SJIF Impact Factor (2025): 8.688| ISI I.F. Value: 1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 10 | Issue: 3 | March 2025 - Peer Reviewed Journal

CHARACTERISTICS OF MORBIDITY AND ORGANIZATION OF MEDICAL AND SANITARY CARE TO INTERNAL AFFAIRS OFFICERS

Kholmurodov A.T., Mavlyanova Z.F., Kim O.A.
Samarkand State Medical University, Uzbekistan

Article DOI: https://doi.org/10.36713/epra20511
DOI No: 10.36713/epra20511

ABSTRACT

Professional activity associated with a threat to life includes work in which a person is constantly faced with situations that threaten his safety The increased level of occupational diseases is associated with work under stress, with intense professional workloads without special psychological preparation, with an incorrect work and rest regime. Arising from difficult circumstances, these situations not only threaten the health and safety of people, but also significantly reduce productivity and output. They increase the psychological and physiological "cost" of labor and in many cases have inevitable monetary and emotional consequences. In the long term, they can cause job dissatisfaction, shifts in a person's personality and character, and changes in his social life outside of work. The article presents the results of the analysis of the morbidity of internal affairs officers and the assessment of the provision of medical and sanitary and rehabilitation care to them.

KEYWORDS: *Morbidity, Internal Affairs Officers, Rehabilitation, Medical And Sanitary Care, Rehabilitation, Prevention*

INTRODUCTION

Professional activity associated with a threat to life includes work in which a person is constantly faced with situations that threaten his safety [1]. A striking example of such specialists are internal affairs officers. Their duties often include responding to emergency situations, detaining dangerous individuals, maintaining public order, which may pose a risk to life. [2,3].

The increased level of occupational diseases is associated with work under stress, with intense professional workloads without special psychological preparation, with an incorrect work and rest regime. Arising from difficult circumstances, these situations not only threaten the health and safety of people, but also significantly reduce labor productivity and output [3,4]. They increase the psychological and physiological "cost" of labor and in many cases have inevitable monetary and emotional consequences. In the long term, they can cause job dissatisfaction, shifts in a person's personality and character, and changes in their social life outside of work. [2,5].

Thus, in order to prevent the development of occupational and somatic diseases, it is necessary to carefully study the incidence of diseases among employees, the factors and causes leading to the development of pathology, and the existing problems in providing medical and sanitary and rehabilitation care to such patients.

AIM OF THE RESEARCH

We were to study the incidence of occupational and somatic pathologies and conduct an analysis of the organization of medical and sanitary care for internal affairs officers.

MATERIALS AND METHODS

A retrospective analysis of the medical documentation of the Central Clinic of the Ministry of Internal Affairs of the Republic of Uzbekistan for the period from 2017 to 2021 was carried out. The obtained data were subjected to statistical processing using modern methods of mathematical analysis.

RESEARCH RESULTS AND DISCUSSION

On the territory of our republic, primary health care for officers of the Ministry of Internal Affairs includes primary health care and specialized care, as well as medical rehabilitation. Outpatient, inpatient and day hospitals are places where various types of medical care are provided. In addition to the state's own resources, a number of other healthcare institutions that are part of the state structure actively participate in the provision of medical care.

SJIF Impact Factor (2025): 8.688| ISI I.F. Value: 1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 10 | Issue: 3 | March 2025 - Peer Reviewed Journal

Figure 1 presents the results of the analysis of the rehabilitation plan and the actual requests of individuals for rehabilitation assistance.

