Original Article

Student Youth Health Culture in System Managing the Quality of Higher Education

Krychkovska Aelita1*, Zayarnyuk Natalia1, Konechna Roksolana1, Khomenko Olena2

¹Department of Technology of Biologically Active Substances, Pharmacy and Biotechnology, Lviv Polytechnic National University, Lviv 79013, Ukraine. ²Department of Pharmaceutical Chemistry, Pharmacognosy, and Botany with Resource Studies of Medicinal Plants, Lviv Medical University, Lviv 79018, Ukraine.

Abstract

In the present paper we considered and substantiated necessity monitoring health status of student youth and maintained a healthy lifestyle within quality management systems educational process institution of higher education on the example Lviv Polytechnic National University. It has been established that the quality of education is affected by various factors, but the greatest risks and threats to the education of higher education students are related to their health. The performed meta-analysis and statistical sources analyzed the relatively general health of young people in Ukraine. The questionnaire which consisted of separate blocks, concerning such bad habits like smoking, drug addiction, alcohol consumption, contraceptive issues, sports, healthy lifestyle, vaccinations, etc. was processed. The processed results presented in this study, indicate the need to promote a healthy lifestyle and monitoring of the student youth environment, which often forms a tendency to bad habits. A meta-analysis of a new bad habit - internet addiction, which may be formed especially actively in connection with the Covid-19 pandemic was conducted and the need for online learning in higher education was investigated. For students a questionnaire was developed on their use of internet resources in the process of study and recreation, and a survey was conducted. According to the survey results, reasonable recommendations are provided on the need to give advice to students on the proper use of internet resources.

Keywords: Education quality, Healthy lifestyle, Addictions, Dependence

INTRODUCTION

In 2009, a higher Quality Management System (QMS) was introduced in higher education institutions. Higher Education Institutions (HEIs) of Ukraine, are based on normative legal acts and developed standards and allow to constantly monitor the provision of educational services [1-5]. The introduction of a QMS in the Free Economic Zone allows to attract all resources and factors, and identify risks and conditions by which the goal of quality of educational services can be achieved, since the provision of educational services is the main task of the Free Economic Zone to educate and train professionals who will be competitive in the world market [5].

The QMS covers the following areas of higher education: pedagogical, scientific, educational, administrative, economic, financial, and information. The operation of a QMS is carried out by involving all staff [5]. Its guidelines regulate such elements of the educational process as educational and methodological environment, staff qualifications, training and motivation of students, financial support, and information services.

However, even with the successful implementation of all other elements of the QMS, the greatest risks are associated with the quality level of health of the contingent of freelance students [6, 7]. It should be noted that the health state of

student youth should be monitored upon admission to the Higher Education Institutions at the stage of entrants, during training and, if possible, after the internship, and graduate school. The state of health when choosing certain specialties is not regulated by departmental regulations and, with the introduction of inclusive education in Ukraine, all entrants are equal in their rights when entering the Free Economic Zone. But most medical specialties, especially specialty 226 «Pharmacy, Industrial Pharmacy» still need to have some guarantees about the health and lifestyle of future students [8].

Address for correspondence: Krychkovska Aelita, Department of Technology of Biologically Active Substances, Pharmacy and Biotechnology, Lviv Polytechnic National University, Lviv 79013, Ukraine. aelita.m.krychkovska@lpnu.ua

This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 License, which allows others to remix, tweak, and build upon the work non commercially, as long as the author is credited and the new creations are licensed under the identical terms.

How to cite this article: Aelita K, Natalia Z, Roksolana K, Olena K. Student Youth Health Culture in System Managing the Quality of Higher Education. Arch Pharm Pract. 2021;12(2):86-93. https://doi.org/10.51847/48jgaY6s4L

It should also be noted that with the beginning of active quarantine restrictions in March 2020, according to UNESCO Director-General Audrey Azulai, due to the COVID-19 pandemic, more than 1.5 billion pupils and students in 165 countries are unable to attend classes due to the educational institutions closing. The introduction of quarantine has changed the lives of each of us and has had a particular impact on educational institutions, forcing us to adapt to new conditions for the provision of educational services. New educational technologies are based on the use of Internet technologies and the active use of personal computers and other modern electronic devices, gadgets, which in turn also in some way affect the health of student youth.

