

COMPARATIVE CHARACTERISTICS OF SYMPTOMS IN NEUROTIC AND AFFECTIVE PATIENTS AFTER COVID-19

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Background. COVID-19 pandemic has negatively affected people's mental health and created new barriers for those who have already suffered from mental illnesses.

Objective. The aim of the study was to compare the symptoms of mental disorders in neurotic and affective patients, who recovered from COVID-19.

Methods. The features of disorders during the pandemic in 35 neurotic and 31 affective patients were analysed. The Hamilton anxiety and depression scales (HAM-A, HAM-D), Insomnia Severity Index (ISI), Schulte tables, Jacobson short-term memory study were used.

Results. Moderate and severe anxiety was more likely to develop in neurotic patients (34.29% and 37.14%, respectively), mild and moderate – in affective ones (38.71% and 32.26%). Neurotic patients had a higher level of depression (moderate – by 31.42%, severe – by 48.57%) than affective patients (mild – by 32.26%, severe – by 35.48%). The degree of memory loss was higher in affective patients (51.62% – low, 35.48% – very low) than in neurotic ones (41.94% – low, 20.00% – very low). Most of patients had reduced attention. Insomnia severity was higher in patients with neurotic disorders (25.72% – subthreshold, 45.71% – moderate) than in affective patients (38.71% – subthreshold, 22.58% – moderate). A higher level of anxiety and depression severity was observed in patients who had COVID-19 in 2021 than in those who had it in 2020, while the severity of insomnia and memory impairment – vice versa.

Conclusion. Anxiety, depression, insomnia, memory and attention loss were detected. Anxiety and depression were more severe in neurotic patients but the degree of memory loss was higher in affective patients.

KEYWORDS: pandemic; mental health; depression; anxiety; insomnia.

Introduction

Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), first detected in Wuhan, China, in December 2019, rapidly spread around the world in 2020. The outbreak of coronavirus disease (COVID-19) is still having a global impact on people today. The association between SARS-CoV-2 infection and mental illness is a topical issue, as the COVID-19 pandemic has negatively affected mental health of many people and created new challenges for those already suffering from a mental illness [1].

With an increase in the number of infected people, there is a simultaneous increase in the number of recovered patients with preserved clinical manifestations of coronavirus infection after complete elimination of the virus from the organism, which indicates the post-COVID syndrome. A lot of people report persistent fatigue, joint and bone pain, rapid heartbeat,

headache, dizziness, insomnia, anxiety, and depression [2, 3]. Residual phenomena of the disease are manifested by damage to many internal organs, including the nervous system, causing neuropsychiatric syndromes that affect cognitive, behavioural, affective and perceptual disorders [4].

The aetiology of psychiatric consequences of coronavirus infection is multifactorial and may include direct effect of the virus, cerebrovascular diseases, hypoxia, immune response, social isolation, psychological impact of a new potentially fatal disease, anxiety about infecting others and stigma or discrimination [4]. SARS-CoV-2 is a neurotropic virus that can enter the brain in various ways, including the olfactory neural pathway, and trigger inflammatory response affecting both the peripheral and central nervous systems (CNS) [3].

At least seven mechanisms of development of affective and neurotic disorders and cognitive dysfunction are established, i.e.: viral replication in innate immune cells, dysregulation of the

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immune response, cytokine storm, antibody-mediated response, hypoxemia, ischemia due to hypercoagulation, neuronal damage [1, 2].

Lung damage and consequently hypoxemia caused by COVID-19 is likely to contribute to neuronal damage and further cognitive decline. SARS-CoV-2 affects the vascular endothelium causing endothelial dysfunction followed by coagulopathy and thrombotic complications. The virus also causes systemic vasculitis and cytokine storm, which can damage brain structures. The hypercoagulatory and hyper-inflammatory states evidenced in COVID-19 may contribute to delusions and future cognitive decline. In addition, peripheral pro-inflammatory cytokines such as tumour necrosis factor alpha (TNF- α), interleukin-1 (IL-1), IL-6 effect the permeability of the blood-brain barrier through cyclooxygenase-2 (COX-2), upregulation and activation of matrix metalloprotease and enter the CNS, causing microglial activation and oxidative stress which induce apoptosis and eventually alterations in neurotransmitter signalling leading to synergistic cognitive impairment, psychiatric disorder development and progression. Induced neuroinflammation can contribute to short-term delusions and severe long-term cognitive deficits [1, 2].

The aim of our study is to compare the symptoms of mental disorders in patients with neurotic and affective mental disorders, who have recovered from COVID-19.

