

Social Factors Influence on the Moscow Police Officers' Psychological Traumatization Formation during their Service in Emergency Coronavirus Disease-19 Pandemic Conditions

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ABSTRACT

The study aim is to identify the social factors influence on police officers' the psychological traumatization formation serving to protect public order in coronavirus disease (COVID)-19 pandemic emergency conditions in Moscow. Two hundred and fifty-three police officers were examined in Moscow, Russia: Group I – 127 people who had a positive test result and clinical COVID-19 manifestations and Group II – 126 healthy police officers who were not released from duty and served to protect public order during the COVID-19 pandemic in crowded areas (patrolling streets, metro duty, etc.). We used an experimental psychological method that included: The Spielberger-Hanin personal and situational anxiety questionnaire, the Bass-Darkey method, and a questionnaire developed by us to identify the police officers' subjective psycho-emotional self-assessment state during the COVID-19 pandemic. It is shown that social factors (police service length, age, marital status, and children presence) in police officers serving in crowded areas during the COVID-19 pandemic affect their emotional state with the affective symptoms the anxiety-phobic spectrum formation. The article substantiates the need to develop differentiated, person-oriented preventive rehabilitation measures for all police officers serving in medical and biological emergencies.

Key words: Coronavirus disease-19, police, mental health, psychological trauma

Coronavirus disease (COVID)-19 pandemic is a situation with high stress potential due to life threat and some groups of the population health and causes people great fear for their lives or the lives of loved ones.^[1] New COVID-19 coronavirus infection feature is that the disease is transmitted quickly and imperceptibly, which can explain the high anxiety and fear in society degree, the stigmatization and discrimination growth.^[2] Movement freedom restriction, quarantine measures are a factor that provokes the mental health disorders formation.^[3]

The police are in a special situation. Like all citizens, they fully experience all the COVID-19 pandemic period psychological difficulties; in addition, they were most widely involved in anti-epidemic measures to protect order and citizens safety during this period. Extreme factors psycho-traumatic impact study on police officers official activity in emergency situations is the leading developing a methodology for professional personnel reliability principle.^[4] During the COVID-19 pandemic, according to departmental statistics, the employee's morbidity level of Internal Affairs bodies (ATS) is 2.2 times higher than population and was close to the medical workers morbidity level of Russian Ministry of Health institutions (2.6 times).^[5]

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To prevent the mental health disorders formation in police officers, it is important to study the social and professional complex factors that contribute to the states of psychological trauma formation,^[6] including during a medical and biological nature emergency.

The aim is to identify the social factors influence on police officers' the psychological traumatization formation serving to protect public order in COVID-19 pandemic emergency conditions in Moscow.

MATERIALS AND METHODS

A random sampling method was used to conduct 253 employees empirical survey of the Main Internal Affairs Department in Moscow (average age 31.8 ± 1.5 years and service experience -10.9 ± 1.9 years), including: Group I – 127 people – police officers (average age 32.06 ± 0.6 years, service experience -11.3 ± 1.5 years) who had a positive COVID-19 test result and clinical manifestations, which occurred in mild and moderate forms, and underwent inpatient and outpatient treatment for the period from March 30, 2020, to June 09, 2020. (The restrictive measures and self-isolation period declared by the Russian Federation Government in connection with the COVID-19 pandemic) and Group II – 126 people – police officers (average age 31.68 ± 0.53 years, and service experience -10.4 ± 2.1 years), healthy police officers who were not released from duty and served to protect public order during the COVID-19 pandemic in crowded areas (patrolling streets, metro duty, etc.).

We used an experimental psychological method that included: The Spielberger-Hanin personal and situational anxiety questionnaire to measure anxiety not only as a personal property but also as a state related to the current situation; the Bass-Darkey aggression diagnostic method to identify the aggression and hostility severity;^[7] 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 average test methods indicators was evaluated using the Student's parametric *t*-test for independent samples; correlation analysis, variables are presented in ordinal and metric scales, and we used a non-parametric statistical method – Spearman's rank correlation coefficient.

RESEARCH RESULTS

The survey results showed that police Group I significantly ($P \leq 0.05$) less often had a bad emotional state unlike

respondents of Group II, which noted increased irritability, irascibility, and anxiety for the friends and relatives health, as performing their duties in areas with large people concentrations could get sick and inadvertently be their infection source.

Average indicators analysis on the Spielberger-Hanin questionnaire scales showed no a clinical neurotic state signs in all the surveyed respondents. Group I police officers had significantly higher situational anxiety indicators ($P \leq 0.05$) than Group II officers, which is probably due to the clinical consequences uncertainty and the severe complications possibility of the disease, which were regularly reported by the media.

In Group I, correlation analysis revealed the mutual social factors influence on the police officers psychological characteristics. Positive correlations were found between the variable "age" and the indicators "anxiety" ($r = 0.282$, $P \leq 0.001$), "situational anxiety" ($r = 0.229$, $P \leq 0.000$), and "personal anxiety" ($r = 0.401$, $P \leq 0.010$). This is probably due to the fact that the older the police officers infected with COVID-19 were, the more likely they were to perceive the pandemic as a threat, and experience personal and situational anxiety manifestations, even in situations that did not contain an objective danger. The mutual "marital status" influence factor on the situational ($r = 0.226$, $P \leq 0.011$) and personal anxiety ($r = 0.224$, $P \leq 0.011$) formation was revealed. Police officers with children rated the COVID-19 infection risk more highly during their professional activities ($r = 0.264$, $P \leq 0.003$).

In healthy police officers Group II, it was found that the variable "age" is interrelated with the variables "well-being" ($r = 0.177$, $P \leq 0.048$), "anxiety" ($r = 0.346$, $P \leq 0.000$), and fear of getting sick COVID-19 ($r = 0.321$, $P \leq 0.000$), that is, the older the police officers serving in crowded areas during the pandemic, the more they showed emotional reactions instability with pronounced psychopathological affective spectrum symptoms. They assessed the situation as having changed their life values ($r = 0.362$, $P \leq 0.000$).

Indicators on the "marital status" scale influenced the night sleep duration ($r = 0.203$, $P \leq 0.023$), the physical ($r = 0.230$, $P \leq 0.001$), and indirect aggression formation ($r = 0.223$, $P \leq 0.012$) during the official duties performance in a medical and biological emergency. This is due to increased responsibility for the loved ones and relatives' health. It was found that Group II police officers with children rated the COVID-19 infection risk more highly during their professional activities ($r = 0.265$, $P \leq 0.003$) and the situation with COVID-19 as "changing their life values" ($r = 0.230$, $P \leq 0.001$), were more likely to experience anxiety ($r = 0.303$, $P \leq 0.001$), and were more likely to show verbal aggression ($r = 0.200$, $P \leq 0.025$).

RESULTS AND DISCUSSION

Social factors (police service length, age, marital status, and children presence) in police officers serving in crowded areas during the COVID-19 pandemic affect their emotional state with the affective symptoms the anxiety-phobic spectrum formation. This is the psychological trauma formation sign caused by the official duties performance in the emergency COVID-19 pandemic situation.

CONCLUSION

The study results revealed the need to develop differentiated, personality-oriented preventive rehabilitation measures for all police officers serving in medical and biological emergencies. This is necessary to prevent the states psychological trauma formation and borderline mental disorders in police officers, and will help to increase their personal reliability.

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How to cite this article: Soloviev A, Zhernov S, Ichitovkina E. Social Factors Influence on the Moscow Police Officers' Psychological Traumatization Formation during their Service in Emergency Coronavirus Disease-19 Pandemic Conditions. *Clin Res Psychol* 2020;3(1):1-3.