MATERIALS AND METHODS

The purpose of our work was to study the culture of health and lifestyle of student youth, which was conducted in the framework of the QMS at Lviv Polytechnic National University, as well as to monitor changes in the current pandemic COVID-19 training on the quality of life of freelance students.

Section 1. QMS of the educational process of Institution Higher Education (IHE) and monitoring of the idea of a healthy lifestyle of student youth. At the Lviv Polytechnic National University (University) QMS was introduced in 2018. Documentation was also developed, covering the necessary processes for the functioning of this system and prescribing their interaction, in accordance with the requirements of standard International Organization for Standardization (ISO) 9001 and National Standards of Ukraine (DSTU) of standard International Organization for Standardization (ISO) 9001. The QMS at the University is kept up to date and constantly improved. The management has identified the processes required for the effective functioning of the QMS and its application within the University. The list of OMS documents of the University, the processes described in them, and the relevant paragraphs of standard International Organization for Standardization (ISO) 9001 and National Standards of Ukraine (DSTU) of standard International Organization for Standardization (ISO) 9001; storage and relevance of documented information are performed in accordance with the Regulations «Management of documented information». The University management is responsible implementation, operation, and improvement of the QMS and effective management of its processes [9-11].

The University has developed the Regulation «Risk Management», following the current regulations [9], which establishes the rules and procedures for risk management: defines the procedure for identifying, analyzing and assessing risks, measures to eliminate them and their causes to prevent further repetition, as well as documentation of the results. This Regulation is developed in accordance with the requirements of paragraph 6.1 of standard International Organization for Standardization (ISO) 9001 and National

Standards of Ukraine (DSTU) of standard International Organization for Standardization (ISO) 9001 and paragraph 6.1 of the Regulation «On the Quality Management System» 2018м [10, 12].

Following this Regulation, to identify risks and threats to the student youth of the Free Economic Zone, we conducted field and office research of the students' ideas about a healthy lifestyle.

RESULTS AND DISCUSSION

In the first stage of the study, we conducted a meta-analysis and developed statistical sources on the general health of young people in Ukraine [10-13]. In this study, special attention was paid to bad habits, such as alcohol use, smoking, drugs, and other addictions. According to the data obtained, half of Ukrainian youth (52.3%) aged 15-17 smoked tobacco at least once in their lives. 12.2% of students (18.2% of boys and 6.7% of girls) smoke every day, most often teenagers aged 15, which can be defined as the age of formation of the habit of using tobacco products. Important factors that determine smoking trends are the availability of cigarettes and the perception of smoking risks. Every fifth student states that s/he has unimpeded access to cigarettes. Among all respondents, only 18.4% believe that smoking poses a high risk of adverse health effects [3, 10, 13].

According to statistics, an average of 83.4% of students drank alcohol at least once in their lifetime. At the age of 15 this figure is 78.4% and at the age of 16-17 almost 85% [14-16].

Perceptions of the risks of alcohol use also largely determine the practice and level of alcohol use among young people. The results show that less than half of students believe that daily alcohol consumption poses a high health risk [12, 13]. Regarding drug use, 11.3% of adolescents reported that they had used drugs at least once in their lives, of which boys accounted for 15.4% and girls for 7.9%. The level of drug use other than marijuana is much lower: 3.6% of young people, of whom 4.6% are boys and 2.9% are girls. The analysis of drug use rates among adolescents aged 15-16 shows a positive trend in the dynamics: after a period of growth from 1995 to 2003 [12, 14-16].

There are significant differences in the level of use of several substances depending on the type of educational institution: college students account for the largest share among those who combine the use of psychoactive substances - 8.9%, while students of free education are 5.9% schools - only 2.7% [13, 17]. Today, such a problem as internet addiction is also gaining relevance. Statistics show that only 8.4% of young people do not have this addiction, and 10.6% have a strong addiction [12, 13, 18].

In the second stage of the study, we developed a questionnaire (**Figure 1**) for students of 3rd, 4th, and 5th-year specialties 226

«Pharmacy, Industrial Pharmacy» in the branch of knowledge 22 «Health care».