Methods

In compliance with the principles of biomedical ethics, on the basis of informed consents, 61 respondents (15 men and 46 women) with no previous psychiatric history were interviewed; 30 respondents among them were not previously infected with COVID-19 and 31 respondents who had suffered from this disease before; and 66 recovered patients (26 men and 40 women) who got previously sick with coronavirus infection and at the time of the study were undergoing inpatient treatment in the Psychiatric Departments of the Ternopil Regional Clinical Psychoneurological Hospital (the psychiatric illness of the cohort was diagnosed before coronavirus disease). The average age of respondents of the control group was (39 \pm 7) years, ranging from 19 to 47 years old. The average age of patients was (50 \pm 13) years, ranging from 20 to 63 years old. Among respondents who were infected with COVID-19, 24 respondents had a mild course

(77.42%), 7 respondents – moderate severity (22.58%). Among the patients, 35 respondents had a mild course (53.03%), 21 – moderate course (31.82%) and 10 – severe course (15.15%).

The study was conducted from December 2021 to January 2022 at I. Horbachevsky Ternopil National Medical University and the Ternopil Regional Clinical Psychoneurological Hospital. The printed questionnaires were distributed among the volunteer respondents who agreed to participate after being invited on private social media pages.

To collect data and optimize the obtained results the following tools were used:

1. General questionnaire with sociodemographic data (age, sex), type of activity, hobbies and support of relatives, previous history of mental disorders.
2. Information about the date of COVID-19 onset and the course of the disease.
3. Hamilton Anxiety Rating Scale (HAM-A).
4. Hamilton Depression Rating Scale (HAM-D).
5. Insomnia Severity Index (ISI).
6. Schulte Table test.
7. Short-term memory study.

Results

The respondents were divided into four groups: two control groups (respondents who were not previously infected with COVID-19 and recovered respondents with no mental disorder), neurotic patients (35 patients: 10 patients with F40, 16 patients with F41, 9 patients with F43), affective patients (31 patients: 9 patients with F31, 12 patients with F32, 10 patients with F33), and six subgroups according to the date of COVID-19 onset:

1. Group 1 – 30 respondents who were not previously infected with COVID-19.
2. Group 2 – 31 respondents who had COVID-19:
 - Subgroup 2.1 – 15 people who were ill in 2020 (48.39%);
 - Subgroup 2.2 – 16 people who were ill in 2021 (51.61%).
3. Group 3 – 35 neurotic patients who recovered from COVID-19:
 - Subgroup 3.1 – 13 people who were ill in 2020 (37.14%);
 - Subgroup 3.2 – 22 people who were ill in 2021 (62.86%).
4. Group 4 – 31 affective patients who recovered from COVID-19:
 - Subgroup 4.1 – 13 people who were ill in 2020 (41.94%);

- Subgroup 4.2 – 18 people who were ill in 2021 (58.06%).

Based on the questionnaire which included the Hamilton Anxiety Rating Scale (HAM-A), the level of anxiety was assessed in the respondents, who were not previously infected with COVID-19, and the recovered respondents with no mental disorder, neurotic patients and affective patients, who recovered from COVID-19.

During our study it was established that among the respondents-volunteers, who were not previously infected with COVID-19 (group 1), 30.00% did not experience anxiety, 70.00% had mild anxiety. Among the respondents with COVID-19 (group 2), only 6.45% had no anxiety, mild anxiety was evidenced in 54.84% of people, moderate and severe anxiety were found in 25.81% and 12.90%, respectively. Among the patients with neurotic disorders (group 3), all of them suffered from anxiety, 28.57% of patients had mild anxiety. In this group moderate and severe anxiety were more common in 34.29% and 37.14% of patients, respectively.

Among the patients with affective disorders (group 4,) 6.45% had no anxiety, mild and moderate anxiety prevailed in 38.71% and 32.26% of them, respectively, and the other 22.58% of patients had severe anxiety (Fig. 1).

Therefore, an increase in the frequency and severity of anxiety in the recovered respondents and patients was evidenced compared to the respondents who were not previously infected with COVID-19. The patients in groups 3 and 4 were more likely to experience moderate and severe anxiety, while the respondents in group 2 were more likely to have mild anxiety. Comparing the anxiety severity in the respondents

of groups 3 and 4, moderate and severe anxiety was more common among the neurotic patients while mild and moderate anxiety – among the affective patients.

Assessing the anxiety severity in the patients by the date of COVID onset, mild anxiety was evidenced more in those patients, who were ill in 2020 (53.85% of neurotic and 53.85% of affective patients), and the patients, who were ill in 2021, had moderate anxiety (50.00% of neurotic and 50.00% of affective patients) (Table 1).

Based on the survey, which involved the Hamilton Depression Rating Scale (HAM-D), the level of depression was assessed in the respondents-volunteers, who were not previously infected with COVID-19, and the recovered ones, neurotic and affective patients, who recovered from COVID-19.

During our study it was established that among the respondents of group 1, 80.00% had no depression, 16.67% had mild depression, and only 3.33% of people had moderate depression. Among the respondents, who recovered (group 2), only 25.81% of them had no depression, 41.93% had mild depression, and 16.13% – moderate and severe depression each. Among the patients with neurotic disorders (group 3), no depression was observed only in 5.71% of them, 14.29% had mild depression. Most often, the patients in this group suffered from moderate or severe depression, in 31.43% and 48.57% of people, respectively. Among the patients with affective disorders (group 4), 9.68% had no depression, 32.26% had mild depression, 22.58% had moderate depression, and 35.48% had severe depression (Fig. 2).