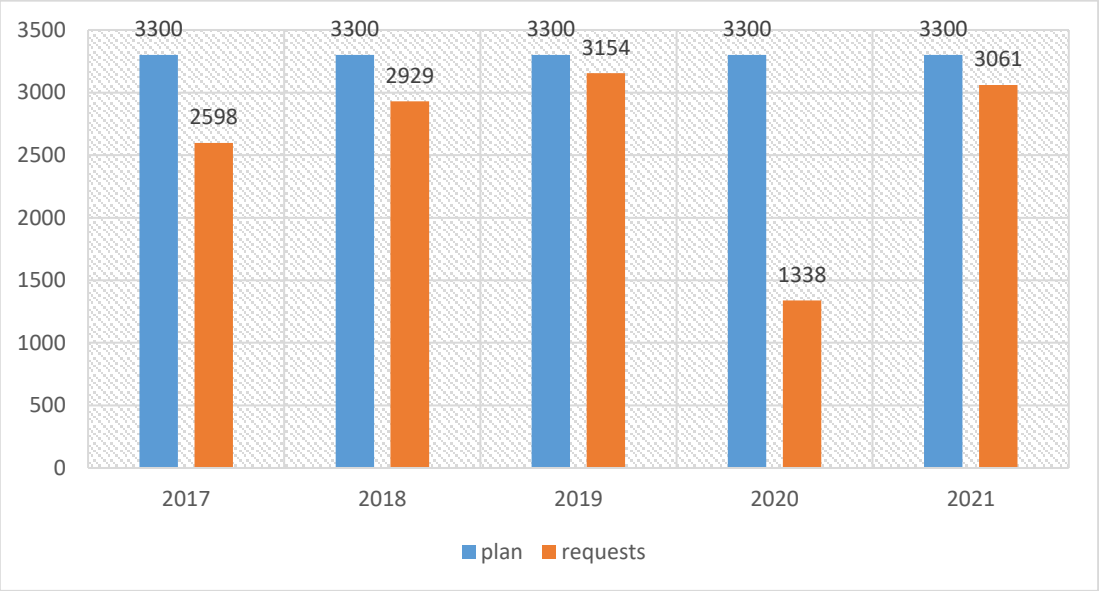


Fig. 1. The number of visits by internal affairs officers in accordance with the visiting plan for the period 2017-2021 (n=16500)

Thus, in the period from 2017 to 2021, the annual plan was 3,300 officers. In fact, 2,598 (15.7%) officers received rehabilitation assistance in 2017, 2,929 (17.8%) officers in 2018, 3,154 (19.1%) officers in 2019, 1,338 (8.1%) officers in 2020, and 3,061 (18.6%) officers in 2021. The overall percentage of requests for medical care over the five-year period was 79.3%.

When it comes to organizing and providing medical care in outpatient settings, preventive focus is seen as the most important and central idea [6], which plays an important role in the provision of basic health care. According to statistics from the Central clinic of the Ministry of Internal Affairs of the Republic of Uzbekistan, 20% of all visits to doctors over the past five years have been for preventive care, which indicates a noticeable attention to preventive medicine [7,8,9].

Regarding inpatient rehabilitation services, in Uzbekistan they are provided in the hospital of the Ministry of Internal Affairs, the hospital in Namangan, the Samarkand rehabilitation center under the Medical Department of the Ministry of Internal Affairs, the sanatorium "Uzbekistan" in Tashkent.

Table 1
Duration of treatment and total number of hospitalizations in hospital for the period 2017-2021

	Total number of hospitalizations	Duration of inpatient treatment (day)	Inpatient bed occupancy (day)
2017 год	2598	10,9	91,2
2018 год	2929	10,8	94,6
2019 год	3154	11,0	95,5
2020 год	1338	10,5	46,8
2021 год	3061	10,5	93,9
M±m	**2616±333,10**	**10,7±0,11**	**82,7±10,71**

Table 1 provides a comprehensive overview of various indicators associated with hospitalization and inpatient treatment at the Samarkand Rehabilitation Center under the Medical Department of the Ministry of Internal Affairs of the Republic of Uzbekistan. According to the analysis, 2,598 hospitalizations were registered in 2017, the average length of inpatient treatment was 10.9 days, while the bed occupancy was 91.2 days. A similar trend with minor deviations was observed in subsequent years. However, 2020 stands out in particular, with a decrease in hospitalizations to 1,338 and a significant decrease in inpatient bed occupancy to 46.8 days, most likely due to the COVID-19 pandemic.

The following year, 2021, the number of hospitalizations increased significantly and amounted to 3061. The average length of inpatient treatment remained unchanged at 10.5 days, and the occupancy of inpatient beds in total amounted to 93.9 days.
In the therapeutic department, the average annual bed occupancy rate for the study period decreased to 315.3±5.1, while in the neurological department, on the contrary, it increased to 327.1±1.9, which did not exceed the norm established in our republic.

