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COVID-ASSOCIATED PANIC ATTACKS: REGIONAL MANAGEMENT ASPECTS

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ABSTRACT — The modern coronavirus pandemic (COVID-19) poses a mortal threat to the populations of more than 210 countries and at the same time constitutes a real challenge to national governments. One of the pandemic problems is the fear of uncertainty, which may lead to development of panic attacks among the general population. It was established that at the national level in Ukraine, standards for provision of medical care to patients with panic attacks amid the COVID-19 pandemic have not been elaborated. The article analyses measures of regional authorities on creating an algorithm for providing the special care to patients with mental disorders during a pandemic on the basis of a specialized psychosomatic clinic.

KEYWORDS — mental disorders, COVID-19, medical care algorithm, health management.

INTRODUCTION

COVID-19 outbreak has started as a health section problem of one country. But too quickly, it becomes a global problem that, at an individual level, affects all areas of health — physical, social and mental health [5; 9].

MATERIALS AND RESEARCH METHODS

The study was conducted on the basis of the Center for Psychosomatic Pathology of the regional hospital named after I.I. Mechnikov (Dnipro, Ukraine). The investigation took place from 16 March 2020 till 30 April 2020. The investigation processed the data from the Center's medical statistics, as well as world statistics on coronavirus infections Worldometer [10]. In Ukraine, the prevalence of the COVID-19 has been registered in all its regions. As of April 30, 2020, 10 406 cases were registered in the country, 246 of them deaths, 1238 recoveries [2]. In addition, the study was the subject of government decisions and or-

ders on COVID-19 issued by the Ukrainian Ministry of Health.

RESULTS AND DISCUSSIONS

In addition to the real epidemic of the coronavirus [2], in Ukraine, as well as around the world a mental epidemic has arisen associated with the induction of the psyche by the media and society. The most powerful trigger mechanism for the panic attack associated with the Covid today is precisely the media. It is common for the human subconscious to react to danger, and the reaction of one person causes a chain reaction of others. A person with a rich imagination perceives information about the possibility of getting sick as a real threat to life, and he/she may have a reaction in the form of mental disorders, such as a panic attack, anxiety disorder, depression and others.

Even the most mentally stable person could have a panic attack due to news about the Coronavirus. It is proved that a mental state under stress affects the immune system — it reduces immunity, and panic could cause harm [4]. It should be noted that such a symptom as any difficulties of breathing is characteristic of both a panic attack and the COVID-19 [5], which increases anxiety and the frequency of panic attacks. Therefore, this fact requires distinction, which can be conducted only by a specialist.

At the primary level of management, such a specialist is a family doctor. The doctor will determine the presence or absence of somatic symptoms, including the symptoms of the Coronavirus, the presence of symptoms of a panic attack. At this moment in Ukraine, the algorithm for the diagnosis and treatment of the Covid-associated panic attacks has not been included in the structure of the national standard of medical care in the light of the COVID-19 pandemic [7].

For mild symptoms of anxiety and / or depression, the patient can be treated by a family doctor for 7–14 days. If there is no improvement, a family doctor issues a referral to a psychiatrist.

The Dnipropetrovsk region is the largest in Ukraine in terms of population. The regional government, namely the Dnipropetrovsk Regional Council set up a Center for Psychosomatic Pathology with 30 beds [1; 3]. This Center is a structural unit of the I.I. Mechnikov regional clinical hospital, which is defined

by the Government of Ukraine as the main hospital for inpatient treatment of the Covid infection [8]. The creation of the Center for Psychosomatic Pathology in the structure of the regional hospital is important for patients with somatic pathology, in whose onsets psychological pathogenic effects play an important role. The services of the Center of Psychosomatic Pathology have become especially popular in conditions of military conflict in the Eastern Ukraine from 2014 up to the present, which made it possible to provide highly qualified comprehensive assistance to the wounded and injured during the military conflict [6]. The demand for the Center is also high in the light of the Coronavirus infection pandemic in Ukraine.

For the period under study, the Center was contacted by 103 patients with various disorders. The subjects underwent their first treatment under the supervision of a family doctor (Table 1).

Table 1. Characterization of pathologies, primarily treated at the level of outpatient general practice

The main diagnosis	Specific gravity, %
Somatiform vegetative dysfunction	90
Cardiovascular disease	25
Gastrointestinal diseases	19
Endocrine diseases	15
Pulmonary disease	13
Other somatic diseases	10

Data of the Center for Psychosomatic Pathology. All patients are taken as 100%. One patient may have several diagnoses.

As it can be seen from the table, panic attacks and other mental disorders are disguised as somatic pathologies or remain unrecognized by general practitioners at the stage of outpatient treatment.

In the case of moderate symptoms of panic disorder, the patient is sent for specialized psychiatric care (Table 2).

As it can be seen from the table 2, the diagnosis of panic disorders is more widely carried out only at the stage of inpatient treatment.

Based on the Psychosomatic Center the algorithm for providing medical care to patients with panic attacks in the context of the COVID-19 pandemic was developed and implemented for a family doctor. The algorithm is sent to all primary care physicians in the Dnipropetrovsk region (1200 doctors).

Part I. General issues

- 1.1. Mental disorders in case of COVID-19 can develop at all stages of the infectious process, in any form and harm, have different clinical severity,

Table 2. Description of pathologies most commonly encountered in specialized psychiatric care

The main diagnosis	Specific gravity, %
Panic disorder	25%
General Anxiety Disorder	22%
Mixed anxiety and depressive disorder	20%
Alcohol addiction	8%
Depressive Disorder	9%
Hypochondriacal disorder	10%
Substance Abuse	5%
Bipolar Affective Disorder	1%
Severe mental disorders	2%

Data from the Center for Psychosomatic Pathology

prognosis, and the degree of danger to oneself and others.