Questionnaire Student surveys are conducted to determine the level of knowledge of young people in higher education about the culture of health of modern man The culture of modern human healthquestion Answer question Student's age to 20 other urban Secondary school where you studied (urban, rural) rural Work experience before studying at the University Yes No Currently living (dormitory, apartment, with parents) Do you smoke? From what age? Do your friends and relatives smoke in your immediate environment? Yes б Νo Yes Νo Do you use drugs? Do your friends and relatives use drugs in your immediate environment? Yes Νo Have you been offered to try drugs? Yes Νo 10 Have you had any surgeries that used narcotics, painkillers, sleeping pills? If so, Yes Νo specify which Yes 11 Do you have a sexual experience? If so, indicate which contraceptives you use Νo 12 Indicate whether you use contraceptives only to prevent unwanted pregnancies. Yes Νo If you use condoms for another purpose, indicate exactly why Yes 13 Νo Do you drink alcohol? If Yes, indicate the regularity of 14 Yes Νo 15 At what age did you first try alcohol? Indicate whether you were vaccinated as a child according to the general schedule 16 Not decided of vaccinations? 17 Are you planning to vaccinate your future children? Yes Νo Not decided Do you do sports? If so, indicate exactly which 18 Yes Νo Other Do you follow a healthy diet? 19 Yes Νo Which products, in your opinion, do not belong to a healthy diet? List Part for processing the questionnaire (to be filled in by the person performing the data analysis) 10 11 12 13 14 15 16 17 18 19

Figure 1. Questionnaire Form for Determining the Level of Knowledge of Young People in Institution Higher Education (IHE) on the Health Culture of Modern Man

However, the survey was conducted at the Lviv Polytechnic National University for students of various specialties. During the processing of the questionnaire, a standard passport part was created, and the questions were composed of separate blocks, which concerned: smoking, drug addiction, contraception, alcohol use, sports, and a healthy lifestyle, etc.

As a result of the survey, 216 students of the Lviv Polytechnic National University were interviewed anonymously. The sample of surveyed respondents is representative and in

several indicators corresponds to the average data of the student youth of the University: age, sex, place of residence, and more.

Elaboration of students' answers allowed obtaining the following results: 90% - young people under 20, before joining institution higher education (IHE) worked 16%. The distribution by place of residence is presented in the diagram (**Figure 2**).

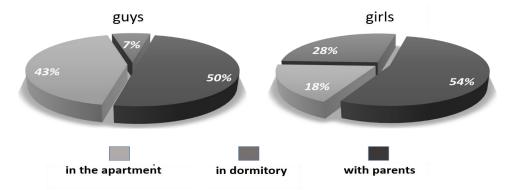


Figure 2. Division at the Place of Residence Surveyed Respondents by Gender

Statistical data analysis regarding smoking, alcohol consumption, and drugs is shown in **Figure 3** and **Figure 4**.

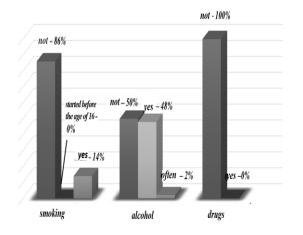


Figure 3. Distribution of Surveyed Female Respondents concerning Smoking, Alcohol Consumption, and Drugs

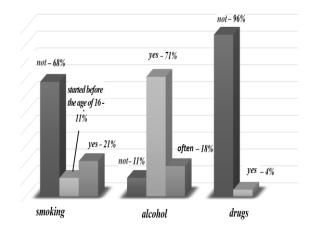


Figure 4. Distribution of Surveyed Respondent's Men on Smoking, Alcohol Consumption, and Drugs

The results of respondents' answers on question surveys, which are not direct, but concerned the problems of smoking, alcohol consumption, and drugs are indirectly represented in the diagram (**Figure 5**).