SJIF Impact Factor (2025): 8.688| ISI I.F. Value: 1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 10 | Issue: 3 | March 2025 - Peer Reviewed Journal

During the period under review, the duration of outpatient treatment averaged 14.4 days, and inpatient treatment averaged 10.7 days, which once again confirms the efficiency of using hospital beds. Table 2 shows the hospital bed turnover rate for the period under review by hospital department.

Table 2
Average annual bed occupancy by inpatient departments for the period 2017-2021.

By years	Therapeutic department	Neurological department	Annual
2017	16,3	9,5	**17,9**
2018	18,12	9,54	19,6
2019	17,22	9,7	18,7
2020	19,28	10,38	20,4
2021	19,22	9,94	19,7
Avg. value	18,03±1,29	9,8±0,36	19,60±0,70

Thus, the overall average annual rate for both departments remained relatively stable, indicating a balanced distribution of patients and a constant demand for rehabilitation services during the observed period. The findings highlight a well-managed health system with sustained patient engagement and departmental efficiency.

Next, we studied the incidence rates of law enforcement officers for the period 2017-2021. Table 3 presents the results of regional characteristics of morbidity among employees of internal affairs agencies over a five-year period. Notable trends include an increase in enrollment in some regions, such as Andijan, Kashkadarya and Samarkand, while other regions showed different dynamics.

In 2017, the largest number of requests to the rehabilitation center were in Samarkand (513; 19.7%), Surkhandarya (318; 12.2%) and Kashkadarya (312; 12.0%). In 2018, the number of those admitted to Jizzakh increased significantly (334; 11.4%), and this trend continued, with the largest number of those admitted to the center remaining in Samarkand.

Despite regional differences, overall admission to the rehabilitation center has been on an upward trajectory - from 2,598 in 2017 to 3,061 in 2021. There is an obvious difference between a general rehabilitation department and a specialized department, which receives a larger number of patients.

Table 3
Distribution of the indicator of requests for medical care by region for the period 2017-2021.

Regions	Period									
	2017 n=2598		2018 n=2929		2019 n=3154		2020 n=1338		2021 n=3061	
	абс	%	абс	%	абс	%	абс	%	абс	%
Central Clinic of the Ministry of Internal Affairs	31	1,2	88	3,0	127	4,0	52	3,9	103	3,4
Tashkent city	133	5,1	108	3,7	147	4,7	34	2,5	52	1,7
Tashkent Region	87	3,3	119	4,1	118	3,7	37	2,8	90	2,9
Andijan Region	171	6,6	170	5,8	162	5,1	66	4,9	279	9,1
Namangan Region	42	1,6	54	1,8	76	2,4	10	0,7	69	2,3
Fergana Region	121	4,7	127	4,3	112	3,6	39	2,9	172	5,6
Kashkadarya Region	312	12,0	320	10,9	391	12,4	131	9,8	367	12,0
Surkhandarya Region	318	12,2	197	6,7	227	7,2	82	6,1	208	6,8
Bukhara Region	154	5,9	200	6,8	225	7,1	76	5,7	213	7,0
Navoi Region	204	7,9	250	8,5	280	8,9	129	9,6	288	9,4
Syrdarya Region.	265	10,2	254	8,7	235	7,5	118	8,8	276	9,0
Zhizzak Region	162	6,2	334	11,4	308	9,8	140	10,5	253	8,3
Samarkand Region	513	19,7	603	20,6	630	20,0	383	28,6	616	20,1
Khorezm region	63	2,4	65	2,2	73	2,3	21	1,6	47	1,5
Republic of Karakalpakstan	22	0,8	40	1,4	43	1,4	20	1,5	28	0,9
Total number admitted to the rehabilitation center	**2598**		**2929**		**3154**		**1338**		**3061**	
Including in departments										
General Rehabilitation Department	1012		1077		1284		588		1357	
Specialized Department	1586		1852		1870		750		1704	
Certified Employees	769		757		785		339		794	

SJIF Impact Factor (2025): 8.688| ISI I.F. Value: 1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 10 | Issue: 3 | March 2025 - Peer Reviewed Journal

In addition, Table 3 provides information on the number of certified employees for different years, indicating the number of personnel involved in the rehabilitation process. This comprehensive dataset provides a detailed understanding of the geographic distribution and dynamics of patient admissions in the context of rehabilitation center activities.