- 1.2. Consultations of a psychiatrist on the diagnosis and treatment of mental and behavioral disorders amid COVID-19 can be carried out with a personal reception (examination) by a psychiatrist, by phone and by web call (for doctors in the region).
- 1.3. If you are a family doctor, then act on the psychosocial factors that are causing a person stress at the moment. Provide additional social support to patients. Teach a person how to deal with stress. Tell him/her about normal reactions to acute stress disorder. Reassure the person that these symptoms sometimes occur after severe stress, and this is hardly a serious medical problem. Prescribe treatment for concomitant diseases, if necessary — include special drugs. Always be in touch with such a patient, ask him/her to visit again within 10 days if the symptoms have not subsided, or at any time if the symptoms worsen.

If there is no proper effect after all of the above measures, proceed to part II.

Part II. Special issues (Table 3).

CONCLUSIONS

In the light of the COVID-19 pandemic, one of the most important challenges is the Covid-associated panic attacks. The algorithm for providing highly specialized aid is necessary for qualified medical care, which can improve the quality of life of patients amid the Coronavirus infection pandemic.

The co-authors declare that there is no conflict of interest in the scientific article submitted for publica-

Table 3. The algorithm for the family doctor's actions in providing medical care to patients with panic attacks in the context of the COVID-19 pandemic

Phase	Action content	Specialist
I.	COMPLAINTS: palpitations, chest pain, feeling of lack of air, dizziness, feeling of unreality; secondary fear of death, loss of self-control or going crazy; fear of developing the next panic attack	Family doctor
II.	SURVEY: clinical, paraclinical, psychological questionnaires	Family doctor
III.	Somatic DIAGNOSIS and concomitant syndromological diagnosis of mental disorder has been established	Family doctor
IV.	Method of treatment: general-acting drugs, tranquilizers, antipsychotics, antidepressants, anxiolytics, psychotherapy Treatment 7-14 days	Family doctor
V.	THERAPEUTIC EFFECT ACHIEVED	
	NO Examinations: clinical, psychopathological, clinical, pathopsychological, paraclinical (EEG, CT, MRI, ultrasound) Actions: inpatient and outpatient clinical observation for the differential diagnosis with anxiety-phobic F 40.0 - F40.2 and other anxiety disorders F41.1, F41.2, manifestations of anxiety included in the structure of some somatic diseases (for example, thyrotoxicosis, coronary heart disease, chronic renal failure, rheumatoid arthritis) F 54.0	Psychiatrist
	YES Treatment: continued treatment and follow-up	Family doctor
VI.	EXPECTED TREATMENT RESULTS ARE ACHIEVED	
	Panic disorder: the termination or a significant decrease in the frequency of panic attacks and related disorders, as well as a decrease in avoiding behavior. Significant improvement: no further monitoring and treatment needed Improvement: dynamic observation by a psychiatrist, psychotherapy, observation by a family doctor	Psychiatrist Family doctor Psychiatrist

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CONTRIBUTORS

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REFERENCES

- Center for psychosomatic pathology. Dnipro. URL: [http://m.mechnikova.com/clients/docl/index.nsf/\(documents\)/4BE4F3F437ABB53AC22579D5003D6668](http://m.mechnikova.com/clients/docl/index.nsf/(documents)/4BE4F3F437ABB53AC22579D5003D6668)
- Coronavirus infection. Operational information. Public Health Center of Ukraine. URL: <https://phc.org.ua/kontrol-zakhvoryuvan/inshi-infekciyni-zakhvoryuvannya/koronavirusna-infekciya-covid-19>
- Dnipropetrovsk Regional Clinical Hospital named after Mechnikov. URL: <http://www.mechnikova.com>
- GORMAN, J. ET AL. A neuroanatomical hypothesis for panic disorder. Gorman J.M., Liebowitz M.R., Fyer A.J., Stein J. *Am J Psychiatry*. 1989; 146 (2): 148-61. [Links] Comment in: *Am J Psychiatry*. 1990; 147 (1): 126-7.
- Mental Health and COVID-19: URL: <http://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/novel-coronavirus-2019-ncov-technical-guidance-OLD/coronavirus-disease-covid-19-outbreak-technical-guidance-europe-OLD/mental-health-and-covid-19>
- MIKHAILOV, B. ET AL. War in Ukraine: pathomorphism of mental and behavioral disorders. B.V. Mikhailov, S.A. Ryzhenko, S. M. Moroz. Dnipro: Svidler AL. 2018.270 p.
- Order of the Ministry of Health of Ukraine dated 28.03.2020 № 722 "Organization of medical care for patients with coronavirus disease (COVID-19)". URL: <https://moz.gov.ua/article/ministry-mandates/nakaz-moz-ukraini-vid-28032020--722-organizacija-nadannja-medichnoi-dopomogi-hvorim-na-koronavirusnu-hvorobu-covid-19>
- Resolution of the Cabinet of Ministers of Ukraine of March 11, 2020 № 211 "On prevention of the spread of acute respiratory disease COVID-19 caused by coronavirus SARS-CoV-2" on the territory of Ukraine. URL: <https://zakon.rada.gov.ua/laws/show/211-2020-%D0%BF>
- WHO. Pandemic COVID-19. URL: <http://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/news/news/2020/3/who-announces-covid-19-outbreak-a-pandemic>
- World statistics of coronavirus in real time. URL: https://www.worldometers.info/coronavirus/?utm_campaign=homeAdvegas1:%22