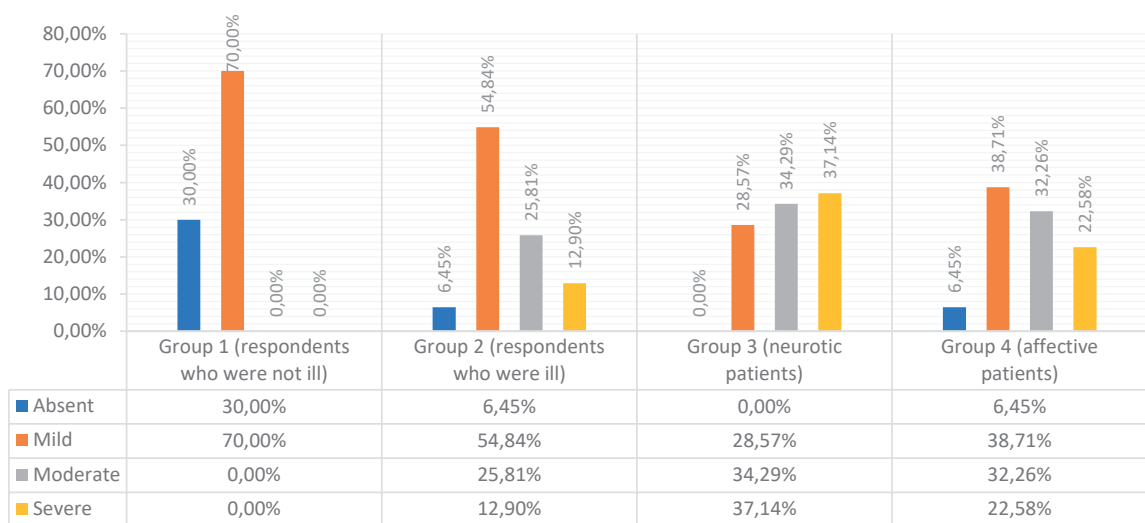


Fig. 1. Anxiety severity according to HAM-A.

Table 1. Anxiety severity according to HAM-A

Severity of anxiety	Group 3 (neurotic patients) 35 people				Group 4 (affective patients) 31 people			
	Group 3.1 Were ill in 2020 13 respondents		Group 3.2 Were ill in 2021 22 respondents		Group 4.1 Were ill in 2020 13 respondents		Group 4.2 Were ill in 2021 18 respondents	
	No	%	No	%	No	%	No	%
Assessment of anxiety								
Absent	0	0	0	0	1	7.69	0	0
Mild	7	53.85	3	13.64	7	53.85	4	22.22
Moderate	1	7.69	11	50.00	2	15.38	9	50.00
Severe	5	38.46	8	36.36	3	23.08	5	27.78

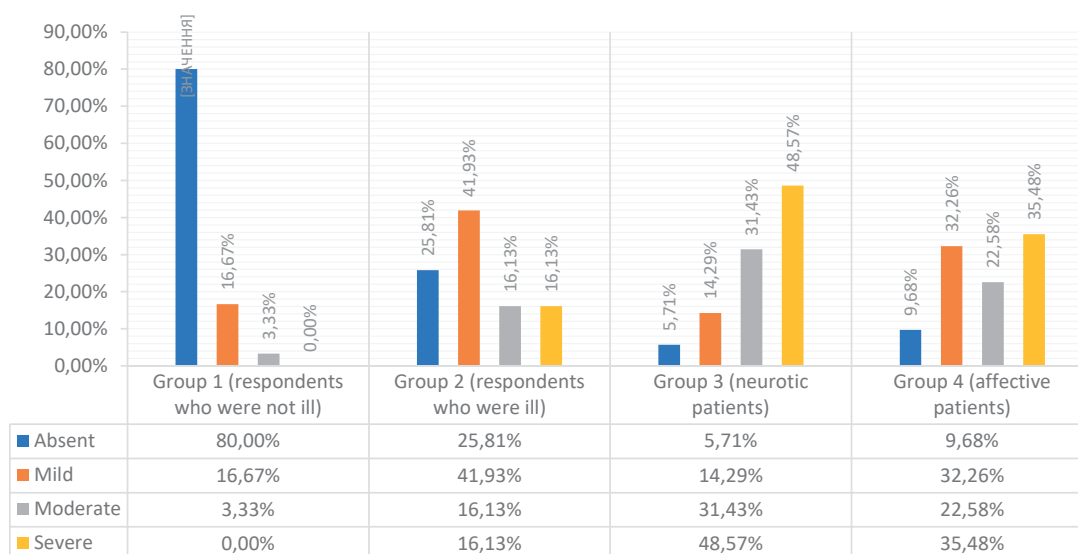


Fig. 2. Depression severity according to HAM-D.

