

# The state of the problem, causes, preventive actions on the use of psychoactive substances in Ukraine (results of doctors' survey)

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## Abstract

**Aim:** To examine the status of a problem of the use of psychoactive substances in Ukraine, causes and preventive actions by interviewing doctors.

**Materials and methods:** To reach the goal in 2016-2018, we questioned 198 doctors who attended the certification training at the Lviv National Medical University after Danylo Halytsky. Two types of statistical analysis methods were used: a description of the study and an explanation of the obtained facts (establishing links between the types of answers and the assessment of these relationships). The results were compared using the  $\chi^2$  method. All the primary data from questionnaires which are eligible to process were submitted to the relevant statistical tables and were built and processed in the Microsoft Excel.

**Results:** The main reasons of high level of the use of psychoactive substances in Ukraine are socio-economic conditions of living and a way of life. The most common in the structure of the use of psychoactive substances in the population of Ukraine are alcohol, low-alcohol beverages, energy drinks and tobacco. According to respondents, the leading role in providing medical care to people who use psychoactive substances should be held by specialized medical institutions (or preventive workrooms) and clinics of family medicine. Firstly, a decline in the substance use in Ukraine can be achieved through the increase of

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the number of preventive actions in schools, the creation of state rehabilitation institutions for addicts and the improvement of health care institutions financing. The direct task of medical workers is to improve the quality of medical care for the population.

**Conclusions:** Conducting surveys is good for increasing the knowledge of respondents on various issues, in this case – on the status of the system which prevents the use of psychoactive substances. In Ukraine, there is an urgent need to improve an approach to prevent addictions among the population, including young people.

## Introduction

The attitude to your health is a prime aspect of healthy and successful life. However, in the hierarchy of the needs of the population, health is not on the first place, although it should have become the first need. In many cases, a person can independently change the state of his health for the better. The norm of life – is an important component of culture, which has a positive effect on the formation of health and determined by our mind. Youth is the most vulnerable in terms of health. The problem of youth health is a key to a number of factors. Youth are the main reserve and a significant part of the country's labor reserves. This is a dynamically developing age group, but the conditions for this are far from the most favorable [1-4].

One of the most important medical and social problems in Ukraine and in other countries is the psychoactive substances (PAS) addiction, including drinking alcohol and smoking tobacco [5-9]. In Ukraine, narcotization encompassed all regions, which led to a decrease in the quality of life and violation of moral values. The massive abuse of PAS leads to an increase in the number of poisonings, injuries, violence, and all kinds of crime. Attention is accenting to the fact that drug use and alcohol abuse are most prevalent among young people, including adolescents and children. This significantly affects the formation of an individual, his interests, social status, etc. The constant psychological tension and uncertainty in the future requires young people to mobilize all the forces to adapt to new environmental conditions, studying, high mental load, accompanied by hypodynamia, intensification of educational process,

weakening the attention to physical development, deterioration of nutrition and other negative factors [10-12].

This situation requires constant attention to these issues from medical workers. In the context of reforming the healthcare system of Ukraine, the need for highly skilled, competent specialists – managers, heads of treatment and prevention institutions is extremely high, which requires the improvement of medical education in general, from pre-graduate, through graduate to post-graduate, in various forms of educational institutions [13]. At the same time, for obtaining scientific knowledge about medical and social objects, often are used logically consistent methodological, methodical and organizational-technical procedures or sociological research [14,15], which has been realized by us to achieve the goal of this study.

The purpose of the study – To examine the status of a problem of the use of psychoactive substances in Ukraine, causes and preventive actions by interviewing doctors.

## Materials and methods

To reach the goal in 2016-2018, we questioned 198 doctors who attended the certification training at the Lviv National Medical University after Danylo Halytsky. Two types of statistical analysis methods were used: a description of the study and an explanation of the obtained facts (establishing links between the types of answers and the assessment of these relationships). The results were compared using the  $\chi^2$  method. All the primary data from questionnaires which

are eligible to process were submitted to the relevant statistical tables and were built and processed in the Microsoft Excel.

## Results

In the process of creating a sociological survey map on a system for PAS abuse prevention, we tried to include the most important issues that addressed the problem quite enough, according to the research objectives. We have identified three main components, namely: status of the problem, causes of the problem, actions to resolve the problem.