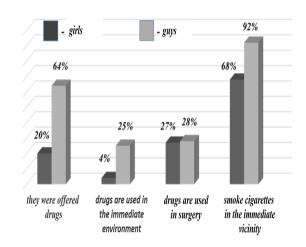


Figure 5. Distribution of Respondents' Answers on Indirect Questionnaire Questions regarding Smoking, Alcohol Consumption, and Drugs

The results of the survey of respondents on the presence of sexual experience are as follows: 47% of respondents answered in the affirmative, 42% objected, and 11% did not answer the question; 50% of men use condoms, half of them - to prevent unwanted pregnancies, the rest - to prevent sexually transmitted diseases. Among women, 32% use condoms to prevent pregnancy, 39% - to prevent disease, 6% - use other means to prevent unwanted pregnancies.

About half of the students play sports regularly and, in their opinion, follow a healthy diet and lifestyle. The diagram shows the food that modern youth classifies as harmful (**Figure 6**).

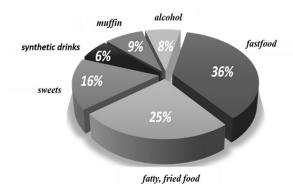


Figure 6. Distribution of Respondents' Answers to Harmful Foods

A separate survey of university students was conducted to identify the risk of internet addiction. The questions of the questionnaire concerned the time they spend in the online learning environment, as well as their perceptions and wishes regarding the learning virtual environment (VNS) developed at the Lviv Polytechnic National University. 84% of respondents have experience in using external internet resources in education, while access to computer equipment is 95%. 5% of respondents did not visit the ANS at all. Of those who attended the virtual environment (VNS): the presented electronic disciplines were used in teaching completely 78%, 5-6 disciplines - 16%, 1-4 disciplines - 6%; materials for preparation for practical and laboratory classes - 100%; for independent work - 97%; participated in webinars - 30%; were tested - 100%. Thus, students use the internet resource to search for interesting information - 33%, for communication with friends - 40%, for training - 26%.

Continuous improvement of the QMS in higher education and its impact on the quality of training should be a strategic priority of a modern higher education institution, which includes the quality implementation of educational programs. Among the activities that have a direct impact on the quality of educational activities of participants in the educational process are, among many others, educational, which contribute to the cultivation of a healthy lifestyle, the formation of intellectual, moral, and cultural personal qualities in young people.

Much higher rates for smoking and low alcohol use are higher for males, while for females they are much lower and there is no craving for drugs at all [4, 19, 20]. Taking into account the influence of the environment, it is necessary to actively promote a healthy lifestyle among students through educational talks, cultural events, and sports events, because this is an effective and economically feasible strategy aimed at providing domestic enterprises and institutions with highly qualified, healthy professionals in particular, and for the health of the nation in general.

Section 2. Internet addiction is one of the common bad habits and socially dangerous diseases among young people.

One of the important tasks of society is to educate a physically, morally, socially, and spiritually healthy person. In the last 5 years alone, the number of young students classified as special medical groups has increased by 41%. However, human health depends on 20% of heredity, 10% on the level of medical development, 20% on the environment, and 50% on lifestyle [1, 21]. The influence of a healthy lifestyle as a norm of behavior is gaining momentum in society. However, over the last decade, the internet has become an even more pernicious internet addiction which includes gambling. Unlike other destructive passions, internet addiction is more difficult to diagnose and is not realized by man or the immediate environment, because, at first glance, it does not violate the perception of a healthy lifestyle [2, 19, 22].

It is often perceived as a manifestation of workaholism. It is a mental disorder in which a person has an obsessive desire to connect to the internet and a painful inability to disconnect from it on time. Currently, the phenomenon of internet dependence - the syndrome of internet addiction - is being intensively discussed and studied. We were to determine the place of internet addiction among other addictive disorders, to consider the peculiarities of its formation in student youth, and to outline the way to limit this dependence during the pedagogical process.

Internet addiction has been regarded as a threat but it was only in 2008 that it was officially recognized as a disease. The definition of the disease and its diagnostic criteria were developed by the staff of the Beijing Central Military Hospital based on 1,300 «problematic» internet users. According to the diagnostic recommendations, a person who spends at least six hours a day online and who has had at least one of the symptoms of addiction during the previous three months is recognized. The first signs of FROM that is an irresistible desire to go online, the inability to control their time online, are mental or physical exhaustion, sleep disturbances or concentration, irritability, depression, nervousness, and difficulty in communicating with people in real life.

