Research Article

EXPOSURE OF STUDENT POPULATION OF THE UNIVERSITY OF SARAJEVO TO HARMFUL ADDICTION HABITS IN EVERYDAY LIFE

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ABSTRACT

In general, smoking is five times more common in men than in women, however, this gender difference decreases in younger age. In developed countries, the population smoking level in men has reached its peak and began to decline, in women it is still growing. The World Health Organization (WHO) stated that "most tobacco-related diseases and early deaths disproportiona-tely hurt the poor population. Since alcoholism is also a social illness, it is considered that the total number of alcoholics registered should be multiplied by 3 in order to obtain an approximate number of persons endangered by alcoholism. The problem of psychoactive substance dependence is one of the most difficult problems of contemporary society, which has serious consequences for the individual as well as for his environment and society as a whole. Respondents are female students who regularly attend the four faculties of the University of Sarajevo from the first to the final year, as follows: Faculty of Health Sciences (FZS), Faculty of Pharmacy (FF), Faculty of Political Science (FPN) and Faculty of Transport and Communications (FSK). An original questionnaire was created, which is the compilation of the internationally recommended questionnaires used for population surveys in assessing the frequency of behavioral risk factors. Modular education was conducted once a week (two school hours) for a period of 6 months, a total of 24 weeks, or 4 weeks according to the studied behavioral risk factors. By analyzing the score of non-exposure to smoking habits, the use of alcohol and psychoactive substances in relation to the faculties considered, only the score of female students at the Faculty of Political Science decreases, indicating that at the end of the study the respondents of this faculty were more exposed to smoking habits, the use of alcohol and psychoactive substances. The educational program during this study had a positive impact on the students who had the least knowledge about exposure to smoking habits, the use of alcohol and psychoactive substances.

INTRODUCTION

In general, smoking is five times more common in men than in women, however, this gender difference decreases in younger age. In developed countries, the population smoking level in men has reached its peak and began to decline, in women it is still growing.(1, 2, 3) in 2002, about 20% of younger teenagers worldwide consume tobacco.(4) Among them 80.000 to 100.000 start smoking every day, and almost half of them live in Asia. Half of those who start smoking in their teenage years continue to smoke in the next 15 to 20 years. The World Health Organization (WHO) stated that "most tobacco-related diseases and early deaths disproportionately hurt the poor population." Of 1.22 billion smokers, 1 billion of them live in developing countries. Smoking rates have declined in developed countries, although, even in those countries, tobacco abuse has begun to grow by 3.4% in 2002. (5) Researches in the field of young people's alcoholism are relatively rare, but due to the increasing importance, it arouses a special interest among experts in the field of health. In the past, most alcoholics were middle-aged while alcoholism among young people was rare. Today it is estimated that "dangerous drinking" among young people in the world is twice as big as it was in the generation of their parents. (6) Since alcoholism is also a social illness, it is considered that the total number of alcoholics registered should be multiplied by 3 in order to obtain an approximate number of persons endangered by alcoholism. Many authors point to the existence of so-called problem drinking, which can be defined as culturally and socially excessive consumption of alcohol. This drinking is much more present in children and young people

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than alcoholism in the true sense of the word. (7) The problem of psychoactive substance dependence is one of the most difficult problems of contemporary society, which has serious consequences for the individual as well as for his environment and society as a whole. Studying the motives of entering drug addicts in the drug abuse cycle have shown a lot of differences, but most commonly, there are three basic motifs that account for about 80% of all possible reasons for drug use and at the same time favor the spread of drugs in our country and in the world. These motives are, in the first place, curiosity, imitation, and desire to change mood. Generally, where young people are present, there are also risks of drug emergence and spread. (8) In the chronic phase of the disease, common symptoms are irritability and aggression, sleep disturbance, mood swings, concentration and attention problems, memory loss, a series of somatic problems, and social withdrawal and confinement. (9)