There was an increase in the severity of depression in the respondents and patients, who had COVID-19, compared to the respondents, who were not previously infected. People of the groups 3 and 4 were more likely to experience moderate to severe depression (more severe in the neurotic patients), while the respondents of group 2 were more likely to experience mild depression. Comparing the level of depression severity in the patients of groups 3 and 4, it was noticed that the neurotic patients were more likely to have moderate and severe depression, while the affective patients – mild and severe.

Assessing depression severity in the patients by the date of COVID-19 onset, it was established that the patients, who were ill in 2020, usually experienced mild depression (30.77% of neurotic patients and 46.16% of affective patients), and the patients, who were ill in 2021 – severe depression (54.54% of neuro-

tic patients and 50.00% of affective patients) (Table 2).

The respondents' memory was evaluated using the "Short-term memory study". It was found out that among the respondents of group 1, 6.67% of them had very high memory, 30.00% had high memory, 43.33% had average memory, and 20.00% had low memory. Among the recovered respondents (group 2), only 6.45% of them had high memory, 19.35% – average memory, and low memory was evidenced the most often in 70.97% of people. Among the patients with neurotic disorders (group 3), 48.86% of them had average memory, low memory in 41.94% of patients, and very low memory – in 20.00%. Among the patients with affective disorders (group 4), average memory was found in 12.90% of respondents, low memory – in 51.62%, and very low memory – in 35.48% (Fig. 3).

There was a decrease in memory of the respondents and patients, who recovered from

Table 2. Depression severity according to HAM-D

Depression severity	Group 3 (neurotic patients) 35 people				Group 4 (affective patients) 31 people			
	Group 3.1 Were ill in 2020 13 respondents		Group 3.2 Were ill in 2021 22 respondents		Group 4.1 Were ill in 2020 13 respondents		Group 4.2 Were ill in 2021 18 respondents	
	No	%	No	%	No	%	No	%
Assessment of depression								
Absent	1	7.69	1	4.55	3	23.08	0	0
Mild	4	30.77	1	4.55	6	46.16	4	22.22
Moderate	3	23.08	8	36.36	2	15.38	5	27.78
Severity	5	38.46	12	54.54	2	15.38	9	50.00

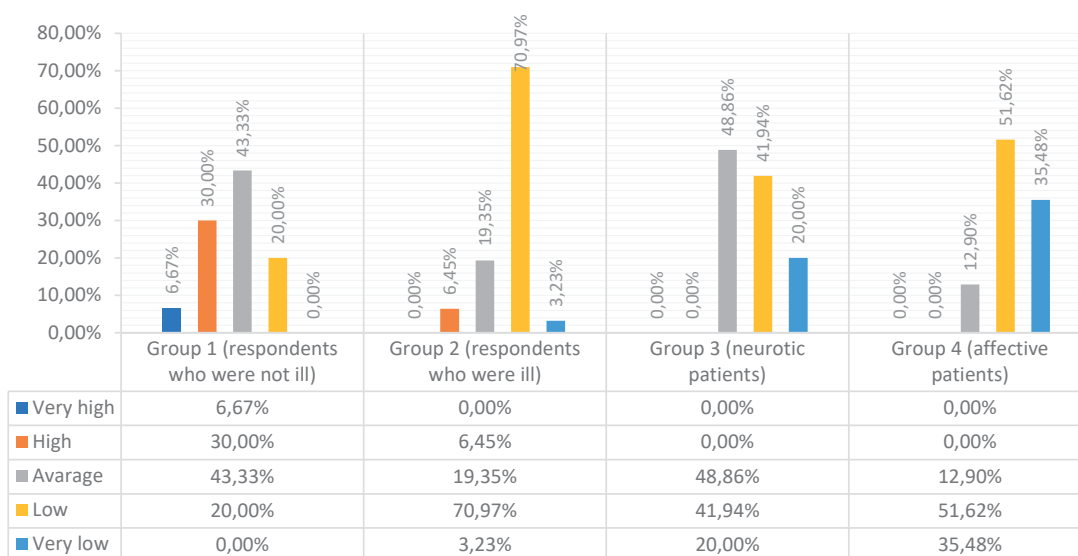


Fig. 3. Assessment of memory according to Short-term memory study.

COVID, compared to the respondents, who were not infected. The people of groups 3 and 4 were more likely to have low and very low memory (more pronounced in the affective patients), while the respondents of group 2 were found to have low memory.

Moreover, the level of attention of respondents according to the "Schulte table" test was evaluated. It was established that 100% of the respondents of group 1 had normal attention, among the people of group 2, 93.50% had normal attention and only 6.45% had reduced attention. Among the neurotic patients, only 17.14% of people had normal attention, while 82.86% had reduced attention. Among the affective patients, only 19.35% of people had normal attention, while 80.65% had reduced attention (Fig.4).

