

Prace oryginalne - Original papers

# PRO-HEALTH AND ANTI-HEALTH BEHAVIOURS OF STUDENT-ATHLETES. THE BASIS FOR PREPARING COMMON PRO-HEALTH PROGRAM FOR STUDENTS FROM DIFFERENT COUNTRIES

Zachowania pro- i antyzdrowotne studentów-sportowców. Podstawa dla przygotowania wspólnego programu prozdrowotnego dla studentów z różnych krajów

# ALEKSANDER SZPAKOW 1, A-F\*

- <sup>1</sup> 3rd year student at the Faculty of Physical Training, Yanka Kupala State University in Grodno
- \* The study written under supervision of Dr Andrzej Szpakow, director of the Department of Sports Medicine and Exercise Therapy

A - przygotowanie projektu badania (study design), B - zbieranie danych (data collection), C - analiza statystyczna (statistical analysis), D - interpretacja danych (data interpretation), E - przygotowanie maszynopisu (manuscript preparation), F - opracowanie piśmiennictwa (literature search), G - pozyskanie funduszy (funds collection)

## Streszczenie

**Wstęp.** Najważniejszym czynnikiem warunkującym zdrowie człowieka jest styl życia i związane z nim zachowania prozdrowotne. Wśród ważnych czynników profilaktycznych jest nieużywanie środków psychoaktywnych przez osób wykształconych, w tym studentów, którzy posiadając ogólną wiedzę o zdrowiu powinni stanowić wzór dla reszty społeczeństwa. Niniejsze doniesienie jest fragmentem znacznie większej całości, jaką są, prowadzone przez grupę naukowców z Uczelni z Grodna, Białegostoku, Suwałk i Kowna, wieloaspektowe monitorowania zachowań pro- i antyzdrowotnych wśród studentów przygranicznych miast w 3 państwach.

**Cel pracy.** Analiza związku między paleniem tytoniu, piciem alkoholu i używaniem innych substancji psychoaktywnych, a postawami prozdrowotnymi wśród studentów-sportowców z wydziału WF oraz rozpatrzenie przeniesienia wypracowanych modeli badań na działania w innych jednostkach regionalnych leżących po obu stronach granicy Ściany Wschodniej. Materiał i metody. W badaniu wzięło udział 445 studentów 1-3 roku z wydziału WF (209 mężczyzn i 236 kobiet). Narzędziem badawczym był anonimowy kwestionariusz unifikowanej ankiety (PAV-10) (w oparciu o zmodyfikowany kwestionariusz z Programu ESPAD).

**Wyniki.** W grupie studentów-sportowców potwierdzono występowanie problemu związanego z paleniem tytoniu i piciem alkoholu. Nie ustalono różnicy między mężczyznami i kobietami w deklaracji palenia tytoniu oraz manifestacji niewłaściwej postawy związanej z paleniem tytoniu i spożywaniem alkoholu. Prawie połowa respondentów (43,9%) nie potępiała swoich rówieśników nadużywających alkohol. Z populacji badanych studentów 22,7% paliło papierosy, 62% nie paliło, a pozostali palili w przeszłości, a obecnie już nie palą. Palenie potępiało 26,4% badanych, a 28,2% - nie. Generalnie 16,9% badanych (17,8 kobiet i 15,9% mężczyzn) przynajmniej raz w życiu używało narkotyków. Do palenia marihuany przyznało się 7,9% badanych. Kilka razy wdychało rozpuszczalniki i kleje 2,9% badanych. Nasvay (rodzaj dopalacza) używało kilka razy 9,7% ankietowanych. Jest potrzeba podjęcia szeroko zakrojonych działań profilaktycznych, jest potrzeba monitorowania zjawiska palenia tytoniu i spożycia alkoholu wśród młodzieży i studentów wyższych uczelni. Pozwoli to na ograniczenie chorób w dalszym życiu i zahamowanie zjawiska kilkuletniego skrócenia życia związanego z paleniem tytoniu, piciem alkoholu i używaniem środków psychoaktywnych.

