HABITS AND ATTITUDES OF FIRST-YEAR FEMALE STUDENTS AT WARMIA AND MAZURY UNIVERSITY: A CALL FOR IMPLEMENTING HEALTH EDUCATION PROGRAMME AT UNIVERSITIES

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SUMMARY

Introduction: Entering university frequently brings about considerable changes in the students' lifestyle, which often affect negatively their health. Therefore, it seems to be of great importance to promote pro-health habits and attitudes particularly among 1st-year-students and thus, it is necessary to accurately assess their lifestyles and needs in this regard.

Aim: The aim of the study was to assess the habits and attitudes towards healthy lifestyle of 762 first-year female students enrolled at the University of Warmia and Mazury in Olsztyn so as to detect health risks and ultimately present the need for remedial measures.

Methods: Female students were randomly selected from all the groups attending obligatory physical education classes. The students filled in an anonymous questionnaire, which contained questions referring to their physical activity, nutrition, tobacco and alcohol use, and stress.

Results: The research demonstrated a worrisome picture of the students' habits and attitudes with regard to health. It showed that the female students took keener interest in daily body care than in proper nutrition and an adequate level of physical activity. What is also alarming is the excessive amount of alcohol they consumed on a regular basis.

Conclusions: The research findings call for a specially designed pro-health programme to be implemented during the time of the studies in order to raise the female students' awareness of leading a health-conscious lifestyle.

Key words: attitudes towards health, opinions and habits, university, female students, Poland

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INTRODUCTION

The role and significance of the intelligentsia in the economic and social development of the country has been emphasized in a number of scientific studies. However, there are few papers exposing the role of the intelligentsia in promoting health culture by shaping the right attitudes towards the proper requirements of individual and public health care (1). In some countries including Poland, having a university degree is still relatively uncommon, and thus it is usually a mark of very high prestige in the immediate environment. Additionally, this social group breeds the highest number of political and administrative executives. Therefore, it can be rightly assumed that they will largely influence the scale of progress in the development of social needs and rational patterns of a healthy lifestyle. A stage through to meet these expectations is a period of study in institutions of higher education.

Facts about the changes in health-related behaviour of students are fairly well documented in the scientific literature including the aspects such as: their physical activity, nutrition, tobacco and alcohol use, and stress. Students' behaviour with respect to the above factors gives rise to many objections and concerns in the prospect of their future.

Physical Activity

According to the norms of a person's daily physical activity established by the United States (2) and the World Health Organization (3), students can be plainly classified as a group of physically inactive individuals (4) with a strong tendency to a sedentary and consumption-oriented lifestyle, which is in sharp contrast to their overtly declared positive attitude towards physical education (5).

Nutrition

According to the scientific data, obesity rates in the economically developed countries have dramatically increased over the past 30 years. This negative phenomenon was observed in the United States (6), Great Britain (7), France (8), and even Finland (9), the inhabitants of which are regarded as the most physically active people in Europe (10). Incidence rates indicate that the time of the greatest increase in individuals' overweight and obesity occurs at the age between 18 and 29 (11). Students of higher education in particular appear to be even more prone to weight gain than those who stay out of university (12). Experts believe that for many students the transition from high school and home

dwelling to a college environment represents a time of notable risk for weight gain (13), which in consequence leads to abnormal functioning of the body as well as a susceptibility to numerous civilization diseases.

Alcohol Use

Another example of worrying data refers to alcohol consumption by students. Excessive alcohol drinking was recorded in the United States (14), and in several European countries such as Ireland (15), Germany, Poland, and Lithuania (16), and the United Kingdom (17). In Finland, the consumption of alcohol by students is the greatest of all Scandinavian countries (18). Moreover, the problems of alcohol abuse was also observed among students of Iran (19) and Pakistan (20), which may come as a surprise as alcohol drinking is against the religious rules of Islam.

Tobacco Use

Tobacco use may cause grave problems such as health failure, cardiovascular disease, cancer, and chronic obstructive pulmonary disease (21). Despite this alarming data, young adults aged 18 to 25 still have one of the highest rates of tobacco use of all age groups (22), however, college students (27.2%) are less likely to use tobacco than their same-age peers (40.6%) not enrolled at universities (14).