Therefore, the majority of neurotic and affective patients, who were previously infected with COVID-19, had reduced attention, 82.86%

and 80.65%, respectively, compared to the recovered respondents without mental illnesses.

Evaluating memory and attention in patients by the date of COVID-19 onset, there was no significant difference in attention changes in the patients, who were ill in 2020 and in 2021. As for memory, the neurotic patients, who were ill in 2021, generally had better memory (45.46% - normal memory, 36.36% - low memory, 18.18% - very low memory) than those, who were ill in 2020 (38.46% - average memory, 38.46% - low memory, 23.08% - very low memory).

Worse results were found in the affective patients, who had COVID-19 in 2021: 5.55% of patients had normal memory, 61.11% - low memory, 33.34% - very low memory, while among the patients, who had COVID-19 in 2020, 15.38% had average memory, 38.46% - low memory and 46.16% - very low memory (Table 3).

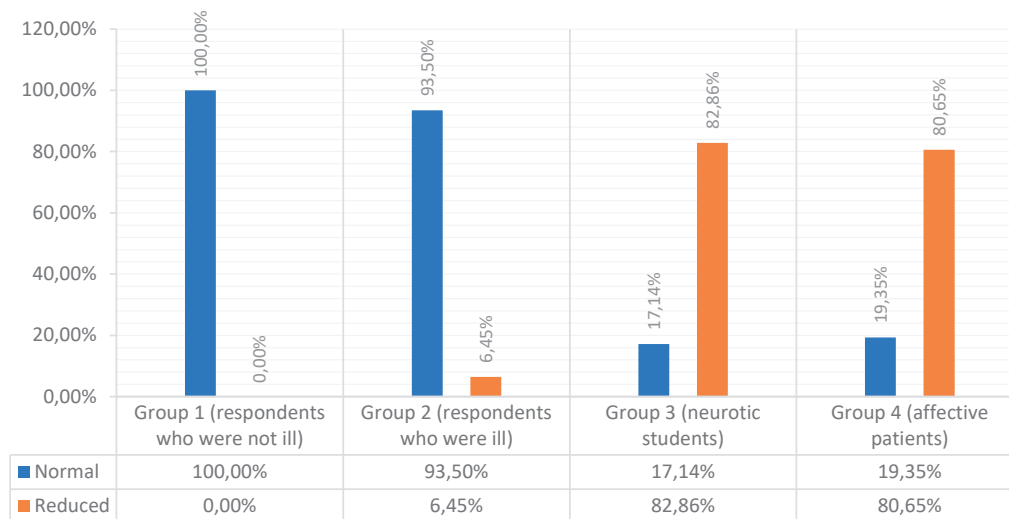


Fig. 4. Assessment of attention according to Schulte table test.

Table 3. Assessment of memory and attention

Severity	Group 3 (neurotic patients) 35 people				Group 4 (affective patients) 31 people			
	Group 3.1 Were ill in 2020 13 respondents		Group 3.2 Were ill in 2021 22 respondents		Group 4.1 Were ill in 2020 13 respondents		Group 4.2 Were ill in 2021 18 respondents	
	No	%	No	%	No	%	No	%
Assessment of attention								
Normal	2	15.38	4	18.18	3	23.08	3	16.67
Reduced	11	84.62	18	81.82	10	76.92	15	83.33
Assessment of memory								
Very high	0	0	0	0	0	0	0	0
High	0	0	0	0	0	0	0	0
Average	5	38.46	10	45.46	2	15.38	1	5.55
Low	5	38.46	8	36.36	5	38.46	11	61.11
Very low	3	23.08	4	18.18	6	46.16	6	33.34

Based on the questionnaire, the Insomnia Severity Index was evaluated. It was found out that 90.00% of the respondents of group 1 had no insomnia, and 10.00% had subthreshold insomnia. Among the respondents, who had COVID-19 (Group 2), only 45.16% of respondents had no insomnia, 38.71% had subthreshold insomnia, 12.90% had moderate insomnia and only 3.23% had severe insomnia. Among the patients with neurotic disorders (group 3), only 8.57% of patients had no insomnia, 25.72% had subthreshold insomnia, 45.71% had moderate insomnia, and 20.00% – severe insomnia.

Among the patients with affective disorders (Group 4), 22.58% had no insomnia, 38.71% had a subthreshold insomnia, 22.58% had moderate insomnia, and 16.13% had severe insomnia (Fig. 5).

Therefore, a higher degree of insomnia was found in the respondents and patients, who were previously infected with COVID-19, compare to the respondents, who did not suffer from the disease. The neurotic patients had moderate insomnia, while the affective patients had subthreshold insomnia. Moderate to severe insomnia was more common in the patients than in the respondents without previous psychiatric history.