**Wnioski.** Niepokojącym zjawiskiem jest stwierdzenie dużego odsetka zachowań ryzykownych w populacji studentów-sportowców. Studenci są grupą tolerancyjnie oceniającą fakt picia alkoholu i palenia tytoniu przez swoich rówieśników. Okazuje się, iż w przypadku części studentów, wiedza zdobyta w procesie edukacji nie zawsze sprzyjała rozwojowi ich aktywnej postawy prozdrowotnej. Celowe wydaje się w populacji studentów kierunków sportowych: monitorowanie sytuacji w zakresie konsumpcji alkoholu i narkotyków przy pomocy wirtualnych grup badawczych na platformach elektronicznych; podnoszenie poziomu świadomości dotyczącej szkodliwości picia alkoholu i używania narkotyków; podnoszenie skuteczności oddziaływania programów profilaktycznych i obowiązującego prawa.

Słowa kluczowe: studenci-sportowcy, substancje psychoaktywne, czynniki ryzyka

#### Summary

from the ESPAD program).

**Introduction.** The most important factor determining human health is life style and pro-health behaviours associated with it. Among significant prophylactic factors there is disuse of psychoactive substances by educated people, including students who should set an example for the rest of the society due to their general knowledge about health. This report is a fragment of much bigger entirety, which are multifaceted monitoring procedures of pro- and anti-health behaviours among students from border cities in 3 countries conducted by a group of scientists from universities of Grodno, Białystok, Suwałki and Kaunas. Aim of the study. Analysis of the relationship between smoking tobacco, drinking alcohol and using other psychoactive substances and pro-health attitudes among student-athletes from the Faculty of Physical Training as well as consideration of transferring worked out study models to activities in other regional units situated on both border sides of the Eastern Wall. **Material and methods.** 445 students of 1-3 year from the Faculty of Physical Training (209 males and 236 females) participated in the study. Research tool was an anonymous questionnaire of unified survey(PAV-10) (based on modified questionnaire

**Results.** In the group of student-athletes occurrence of a problem connected with smoking tobacco and drinking alcohol was confirmed. Differences between males and females in the statement of smoking tobacco were not found as well as manifestation of improper attitude associated with smoking tobacco and alcohol consumption. Nearly half of respondents(43,9%) did not condemn their peers abusing alcohol. From the population of the respondent students 22,7% smoked cigarettes, 62% did not smoke and the rest had smoked in the past but they do not do it now. Smoking was condemned by 26,4% of the respondents and was not condemned by 28,2%. Generally 16,9% of the respondents(17,8 females and 15,9% of males) used drugs at least once in their lifetime. 7,9% of the respondents admitted to smoking marihuana. 2,9% of the respondents inhaled solvents and glues a few times. Nasvay(a kind of designer drug) was used a couple of times by 9,7% of the respondents. There is a need to undertake large-scale prophylactic actions and to monitor the phenomenon of smoking tobacco and alcohol consumption among youth and university students. It will allow to reduce diseases in further life and inhibit the phenomenon of a few year life shortening associated with smoking tobacco, drinking alcohol and using psychoactive substances.

**Conclusions.** A worrying phenomenon is ascertainment of a large percentage of risk behaviours in the population of student-athletes. Students are a group that tolerantly evaluate the fact of drinking alcohol and smoking tobacco by their peers. It turns out that in case of some students knowledge acquired in the educational process has not always been conducive to development of their active pro-health attitude. In the population of students of sports subjects the following things seem to be appropriate: monitoring the situation within the range of alcohol and drug consumption with the use of virtual research groups on electronic platforms; increasing the level of awareness concerning harmfulness of drinking alcohol and using drugs; increasing efficiency of influence of preventive programs and valid law.

Key words: student-athletes, psychoactive substances, risk factors

#### Introduction

Statistics concerning the phenomenon of spreading psychoactive substances among youth in the Eastern and Central Europe are lower than in the Western Europe; however in the recent years some anti-health behaviours have revealed rising trends and such phenomena as alcoholism, drug abuse, drug dependence, nicotine addiction cover wider and wider social circles or maintain on the same high level [1,2]. Restriction on this phenomenon is an important social goal of work of scientists from various fields. Therefore it is necessary to monitor the situation constantly.

The most important factor determining human health is life style and pro-health behaviours associated with it. Such a factor is not smoking among educated people, including students who should set an example for the rest of the society as they have a general knowledge about health. Particularly student-athletes representing the subject of physical education (PE) ought to emphasize pro-health attitudes in life. If not a PE teacher or rehabilitation instructor, then who will better efficiently act within the scope of prophylaxis to limit tobacco and alcohol consumption [3]?