Physical symptoms are wrist pain due to prolonged muscle strain, dry eyes,; headache, back pain, irregular diet, neglect of personal hygiene, and sleep disorders. Psychological symptoms include feeling unwell or euphoric while working at the computer, inability to stop, and a constant increase in the amount of time spent on the internet.

Scientists distinguish the following stages: Stage I is a mild disorder. Stage II is increase in symptoms (impaired attention, decreased efficiency, obsessions, insomnia). Stage III is social maladaptation. In the risk group with internet addiction are children, adolescents, and young people (78%), women older than 45 years (57%), and men older than 30-35 years (32%). In Ukraine, the number of internet users is growing rapidly. Mind Factum Group study shows that 12.9

million Ukrainians (33%) use the internet once a month and more often, 11.8 million (30%) once a week and more often, 8.7 million (22 %) daily or almost daily [2, 3, 23].

However, the realities of today, namely the pandemic COVID-19 dictates the introduction into the educational process of distance learning, which is a high-tech product that uses the idea of lifelong learning, which explains its active spread around the world [1]. That is why distance education is often called the most promising area of education in general, a special pedagogical technology of the XXI century, based on open learning using modern capabilities of telecommunications: «student-teacher», «student-student», «student-information» in the information space. The main person of distance learning is a student.

At the same time, the internet space is characterized by specifics that can pose potential threats to the success of learning in it, namely identity violations, dependencies, problems with information security, deteriorating quality of communication and social life, the development of specific psychopathology.

COVID-19 forces the Free Economic Zone in Ukraine to implement innovative solutions in a relatively short time and to introduce distance learning using various web services, platforms, resources, and social networks.

The authors of several studies draw ambiguous conclusions about the advantages or disadvantages of online learning. Identification of the difficulties and benefits of implemented distance learning is uncertain since the reality has shown that not all free economic zones are technically prepared for distance learning. Students experience the shortcomings of the system due to the lack of live communication, the ability to retake missed practical and laboratory classes, increased tasks, lack of time to complete tasks, routine family affairs, limited access to a computer, lack of support for all family members. Teachers note the impossibility of individual counseling of students, increasing the time correspondence with students, as online courses provide a more detailed description of homework than usual in the classroom. At the same time, among the positive aspects of the use of distance learning, teachers and students note that the quality of distance education is not inferior to the quality of face-to-face learning.

Students note the development of discipline and selforganization, which makes it possible to receive education at a convenient time and place and equal access to education, regardless of the place of residence, health status, or social status. Teachers point to the renewed role of the teacher, who becomes a mentor-consultant, who coordinates the learning process, and constantly improving their courses and skills. The use of social networks in the educational process is because most of the time modern youth spend in social networks. Social networks can also be used to attract applicants. The advantages of using social networks are the speed of dissemination of the necessary information, the proximity of the audience, constant communication with the audience, free space for discussion, the deformation of the relationship «student-teacher».

At the third stage of the research, we developed another questionnaire for student youth to study IZ. It was designed in such a way that there were no direct questions about the student's time in the internet environment and concerned only their perception and wishes about the learning virtual environment, which was developed at the Lviv Polytechnic National University (VNS LP NU). Questionnaires were conducted for third and fourth-year students majoring in 226 «Pharmacy, Industrial Pharmacy». According to the questionnaire compiled by the teachers of the department, 70 students were interviewed and answered the following 15 questions:

1. Age of the student 2. Secondary educational institution where you studied (urban, rural) 3. Work experience before studying at the University 4. Experience of using Internet resources in teaching 5. Place of residence at the moment (dormitory, apartment, house) 6. Access to computer equipment (available, absent) 7. Are you registered with virtual environment VNS Lviv Polytechnic National University (VNS LP NU) as a student? 8. How many disciplines according to the workload are available in the VNS? 9. How many e-disciplines did you use in your studies at the VNS? 10. Have you used e-learning publications for learning? 11. Do you use the lecture materials presented at the VNS to prepare for practical and laboratory classes? 12. Have you participated in online seminars (webinars)? 13. Have you passed the computer tests offered at the VNS? 14. Do you use the internet - resource and virtual environment (VNS) for independent work, in the course work, calculation work, and abstract work? 15. In percentage (within 100%) indicate how often you use the internet resource: a) to search for information of interest to you; b) to communicate with friends; c) for training. As a result of the survey, the following results were obtained.