Assessing the level of insomnia severity in the patients by the date of COVID-19 onset, it was established that in neurotic patients, who were ill in 2020, subthreshold and moderate insomnia prevailed (30.77% and 53.85%, respectively), and in the patients of this group, who were ill in 2021 – moderate and severe insomnia (40.91% and 27.27%, respectively). Severe insom-

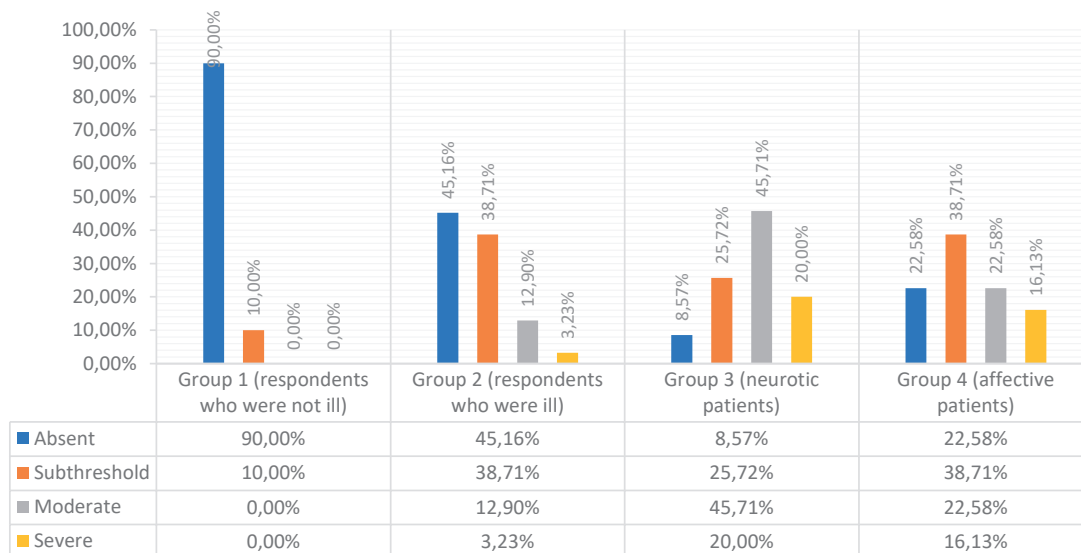


Fig. 5. Assessment of insomnia severity according to ISI.

nia prevailed in the affective patients, who were ill in 2020 (38.46% of people), and subthreshold insomnia prevailed in the patients of this group, who were ill in 2021 (50.00 %) (Table 4).

According to the survey, the severity of mental and cognitive changes in the patients were evaluated depending on the date of COVID-19 onset (2020 or 2021 year). Thus, it was established that 96.15% of patients, who were ill in 2020, and 100% of patients, who were ill in 2021, suffered from anxiety. Therefore, the anxiety severity in the patients, who had COVID-19 in 2021, was higher than in those who had it in 2020.

The respondents, who were ill in 2021, were more likely to have moderate and severe anxiety in 50.00% and 32.50%, respectively. As for the patients, who were ill in 2020, mild and severe anxiety was more common in 53.85% and 30.76% of them, respectively.

Depressive disorders were observed in 84.62% of patients, who were ill in 2020, and in 97.50% of patients, who were ill in 2021. The severity of depression was also higher in the patients, who were ill in 2021. In this group of patients, moderate depression was most often observed in 32.50% of patients and severe depression – in 52.50%. Among the patients, who were ill in 2020, severe depression was observed in 26.92% of them and mild depression – in 38.46% of people.

Attention was reduced in the majority of patients, who were ill in 2020 and 2021, 80.77% and 82.50%, respectively.

Reduced memory was evidenced in 72.50% of patients, who were ill in 2021, and in 73.08% of patients, who were ill in 2020, but the degree of memory loss was higher in those who were ill in 2020 (low memory – in 38.46%, very low memory – in 34.62%). Among the patients, who

Table 4. Assessment of insomnia severity according to ISI

Insomnia severity	Group 3 (neurotic patients) 35 people				Group 4 (affective patients) 31 people			
	Group 3.1 Were ill in 2020 13 respondents		Group 3.2 Were ill in 2021 22 respondents		Group 4.1 Were ill in 2020 13 respondents		Group 4.2 Were ill in 2021 18 respondents	
	No	%	No	%	No	%	No	%
Assessment of insomnia severity								
Absent	1	7.69	2	9.09	1	7.69	5	27.78
Subthreshold	4	30.77	5	22.73	4	30.77	9	50.00
Moderate	7	53.85	9	40.91	3	23.08	4	22.22
Severe	1	7.69	6	27.27	5	38.46	0	0

were ill in 2021, low memory was evidenced in 47.50%, very low – only in 25.00%.

Sleep disorders affected 82.50% of patients, who were ill in 2021, and 92.31% of those, who were ill in 2020. The severity of insomnia was higher in the patients, who were ill in 2020: subthreshold insomnia was observed in 30.77% of people, moderate insomnia – in 38.46%, severe insomnia – in 23.08%.