This year is another one when studies of prohealth attitudes of students from various faculties of Yanka Kupala University in Grodno are conducted with the use of a educational platform Moodle and a survey Internet system LimeSurvey. The conducted

studies are based on techniques and methods of scientific research characteristic for virtual research groups and ultimately they concern large populations of people. Team virtuality is manifested in the fact that while using advanced communication technologies a team of people dispersed in different places can work together without physical direct contact. Then in the context of the knowledge management issue virtual scientific teams are conducive to sharing knowledge as well as knowledge organization and the process of mutual learning [4].

This report is a fragment of much bigger entirety which are multifaceted monitoring procedures of pro- and anti-health behaviours among students from border towns in 3 countries conducted by a group of scientists from universities of Grodno, Białystok, Suwałki and Kaunas [5]. In further perspective we are going to transfer common actions oriented at improvement of the health value system and shaping normative beliefs and psychosocial skills protecting from using psychoactive substances onto university students from the whole Eastern Wall starting with offers of mutual studies of virtual research groups for Kaliningrad, Suwałki, Białystok, Brest, Kaunas, Lublin and Tarnopol.

# Aim of the study

Analysis of the relation between smoking tobacco, drinking alcohol and using other psychoactive substances and pro-health attitudes among student-athletes from PE faculty as well as consideration of transferring worked out research models to actions in different regional units situated on both sides of the Eastern Wall border.

# Material and methods

445 students of 1-3 year (mean age 20,9±3,0) from PE faculty (209 males and 236 females) took part in the research. Research tool was an anonymous questionnaire of unified survey (PAV-10) (based on a modified questionnaire from the ESPAD program). The survey questionnaire consisted of 42 questions concerning e.g. respondents' attitude towards consumption of psychoactive substances, alcoholic drinks and smoking tobacco; a kind of alcoholic drinks consumed most often by youth; age when respondents

smoked a cigarette for the first time; a period during which they smoke one pack of cigarettes; first access to information about drugs and their consumption; period of time in which one can get drugs as soon as possible; frequency and a kind of used drugs. Alternatively e-learning software Moodle was used for establishing a survey database. Non-parametric Pearson's  $\chi^2$  test was used for calculations.

# **Results**

One of the first questions about using psychoactive substances was the question concerning opinions and general knowledge of young people about preferences and consumption of alcohol products. The results of students' surveys with division into sex are presented in Tables 1 and 2.

**Table 1.** What drinks does modern youth use often, in your opinion (%)?

Dwinks	Student-athletes		
Drinks	Males	Females	Total
Beer	92,3	93,6	93,0
Wine	1,0	0,8	0,9
Champagne	1,4	1,7	1,6
Strong alcohols (vodka, brandy)	5,3	3,8	4,5

**Table 2.** What is Your personal attitude towards consumption of psychoactive substances such as alcohol (%)?

Personal attitude	Student-athletes			
Personal attitude	Males	Females	Total	
Absolutely cannot be used	E 2	4.7	5.0	
in any circumstances	5,3	4,7	5,0	
Can be consumed but only	88,5	90.3	89.4	
in some cases and small amounts	د,٥٥	90,3	09,4	
I cannot see any reason	3,4	3,4	3,4	
why alcoholic drinks should not be used	3,4	3,4	3,4	
Hard to say	2,9	1,7	2,3	

The presented data show that very small is a group of people among students from PE faculty that is in favour of absolute exclusion of alcohol consumption among young people. Drinking alcohol is accepted by almost everyone. It is also interesting that almost all the women allowed for the possibility of alcohol consumption although in general opinion

among women there is the largest group supporting absolute abstinence. It was also confirmed that the most popular alcohol among students is beer. Checking opinion was included in the next question: what do you think about the fact that your peers use alcohol? The responses are presented in Table 3.

**Table 3.** What do you think about the fact that your peers use alcohol?

Dave and attitude	Student-athletes		
Personal attitude	Males	Females	Total
l condemn	11,1	17,4	14,4
I probably condemn	38,5	27,1	32,4
I rather not condemn	23,1	23,7	23,4
I do not condemn	21,2	19,9	20,5
I do not know	6,3	11,9	9,2

Nearly half of the respondents (43,9%) did not condemn their peers abusing alcohol, including 23,4% – 'rather not condemned" and 20,5% – 'did not condemn.

46,8% of the respondents had a different opinion (32,4% 'probably condemned" and 14,6% 'condemned") and 9,2% did not express their opinion.