The surveyed group of students is homogeneous in age: out of 70 students, 65 people aged 19 years, 2, 18 years, and 3, 20 years. Secondary educational institution where students studied: 57% urban, 33% rural. Only one student had 1 year of work experience at NU LP. At the current place of residence (dormitory, apartment rented, at home), the student audience was divided accordingly: dormitory 76%, apartment rented 8%, home 16%. The experience of using internet resources in teaching was distributed as follows: 84% available, 16% absent. Access to computer equipment (available, missing) was distributed as follows: 95% available, 5% missing. The question of whether a student is registered at the virtual environment (VNS) of Lviv Polytechnic National University was given a 100% positive answer. 100% of students used the materials presented in VNS only to prepare for practical and laboratory classes. 92%

of students used «e-learning complexes» located in VNS for general study of disciplines.

All 100% of students passed the computer tests offered by the VNS. 97% of students used Internet resources and VNS to perform individual work, course projects, calculation and research work.

In terms of percentage, students more often use the Internet - a resource: a) to search for information of interest to them - 33%; b) for communication with friends - 40%; c) for training - 26%. Thus, the studied student sample is quite homogeneous in age, education, and length of service. Access to computer technology is satisfactory - 95% of the sample of students. Up to 70% of the sample of students work and use the resource in full, the rest uses it - not in full. From the data obtained from the survey of students, we can draw a clear conclusion that the vast majority of students are actively working with internet resources, using them for learning, and if you add the time that young people use to communicate with friends and search for interesting information talk about a certain level of internet addiction, which is not realized by the individual and society.

Our next task was to provide student audiences with advice on the proper use of internet resources. Among these tips were the following: do not go aimlessly on the internet; set time limits on the use of internet resources; try to understand your problem in time; it is necessary to look for classes in real life and real communication in society.

We also studied the differences between traditional and Internet Computer Technology (ICT) in terms of professional development proposals for higher education teachers (**Table 1**).

Of the advantages, as mentioned earlier, all active participants have a profile on the site, which is associated with other participants, with educational content, and with other add-ons and capabilities of educational platforms. For example, on Facebook, you can place a Widget about the upcoming webinar, through which you can register, and then go to the webinar, post information with the topics of classes, additionally post interesting articles with information on educational topics.

Table 1. Differences between Traditional and Internet Computer Technology (ICT) Proposals for Professional Development of Higher Education Teachers

Criteria differences	Traditional forms of professional development of teachers	Professional development of teachers with the help of ICT
time required for study	time conducting courses, seminars, master classes determined according to a schedule	offers professional development available around the clock
place of study	participants and consultants occur in a predetermined place	learning takes place anywhere where internet access or to the software
training offers	offers training are determined mainly according to the geographical region	training offers are available worldwide
structure teaching	mostly formal structure	training learning activities aimed at the consumer and provides conformity individual needs

IC is a relatively new type of bad habit, the effect of which on the human body is very similar to the effects experienced by drug addicts and alcoholics. The vast majority of students are not aware of their own progressive IC, respectively, the task of higher education teachers is to prevent its occurrence. However, at the current level of opportunities to use internet technologies, it is no longer possible to limit the learning of student audiences only to traditional methods. Teachers of higher education are faced with the task of ensuring balanced learning using both traditional and modern forms, and most importantly - to cultivate an activity approach. Distance learning today is one of the key areas of renewal of all parts of the educational system of Ukraine. To adapt to a prolonged pandemic, universities will need flexible and reliable models of education that will allow them to continuously adapt to different stages. COVID-19 has accelerated and intensified long-term pedagogical trends by creating a natural experiment in which numerous innovations are tested and

evaluated. The first signs suggest that many of the innovations used during the pandemic will be useful to students after the crisis.