RESPONDENTS AND METHODS

Respondents are female students who regularly attend the four faculties of the University of Sarajevo from the first to the final year, as follows: Faculty of Health Sciences (FZS), Faculty of Pharmacy (FF), Faculty of Political Science (FPN) and Faculty of Transport and Communications (FSK). An original questionnaire was created, which is the compilation of the internationally recommended questionnaires used for population surveys in assessing the frequency of behavioral risk factors (WHO MONICA, European Health Risk Control Project - EHRM, European Health Interview Survey - EHIS). Modular education was conducted once a week (two school hours) for a period of 6 months, a total of 24 weeks, or 4 weeks according to the studied behavioral risk factors (poor habits related to smoking, alcohol, abuse of psychoactive substances) with stress. The analysis of categorical variables was done using a Pearson's χ^2-test or Fisher's exact test of probability. Pearson's and Spearman's rank correlation coefficients were used to investigate the linear relationship between the ratio and the ordinal characteristics. For qualitative variables, a Chi-squared test (X^2-test) was used.

RESEARCH RESULTS

A score of non-exposure to smoking habits, the use of alcohol and psychoactive substances, calculated using 14 questions (100%). At the beginning of the study on a sample of 400 female students (four faculties) an average score of non-exposure to smoking habits, the use of alcohol and psychoactive substances was 72,83±12,41%, and in the population of these students the risk score ranges in the interval from 71,61 ± 74,05%. According to the statistics, this score has not changed significantly at the end of the study on a sample of 330 female students of all faculties p=0,667. Thus at the end of the research, it is 72,42 ± 13.17, while in the female student population this risk is 71,00-73,85%.

The coherence degree of responses to the 14 questions in this area before education was 0,830, at the end of research 0,815 (table and graph 1).
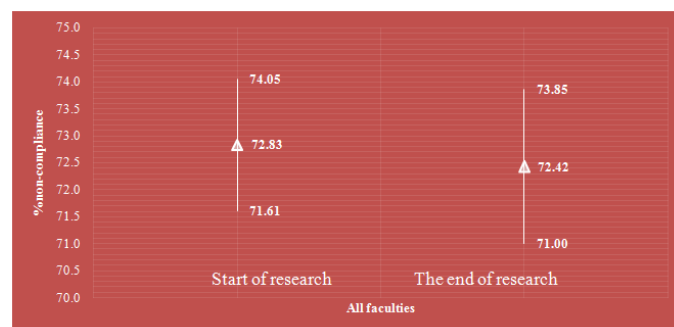
Graph 1 Mapped Risks/Scores of Exposure to Smoking Habits, Use of Alcohol and Psychoactive Substances

Non-exposure to smoking habits, the consumption of alcohol and psychoactive substances, of the interviewed female students of the Faculty of Health Sciences at the beginning of the study is 71,53±9,98, while in the population of these female students ranges from 69,55 to 73,51%. At the end of the study, the score has not statistically significantly decreased p=0,668, and is 70,82±13,01, i.e. in the population at the interval 68,09-73,54%. The coherence degree of responses to the questions asked at the beginning of the study was α = 0,829 and at the end α = 0,825. Non-exposure to smoking habits, the consumption of alcohol and psychoactive substances, of the interviewed female students of the Faculty of Pharmacy at the begging of the study is 71,80±14,15, while in the population of these female students ranges from 68,99-74,61%. At the end of the study, the score has not statistically significantly changed p=0,150, and is 74,36 ±9,68, ie in the population at the interval 72,34-76,38%. The coherence degree of responses to the questions asked at the beginning of the study was α=0,829, and at the end α=0,823. Non-exposure to smoking habits, the consumption of alcohol and psychoactive substances, of the interviewed female students of the Faculty of Political Science at the begging of the study is 76,33±12,76, while in the population of these female students ranges from 73,8-78,86%. At the end of the study, the score has not statistically significantly decreased p=0,018 and is 71,01±16,08 i.e. in the population at the interval 67,15-74,88%, which means that students became more exposed to the risks of smoking, the use of alcohol and psychoactive substances. The coherence degree of responses to the questions asked at the beginning of the study was α=0,831, and at the end α=0,839 (table 2).

