

## References

1. Shigemura J, Ursano RJ, Morganstein JC, Kurosawa M, Benedek DM. Public responses to the novel 2019 coronavirus (2019-nCoV) in Japan: mental health consequences and target populations. *Psychiatry Clin Neurosci* 2020;74:281–2.
2. Zhou X, Snoswell CL, Harding LE, Bambling M, Ediripulige S, Bai X, *et al.* The Role of Telehealth in Reducing the Mental Health Burden from COVID-19. *Telemed J E Health* 2020;26:377–9.
3. Wu YC, Chen CS, Chan YJ. The outbreak of COVID-19: an overview. *J Chin Med Assoc* 2020;83:217–20.
4. Sunjaya AP, Chris A, Novianti D. Efficacy, patient-doctor relationship, costs and benefits of utilizing telepsychiatry for the management of post-traumatic stress disorder (PTSD): a systematic review. *Trends Psychiatry Psychother* 2020;42:102–10.
5. Bleyel C, Hoffmann M, Wensing M, Hartmann M, Friederich HC, Haun MW. Patients' Perspective on Mental Health Specialist Video Consultations in Primary Care: Qualitative Preimplementation Study of Anticipated Benefits and Barriers. *J Med Internet Res* 2020;22:e17330.

*Conflicts of interest.*—The authors certify that there is no conflict of interest with any financial organization regarding the material discussed in the manuscript.

*Authors' contributions.*—All authors read and approved the final version of the manuscript.

*History.*—Manuscript accepted: June 8, 2020. - Manuscript revised: May 27, 2020. - Manuscript received: April 26, 2020.

*(Cite this article as:* Prisco V, Prisco L, Donnarumma B. Telepsychiatry in adolescents and adults during COVID-19 outbreak: pros and cons. *Minerva Psichiatr* 2020;61:108-9. DOI: 10.23736/S0391-1772.20.02067-1)

© 2020 EDIZIONI MINERVA MEDICA

Online version at <http://www.minervamedica.it>

*Minerva Psichiatrica* 2020 September;61(3):109-12

DOI: 10.23736/S0391-1772.20.02083-X

## Medical and psychological support to specialists under conditions of pandemic COVID-19

The problems of psychological health among different population categories during the pandemic COVID-19 have been revealed by many researchers. They state that about 10.8% of population is now suffering from post-traumatic stress disorders caused by the pandemic COVID-19.<sup>1</sup>

A number of specialists who committed their duties experienced psychological problems (anxiety, depression and stress). The situation of COVID-19 has acti-

vated the problem of medical and psychological support to specialists of vulnerable groups, who were involved into performing their professional duties during the quarantine. Among them are: medical staff, policemen, military-men and others.

They are the ones who were affected more than others by such psychogenic factors as high mental tension, danger to be infected, fear for health of their family members, mental strain, shortage of personal protective equipment, inefficiency of the infection control system, etc.<sup>2</sup>

The works that have been published recently emphasize the necessity and direct priority to collect high quality data concerning consequences of the pandemic COVID-19 to mental health of the whole population and vulnerable groups. They are focused on the current demand for the research concerning the ways to diminish the consequences of mental health for vulnerable groups under conditions of the pandemic COVID-19.<sup>3</sup>

One of the most vulnerable groups that play an important role in fighting the pandemic and overcoming its consequences is policemen and military-men who provide maintaining order and fulfilling quarantine requirements by the population. Among their functions are: to safeguard places of quarantine and observation, to protect the public, to control fulfilling restrictive containment measures by city and village dwellers, to patrol the places, etc. Committing service duties provokes higher risks to catch COVID-19 as a result of direct contact with the infected ones. Besides, there are frequent conflicts with those people who are unwilling to obey the quarantine policy. Under the conditions of performing official duties during the pandemic COVID-19 policemen and military-men are affected by additional stress-factors. It stipulates the necessity to study the influence of the pandemic psychogenic factors on military-men, and to develop an efficient system of preventing their neurotic disorders.

We have researched 334 military-men of Ukrainian National Guard (different categories: army officers, military-men under contract and military-men of compulsory military service at the age of 18-40), who committed duties together with the police to protect public order. As the government has restricted locating groups in closed premises as well as direct personal contacts, this research has been done by electronic means. An online questionnaire has been sent via online messengers such as Telegram, Facebook, WhatsApp etc. to potential participants.