198 respondents were surveyed. The respondents divide into three groups. 39.4% – heads of healthcare institutions at all levels of healthcare provision (first group). 42.4% – deputy heads of healthcare institutions, including those from medical work, from outpatient work, from examinations of temporary disability (second group). The third group consisted of statistic doctors, methodologists and personnel reserve for positions in the specialty “Organization and management of healthcare” – 18.2%. Of the respondents, 35.9% live in the regional center, 53.0% in the district center and urban settlements and 11.1% – in rural areas. The place of work distribution was as follows: regional medical institution – 33.3%, central district, county, city hospital – 55.6% and a district hospital or medical outpatient clinic – 11.1%.

Work experience in health care – 105 people (53.0%) – more than 30 years, 55 (27.8%) – from 20 to 30 years, 34 (17.2%) from 10 to 20 years, the remaining 4 people (2.0%) had a work experience of up to 10 years.

The component “status of a problem” is extremely important from the point of the basic level of knowledge of healthcare organizers that have to use integral indicators in the management process; demonstrate the practical application of a methodology for analyzing the process of achievement of the ultimate goals of health policy; to investigate the problem, interpretate the obtained results, conclude; to develop a strategic plan of an institution, to have a method of strategic planning; have methods of estimation and provision of extraordinary situations in

their management practice; guaranteeing system interaction with local authorities and public organizations, related medical institutions.

Among three surveyed groups  $26.52 \pm 2.50\%$  expresses the opinion that the status of the PAS abuse prevention system in Ukraine depends on the level of awareness of citizens and their willingness to cooperate and to  $24.60 \pm 2.43\%$  – level of morbidity and prevalence of addicted persons ( $p < 0.05$ ).

Respondents' assessment of general trends in PAS abuse in the world today is as follows: the prevalence tends to increase in the whole world –  $65.38 \pm 3.30\%$ ; growing in low-developed countries –  $16.35 \pm 2.5\%$ ; there is a rapid growth –  $13.46 \pm 2.37\%$ .

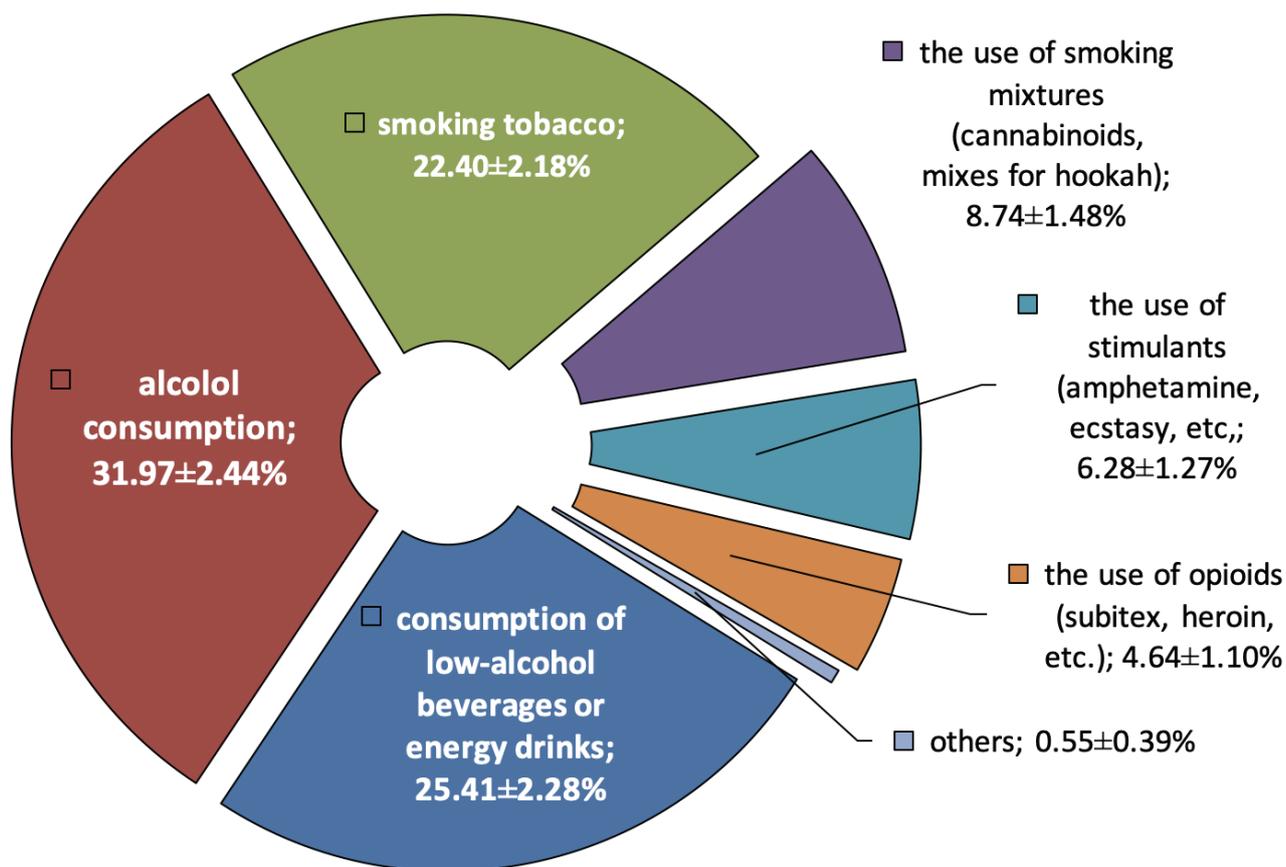
Of the total number of interviewed  $86.36 \pm 2.44\%$  stated that the use of psychoactive substances tends to rise among the population of Ukraine today ( $p < 0.01$ ).

