

Police Officers' Emotional State Influence on the Tendency to Excessive Alcohol Consumption Formation in the COVID-19 Pandemic Context

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Abstract: In order to determine the police officers' emotional state influence serving to protect public order in emergency the COVID-19 pandemic conditions on the tendency to excessive alcohol consumption formation, a continuous empirical survey of 371 police officers in Moscow was conducted. Three groups were identified: I-127 people who had a positive test result and COVID-19 clinical manifestations, II-118 healthy individuals who did not have COVID-19 clinical manifestations, but were released from official duties as contacts with the sick; III-126 healthy police officers who were not released from their duties during the pandemic and served to protect public order in crowded places. It is shown that the main factors contributing to excessive alcohol consumption by police officers serving during the emergency the COVID-19 pandemic situation are infection fear with a new coronavirus infection and serious complications after the disease, psychosomatic complaints, and general health deterioration. It is proposed to develop differentiated psycho-preventive programs that will help normalize the police officers' emotional state, prevent organizational stress and, as a result, protect the harmful alcohol use formation.

Keywords: COVID-19, police officers, mental health, psychological trauma, addictive behavior

1. INTRODUCTION

During the COVID-19 pandemic, the police officers' morbidity rate in Russia was 2.2 times higher than that of the general population and was close to medical workers' one on the Russian Ministry of Health [7]. The high police officers' infection risk with COVID-19 during the performance of their official duties to protect public order is a psycho-traumatic factor that contributes to the psycho-emotional maladaptation symptoms formation [4].

Police officers' psychological traumatization is manifested by marked tension, anxiety and sub depressive states, and becoming fear an infection source for their relatives and friends [3]. Being in chronic emotional stress state, police officers prefer not to contact mental health specialists, they try to improve their mental state on their own, and one of the easiest ways from their point of view is to drink alcohol [6].

The alcohol addiction problem is currently the most acute due to the wide this phenomenon

prevalence both in society as a whole and in individual social groups, as well as due to the scale of the consequences for the individual, its formation and development [8]. To prevent the psychological traumatization formation in police officers, it is important to study the socio-psychological factors complex that contribute to alcohol abuse [1].

The aim of the study is to determine the police officers' emotional state influence who are on duty to protect public order in emergency the COVID-19 pandemic conditions on the tendency to excessive alcohol consumption formation.

2. MATERIALS AND METHODS

A complete empirical 371 police officers' survey in Moscow was conducted. There are three groups: I - 127 police officers who had a positive test result and the clinical manifestations COVID-19, flowing in light and moderate forms, and held inpatient and outpatient treatment (the average age of

33.3±1.1 years, the age of 6.1 ±1.3 years); II – 118 policeofficers – healthy persons who had no clinical manifestations COVID-19, but was released from duty, as contact with sick people (average age of 30.9±1.5 years, length of service and 5.6±1.9 years); III - 126 - healthy police officers who were not their duties relieved during the COVID-19 pandemic, who were on duty to protect public order in crowded areas (patrolling streets, metro duty, etc.) (average age 32.4±1.5 years, service experience – 7.1±1.9 years).

A survey was conducted based on a questionnaire developed by us for the subjective the police officers' mental state assessment. The University of Michigan chronic alcohol intoxication test (MAST) was used to assess social, professional, and family problems associated with alcohol abuse [5].

Statistical processing of the results were conducted using the program SPSS 22.0. In the quantitative data analysis with normal distribution was used the parametric t-Student test for independent samples, when the observations distribution is different from the normal was used the nonparametric Mann-Whitney test; correlation analysis, variables are represented in ordinal and metric scales, in data processing, we used a nonparametric statistical method – Spearman rank correlation coefficient.

3. RESEARCH RESULT

Table1. Police officers' emotional state features on duty in the COVID-19 pandemic context, points(M±m)

	Scales	Groups I-II (M±m)	*p	Groups I-III (M±m)	**p	Groups II-III (M±m)	***p
Questionnaire	Severity and intensity of service	5,25±0,197	t, 0,001	5,25±0,197	t, 0,028	6,07±0,146	X
		6,07±0,146		5,84±0,180		5,84±0,180	
	Stable emotional state	7,78±0,229	U, 0,040	7,78±0,229	X	7,61±0,159	X
		7,61±0,159		7,78±0,229		7,78±0,229	
	Deterioration of health	8,29±0,203	U, 0,009	8,29±0,203	X	8,00±0,148	X
8,00±0,148		8,27±0,144		8,27±0,144			
Good mood	8,13±0,170	t, 0,053	8,13±0,170	X	7,66±0,167	t, 0,049	
	7,66±0,167		8,08±0,132		8,08±0,132		
Reduced performance	8,32±0,189	U, 0,045	8,32±0,189	X	8,08±0,154	X	
	8,08±0,154		8,33±0,120		8,33±0,120		
Test MAST	Alcohol Abuse	1,42±0,362	t, 0,022	1,42±0,362	t, 0,014	2,59±0,632	X
		2,59±0,632		0,97±0,169		0,97±0,169	

Note: differences between groups are significant at $p \leq 0.05$, according to the criteria: t – t-Student's criterion, U-U-Mann-Whitney criterion. X-there are no significant differences in both criteria, *p – comparison between Groups I and II, **p-between Groups I and III, *** p-between Groups II and III

In Group I police officers, the tendency formation to excessive alcohol consumption

Group I police officers compared to Group II respondents were significantly less likely to note that during anti-epidemic measures, their official duties became more complex and stressful, they were less likely to experience emotional tension in everyday life. Despite their general condition deterioration and a marked decrease in performance (in the last days before the clinical symptoms appearance), they were much less likely to notice a decrease in mood. According to the MAST test, they did not have the need to relieve emotional stress with alcoholic beverages and did not have social, professional and family problems associated with excessive alcohol consumption (Table 1).