Analysis of morbidity by visits with an emphasis on the availability of medical care and the organization of preventive work in the primary care within departmental medical organizations provides valuable insight into the state of health and the effectiveness of medical services. The incidence rate of the attached contingent in 2017 was 569.8 per 1000 people. Over the period under review, the indicator increased by 18.2 percentage points - from 482.8 per 1000 people of the assigned contingent in 2021. As a result, more opportunities for diagnosis and treatment of pathological disorders appear, which reflects well the systematization of medical care in primary health care.

Over the entire observation period, a significant increase in respiratory system morbidity was noted (by 35%). In second place are injuries, poisoning and other secondary consequences of infectious diseases. In 2017, the leading cause of disability was diseases of the genitourinary system, with diseases of the skin and subcutaneous fat tissue in third place. In the considered time period of 2020-21, the rates of respiratory diseases increase by 42%, and cardiovascular diseases by 37%. Increased stress, decreased hygiene education, encouragement of bad habits and a general increase in unhealthy lifestyles are all socio-economic factors that affect people's ability to work.

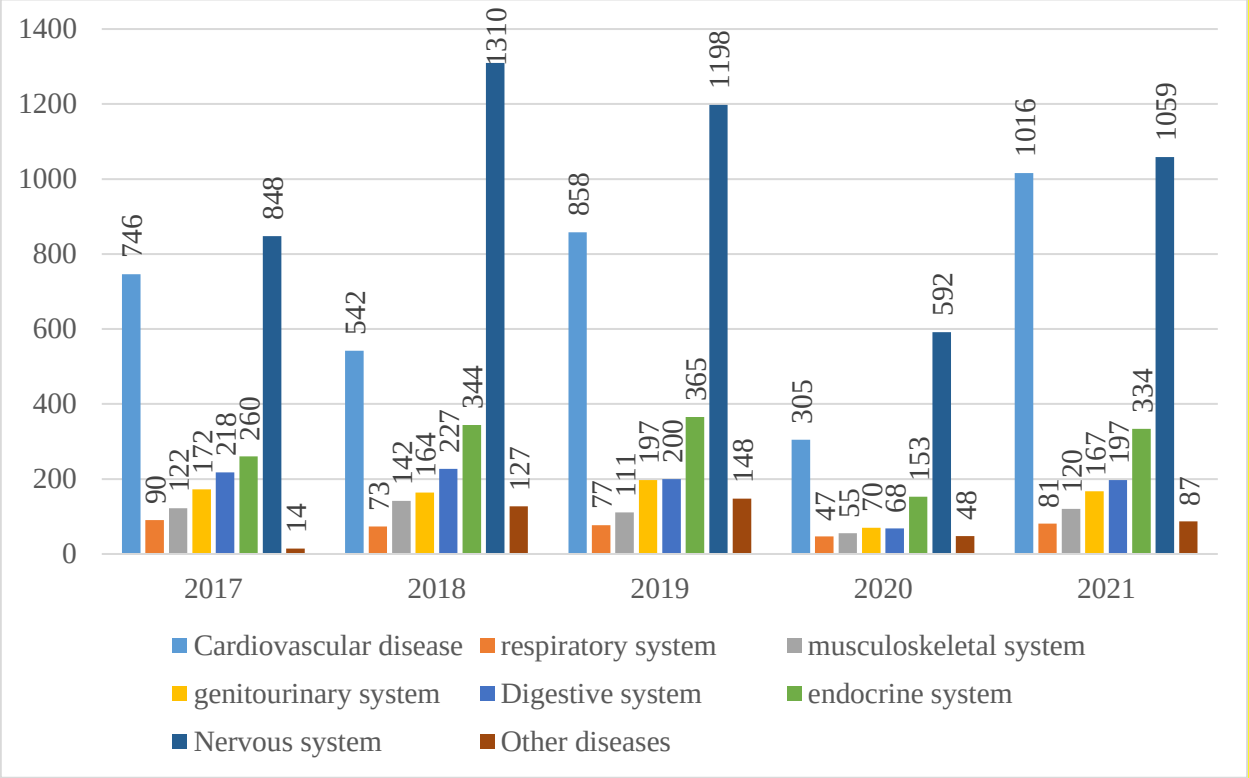


Fig. 2. Incidence of organ system pathologies among internal affairs officers in 2017-2021, n = 13080