The most common in the structure of PAS using in Ukraine, respondents indicated: drinking alcohol –  $31.97 \pm 2.4\%$ , alcoholic beverages or energy drinks –  $25.41 \pm 2.28\%$  and smoking tobacco –  $22.40 \pm 2.18\%$  ( $p < 0.01$ ) (fig. 1).

Regarding to the level of the use of psychoactive substances by gender of addicts, all respondents find it higher among men than women. Regarding the place of residence, the opinion of the respondents was as follows:  $78.49 \pm 3.13\%$  of respondents believe that it is higher in cities, while  $21.51 \pm 3.13\%$  of respondents believe that it is higher in the villages.

$45.04 \pm 4.35\%$  of respondents don't see the difference in the residence-dependent rates, at the same time,  $51.91 \pm 4.37\%$  of them have stated that the highest level is in the Eastern ( $16.79 \pm 3.27\%$ ), Southern ( $6.87 \pm 2.21\%$ ), or South-Eastern ( $15.27 \pm 3.14\%$ ) regions.

The component “causes of a problem” is very important from the point of the ability of healthcare managers to evaluate it and use the principle of optimality; to be able to use a methodology for analyzing cost-effectiveness in the process of providing medical services; to reproduce the system of quality management of medical care, to define the main levels of the medical care quality management and methods of their assessment; to develop a strategy and methods on formation of a healthy lifestyle, improvement of



**Fig. 1.**

Structure of the distribution of psychoactive substances (according to the survey of doctors)

the external environment, improvement of the quality of medical care; use statistical techniques.

The respondents stated that the main reason for the high PAS abuse in Ukraine is socio-economic living conditions of the population ( $7.88 \pm 0.23$  points on a 10-point scale,  $p < 0.01$ ) and lifestyle ( $7.02 \pm 0.24$  points,  $p < 0.01$ ).

In opinion of the surveyed physicians, the high level of PAS abuse in Ukraine is caused by economic factors ( $7.34 \pm 0.24$  points on a 10-point scale) and inaction at the national level ( $7.31 \pm 0.25$  points). As another leading cause, respondents consider social and psychological factors ( $6.95 \pm 0.27$  points).

In opinion of respondents, the leading role in providing medical care to the people, who abuse psychoactive substances, should be played by specialized medical institutions (or preventive workrooms) – 22.52% and 1.88%, and outpatient clinics of family medicine –  $22.31 \pm 1.88\%$ . In  $14.81 \pm 1.60\%$

and  $14.40 \pm 1.58\%$ , respectively, public health centers or regular health centers have to be the leading health care institution. Only in  $2.43 \pm 0.69\%$ , the preference is given to private institutions. The development of private medicine in Ukraine is at its early stage, especially in terms of preventive work organization.

The respondents of the healthcare system assessment shows that the lack of state rehabilitation institutions for addicted persons ( $6.49 \pm 0.26$  points), low level of preventive actions ( $6.22 \pm 0.23$  points), insufficient level of medical care ( $5.82 \pm 0.27$  points) and late application for medical assistance ( $5.63 \pm 0.25$  points) are determinative in terms of the PAS abuse level increase. Respondents from all three groups of physicians expressed that opinion. According to respondents, the prevalence of the use of PAS in Ukraine increased because of the increase of number of people suffering from AIDS ( $5.20 \pm 0.26$  points) and the

actual cessation of the medical examination of the population ( $5.13 \pm 0.23$  points).