Group II police officers, in contrast to Group III respondents, had pronounced emotional problems with sub-depressive manifestations, which led to the need to improve their mental state through alcohol consumption. In the home self-isolation conditions, they had family conflicts, including those related to alcoholic beverages use, which is confirmed by the the MAST test data, which revealed significant intergroup differences.

Group III respondents noted increased tension and professional responsibilities complexity during anti-epidemic activities. According to the MAST test, Group III representatives did not have any psychosocial problems signs or excessive alcohol consumption.

during the COVID-19 pandemic was influenced by the serious complications fear after the

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disease ($r = 0.1199$; $p=0.002$), a negative correlation was found with the variable "positive

mood for the future" ($r = -0.178$; $p=0.012$) and "good mood" ($r = -0.183$; $p=0.024$) (Fig. 1)

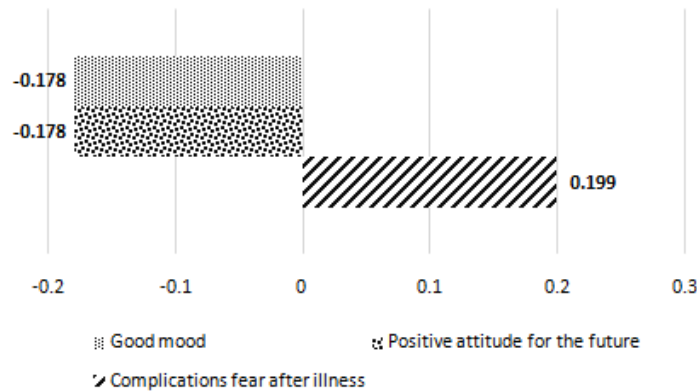


Fig1. Group I police officers' psycho-emotional state influence on the tendency to excessive alcohol consumption formation during the COVID-19 pandemic

Note: here and further in Fig. 2 and 3 show the results using Spearman's rank correlation coefficient.

Group II police officers during their stay in quarantine at home while waiting for laboratory the COVID-19 virus absence confirmation had an illness fear ($r = 0.374$; $p=0.001$) and psychosomatic complaints ($r = 0.234$; $p=0.012$), which contributed to the need to change formation their mental state through alcoholism.

A negative correlation was found with the variable "level of education" ($r = -0.193$; $p=0.001$), the higher the police officers' education level, the less problems they had related to excessive alcohol consumption (Fig. 2).

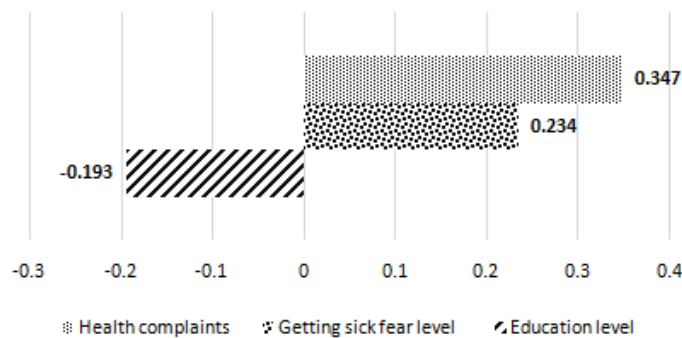


Fig2. Group II police officers' psycho-emotional state influence on the tendency to excessive alcohol consumption formation a during the COVID-19 pandemic

In Group III police officers, the desire to drink alcohol was influenced by fatigue and decreased performance ($r = 0.239$; $p=0.005$), general health deterioration ($r = 0.277$; $p=0.051$), while a negative correlation was obtained with the

variable " official duties severity and intensity in an emergency situation related to the COVID-19 pandemic" ($r = -0.221$; $p=0.015$), which allows us to determine this factor as a alcohol consumption deterrent (Fig. 3).

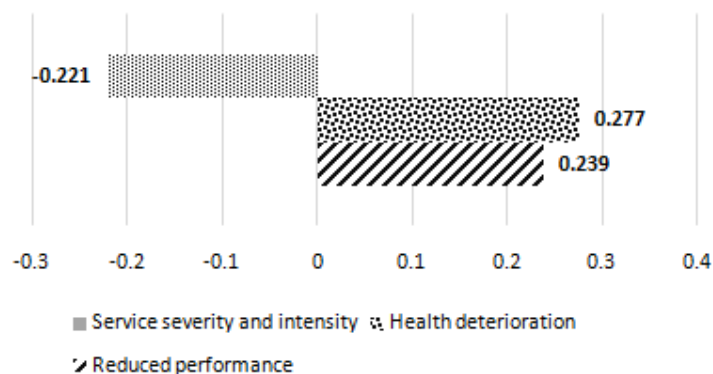


Fig3. Group III police officers' psycho-emotional state influence on a tendency to excessive alcohol consumption formation during the COVID-19 pandemic.

4. DISCUSSION OF RESULTS

The study results show that the factors contributing to police officers' excessive alcohol consumption during the COVID-19 pandemic emergency situation are mainly infection fear with a new coronavirus infection and serious complications after the disease, psychosomatic complaints, general health deterioration, and decreased performance. Correlation analysis indicated that the police officers' psycho-emotional state also affects the propensity to drink alcohol formation.

5. CONCLUSION

To prevent maladaptation states manifestations with excessive alcohol consumption, it is advisable to develop differentiated psycho-preventive programs that will help normalize the police officers' emotional state, prevent organizational stress [2] and, as a result, protect the harmful alcohol use formation.

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