A study of the incidence structure for various organ systems in the period from 2017 to 2021 revealed dynamic trends in the study population. Cardiovascular disease incidence has shown significant fluctuations, peaking at 1,016 cases in 2021, indicating a significant burden on cardiovascular health. Respiratory-related illnesses remained relatively stable, with a slight increase in 2021, indicating a persistent but not dramatic impact on respiratory health. The incidence of musculoskeletal problems showed moderate fluctuations but remained generally stable, indicating a consistent but not alarming prevalence of musculoskeletal problems. A significant increase in genitourinary system diseases was observed in 2019, followed by a decrease in subsequent years, reflecting specific trends in the health of this organ system. The incidence of digestive system-related diseases fluctuated, peaking in 2017 and gradually declining in subsequent years, suggesting variable impacts on digestive health over time. The endocrine system showed fluctuations, with a significant increase in 2018 and a subsequent decrease in 2020, indicating specific health problems in this system during these years. Nervous system-related morbidity peaked in 2018 and fluctuated in subsequent years, maintaining relatively high levels, indicating a significant and persistent impact on nervous system health. The category, which includes a variety of diseases, showed varying rates over the years, with a notable increase in 2018. In conclusion, it should be noted that the obtained

SJIF Impact Factor (2025): 8.688| ISI I.F. Value: 1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 10 | Issue: 3 | March 2025 - Peer Reviewed Journal

results provide valuable information on the dynamics of the health status of the observed population, which contributes to the assessment of the health status and the distribution of resources.

CONCLUSION

The results of the correlation analysis further support the idea that medical activity and the propensity to seek medical care coincide with the increase in morbidity. Based on the results obtained, we recommend hospitalization for diseases associated with occupational disability. This method improves the accuracy of estimating economic losses due to temporary disability and reduces these losses, but at the same time increases the burden on the resource-intensive inpatient health care sector.

REFERENCE

1. *Mukhin N.A. et al. Occupational diseases // M.: Geotar-media. - 2013.*
2. *Bobrovik A. P., Medvedev I. V. Manifestations of occupational diseases in older employees of the Internal Affairs Directorate and means of their prevention // Physical culture and sports in the post-industrial era: problems and solutions. - 2019. - P. 25-28.*
3. *Azarov D. N. Physical training of employees of the internal affairs bodies of the Russian Federation at the present stage // Improving the physical training of law enforcement officers. - 2016. - P. 9-12.*
4. *Shogenov A. G., Elgarov A. A. Features of professional activities of employees of internal affairs bodies and major cardiovascular diseases // Preventive Medicine. - 2010. - V. 13. - No. 2. - P. 9-14.*
5. *Shapoval V. A. Professional health of employees of internal affairs bodies: new methodological approaches to diagnostics and forecasting // Bulletin of the St. Petersburg University of the Ministry of Internal Affairs of Russia. - 2006. - No. 2. - P. 344-352.*
6. *Correction of asthenic syndrome against the background of taking succinic acid preparations./Stetsura Ya.A., Sholomov I.I., Shchukovsky N.V., et al.//Bulletin of medical Internet conferences. 2015. Vol. 5. No. 4. P. 265.*
7. *Pain, apathy, fatigue and tiredness in patients with neurological and therapeutic profiles in hospital. / Akhmadeeva L.R., Kutlubaev M.A., Shamsiyarova L.I., et al. // Russian journal of pain. 2013. No. 1 (38). P. 71.*
8. *Davydov A.V. Driver fatigue as an indicator of a specialist's performance.// Almanac of the Perm Military Institute of the National Guard Troops. 2021. No. 4 (4). P. 442-448.*
9. *Enikeev R.V., Rybalkina A.L. Methodology for managing fatigue of engineering and technical personnel.//XXI century: results of the past and problems of the present plus. 2020. Vol. 9. No. 3 (51). P. 132-137*