Table 1 A score of non-exposure to smoking habits, the use of alcohol and psychoactive substances

	N	X	S.D.	SEM	95% CI		t-test	Cronbach's Alpha	Br.pitanja
					DG	GG	P		
Start of research%	400	72,83	12,41	,62	71,61	74,05	0,677	0,830	14
The end of research %	330	72,42	13,17	,73	71,00	73,85		0,815	14

Table 2 A score related to non-exposure to smoking habits, the use of alcohol and psychoactive substances, according to the faculties considered.

		N	Ar.Sr.	S.D.	SEM	95% CI		p	Cronbach's Alpha
						DG	GG		
FZS	Start of research%	100	71,53	9,98	1,00	69,55	73,51	0,668	,829
	The end of research %	90	70,82	13,01	1,37	68,09	73,54		,825
FF	Start of research%	100	71,80	14,15	1,41	68,99	74,61	0,150	,829
	The end of research %	91	74,36	9,68	1,01	72,34	76,38		,823
FPN	Start of research%	100	76,33	12,76	1,28	73,80	78,86	0,018	,831
	The end of research %	69	71,01	16,08	1,94	67,15	74,88		,839
FSK	Start of research%	100	71,67	11,92	1,19	69,30	74,03	0,412	,811
	The end of research %	80	73,25	13,89	1,55	70,16	76,34		,829

Non-exposure to smoking habits, the consumption of alcohol and psychoactive substances, of the interviewed female students of the Faculty of Transport and Communications at the begging of the study is 71,67±11,92 , while in the population of these female students ranges from 69,30-74,03%. At the end of the study, the score has not statistically significantly changed p=0,412, and is 73,25 ±13,89, i.e. in the population at the interval 70,16-76,34%. The coherence degree of responses to the questions asked at the beginning of the study was α=0,811, and at the endα=0,829 (graph 2).
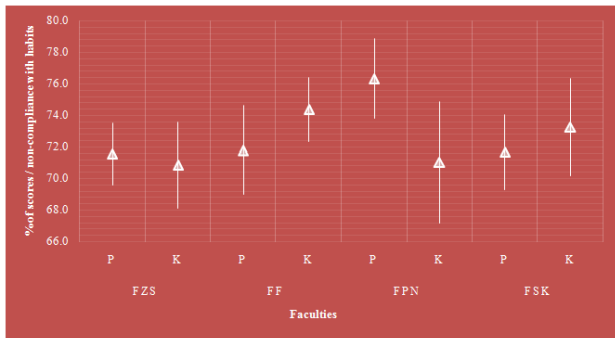

Graph 2 Graphical view of the risk score change of non-exposure to smoking habits, the consumption of alcohol and psychoactive substances, according to the faculties considered at the beginning (P) and at the end of the study (K).

At the Faculty of Political Sciences (FPN), at the end of the study, the score statistically decreases significantly p=0,018, i.e. the students changed their habits to "worse", while at other faculties there was no statistically significant shift p>0,05.

DISCUSSION

Smoking habits of parents may impact on adolescents so that they perceive smoking as normal and expected behavior. (10) Studies conducted in some Western European countries have shown that the habit of consuming cigarettes in family positively correlates with the greater prevalence of cigarette consumption among family members belonging to the adolescent population. (10) The score of non-exposure to smoking habits of exposure to smoke, alcohol consumption and consumption of psychoactive substances, calculated using 14 questions (100%). At the beginning of the study on a sample of 400 female students (four faculties), the average score of non-exposure to smoking habits, the use of alcohol and psychoactive substances is 72±12,41%, and in the population of these students, this risk score ranges between 71,61±74,05%. Statistically, this score has not either significantly changed at the end of the study, p=0,667. So at the end of the research it is 72,42 ±13,17.