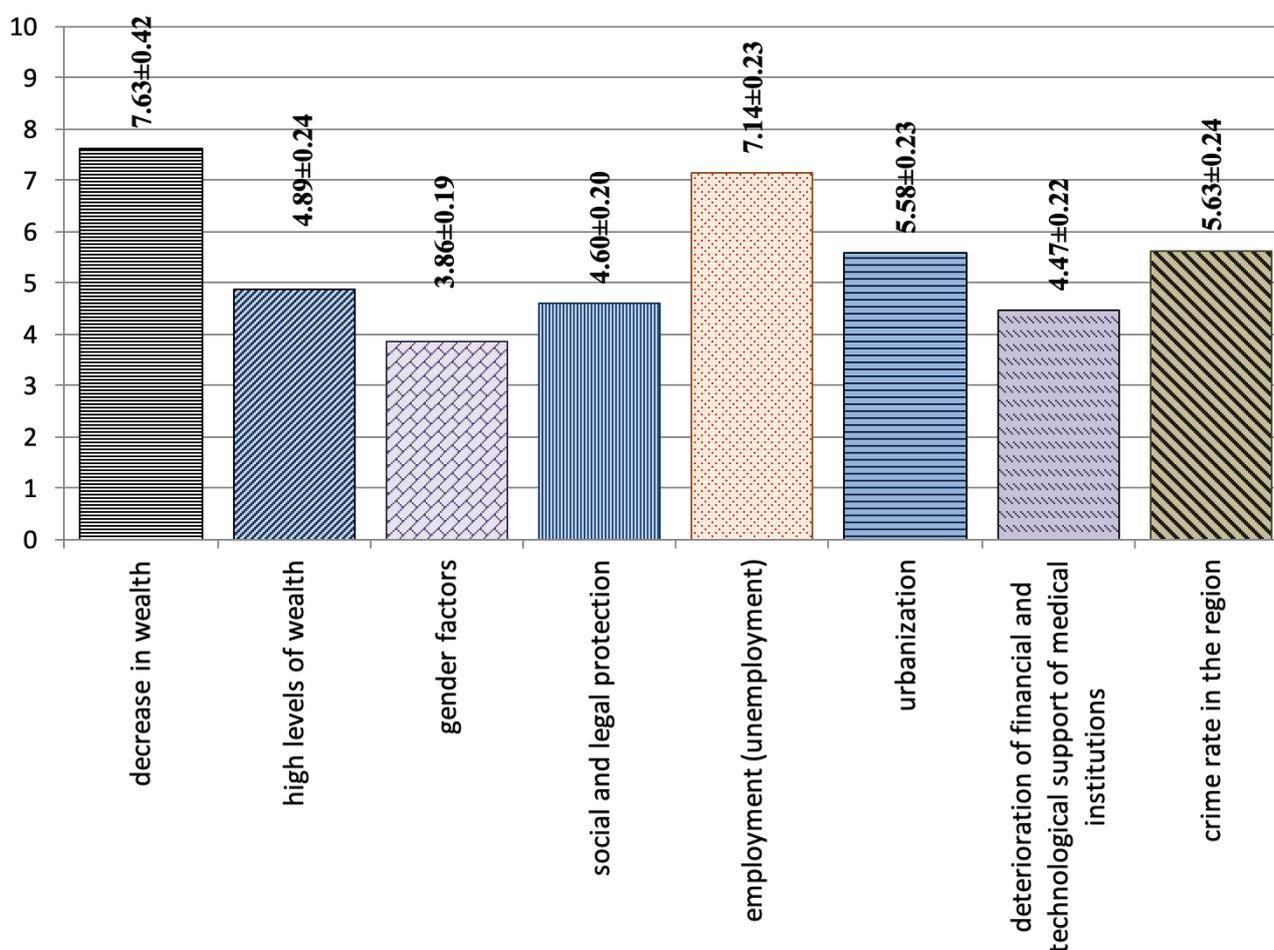
The structure of social and economic factors that contributed to the growth of the using of PAS in youth is as follows: the deteriorating financial condition of the population ( $7.63 \pm 0.42$  points, a 10 point scale,  $p < 0.05$ ) employment / unemployment of the population ( $7.14 \pm 0.23$  points,  $p < 0.05$ ), crime rate in the region ( $5.63 \pm 0.24$  points), urbanization ( $5.58 \pm 0.23$  points) (fig. 2).