A bigger group of males than females allows for alcohol consumption among peers. The most tolerant is the group of male students in comparison with females and that is the group which indicated the most frequent alcohol consumption: a few times a month. The results obtained from a survey analysis are shown in Table 4.

**Table 4.** Have you drunk alcohol in the last three months?

Drinking alcoholic drinks	Student-athletes		
during the last three months	Males	Females	Total
Yes, once	44,2	59,7	52,5
Yes, a few times	16,8	16,1	16,4
No	38,9	24,2	31,1

When asked about their attitude towards the issue of smoking cigarettes, most often (14,6%) the students said that you can smoke them but only in some cases. Twice fewer number of them (6,3%) did not see any reason why one should not smoke ciga-

rettes. 72,3% of the respondents were convinced that absolutely in no circumstances one should smoke cigarettes. 6,8% of the respondents did not have a precise opinion in the above issue; they chose the reply "hard to say" (Table 5).

**Table 5.** What is your personal attitude towards consumption of psychoactive substances such as tobacco?

Attitude towards smaking	Student-athletes		
Attitude towards smoking	Males	Females	Total
Absolutely cannot be used in any circumstances	69,7	74,6	72,3
Can be consumed but only in some cases and small amounts	15,4	14,0	14,6
I cannot see any reason why cigarettes should not be smoked	8,7	4,2	6,3
Hard to say	6,3	7,2	6,8

When asked what they think about the fact that their peers smoke tobacco, as a rule the respondents (28,2%) replied 'I do not condemn'. Smoking was

condemned by 26,4% of the respondents, while 7,9% did not have any opinion in the that issue (Table 6).

**Table 6.** What do you think about the fact that your peers smoke?

Personal attitude	Student-athletes		
reisonal attitude	Males	Females	Total
l condemn	26,0	26,7	26,4
I probably condemn	23,1	15,3	18,9
I rather not condemn	18,3	19,1	18,7
I do not condemn	24,5	31,4	28,2
I do not know	8,2	7,6	7,9

From the population of the respondent students 22,7% smoked cigarettes, 62% did not smoke and the rest had smoked in the past but they do not do it now. In the group of smokers (males – 22,0% and females – 25%) – 45,5% have smoked for 15 years and less, 15,8% for 16 years and 25% – for 17 years and more. The smoking respondents smoked one pack of cigarettes most often within 2–3 days (60,4%), a week (3,9%) or a month (2,8%). The rest (7,9%) – within 1 day.

The presented data show that very radical opinions were expressed by the female students among whom over 70% are against tobacco consumption. According to the Act universities are the place where smoking is not allowed and smoking bans are also valid in other public places. So it is strange that a large group (25% of the female students) smokes on the same level as men. However among women only 4,2% of the respondents do not see any reason

why one should not smoke cigarettes (among men – 8,7%).

Next very important questions were the ones about taking drugs. The survey contained questions not only about attitude towards using drugs but also about access to them on the market and source of information from which youth draws knowledge about psychoactive substances. The respondents were also asked whether and how often they used drugs. Generally 16,9% of the respondents (17,8 females and 15,9% of males) used drugs at least once in their life. 7,9% of the respondents admitted to smoking marihuana, including 1,1% smoked once, 4,7% – a few times and 2,0% many times. 2,9% of the respondents inhaled solvents and glues a couple of times. Ecstasy, Ephedrone or Methamphetamine were used by 0,9% of people. Hypnotic, sedating drugs and tranquillizers were preferred by 3,7% of the students; vast majority (62,5%) used them many times. Nasvay (a kind of designer drug) was used a few times by 9,7% of the respondents.

The data obtained from surveys of the respondent students are presented in Tables 7-9.

Table 7. What do you think about the fact that your peers consume psychoactive substances such as drugs?

Dougonal attituda	Student-athletes		
Personal attitude	Males	Females	Total
I condemn	76,4	73,3	74,8
I probably condemn	8,7	11,0	9,9
I rather not condemn	1,4	3,0	2,3
I do not condemn	6,3	3,8	5,0
I do not know	7,2	8,9	8,1

Table 8. Where do you think youth can buy drugs when in need?