CONCLUSION

- Quality management systems in higher education and their impact on the quality of training should be a strategic priority in modern institutions of higher education, which should promote a healthy lifestyle, formation in student youth intellectual, moral and cultural personal qualities.
- 2. Special attention should be addressed to the environment of young people, as research has shown what exactly the environment is actively addictive among students to such bad habits as smoking, alcoholism, drug addiction.
- 3. Quarantine restrictions are related to the COVID-19 pandemic encouraged to the introduction of distance learning, which for today is one of the main areas of

- update all parts of the educational system of Ukraine. On modern level opportunities to use internet technologies, already it is not possible to limit teaching student audience only by traditional methods, however, this provokes internet addiction.
- 4. Internet addiction is a relatively new type of bad habit, whose effect on the human body is very similar to influence, that feel on yourself, drug addicts, and alcoholics. The vast majority of students are not aware of their progressive internet addiction, respectively, teachers of higher education have a task to prevent its occurrence.
- 5. For the purpose of adaptation to pandemic universities we need flexible and reliable models of education, which will allow continuously adapt to different types of the educational process, and also allow to accelerate and activate long-term pedagogical tendencies on the introduction of internet technologies.
- 6. Institutions of higher education should actively promote Healthy Lifestyles among students through educational conversations, conducting cultural and mass and sports events, because it is an effective and cost-effective strategy, which aims to provide domestic enterprises with highly qualified, healthy professionals.

ACKNOWLEDGMENTS: None CONFLICT OF INTEREST: None FINANCIAL SUPPORT: None

ETHICS STATEMENT: All measures accomplished in this scientific trial containing human supporters remained in similarity through the ethical principles of the institutional advisory group.

REFERENCES

- National report for 2017 on the drug situation in Ukraine. [Internet]. Kyiv: Public Health Alliance International Charitable Foundation; 2017. [Quoted 2021 Tp. 04] 176 c. Available from: http://aph.org.ua/wp-content/uploads/2017/11/National-report-2017.pdf
- Matsoha T. Internet addiction of Ukrainian youth: the current state of the problem. Public. [Internet] 2017 Tp. [Quoted 2021 Tp. 04]. Available from: https://commons.com.ua/uk/internet-zalezhnist/
- Ministry of Social Policy. Information on the results of the study on the topic: "Smoking, alcohol and drug use among adolescents studying: prevalence and trends in Ukraine." [Internet] [updated 2016 September. 20; Quoted 2021 May. 04]. Available from: https://www.msp.gov.ua/news/10515.html?PrintVersion
- Zayarnyuk N, Krychkovska A, Fedorova O, Zhurahivska L, Palyukha A. Problems of nicotine addiction: the needs and the development of optimal medicines forms: Monographic series Promoting healthy lifestyle, Human health: realities and prospects, edited by N.V. Skotna V. Drohobych: Posvit, 2017:11-22.
- Shevchenko VV. Pedagogical conditions for the introduction of Internet technologies in the process of studying the disciplines of the information cycle Scientific journal NPU. S. 5: Pedagogical sciences: realities and prospects [Internet]. 2015; [Quoted 2021 Tp. 04]; 51:317-23. Available from: enpuir.npu.edu.ua/bitstream/123456789/.../Shevchenko.pdf.
- Hanawi SA, Saat NZ, Zulkafly M, Hazlenah H, Taibukahn NH, Yoganathan D, et al. Impact of a Healthy Lifestyle on the Psychological Well-being of University Students. Int J Pharm Res Allied Sci. 2020;9(2):1-7.