To estimate the psychological affect during the epidemic COVID-19 and the vulnerability level of post-traumatic stress reactions (PTSR) of military men we have applied a structured questionnaire form that consisted of questions comprising several methods:

- methods “Mississippi scale for estimating post-traumatic reactions (military variant);”
- methods “The Depression Anxiety Stress Scales” (DASS-21);
- methods “Insomnia Severity Index” (ISI).

The results of studying the psychological influence

of the pandemic COVID-19 on military-men and the severity level of PTSR revealed by the methods “Mississippi scale for estimating post-traumatic reactions (military variant)” have shown that the group of military-men who performed duties of community policing during the epidemic eruption of COVID-19 and did not have any battle experience, had practically twice as many symptoms of PTSR in comparison with a group of military-men who had some battle experience. In our opinion it is stipulated by committing professional du-

ties in extreme conditions and absence of battle experience that could have been used by them in terms of COVID-19.

We have also revealed some gender differences. Normative indicators among military-men and women have been noticed in the group of military members who participated in military actions practically in equal numbers (92.71% and 93.75% correspondingly). At the same time certain symptoms of PTSR among military members who did not have any experience of military

TABLE I.—Psychological impact of the epidemic COVID-19 on military members and the severity of post-traumatic stress reactions.

Reactions	Group 1						Group 2						Group 3 (control)					
	Total		Men		Women		Total		Men		Women		Total		Men		Women	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Normal	104	92.86	89	92.71	15	93.75	99	84.62	88	88.89	14	77.78	101	96.19	83	96.51	18	94.74
Psychiatric	6	5.36	5	5.21	1	6.25	12	10.26	8	8.08	4	22.22	4	3.81	3	3.49	1	5.26
PTSR	2	1.79	2	2.08	0	0.00	4	3.42	3	3.03	0	0.00	0	0.00	0	0.00	0	0.00

N.: number of military members performed duties of community policing during the epidemic eruption of COVID-19; % percentage value. Group 1: military members who had experience of community policing and some battle experience - 112 people, among them: 96 (85.71%) men and 16 (14.29%) women; group 2: military members who had experience of community policing, but did not have any battle experience - 117 people, among them: 99 (84.62%) men and 18 (15.38%) women; group 3 (control): military members who did not have experience of community policing as well as any battle experience - 105 people, among them: 86 (81.90%) men and 19 (18.10%) women.

TABLE II.—Manifestations of depression, anxiety and stress among military members who performed duties of community policing during the pandemic COVID-19.

Indicators	Group 1						Group 2						Group 3 (control)					
	Total		Men		Women		Total		Men		Women		Total		Men		Women	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Mean DASS-21 Anxiety Score	2.54		2.43		3.19		2.97		2.73		4.28		2.17		2.10		2.47	
Normal	103	91.96	90	93.75	13	81.25	98	83.76	86	86.87	12	66.67	101	96.19	84	97.67	17	89.47
Mild	3	2.68	2	2.08	1	6.25	9	7.69	7	7.07	2	11.11	2	1.90	1	1.16	1	5.26
Moderate	3	2.68	2	2.08	1	6.25	5	4.27	3	3.03	2	11.11	2	1.90	1	1.16	1	5.26
Severe	2	1.79	1	1.04	1	6.25	3	2.56	2	2.02	1	5.56	0	0.00	0	0.00	0	0.00
Extremely Severe	1	0.89	1	1.04	0	0.00	2	1.71	1	1.01	1	5.56	0	0.00	0	0.00	0	0.00
Mean DASS-21 Depression score	2.26		2.33		2.50		2.88		2.63		4.28		2.17		2.14		2.47	
Normal	104	92.86	90	93.75	14	87.50	99	84.62	87	87.88	12	66.67	100	95.24	83	96.51	17	89.47
Mild	3	2.68	2	2.08	1	6.25	9	7.69	7	7.07	2	11.11	3	2.86	2	2.33	1	5.26
Moderate	3	2.68	2	2.08	1	6.25	5	4.27	3	3.03	2	11.11	2	1.90	1	1.16	1	5.26
Severe	1	0.89	1	1.04	0	0.00	2	1.71	1	1.01	1	5.56	0	0.00	0	0.00	0	0.00
Extremely Severe	1	0.89	1	1.04	0	0.00	2	1.71	1	1.01	1	5.56	0	0.00	0	0.00	0	0.00
Mean DASS-21 Stress score	4.26		4.53		4.00		4.97		5.15		4.22		4.25		4.17		4.00	
Normal	105	93.75	89	92.71	16	100.00	100	85.47	84	84.85	17	94.44	102	97.14	83	96.51	19	100.00
Mild	3	2.68	3	3.13	0	0.00	9	7.69	8	8.08	1	5.56	2	1.90	2	2.33	0	0.00
Moderate	2	1.79	2	2.08	0	0.00	4	3.42	4	4.04	0	0.00	1	0.95	1	1.16	0	0.00
Severe	1	0.89	1	1.04	0	0.00	2	1.71	2	2.02	0	0.00	0	0.00	0	0.00	0	0.00
Extremely Severe	1	0.89	1	1.04	0	0.00	2	1.71	2	2.02	0	0.00	0	0.00	0	0.00	0	0.00