Where can youth	Student-athletes		
buy drugs?	Males	Females	Total
From acquaintances and friends	20,0	16,8	18,2
In hospital	5,9	7,2	6,6
From distributors	55,6	54,5	55,0
In other places	18,5	21,6	20,2

The results show that the problem of using drugs concerns all the respondents, although in accordance

with the respondents' indications declarations of using drugs were made by both female and male groups.

Table 9. Is it easy to buy drugs in your opinion?

Puning drugs		Student-athletes		
Buying drugs	Males	Females	Total	
Yes, it is easy	33,2	24,6	28,6	
No	66,8	75,4	71,4	

Unfortunately nearly 30% of young people indicated the possibility of general access to psychoactive substances. The obtained results should be the basis for preparing prophylactic program which will particularly emphasize that group of psychoactive compounds.

Reasons for early using drugs among youth were found by the students in escape from life problems (41,6%), satisfying curiosity (41,7%), influence of friends or acquaintances (40,1%), desire to stand out from peers (32,2%), desire for pleasure (28,5%), desire to escape from boredom (12,1%), belief that it is not dangerous (18,4%), striving for mood improvement (19,2%) or self-esteem (5,6%).

According to the respondents narcotization of the society is the result of: decrease of morality and ethics (36,2%), broad distribution of stimulants (29,2%), relationship problems at university (20,1%), violence and aggression in the society (22,2%), spreading drunkenness and alcoholism (26,2%), division of the society due to income level (10,5%), psychological divisions of people in the society (9,8%), growth of crime (8,6%) and economic problems (2,9%). 9,0% of the respondents could not express their opinion.

#### Discussion

In the group of the respondent student-athletes occurrence of the problem connected with smoking tobacco and drinking alcohol was confirmed.

A difference between men and women in smoking declaration was not determined as well as manifestation of improper attitude associated with smoking tobacco and drinking alcohol.

Just like other authors quoted in the literature we have stated that people studying subjects connected with health promotion (medicine, nursing, medical rescue, PE) and generally regarded as those guided by pro-health behaviours do not always indicate a positive attitude in that field [1-4]. Our own studies have proved that in the group of students from different faculties of university (to a large extent feminized group) the percentage of smokers was 29,8% [5]. It seems that students who in the future will promote healthy life style and also shape pro-health awareness of their clients should demonstrate bigger pro-health awareness than students of different faculties [6]. Comparative research among the same students after 3-4 years of studies would be interesting. Perhaps knowledge in the scope of health prophylaxis would allow to achieve more favourable indices. Admittedly both male and female students declare beer consumption as the most popular alcohol, however especially men use highproof alcohols more often than women. In conclusion we should state that it is necessary to undertake large-scale prophylactic actions and monitor the phenomenon of smoking tobacco and drinking alcohol among youth and university students. It will allow to reduce diseases in further life and inhibit

the phenomenon of a few - year life shortening associated with smoking tobacco, drinking alcohol and using psychoactive substances.

# **Conclusions**

- A worrying phenomenon is affirmation of a large percentage of risk behaviours in the population of student-athletes. The problem of using psychoactive substances including drugs among students of PE faculty is not only a theoretical problem. Those students are a group that tolerantly assesses the fact of drinking alcohol and smoking tobacco by their peers.
- In the group of male students, compared to females, examples of anti-health behaviour prevailed and they mainly concerned more frequent consumption of such psychoactive substances as alcohol. A difference in smoking frequency among drug use samples was not found.
- 3. As regards consumption frequency top positions among drugs are occupied by: marihuana, nasvay, inhalants, ecstasy.
- 4. It turns out that in case of some students knowledge acquired in the educational process has not always been conducive to development of their active pro-health attitude.
- 5. In students' opinion the reasons for narcotization of the society are: escape from life problems; satisfying curiosity; decrease of morality and ethics.
- 6. It is important to undertake preventive actions for early detection of youth receptive to using intoxicating substances and working out appropriate prophylactic programs.
- 7. In the population of students of sports subjects the following things seem to be appropriate: monitoring the situation within the range of alcohol and drug consumption with the use of virtual research groups on electronic platforms; increasing the level of awareness concerning harmfulness of drinking alcohol and using drugs; increasing efficiency of influence of preventive programs and valid law.

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## Correspondence address:

Aleksander Szpakow Student Scientific Association of the Department of Sports Medicine and Exercise Therapy Yanka Kupala State University of Grodno E. Orzeszkowej 22, 230023

Tel.: +375 (152) 754908 E-mail: shpakov@grsu.by

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