Stress

There is substantial empirical evidence that there has been a discernible increase in depression and other forms of psychopathology among American college students over the past 50 years (23). University counselling centres report an increasing number of students with severe problems (24). Additionally, depression has been proved to be an important cause of poor academic performance by university students (25). Psychological problems such as depression also appear to be a reason for dropping out of college (26).

The implementation of pro-health education programmes promoting health-conscious culture among students must be based on a thorough survey on the habits and health behaviour of this social group. The aim of the study conducted with 1st year female students at the University of Warmia & Mazury (UWM) in Olsztyn was to assess their habits and attitudes towards a healthy lifestyle. We analyzed answers to the following question:

Do the female students' lifestyle and attitudes promote a healthy life?

MATERIALS AND METHODS

Ethical Consideration

The research was carried out with prior approval of the Ethical Committee of UWM, and the volunteers willingly agreed to participate in the study, which they confirmed by signing a written consent form.

Study Sample

The research was conducted with a total of 762 1st year female students enrolled at the UWM in the summer semester of the academic year 2009/2010. Seventy three groups of students were chosen using random selection tables (27) from a total of 261 groups attending obligatory Physical Education (PE) classes. The participants were female students of various faculties who constituted 95% of all the females aged 19–20 allocated in the selected groups. This number was determined based on the technical possibilities of surveying the study participants during a single week. Only those students who were absent on the day of the studies for some reason were excluded from the research. First-year female students were specifically chosen because they are a particularly valuable research group, as it is still possible to shape and alter their health attitudes and habits. What is more, this study constitutes the sixth stage of cross-sectional studies, which have been conducted biannually since 2000 (28, 29). Another reason for selecting only female students for the purpose of the research is that female students constitute a vast majority of all the UWM students (approx. 70%). Finally, an overwhelming majority of the students were permanent residents of the Warminsko-Mazurskie province.

It was also assessed whether the number of participants is sufficient so as the group could be considered as representative. The following formula was used for this purpose (1):

$$n = \frac{\mu_\alpha^2}{4d^2},$$

where d – maximum (acceptable) estimation error; $\mu\alpha$ – value read from the normal distribution table N(0.1) at the accepted significance level of $1 - \alpha$. For the accepted level of significance $1 - \alpha = 0.95$ ($\mu\alpha = 1.96$), it was assumed that the estimation error does not exceed 5% (30). The necessary number of participants was established as 385 and therefore was lower than the actual number accounted for in the studies (762). That is why the study group can be considered homogenous and representative for the population of 1st year female UWM students.

Data Collection Tool

The anonymous questionnaire consisted of 27 questions (including 20 closed-ended and 7 open-ended questions). Open-ended questions enabled the students to give a lengthy and more detailed response to the given questions. Both types of questions dealt with issues such as: physical activity, nutrition, alcohol and tobacco use, and stress.

Statistical Analysis

The analysis of results used descriptive statistics (frequencies and percentages) which were calculated using the Statistica PL v. 10 software package.

RESULTS

Physical Activity

The results shown in Table 1 reveal that more than half of the female students (54.88%) practiced only one form of physical

Table 1. *Students' physical activity during high school and university studies*

Number of physical activity forms during high school									
1		2		3		4		Total	
n	%	n	%	n	%	n	%	N	%
416	54.88	290	38.26	43	5.67	9	1.19	758	100.00

Limit of PA due to health or other reasons							
Not limited		Periodically limited		Limited constantly		Total	
n	%	n	%	n	%	N	%
578	76.35	130	17.17	49	6.47	757	100.00

Circumstances under which physical activity was performed*	N	%
Obligatory PE lessons	762	65.63
School Sports Club (SSC)	46	3.96
Collegiate Sports Club	11	0.94
Out-of-School Sports Clubs (NSSC)	57	4.90
Society for the Propagation of Physical Culture	2	0.17
Other organisation	41	3.53
Academic Sports Association (ASA)	0	0
Individually, occasionally with family	242	20.84
Total	1,161	100.00

Attitude towards obligatory PE lessons during university studies											
Obligatory during all study years		Obligatory during first two years		Only voluntary		Completely unnecessary		Hard to say		Total	
n	%	n	%	n	%	n	%	n	%	N	%
157	21.07	274	36.78	275	36.91	35	4.70	4	0.54	745	100.00