The beginning of alcohol use usually begins at the time of adolescence when the young people due to specific period of growing up, relative inexperience and the tendency of risks, are the most vulnerable group for addiction behavior development. Addiction is a mental and sometimes physical condition that arises through the interaction of a living organism and addictive substances. It is characterized by irresistible craving, or irresistible coercion for taking addictive substances, either because of its desirable effects, or to avoid suffering that occurs if they stop using it. (11) In particular, alcohol has a negative impact on psycho-physical health of young people, whose organism is more sensitive than older, and the harmful effect is more pronounced. Concentration, thinking, creativity and interest are also reduced. Alcoholism is part of a group of social psychiatric disorders because drinking alcoholic beverages causes many and serious consequences for the health of an individual, his family, and society in a wider sense. Alcoholism is a disease that, due to the excessive and long-term use of alcoholic beverages, results in damage to all organs, as well as biopsychosocial characteristics of the person. Drinking alcohol once a week during the weekends is relatively common in young people. The distribution of alcohol consumption increases with age at both sexes. It is worrying lately increase in "risky drinking", i.e. six or more times a month. We witness increased consumption of alcohol in the adolescent age. Since early acquired bad habits can lead to alcoholism, it is important to know what can be done. (12) Before the study 46% of interviewed female students, i.e. in the interval 41,12-50,88% in their opinion beleive that alcohol has no impact on health, at the end of the study this number statistically significantly decreased χ^2=5,261 p=0,022, and is 37,58% i.e. in the interval 32,35-42,8%. The phenomenon of alcohol consumption among young people in the region is becoming more common. These are the results of the extensive European research in the schools about smoking, drinking and taking of drugs (ESPAD) of young people aged 16 and over (13) carried out in 1995, 1999, 2003 and 2007 in thirty European countries, including countries of the region. The results of the research conducted in 2001 indicate that there is a noticeable increase in the consumption of alcohol among young people. The authors particularly point out the trend of alcohol consumption growth in girls aged 16 years. There is also a frequent occurrence of teen drinking, the so-called binge drinking, the consequences of which on the physical and psychological condition of the young person can be very critical. Namely, numerous studies have shown that drinking alcohol at the age of 16 is associated with an increased likelihood of alcohol consumption in later years, as well as greater inclination to violent behavior, severe bodily injury, and

absence from school or work, as well as increased risk of abuse of psychoactive substances. (14) From the above it is clear that the problem of alcohol consumption among young people is a problem that requires reactions. Howlert says that reducing alcohol consumption among young people can only be influenced by systemic approaches focusing on two key phenomena, the phenomenon of alcohol supply to young people, and the phenomenon of alcohol demand by young people (applying the Alcohol Prohibition Act). In order to make the preventive policy of this phenomenon successful, it is necessary at the same time to act intensively on both phenomena. (258) At the beginning of the study, 51,75% of female students did not consume alcohol in the previous 12 months, or in the range of 46,85-56,65%, after the study this number did not statistically significantly decrease χ^2=0,635, p=0,426, so at the end of the study it is 48,79% or in the range of 43,39-54,18%. Discussions and reflections on raising the minimum age limit for the consumption of alcoholic beverages as a strategy for preventing alcohol consumption in young people are very common. Komro cites data on the existence of even132 studies directed to the analysis of the mentioned strategy. The same authors state that these studies confirm that the raising of the minimum age limit for drinking alcohol from the age of 18 to the age of 21 leads to a reduction in alcohol consumption and alcohol-related problems among young people, including the reduction of youth traffic accidents and delinquency. Grant and Dawson (15) point out that studies show that young people who have started drinking alcohol at the age below 21 are more prone to alcohol consumption in adulthood. Despite the results mentioned, the world is still divided. In an equal number of countries, the minimum age limit for alcohol consumption is 18 and 21 years respectively. Given the ways of disabling and controlling the sale of alcoholic beverages to people under the legal minimum age limit, many efforts are being made in the world. The scientists, as an important segment of action, emphasize the importance of consistently enforcing legal norms and the intolerance of "permissiveness" of responsible persons for persons below the minimum age limit in alcohol consumption. The same authors also state that frequent controls over the implementation of legal provisions greatly affect the reduction in sales of alcoholic beverages to the teenagers.

CONCLUSION

By analyzing the score of non-exposure to smoking habits, the use of alcohol and psychoactive substances in relation to the faculties considered, only the score of female students at the Faculty of Political Science decreases, indicating that at the end of the study the respondents of this faculty were more exposed to smoking habits, the use of alcohol and psychoactive substances. The educational program during this study had a positive impact on the students who had the least knowledge about exposure to smoking habits, the use of alcohol and psychoactive substances.

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