Among the patients, who were ill in 2021, subthreshold insomnia was evidenced in 35.00% of people, moderate insomnia – in 32.50%, severe insomnia – only in 15.00% (Table 5).

Discussion

It is established that COVID-19 negatively affects mental health of the population around the world. Fear of coronavirus infection associated with the possible risk of infection, unpredictable course of the disease, lack of pathogenetic treatment and total uncertainty

causes negative psychological reactions, such as distress and maladaptation [5]. As for patients with a primary psychiatric history, usually after COVID-19, the symptoms of mental disorders were more significant [6].

According to the survey it was found out that 100% of neurotic and 92.31% of affective patients experienced anxiety after COVID-19. Moderate and severe anxiety was more common in the patients with neurotic disorders (in 34.29% and 37.14%, respectively), and mild and moderate anxiety was evidenced in the affective patients (38.71% and 32.26%, respectively).

It was established that 94.29% of neurotic patients and 90.32% of affective patients experienced depression after recovering from COVID-19. The neurotic patients had a higher degree of depression (moderate – in 31.42%, severe – in 48.57%) than the affective patients (mild depression – in 32.26% and severe – in 35.48%)

Table 5. Comparison of the severity of mental and cognitive disorders depending on the date of COVID-19 onset (year 2020 and 2021)

Severity	All patients 65 patients			
	Were ill in 2020 26 patients		Were ill in 2021 40 patients	
	No	%	No	%
Assessment of anxiety				
Absent	1	3.85	0	0
Mild	14	53.85	7	17.50
Moderate	3	11.54	20	50.00
Severe	8	30.76	13	32.50
Assessment of depression				
Absent	4	15.38	1	2.50
Mild	10	38.46	5	12.50
Moderate	5	19.23	13	32.50
Severe	7	26.92	21	52.50
Assessment of attention				
Normal	5	19.23	7	17.50
Reduced	21	80.77	33	82.50
Assessment of memory				
Very high	0	0	0	0
High	0	0	0	0
Average	7	26.92	11	27.50
Low	10	38.46	19	47.50
Very low	9	34.62	10	25.00
Assessment of insomnia				
Absent	2	7.69	7	17.50
Subthreshold	8	30.77	14	35.00
Moderate	10	38.46	13	32.50
Severe	6	23.08	6	15.00

Additionally, impaired cognitive functions were found in the respondents with coronavirus infection, i.e. memory and attention. The memory loss was diagnosed in 61.94% of patients with neurotic disorders and 87.10% of patients with affective disorders. The degree of memory loss was higher in the affective patients (51.62% – low memory, 35.48% – very low memory) than in the neurotic patients (41.94% – low memory, 20.00% – very low memory).

Reduced attention was observed in the majority of the examined patients: 82.86% of neurotic patients and 80.65% of affective patients.

Sleep disorders were evidenced in 91.43% of neurotic patients and 77.42% of affective patients after COVID-19. Subthreshold insomnia and moderate insomnia were more common in both groups of patients. The frequency of their occurrence was higher in the patients with neurotic disorders (25.72% of patients – subthreshold insomnia, 45.71% – moderate insomnia) than in those with affective disorders (38.71% – subthreshold insomnia, 22.58% – moderate insomnia).

We have identified features of mental and cognitive disorders among the patients with a previous psychiatric history, who recovered from COVID-19, depending on the date of COVID-19 onset (2020 and 2021 year):

- depressive disorders and anxiety in the neurotic and affective patients, who were ill in 2020, were mostly mild, and in those, who were ill in 2021 – moderate;

- memory was more worsened in the neurotic patients, who were ill in 2020, than in those, who were ill in 2021. The affective patients had the opposite result – the better memory was in those, who had COVID-19 in 2020;

- sleep disorders also correlated with the date of COVID-19 onset. The neurotic patients, who were ill in 2020, had subthreshold and moderate insomnia, and those, who were ill in 2021, had moderate and severe insomnia. In the affective patients, the results were opposite: those, who were ill in 2020, had severe insomnia, and those, who were ill in 2021, had subthreshold insomnia.

Numerous studies also show that people with psychiatric illnesses are at higher risk of COVID-19 infection and related complications due to a variety of factors [6]. Comorbidities, altered immune functions, sleep problems and various socioeconomic risk factors contribute to an increase in COVID-19 infection rates [6].

Studies [7, 8] from around the world have established a significant association between existing psychiatric disorder and an increased risk of COVID-19 infection and COVID-19-related hospitalization, morbidity and mortality. The prognosis was found to be worse among patients with affective mental illnesses than for patients with neurotic ones [7, 8]. Threats of coronavirus disease, violation of the usual life stereotype, restriction of leisure activity, harmful interest in news about the pandemic, usage of tobacco are important in the mechanisms of distress development. These conditions increase the risk of stress, anxiety and depression [9]. Therefore, patients with mental disorders should be considered a vulnerable group for COVID-19 infection, and the results of this study are of particular significance and value in predicting development of mental disorders and optimizing treatment after an infectious disease in people suffering from neurotic and affective disorders during this pandemic or subsequent ones.