Preferred form of PE lessons during university studies											
Hard to say		I do not want to attend		Recreation		Sport		Sport and recreation		Total	
n	%	n	%	n	%	n	%	n	%	N	%
57	7.52	87	11.48	377	49.74	135	17.81	102	13.46	758	100.00

Current physical activity of students	**N**	**%**
Obligatory PE lessons	652	85.56
Academic Sports Association (ASA)	34	4.46
Out-of-School Sports Clubs (NSSC)	10	1.31
Lack of exercise due to sick leave	66	8.66
Total	762	100.00

Students' assessment of their motor fitness level on a scale of 1–6	**N**	**%**
1 (very poor)	2	0.27
2 (poor)	16	2.12
3 (satisfactory)	35	4.64
4 (good)	451	59.81
5 (very good)	237	31.43
6 (outstanding)	13	1.72
Total	754	100.00

*Respondents could indicate more than one answer

activity (PA) in high school and less than two-fifths (38.26%) two forms. Merely 5.67% of women practiced three forms and only 1.19% four forms. A vast majority of respondents (76.35%) did not limit their PA in high school due to health or other reasons, 17.17% limited it temporarily and 6.47% permanently. The research showed that physical exercise (PE) classes were by far the most popular form of PA among women in high school. Almost one-third occasionally practiced some form of PA individually or with their family (31.93%). A low percentage of respondents attended the training organized by school sports clubs (SSC) and out-of-school sports clubs (NSSC) (6.07% and 7.52%, respectively). Interestingly, no one participated in the activities organized by the Academic Sports Association (ASA). The highest percentage of female students (36.7%) opted for compulsory PE classes for the 1st and 2nd year and the similar percentage (36.91%) were in favour of only voluntary activity during the first year. More than one-fifth (21.07%) were of the opinion that such classes should be obligatory throughout the university education. Nearly 5% of women were against compulsory PE classes at university and a marginal percentage (0.54%) was not specific in this case. Almost half of the respondents (49.74%) wanted to have a recreational form of PE, 17.81% preferred sports and 13.46% the combination of sport and recreation. Nearly 12% of the women were not willing to participate in such activities and 7.52% were unable to indicate their favourite form of PA. The vast majority of respondents attended only obligatory PE classes in high school as well as at university, 8.66% held sick leave and 4.46% participated in the trainings organized by ASA. Almost three-fifths (59.81%) of the students boasted a fairly good level of their motor fitness, and more than one-third (31.43) even very good. Barely 0.27% estimated their level as very weak.

Nutrition

According to the majority of women, their diet has a positive effect on their health at present (60.52%) and is likely to have such in future (61.25%). About 30% were aware of its negative impact now and in future (30.33% and 28.18%, respectively), and nearly one-tenth were of the opinion that there is no relation between their eating habits and their health currently (9.15%) and in future (10.57%). More than 72% of the respondents were willing to improve their diet and slightly more than a quarter

Table 2. *Students' eating habits*

What influence does nutrition have on your current health status?							
Positive		Negative		No influence		Total	
n	%	n	%	n	%	N	%
443	60.52	222	30.33	67	9.15	732	100.00
What influence will nutrition have on your health status in the future?							
n	%	n	%	n	%	N	%
452	61.25	208	28.18	78	10.57	738	100.00

Students' willingness to improve eating habits							
Yes		No		Hard to say		Total	
n	%	n	%	n	%	N	%
543	72.79	191	25.60	12	1.61	746	100.00

How regularly do you consume the following meals?													
Breakfast				Dinner				Supper				Total	
Yes		No		Yes		No		Yes		No		N	%
196	25.72%	566	74.27%	312	40.94%	450	59.05%	199	26.11%	563	73.88%	762	100.00
How often do you eat fruit?													
Everyday		2–3 times a week				Less than once a week				Not at all		Total	
89	11.67%	263	34.51%			388	50.91%			22	2.88%	762	100.00%
How often do you take vitamin supplements?													
Not at all		Once a month				Once a week				Everyday		Total	
561	73.62%	112	14.69%			52	6.82%			37	4.85%	762	100.00%