N.: number of military members performed duties of community policing during the epidemic eruption of COVID-19; % percentage value. Group 1: military members who had experience of community policing and some battle experience - 112 people, among them: 96 (85.71%) men and 16 (14.29%) women; group 2: military members who had experience of community policing, but did not have any battle experience - 117 people, among them: 99 (84.62%) men and 18 (15.38%) women; group 3 (control): military members who did not have experience of community policing as well as any battle experience - 105 people, among them: 86 (81.90%) men and 19 (18.10%) women.

This document is protected by international copyright laws. No additional reproduction is authorized. It is permitted for personal use to download and save only one file and print only one copy of this Article. It is not permitted to make additional copies (either sporadically or systematically, either printed or electronic) of the Article for any purpose. It is not permitted to distribute the electronic copy of the article through online internet and/or intranet file sharing systems, electronic mailing or any other means which may allow access to the Article. The use of all or any part of the Article for any Commercial Use is not permitted. The production of derivative works from the Article is not permitted. It is not permitted to remove, cover, overlay, obscure, block, or change any copyright notices or terms of use which the Publisher may post on the Article. It is not permitted to frame or use framing techniques to enclose any trademark, logo, or other proprietary information of the Publisher.

TABLE III.—*Manifestations of sleep disorders among military members who performed duties of community policing during the pandemic COVID-19.*

Indicators	Group 1			Group 2			Group 3 (control)											
	Total		Men	Women		Men		Women										
	N.	%	N.	%	N.	%	N.	%	N.	%								
Mean ISI score	5.62		5.76		6.56		6.97		6.62		8.89		5.35		5.48		5.32	
No clinically significant insomnia	98	87.50	85	88.54	13	81.25	88	75.21	77	77.78	11	61.11	100	95.24	84	97.67	18	94.74
Subthreshold insomnia	12	10.71	10	10.42	2	12.50	23	19.66	19	19.19	4	22.22	4	3.81	3	3.49	1	5.26
Moderately severe clinical insomnia	2	1.79	1	1.04	1	6.25	4	3.42	2	2.02	2	11.11	1	0.95	1	1.16	0	0.00
Severe clinical insomnia	0	0.00	0	0.00	0	0.00	2	1.71	1	1.01	1	5.56	0	0.00	0	0.00	0	0.00

N.: number of military members performed duties of community policing during the epidemic eruption of COVID-19; % percentage value. Group 1: military members who had experience of community policing and some battle experience - 112 people, among them: 96 (85.71%) men and 16 (14.29%) women; group 2: military members who had experience of community policing, but did not have any battle experience - 117 people, among them: 99 (84.62%) men and 18 (15.38%) women; group 3 (control): military members who did not have experience of community policing as well as any battle experience - 105 people, among them: 86 (81.90%) men and 19 (18.10%) women.

operations, have been indicated among military-women more rarely (77.78%) than among men (88.89%) (Table I).

It should be noted that women could be characterized by complaints concerning worries as for their physical health, fear, disappointment, feelings of personal weakness, helplessness, disorientation, paranoid ideas of the pandemic COVID-19. As for men, they were mostly concerned with a loss of control over the situation, irritation, aggressive behavior and extreme optimism.

Further detalisation of PTSD symptoms has been carried out by the methods “DASS-21” and “ISI”. Hard and most hard symptoms of anxiety, depression and stress have been indicated more often among military-men, who did not have battle experience, than among those who had such.

