to react. Also, the mask on the face (or its absence) in some collectives turns its bearer into “not like the others”, “contagious”. Suspicion in each person of a “carrier of coronavirus infection” leads to isolation, hostility, reluctance to come into contact. The requirement to maintain a social distance leads to a sense of loneliness and social isolation. The suppression of habitual social gestures, such as the habit of shouting hands, is subconsciously perceived as a manifestation of hostility (remember: “I will not give him a hand!”) and reduces friendliness in communication. The accumulated social negativity also has a negative impact on family relations.

The increase in domestic violence against women and children in the conditions of the pandemic

Many researchers in various countries have noted the increase in domestic violence against women and children as a source of serious concern [3,4]. Prohibitive measures have not only forced many women and children to stay home with their abusers, but also made it difficult to access support services. Previous extensive studies have found that domestic violence increases the risk of mental health problems for women [10] and children [7], and it should be noted that intimate partner violence [6] and childhood trauma (i.e. sexual abuse, emotional abuse, and physical neglect) [31] are also associated with attempted suicides resulting from incidents.

Alcohol and illegal drugs as a serious additional risk factor

A serious additional risk factor for mental and behavioral disorders manifestation is the use of psychoactive substances such as alcohol and illegal drugs. Alcohol and illegal drugs use has been shown to increase as a result of stressful life experiences and economic crises [5,14,19], and there are already statistics showing increased alcohol sales during the current pandemic [1]. Similarly, the global crisis is facilitating access to lethal drugs, a critical risk factor for suicidal behavior [29]. This is due both to the stockpiling of medicines and to the dramatic increase in the sale of firearms reported in some countries, which has the potential to lead to an increase in mass clashes with firearms.

Assessment of the situation with the prevalence of problematic psychoactive substance use in the context of the COVID-19 pandemic

A study of clinical characteristics in 1099 patients with COVID-19 conducted by W. Guan and co-authors in China [11] describes the results regarding the smoking status of patients were provided for 1099 patients, of which 173 patients had a severe course of the disease, and 926 had a “non-severe” course. Among patients with severe symptoms, 16.9% were current smokers and 5.2% were former smokers, in contrast to patients with non-serious symptoms, where 11.8% were current smokers and 1.3% were former smokers. In addition, in

the group of patients who needed artificial ventilation of the lungs, were admitted to intensive care or died, 25.5% were current smokers and 7.6% were former smokers. In contrast, in the group of patients who did not have these adverse outcomes, only 11.8% were current smokers and 1.6% were former smokers [11].

In a study by Liu, *et al.* out of 78 patients with COVID-19, the group with an adverse outcome had a significantly higher proportion of patients with a history of smoking (27.3%) than the group that showed improvement or stabilization of the condition (3.0%), with this difference being statistically significant at the level of $p = 0.018$. In their multidimensional logistic regression analysis, smoking was identified as a risk factor for disease progression [18]. According to the results of a systematic review, even taking into account other factors that may affect the progression of the disease, smoking is most likely associated with negative progression and adverse outcomes of COVID-19 [25].

In Russian Federation, Super Job company conducted a survey on tobacco use during the period of self-isolation, which was attended by 1,600 people. According to the data obtained, 14% of respondents claim that they have become more likely to smoke in self-isolation. However, 26% of smokers noted a decrease in cigarette consumption. This may be due to a social factor and the lack of opportunities to go out for a smoke break with colleagues. More than half of the respondents (54%) smoke normally. (Online media (radiokp.ru, 21.04.2020) <https://www.who.int/news-room/q-a-detail/q-a-on-smoking-and-COVID-19#>).

Due to the fact that official state statistics on the spread of non-medical use of psychoactive substances during the COVID-19 pandemic in the Russian Federation and the Republic of Belarus at the time of preparation of this article (May 2020) were not available, the assessment of the current drug situation was possible only on the basis of a study of the volume of sales of alcoholic beverages taken from open sources.