According to doctors, the first rank is given to communicating with people who use these substances ( $7.16 \pm 0.25$  points 10-point rating scales;  $p < 0.05$ ) when determining the ranking of the characteristics of lifestyle that affects the growth of the use of PAS among youth. Relationships, stresses in families took second ranking position ( $6.83 \pm 0.21$ ;  $p < 0.05$ ). Third position – psychological peculiarities of an individual

( $6.55 \pm 0.25$  points;  $p < 0.05$ ). Lack of physical activity and loneliness were estimated by respondents more than 5 points and received respectively:  $5.83 \pm 0.23$  and  $5.71 \pm 0.23$  points.

While evaluating pathological conditions and the potency of addiction forming, the interviewed indicated a greater possibility of forming PAS addiction (when used for therapeutic purposes) in patients with mental and behavioral disorders ( $40.74 \pm 3.25\%$ ) and in cancer patients ( $34.01 \pm 3.14\%$ ).

The “preventive actions” component provides an opportunity to assess the level of healthcare organizers ability to use the methodology of system analysis in management based on the use of methods for involving responsible and concerned people in solving current management and decision-making problems; the bases of the current legislation in the field of healthcare; the ability to organize the work



**Fig. 2.**

The structure of socio-economic factors that contribute to the increase in the level of using of psychoactive substances among young people (according to the survey of doctors)

of management personnel in a team as a modern organizational structure, to determine the methods of its work; demonstrate the practical application of the methodology for analyzing the achievement of the ultimate goals of public health policy.

According to physicians – specialists in the organization and management of healthcare, to reduce the level of abuse psychoactive substances in Ukraine we have to: firstly, increase the number of preventive actions in schools ( $29.06 \pm 1.97\%$ ), secondly, begin creating public rehabilitation institutions for addicts ( $27.36 \pm 1.94\%$ ), thirdly, improve funding healthcare institutions ( $14.15 \pm 1.51\%$ ), to widely implement and control the implementation of state and inter-sectoral programs ( $11.51 \pm 1.39\%$ ) and to introduce compulsory social health insurance ( $10.38 \pm 1.32\%$ ). Doctors consider the improvement of the health care quality as an urgent task ( $7.55 \pm 1.15\%$ ).

Among the proposals that the surveyed have expressed regarding the reduce of the prevalence of the use of PAS there are: spreading prevention information through the media, developing a national concept of counteracting the use of PAS and youth involvement to its implementation, providing the implementation of state programs and their financing, providing jobs (elimination of unemployment), focusing more on youth free time, to motivate young people to maintain an active lifestyle, to spread sports, propaganda and active state support of a healthy lifestyle, etc.

## Discussion

The survey of physicians – organizers of health care, showed their interest in the questions asked by the survey and revealed a number of features in their assessment of the status and reasons of the use of PAS. Thus, respondents noted that this problem caused by low level of citizens' awareness and readiness for cooperation, as well as significant morbidity and prevalence of pathologies among the addicted. In Ukraine, just like in the whole world, the prevalence of using psychoactive substances has a tendency to

grow [16-19]. The most common PAS in Ukraine list include alcohol, then, according to doctors, low-alcohol beverages are getting more popular and tobacco smoking is a significant part of it as well [20-22].

The main reasons for the increase in the PAS consumption are: socio-economic conditions of population and lifestyle: there is a deterioration of the wealth of the population, unemployment and crime are increasing, and urbanization is taking place – the importance of cities is increasing in terms of society development. Factors that affect the growth of the prevalence of PAS: communication with people who use PAS, love relationships / stress in families, individual psychological features, physical inactivity and loneliness, which is especially clearly observed among the youth [23-25].

Specialized medical facilities or preventive workrooms should play the main role in the organization of medical care to the people who use PAS and such an assistance should be carried at the primary level – in contact with the family doctor [26,27]. In Ukraine, because of the absence of state rehabilitation centers for the addicted, considerable attention should be paid to increasing preventive actions, including those in educational institutions [28].

## Conclusions

1. Unstoppable growth of drug addiction and alcohol abuse in Ukraine demonstrates the need for intensive developing and testing of new modern concepts, which are in the needs of the changed social environment.
2. To reduce the use of psychoactive substances, it is necessary to increase the number of preventive actions in educational institutions, to start the creation of state rehabilitation institutions for the addicted and to improve the financing of health facilities.
3. Conducting a survey is good for raising the level of knowledge of respondents on a number of issues, in our case – on the status, causes of the spread and prevention of the use of PAS.

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