Sociological Analysis of Population Anxiety in the Covid-19 Pandemic Era

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Abstract:

The article analyzes the level of anxiety of the population. The sociological survey took place in October of 2021. The study method was anonymous questioning on the Internet using specially created tools in Google forms. N = 107 respondents were interviewed in the study. The findings were compared with data from a similar study a year ago. As a result of a comparative analysis, the main factors that increase the risk of occurrence and development of anxiety and depression were identified. The study provides a correlation between the level of anxiety of respondents and their attitude to vaccination. The attitude of respondents to compliance with the norms of personal protection and prevention of COVID-19 was also determined. A correlation was found between the level of anxiety of respondents and their interest in studying the flow of media information about the coronavirus.

1 INTRODUCTION

More than a year ago, the whole world plunged into the era of the global crisis associated with the pandemic of the new unknown virus COVID-19. The consequences of the spread of a new type of disease are still not fully understood. Of course, the pandemic has had a significant impact and continues to strongly affect all systems of society: from the economy to health care. As noted by A.N. Kuryukin, COVID-19 continues to kill people and bring suffering to people, it changes the life of society as a whole so much that what is happening becomes something more than just a public health or national health crisis, it is an economic, humanitarian and social crisis. The ongoing pandemic has a particularly negative impact on the mental health of the population. A constant increase in morbidity, an increase in mortality, imposed social restrictions lead to an increase in the level of anxiety among the population.

Scientists consider psychopathological manifestations of anxiety in the era of a pandemic to be such symptoms as increased nervousness with a sense of imminent impending danger, irritation and anger, nightmares and insomnia, including heterothematic fears such as getting sick and dying.

An analysis of empirical data shows that the problem of anxiety has become one of the key ones in an epidemic situation, since among the many challenges that people face in a new social context, the main thing was the maintenance of calm and absence of panic. To date, the factors affecting the level of anxiety of the population in the era of a pandemic, including vaccination of the population against the COVID-19 virus, have not been sufficiently studied. Empirical studies regarding vaccination have not yet been carried out.

2 STUDY METHODS

In order to determine the level of anxiety of the population, an anonymous survey was conducted on the Internet using Google-forms. study Instrument - Hospital Anxiety and Depression Scale (HADS) developed in 1983 by A. Siegmond and R. Snight. It is known that this scale has a high level of discriminant validity in determining the level of depression and anxiety. The toolkit also included questions about the attitude to vaccination, compliance with hygiene and sanitary standards, and others. N = 107 respondents took part in the survey.

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The survey was conducted in October of 2021. There were no age or gender restrictions. The data obtained during the questionnaire were analyzed using statistical methods, the confidence interval with the determination of average values. Wherein, p < 0.05 was taken as the level of statistical significance.

3 STUDY RESULTS

As a result of the analysis of the obtained data on the HADS scale, it became obvious that the interviewed respondents feel rather calm. The average value of the level of anxiety is 5.75, and the level of depression is 4.07. It shall be noted that overestimated indicators of anxiety were identified only in 15% of all respondents who participated in the survey, and depression was identified only in 7% of cases. Wherein, none of the interviewed respondents had clinically expressed anxiety or depression. This is a fairly good indicator in comparison with similar data of the last year. Therefore, the level of anxiety decreased by 2 points, and depression — by 2.3. Such a decrease indicates the continuing mental adaptation of the population to the peculiarities of life in the era of the coronavirus pandemic. In this regard, one cannot but agree with scientists who believe that an emotionally stressful situation that has existed for a long time has led to the fact that people with a normal and high level of adaptation began to perceive this situation as "familiar", which can explain the gradual decrease in anxiety.

On average, respondents rated their fear of contracting a new coronavirus infection at 5.5 points on a ten-point scale. This indicator is slightly higher than a year ago (4.86 points). Moreover, among those who are afraid of getting sick, there are more representatives of the middle age group (from 35 to 55 years old). This increase is due to an increase in the incidence in general and, accordingly, an increase in the number of patients in the social environment of the respondents.

The level of anxiety of the population is undoubtedly influenced by the media, providing more and more reports on the number of cases and deaths, new restrictions, and etc. So, according to the results of the survey, only 9.3 % (10 people) are "not at all interested" in media information about the coronavirus, 42.1 % (45 people) are "practically not interested". Fully interested in all aspects of the pandemic 18.7 % (20 people) and "sufficiently interested" 29.9 % (32 people). Therefore, interest in media reports regarding the COVID-19 pandemic was almost evenly distributed. Wherein, respondents

interested in media information on this topic showed more pronounced anxiety and anxiety, and among respondents who avoid news about COVID-19, the percentage of respondents with a normal level of anxiety/depression is higher. The researchers note that the increase in anxiety and mental disorders is influenced by the excessive emphasis by the media on pandemics and the inconsistency of information from different sources, which, in turn, provokes people's mistrust of its reliability.

