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Female Moscow Police Officers' Emotional Reactions Features during Service in the COVID-19 Pandemic Emergency Conditions

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ABSTRACT

The COVID-19 pandemic was an extreme situation that had a traumatic impact on psychosocial groups that performed their official duties in contact with the infected and sick, including in the gender aspect. Police officers were widely involved in anti-epidemic measures to protect order and citizens safety during the COVID-19 pandemic. The aim of the study is to identify the emotional reactions features in female police officers - the Moscow police employees, carrying serving as public order guards in the COVID-19 pandemic emergency conditions.

It is shown that female police officers, in contrast to male police officers, in emergency conditions of the COVID-19 pandemic, showed greater neuro-psychic adaptability to stressful situations, despite increased situational and personal anxiety. When serving in crowded places, they showed anxiety not about their own health, but because of fears about the relatives possibility infecting. It is shown that it is expedient to develop differentiated psychosocial support personality-oriented programs for police officers, taking into account gender characteristics during medical and biological emergencies.

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INTRODUCTION

The COVID-19 pandemic was an extreme situation that had a psycho-traumatic impact on the entire population and, especially, on individual psychosocial groups that performed their official duties in contact with infected and sick COVID-19 [1].

Researchers of population's mental health problems during the new coronavirus infection COVID-19 pandemic, note the presence in the psychological anxiety people state, depression symptoms, fear and post-traumatic stress disorder manifestations [2]. According to Chinese scientists, medical staff in late January early February 2020, doctors and nurses who worked with COVID-19 patients had depression symptoms (50.4%), anxiety (44.6%), sleep disorders (34%) and distress (71.5%). Greater symptoms intensity was found in women compared to men [3].

Police officers served during anti-epidemic measures in Moscow, to protect order and public citizens safety in the COVID-19 pandemic context [4]. To prevent the mental health formation disorders in police officers, it is important to study the social and professional factors complex that contribute to the formation of psychological trauma states [5], including during an medico-biological nature emergency [6].

The aim of the study is to identify the emotional reactions features in female police officers the Moscow police employees, carrying serving as public order guards in the COVID-19 pandemic emergency conditions.

MATERIALS AND METHODS

An empirical 68 Moscow police officers survey who served to protect public order in crowded areas (patrolling streets, metro duty, etc.) was conducted using a random sample and with their voluntary written consent on April 1-5, 2020, when, according to statistical data, the peak a new coronavirus infection incidence among police officers was registered [7]. The criteria for inclusion in the study were senior officers with higher education who did not have a neurotic conditions history (average age 32.4 ± 1.5 years, service experience - 7.1 ± 1.9 years), including: 32 people-women (average age 33.3 ± 1.1 years, service experience - 6.1 ± 1.3 years); 36 people men (average age 30.9 ± 1.5 years, service experience - 5.6 ± 1.9 years).

An experimental psychological method was used, which included: the differential depressive states diagnosis method by Tsung [8] for depression level self-assessment and determining the depressive disorder degree; the Neuro-psychic adaptation test by Gurvich [2] for conducting a mental state level assessment in an extreme service situation; the Spielberger-Hanin personal and situational anxiety questionnaire [8] for measuring anxiety, not only as a personal property, but also a state related to the current situation; the Bass-Darkey aggression state diagnosing method [9] to identify the aggressiveness and hostility severity, and the questionnaire developed by us to identify

the subjective police officers' psycho-emotional state self-assessment during the COVID-19 pandemic.

Statistical processing

The differences reliability between groups based on the test methods average indicators was evaluated using the Student's parametric t-test for independent samples; when analyzing quantitative data with a normal distribution, and the nonparametric Mann-Whitney U-test, if the distribution of observation results was different from the normal one (Table 1).

RESEARCH RESULT

Only 12% of female police officers, when serving as public order officers in emergency COVID-19 pandemic conditions, had concerns about their own physical health and getting COVID-19 fear, which is significantly ($p = 0.009$) less often than male police officers. Of these, 89% subjectively rated their overall health and performance more highly. At the same time, female police officers in 53% of cases were more prone to depressive states due to expressed anxiety as a personal quality. When serving in crowded places, 76% of them showed anxiety not about their own health, but because of fears about the infecting possibility their relatives and relatives with the infection.

Female police officers were significantly less likely to have maladaptive responses to stressful situations in the physical aggression form, irritation, suspicion, verbal aggression, hostility, and general aggressive behavior levels. This reflects their emotional background stability,

Table 1: Experimental psychological methods basic scales results and police officers surveys (M ± m).

Scales	Women n = 32	Men n = 36	p
The severity and intensity	5.25 ± 0.197	6.07 ± 0.146	t. 0.001
Emotional state	7.78 ± 0.229	7.61 ± 0.159	U. 0.040
State of health	8.29 ± 0.203	9.00 ± 0.148	U. 0.009
Efficiency	8.32 ± 0.189	9.08 ± 0.154	U. 0.045
Fear of getting sick COVID-19	2.94 ± 0.273	3.39 ± 0.196	U. 0.009
Changing life values	2.50 ± 0.263	2.34 ± 0.193	X
Level of depression	26.81 ± 0.567	25.85 ± 0.677	U. 0.008
Personal anxiety	30.71 ± 0.539	27.76 ± 0.533	t. 0.000
Physical aggression	33.56 ± 1.271	42.83 ± 1.691	t. 0.000
Indirect aggression	16.91 ± 0.860	16.17 ± 0.812	X
Irritation	13.98 ± 1.484	21.13 ± 1.611	t. 0.001
Suspiciousness	19.49 ± 1.468	24.88 ± 1.478	t. 0.01
Verbal aggression	65.66 ± 2.418	74.52 ± 2.254	t. 0.008
Guilt	37.94 ± 1.685	37.85 ± 1.536	X
Hostility	3.44 ± 0.229	4.20 ± 0.227	t. 0.019
Aggressiveness	9.68 ± 0.344	11.94 ± 0.357	t. 0.000

Note: The critical level of statistical significance was: $p \leq 0.05$; t: t-Student's test; U: U-Mann-Whitney test; X-there are no significant differences for both criteria

a good neuropsychic adaptation level, and enhanced volitional behavior control when serving in an emergency. At the same time, women were significantly less likely to subjectively feel an increase in the complexity and official activities tension, accepted the situation as normal, and they had less pronounced fears and getting sick COVID-19 fear. Both groups respondents equally often assessed the COVID-19 pandemic situation as an event that changed their life prospects, views and values.no significant inter-group differences were found in this parameter.

DISCUSSION

There are almost no publications in the available literature concerning gender differences in specific occupational groups in response to the COVID-19 pandemic emergency. At the same time, our analysis showed the presence of maladaptive response features to stressful situations of female police officers in the largest Russian metropolis. The features emotional reactions in female police officers serving as public order guards during the COVID- 19 pandemic, in contrast to male police officers, were good neuropsychic adaptability to stressful situations, despite increased situational and personal anxiety. When serving in crowded places, they mostly showed anxiety not about their own health, but because of fears about the infecting relatives possibility and relatives with infection.

CONCLUSION

The study results show that there are gender differences in the police officers in Moscow psychological responses, who served to protect public order in the COVID-19 pandemic emergency conditions.

The obtained data make it expedient to develop differentiated personality-oriented psychosocial support programs for police officers, taking into account gender characteristics during medical and biological emergencies.

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