According to experts' estimates of the Russia's leading retailers, in March 2020, after the announcement of non-working weeks and after a decrease in the hype demand for long-term storage goods, there was a weekly (March 9 - 15, March 16 - 22, March 23 - 29, 2020) growth in sales of alcoholic beverages:

- Vodka by 10%; 21%; 31% (by week, respectively);
- Whiskey at 19; 33%; 47%;
- Beer by 15%; 14%; 25%;
- Sparkling wine by 11%; 6%; 5%.

Similarly, the Republic of Belarus recorded an increase in sales of alcoholic beverages in the first quarter of 2020 compared to the first quarter of 2019. Sales of cognac and cognac beverages, as well as low-alcohol beverages, especially strongly alcoholic beverages, has grown (according to the data of the National Statistical Committee of the Republic of Belarus) [20]. The increase in retail alcohol sales in March 2020 was mainly due to non-clinical factors:

- Termination of on-line alcohol sales;
- The closure of cafes and restaurants;
- The fall in the ruble exchange rate and the population's fears about the rise in the price of alcohol;
- The deterioration of the epidemiological situation in Europe and the resulting public expectations of a shortage of alcohol supplied from there;

- Waiting for the “long weekend” by the population (in Russia);
- Lack of hand sanitizers and antiseptics and their replacement with strong alcoholic beverages.

Recommendations for the preservation of mental health and social well-being

The above features allow the development of rules for the preservation of mental health and social well-being.

First of all, it's information security. It is necessary to learn how to select reliable sources of information, check the facts and evaluate the reasonableness of the proposed conclusions. As a rule, reliable sources of information are those who are responsible for it. These are public media, newsletters of responsible international organizations (World Health Organization/WHO, UN), scientific publications, publications of relevant ministries and agencies. On the basis of the reliable information received, it is necessary to make conclusions about what to prepare for, what rules of conduct to observe, then to stock up, where to go.

The next level of protection is maintaining social partnerships at all levels (from rural communities and urban areas to megacities). At the individual level, one must never become self-contained, callous, callous, far from the problems of others. It has been noticed since the First and Second World Wars that moral values, compassionate, empathetic skills and helping those who are worse off than you are helps to survive, stay human and stay healthy.

The third level of protection is measures aimed at preserving mental health at both the individual and population levels [27-29]. To reduce anxiety it is necessary to learn to be distracted, to “pass by ears” anxious thoughts, to switch to manual work, physical exercises. Planning the schedule of the day, daily recording of goals for the day helps to make life full, busy and struggling with boredom. If there are signs of anxiety or depression, do not hesitate to see a specialist: psychologist or psychotherapist. You should be very careful with alcohol consumption. People who have lost control over their drinks, and even more so, have started drinking, alcohol consumption is strictly prohibited, because “it will not end well. The phenomenon of “reducing the anti-suicidal barrier” against alcohol consumption is known [15]. Besides alcohol, one should beware of game and Internet addiction. Hang-up in computer games, strings, chats leads to mental exhaustion, increased anxiety when these chats are not available, insomnia, wasted time.

Conclusion

To date, the following factors have been identified as contributing to an increased risk of mental health impairment due to the COVID-19 pandemic:

- Social isolation,
- Loss of employment and lower income,
- Inability to visit places that provide social support (temples, social centers, etc.),
- Inability to provide full psychological and psychiatric care,
- Psychosocial stress, world-wide anxiety over the constant news of the coronavirus in the media.

During the pandemic, many countries go through a period of so-called “self-isolation” or quarantine, during which people are forced for a long time not to see their loved ones, not to visit places of importance to them and experiencing constant anxiety and uncertainty due to changing living conditions. This has had a very negative impact on most people's mental state [30].

Analyzing data from many countries around the world, the World Health Organization (WHO) notes that the fear, loneliness, isolation, stress and anxiety experienced by all people during the COVID-19 pandemic can cause great mental health problems and countries need to be prepared for them. Depression, drug and alcohol addiction, self-harm and suicidal behavior are expected to increase [27], requiring increased preparedness by mental health services.

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