Of course, the level of citizens' anxiety is also affected by the drop in their incomes, which, together with growing inflation, leads to a significant decrease in the level and quality of life of the population. So, only 35 % (38 people) do not notice a change in their financial situation in connection with the pandemic. Almost the same number of respondents, 34.6 % (37) people), noted that their situation has become worse due to the pandemic. Another 26 % (28 people) of the respondents had a much lower income. Therefore, most of the respondents are experiencing financial difficulties in connection with the pandemic. Wherein, there is a correlation between the level of anxiety and financial situation. So, 79 % of those who have it worse during the pandemic have a high level of anxiety.

The respondents were also asked about their assessment of the level of anxiety in society as a whole in connection with the pandemic. Therefore, 21.5 % of respondents (23 people) noted a very high level of social anxiety, 38.3 % (41 people) indicated a fairly high level. A moderate level of anxiety was indicated by 29.9 % of respondents (32 people). The data obtained demonstrate the correlation between the level of one's own anxiety and the subjective assessment of the psychoemotional state of the people around. On average, the presence of sick people among the close environment (and there cannot be such, given the significant increase in the incidence) increases the perception of COVID-19 as a real threat and more often leads to greater control over the spread of the pandemic and, accordingly, an increase in anxiety. Wherein, when the respondents were asked to rate their fear of contracting a new coronavirus infection, 10.3 % (11 people) answered that they were afraid of this "more than anything else", and 15.9 % (17 people) absolutely not be afraid that this happen. Wherein, a significant part of the respondents — 21.5 % (23 people) — rated their level of fear as medium (by five points), and in general, opinions were equally divided between high and low levels of fear of getting sick. This distribution also indicates an increase in the mental adaptation of the population to living conditions in the era of

pandemic.

Another factor causing an increased level of anxiety among the population is the risk of introducing quarantine measures associated with self-isolation. Self-isolation is considered a forced and necessary measure by 39.3 % of the respondents (42 people). 31.8 % of respondents (34 people) perceive self-isolation as an opportunity to usefully spend time at home. 29 % of respondents (31 people) answered that this is an unjustified measure. As the researchers note, the greatest anxiety during the period of self-isolation is caused in descending order: limited opportunities for entertainment, inability to spend time with friends; difficulties with playing sports and hobbies; restrictions in study/work.

It is undeniable that one of the most significant, but least studied anxiety factors in the era of a pandemic is the campaign to vaccinate the population. 63.6 % (68 people) noted the legitimacy of the introduction of measures for compulsory vaccination of the population against the new type of virus COVID-19. The survey also asked about the health safety of the vaccine. Here a paradox can be noted: the majority, 59.8 % (64 respondents), of the respondents answered that did not consider vaccination safe for themselves.

Wherein, the level of anxiety is higher among those surveyed who believe that vaccination measures are necessary than among those who do not. In the responses of the respondents, there is a correlation between the unsafe vaccination and the level of anxiety. Wherein, respondents who consider vaccination unsafe for their health note its necessity.

It shall also be noted that the majority of respondents tend to follow all the recommendations of Rospotrebnadzor. 50.5 % of the respondents (54 people) named compliance with all sanitary standards as their priority, and said that they do not always adhere to the standards, but from "case to case" — 46.7% of the respondents (50 people).

4 RESULT DISCUSSION

In general, anxiety in the psychological dictionary is defined as "an individual psychological feature that manifests itself in a person's tendency to frequent and intense experiences of anxiety, as well as in a low threshold for its occurrence". As I.N. Tartakovskaya rightly noted, the social situation in the era of a pandemic is characterized by a high level of uncertainty, i.e. "Situations with an unknown outcome". This circumstance also leads to the accumulation of stress among citizens.

Sociologists who have studied the consequences of the spread of COVID-19 point to a number of popular complaints from citizens: emotional problems, fear, anxiety, depression, sleep disturbances, feelings of helplessness, depression and apathy. In the population of countries in which the number of infected is especially high, there is a surge in mental disorders, including symptoms of post-traumatic stress: a feeling of loneliness, anxiety, severe emotional destabilization, exacerbation of pre-existing fears and the emergence of new ones.

As noted, public anxiety is influenced by the campaign to vaccinate the population. According to the GOGOV website, at the beginning of this campaign, the number of vaccinated people was quite small, which indicates a low level of public confidence in the vaccine at the time of its creation. Moreover, it is paradoxical that at the beginning of vaccination the registration of those wishing to be vaccinated with the domestic vaccine "Sputnik" in paid clinics for 1,850 rubles was much denser than in the state polyclinic, where the same vaccine was administered free of charge.

The graph shows that the peak of vaccination fell on the summer of this year, when there was a significant increase in cases. This, in the first place, was facilitated by a wide media campaign to promote vaccination. Currently, the number of vaccinated people is less than half compared to the summer period, although autumn is traditionally considered the peak of acute respiratory viral infections. Such statistics indicate a low level of public confidence in the vaccine. This is confirmed by the survey data, where the majority spoke in favor of the need for vaccination, however, at the same time indicated its unsafe for their health. However, the increase in the number of vaccinated citizens suggests that vaccination is becoming a part of social reality.