- Alsulami SA, Alqarni AM, Felemban DF, Alshawaf YY, Alsulami SK, Belal SH, et al. An overview of urinary tract infection diagnosis and management approach in primary health care centers: literature review. Pharmacophore. 2020;11(6):104-7.
- Shestera AA, Kijunova VY, Kiku PF, Kuzmina TN, Sturova EV. The characteristics of health condition of students of medical university. Probl Sotsialnoi Gig Zdravookhranenniiai Istor Med. 2020;28(3):400-4. doi:10.32687/0869-866x-2020-28-3-400-404
- SSU ISO 9001:2015 (ISO 9001:2015, IDT) Quality management systems. Requirements. Kyiv: SE «URTC»; 2016. 22 p.
- SSU ISO 19011:2012 (ISO 19011:2011, IDT) Guidelines for auditing management systems. Kyiv: SE «URTC»; 2013. 29 p.
- 11. Standards and recommendations for quality assurance in the European Higher Education Area (ESG). Kyiv: LLC «CS»; 2015. 32 p.
- SSU IEC/ISO 31010:2013 Risk management. Methods of general risk assessment. (IEC/ISO 31010:2009, IDT). Kyiv: SE «URTC»; 2015.74 c. BZ №12-2013/552.
- Brueva V. Adaptation of a higher education institution in terms of implementing a quality management system in accordance with the standard SSU ISO series 9001:2009 (on the example of the Ukrainian Engineering and Pedagogical Academy). Measuring Equipment and Metrology 2013. [Internet]. [Quoted 2021 May 04]; 74:163-8. Available from: http://ena.lp.edu.ua:8080/bitstream/ntb/24182/1/35-163-168.pdf
- 14. Report on the drug and alcohol situation in Ukraine for 2019 (according to 2018) [Quoted 2021 May 04]; 41 c. Available from: https://cmhmda.org.ua > uploads > 2020/03 > Zvit
- 15. MHU calculated the number of injecting drug users in Ukraine. Many young people already have a syndrome of dependence on these substances. TNS.ua [Quoted 2018 June 27; quoted 2021 May 04]. Available from: https://tsn.ua/zdorovya/moz-pidrahuvalo-skilki-v-ukrayini-in-yekciynih-narkomaniv-1177812.html
- 16. National report for 2017 on the drug situation in Ukraine (According to 2016. In-depth review of the drug situation in Ukraine for the European Monitoring Center for Drugs and Drug Addiction [Internet]. Kyiv. State Institution Ukrainian Monitoring and Medical Center for Drugs and Alcohol of the Ministry of Health of Ukraine; 2017 [quoted 2021 May 15]; 658 p. Available from: http://aph.org.ua/wp-content/uploads/2017/11/National-report-2017.pdf
- Kononets N, Zhamardiy V, Nestulya O, Nestulya S, Tsina V, Petrenko L, et al. Structural Components of Physical and Health-Improving Educational Activity of Student Youth in the Distance Educational Process. Int J Appl Exerc Physiol. 2021;10(2):87-94.
- Lenz AS. Evidence for relationships between hope, resilience, and mental health among youth. J Couns Dev. 2021;99(1):96-103.
- Saberi P, McCuistian C, Agnew E, Wootton AR, Legnitto Packard DA, Dawson-Rose C. Video-Counseling Intervention to Address HIV Care Engagement, Mental Health, and Substance Use Challenges: A Pilot Randomized Clinical Trial for Youth and Young Adults Living with HIV. Telemed Rep. 2021;2(1):14-25. doi:10.1089/tmr.2020.0014
- Yaroshyk M, Malanchyk H, Solovei A. Assessment of the state of emotional health of Ukrainian university student youth that is involved into different levels of physical activity. Society Integration Education Proceedings of the International Scientific Conference. 2020;6:467-75. doi:10.17770/sie2020vol6.4867
- Kashefi F, Bakhtiari A, Pasha H, Nasiri Amiri F, Bakouei F, Attitudes St. About Reproductive Health in Public Universities: A Cross-Sectional Study. Int Q Community Health Educ. 2021;41(2):133-42. doi:10.1177/0272684X20916599
- Griban G, Dikhtiarenko Z, Yeromenko E, Lytvynenko A, Koval A, Ramsey I, et al. Influence of positive and negative factors on the university students' health. Wiad Lek. 2020;73(8):1735-46. doi:10.36740/WLek202008128
- Perry CL, Creamer MR, Chaffee BW, Unger JB, Sutfin EL, Kong G, et al. Research on Youth and Young Adult Tobacco Use, 2013-2018, From the Food and Drug Administration-National Institutes of Health Tobacco Centers of Regulatory Science. Nicotine Tob Res. 2020;22(7):1063-76. doi:10.1093/ntr/ntz059