In the perspective of this study, after the survey and interpreting the attained results, a conversation with the respondents took place and a course of cognitive-behavioural and biosuggestive psychotherapy was offered to correct the symptoms of mental disorders and improve resocialization of the patients. The data will be published in the following publications.

Conclusion

Anxiety, depression, insomnia, memory and attention loss were found in examined patients. Anxiety and depression were more severe in the patients with neurotic disorders while the degree of memory loss was higher in the patients with affective disorders. Reduced attention was observed in most of the examined patients with affective and neurotic disorders. Our survey found that 100% of neurotic and 92.31% of affective patients experienced anxiety after COVID-19. Moderate and severe anxiety was more common in the patients with neurotic disorders and mild and moderate anxiety was evidenced in the affective patients. It was established that 94.29% of neurotic patients and 90.32% of affective patients experienced depression after recovering from COVID-19. The neurotic patients had more severe depression than the affective ones. Additionally, impaired cognitive functions in the respondents with coronavirus infection, i.e. memory and attention, were found. Memory loss was diagnosed in 61.94% of patients with neurotic

disorders and 87.10% of patients with affective disorders. Memory loss was more significant in the affective patients than in neurotic ones. Reduced attention was observed in the majority of the examined patients: 82.86% of neurotic patients and 80.65% of affective patients. Sleep disorders were evidenced in 91.43% of neurotic patients and 77.42% of affective patients after COVID-19. Subthreshold insomnia and moderate insomnia were more common in both groups of patients. Their frequency was higher in the patients with neurotic disorders than in those with affective ones. More severe anxiety

and depression was observed in the patients, who had COVID-19 in 2021, than in those, who had it in 2020, while severity of insomnia and memory impairment vice versa.

Conflict of Interests

Authors declare no conflict of interest.

Author's Contributions

Olena Venger – conceptualization, methodology, formal analysis, writing – reviewing and editing; *Anna-Maria Koval*, *Mykola Shved*, *Tetiana Ivanitska* – data curation, investigation, writing – original draft.

ПОРІВНЯЛЬНА ХАРАКТЕРИСТИКА СИМПТОМІВ У НЕВРОТИЧНИХ ТА АФЕКТИВНИХ ПАЦІЄНТІВ ПІСЛЯ COVID-19

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ТЕРНОПІЛЬСЬКИЙ НАЦІОНАЛЬНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ ІМЕНІ І. Я. ГОРБАЧЕВСЬКОГО, ТЕРНОПІЛЬ, УКРАЇНА

Вступ. Пандемія COVID-19 негативно вплинула на психічне здоров'я людей і створила нові бар'єри для тих, хто вже страждає на наявні психічні захворювання.

Мета. Порівняти симптоми психічних порушень у пацієнтів з невротичними та афективними психічними розладами, які перенесли COVID-19.

Методи. Проаналізовано особливості порушень під час пандемії у 35 невротичних і 31 афективних пацієнтів. Було використано: шкалу тривоги та депресії Гамільтона (HAM-A, HAM-D), індекс вираження безсоння (ISI), «Таблиці Шульте», «Дослідження короткотривалої пам'яті за Джекобсоном».

Результати. Встановлено, що тривога помірного та тяжкого ступеня частіше розвивається у пацієнтів з невротичними розладами (34,29% та 37,14% відповідно), а легкого і помірного ступеня – у афективних (38,71% та 32,26% відповідно). Більший рівень вираженості депресії був у невротичних пацієнтів (помірна – у 31,42% осіб, тяжка – у 48,57%), ніж у афективних (переважала легка – у 32,26% та тяжка – у 35,48%). Ступінь зниження пам'яті вищий у афективних пацієнтів (у 51,62% – низька, у 35,48% – дуже низька), ніж у невротичних (у 41,94% – низька, у 20,00% – дуже низька). У більшості обстежених виявлено порушення уваги та безсоння. Частота безсоння більша у пацієнтів із невротичними розладами (у 25,72% осіб – субклінічне, у 45,71% – помірне), ніж в афективних (у 38,71% осіб – субклінічне, у 22,58% – помірне). Вищий рівень тривоги та депресії спостерігався у пацієнтів, які хворіли у 2021, а тяжкість безсоння та порушення пам'яті – у тих, які хворіли у 2020.

Висновки. Виявлено тривогу, депресію, безсоння, зниження пам'яті та уваги. Рівень тривоги та депресії більше виражений у невротичних пацієнтів, натомість ступінь зниження пам'яті вищий у афективних пацієнтів. Знижена увага спостерігалася у більшості обстежених пацієнтів із афективними та невротичними психічними розладами.

КЛЮЧОВІ СЛОВА: пандемія; психічне здоров'я; депресія; тривога; безсоння.

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