Beyond vaccinations, COVID-19 tests becoming a reality as well. So, one of the recent issues of The British Journal of Sociology was completely devoted to a new direction in the study of society the sociology of the test [12]. Scientists point out that although testing is an established social form, its role in society and everyday life is expanding. In the current pandemic situation, the test has literally become an integral part of social reality. One of the authors of the magazine Jonathan Bach called testing an element of social management. The possibility of receiving certain social benefits only with a COVID-19 test is also an additional risk that increases the level of anxiety among the population. In general, the factors influencing the attitude towards vaccination, as well as the problems of the sociology of the test in connection with the coronavirus, are of significant interest for future scientific research.

Vaccination rates: 7-day moving average

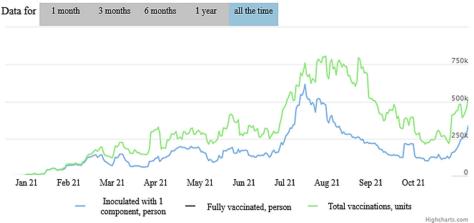


Figure 1: Pace of COVID-19 Vaccination Campaign.

5 CONCLUSIONS

In the era of a pandemic humanity faced with a deep crisis of all systems, which had an impact on the mental health of the population. According to the results of the conducted study, the level of anxiety and other mental disorders in society has increased.

At the beginning of the pandemic, the level of anxiety and stress in the population was higher than at present, which indicates an adaptation period of stress in the population in general. However, there are slightly more people feeling fear for their health in the face of the pandemic than a year ago.

An additional factor contributing to increased levels of anxiety is media coverage of the pandemic. The majority of the respondents noted that the society as a whole is quite alarmed by the current events.

In the course of the study, it was determined that half of the respondents surveyed had a worsening financial situation during a pandemic, which, in turn, contributed to the accumulation of stress and an increase in anxiety. However, self-isolation does not frighten the respondents, the majority considers it a forced and necessary measure. Wherein, the majority of respondents reported strict adherence to all norms recommended by Rospotrebnadzor for the prevention of coronavirus infection.

During the study, it became obvious that the population is distrustful of the vaccination campaign, as they consider the vaccine unsafe for their health. However, it also supports universal vaccination measures.

REFERENCES

Grechko, T.Yu., Ponomareva, D.A., Nomokonova, E.O., 2021. Izmeneniya urovnya trevozhnosti u naseleniya v period pandemii COVID-19: faktory, vliyayushchie na dinamiku trevozhnosti. *Nauchno-medicinskij vestnik Central'nogo CHernozem'ya*, 84: 13–20.

Kostinov, M.P., SHmit'ko, A.D., Polishchuk, V.B., Hromova, E.A., 2020. Sovremennye predstavleniya o novom koronaviruse i zabolevanii, vyzvannom SARS-COV-2. *Infekcionnye bolezni: novosti, mneniya, obuchenie*, 9(2): 33–42.

Kuryukin, A.N., 2020. COVID-19 kak vyzov ekonomike, sociumu, politike. *MIR*, 11(3): 250–265.

Medvedev, V. E., Dogotar', O.A., 2020. COVID-19 i psihicheskoe zdorov'e: vyzovy i pervye vyvody. *Nevrologiya*, *nejropsihiatriya*, *psihosomatika*, 12(6): 4–10.

Tartakovskaya, I. N., 2021. Doverie pered licom pandemii: v poiskah tochki opory. Sociologicheskij zhurnal, 27:68–89.

Holodova, Y.B., 2020. Osobennosti perezhivaniya trevogi v period pandemii COVID-19 predstavitelyami raznyh vozrastnyh grupp. Mezhdunarodnyj zhurnal mediciny i psihologii, 3(2): 114—117.

Yaremchuk, S. V., Bakina, A.V., 2021. Sub"ektivnoe blagopoluchie molodezhi i ego vzaimosvyaz' s psihologicheskoj distanciej do ob"ektov social'nopsihologicheskogo prostranstva lichnosti v usloviyah pandemii COVID-19. Social'naya psihologiya i obshchestvo, 12(1): 26–43.

Röhr, S. et al., 2020. Psychosocial Impact of Quarantine Measures during Serious Coronavirus Outbreaks: A Rapid Review. *Psychiatrische Praxis*, 47(4): 179–189.

Rajkumar, R.Ph. 2020. COVID-19 and Mental Health: A Review of the Existing Literature. Asian Journal of Psychiatry, 52. Special Issue: Put to the Test. The Sociology of Testing, 71(3). Xiang, T. et al., 2020. Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. The Lancet Psychiatry, 7(3): 228–229.

Liang, L. et al., 2020. The Effect of COVID-19 on Youth

Mental Health. *Psychiatric Quarterly*, 91(3): 841–852. Brooks, S.K. et al., 2020. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. The Lancet, 395(10227): 912-920.