Military-women who did not experience military actions can be characterized by high indicators of the average point by the scales “Anxiety” and “Depression” of the methods “DASS-21”, while the average point of military-men who did not experience military actions by the scale “Stress” is the highest (5.15 points) among all the researched gender groups (Table II).

Military-men in all the groups had lower indicators by the methods “ISI” than women by the scales “Subliminal insomnia” and “Clinical insomnia of the average severity”. The average point by the methods ISI among women of the second group was the highest among all the researched groups. In our opinion it could be observed due to higher women’s extroversion and stress in conditions of the pandemic COVID-19. A hard level of clinical insomnia among military-men unlike women has not been indicated by us (Table III).

The carried out research indicates the similarity of symptoms and consequences revealed in different groups of military-men who performed their professional duties in various extreme conditions.<sup>4, 5</sup> A high correlation between the results of this research has been observed.

Thus, it is more expedient and less psycho-traumatic

to involve into the COVID-19 situation those specialists who have already experienced extreme conditions. In such terms these specialists are able to perform professional activity efficiently in extreme conditions while suffering less from mental disorders.

This research allows making an assumption for the efficiency of applying the model of medical and psychological support of specialists’ professional activity, which is described on the pages of the Journal *Minerva Psichiatrica*.<sup>5</sup> This model has been tested on military-men who are under various extreme conditions, and it has been applied for estimating the state of mental health, outlining tendencies and providing preventing measures for development of mental disorders as well as their recovery. Our findings could be used information for other countries during the pandemic COVID-19.

We see the prospects of further scientific research in studying the peculiarities of the most efficient ways of medical and psychological support and psycho-prophylaxis among the most vulnerable professional categories, who have suffered from psycho-traumas during the pandemic COVID-19. Development and standardization of means and models of providing medical and psychological support in case of pandemics will allow specialists involved into its recovery to feel more self-assured, protected and efficient.

Yuriy B. MELNYK <sup>1</sup> \*, Anatoliy V. STADNIK <sup>2</sup>

<sup>1</sup>Department of Psychology and Pedagogy, National Academy of National Guard of Ukraine, Scientific Research Institute KRPOCH, Kharkiv, Ukraine;

<sup>2</sup>Department of Military Training, Kharkiv National University of Internal Affairs, Kharkiv, Ukraine

\*Corresponding author: Yuriy B. Melnyk, Department of Psychology and Pedagogy, National Academy of National Guard of Ukraine, Scientific Research Institute KRPOCH, Zakhysnykiv Ukrainy maïdan 3, 61001 Kharkiv, Ukraine.  
E-mail: YBM.office@gmail.com

## References

1. Tan W, Hao F, McIntyre RS, Jiang L, Jiang X, Zhang L, *et al.* Is returning to work during the COVID-19 pandemic stressful? A study on immediate mental health status and psychoneuroimmunity prevention measures of Chinese workforce. *Brain Behav Immun* 2020;87:84–92. [Epub ahead of print]
2. Joob B, Wiwanitkit V. Traumatization in medical staff helping with COVID-19 control. *Brain Behav Immun* 2020;87:10. [Epub ahead of print]
3. Holmes EA, O'Connor RC, Perry VH, Tracey I, Wessely S, Arseneault L, *et al.* Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science. *Lancet Psychiatry* 2020;7:547–60. [Epub ahead of print]
4. Melnyk Y, Stadnik A. Mental health of a personality: diagnostics and prevention of mental disorders. *Int J Educ Sci* 2018;1:50.

5. Melnyk YB, Prykhodko II, Stadnik AV. Medical-psychological support of specialists' professional activity in extreme conditions. *Minerva Psichiatr* 2019;60:158–68.

---

*Conflicts of interest.*—The authors certify that there is no conflict of interest with any financial organization regarding the material discussed in the manuscript.

*Authors' contributions.*—Yuriy B. Melnyk: Study design; data collection; statistical analysis; data interpretation; manuscript preparation; Anatoliy V. Stadnik: data collection, statistical analysis; literature search. All authors read and approved the final version of the manuscript.

*History.*—Manuscript accepted: June 9, 2020. - Manuscript revised: May 27, 2020. - Manuscript received: May 13, 2020.

*(Cite this article as:* Melnyk YB, Stadnik AV. Medical and psychological support to specialists under conditions of pandemic COVID-19. *Minerva Psichiatr* 2020;61:109-12. DOI: 10.23736/S0391-1772.20.02083-X)