Most important pro-health activities according to students*		
Everyday body hygiene	837	88.85%
Intimate hygiene	69	7.32%
Proper nutrition	18	1.91%
Proper motor fitness	18	1.91%
Total	942	100.00%

*Respondents could indicate more than one answer

Table 3. *Students' alcohol consumption*

Frequency of alcohol consumption											
I do not drink		Occasionally		Once a month		Once a week		Every day		Total	
n	%	n	%	n	%	n	%	n	%	N	%
67	8.86	462	61.11	35	4.63	124	16.40	68	8.99	756	100.00
Number of alcohol beverages consumed by students											
1		2		3		4		5		Total	
n	%	n	%	n	%	n	%	n	%	N	%
559	73.55	142	18.68	40	5.26	12	1.58	7	0.92	760	100.00

Types of alcohol most frequently consumed	**N**	**%**
Beer	452	47.03
Wine	350	36.42
Vodka	128	13.13
Other	31	3.22
Total*	961	100.00

Students' opinion on whether alcohol should be allowed on campus							
Yes		No		Hard to say		Total	
n	%	n	%	n	%	N	%
490	65.51	87	11.63	171	22.86	748	100.00
Have you ever had a blackout caused by alcohol consumption?							
Never		Once		2–3 times		Total	
n	%	n	%	n	%	N	%
667	87.76	53	6.97	40	5.26	760	100.00
Do you want to stop drinking?							
Yes		No		Hard to say		Total	
n	%	n	%	n	%	N	%
211	30.44	434	62.62	48	6.92	693	100.00

*Respondents could indicate more than one answer

had no intention of doing so (25.60%). As can be seen from the Table, most students have no time for regular basic meals (breakfast – 74.27%, dinner – 59.05%, and supper – 73.88%). More than half of the women (50.05%) consume fruit less than once a week, 34.51% between two and three times a week and merely 11.67% every day. A very small percentage of respondents (2.88%) excluded fruit from their diet completely. Nearly 74% of the women never complemented their meals with supplements, 14.69% did so once a month, 6.82% once a week, and 4.85% every day. In the opinion of the vast majority of students (88.85%), the most important pro-health activities are connected with daily body care and body hygiene. A marginal percentage of women (1.91%) regard proper nutrition and taking care of motor fitness as essential health-related attributes.

Alcohol Use

Out of the women involved in the research, the highest percentage of respondents (61.11%) drank alcohol occasionally, and almost 9% totally refrained from drinking. Out of the women drinking regularly, the highest percentage consumed alcohol once a week (16.40%), slightly less every day (8.99%) and the smallest percentage once a month (4.63%). The vast majority of respondents (73.55%) consumed only one type of alcohol, and nearly one-fifth (18.68%) two types. Very few women consumed three, four or five types of alcoholic beverages (5.26%, 1.58% and 0.92%, respectively). As can be seen from the Table, beer is the most favourite alcoholic drink (47.03%), followed by wine and vodka (36.42% and 13.13%, respectively). Over 65% of respondents declared that alcohol should be available at the UWM campus, 22.86% had no opinion on the matter, and only 11.63% were totally against it. The vast majority of women (87.76%) have never experienced blackout caused by excessive alcohol consumption, 6.97% only once and 5.26% twice or three times. Out of the women consuming alcohol in various quantities, 62.62% were not willing to stop drinking, 30.44% intended to stop the habit, and 6.92% had no opinion on the matter.

Tobacco Use

As shown in Table 4, over 65% of female students abstained from smoking, whereas 16.58% smoked occasionally in certain circumstances. Women who smoked a few cigarettes a day con-

Table 4. *Students' tobacco use*

Smoking habits	**N**	**%**
I am in favour of total abstaining from cigarettes	489	65.90
I sometimes smoke in social situations	123	16.58
I smoke a few cigarettes a day	56	7.55
I smoke more than 10 cigarettes a day	68	9.16
I smoke more than a package of cigarettes a day	6	0.81
Total	742	100.00

Reasons for smoking	**N**	**%**
Smoking is fashionable now	199	76.24
Smoking helps me to relieve mental tension	41	15.70
Smoking helps me to socialize	20	7.66
Total	261	100.00

Do you want to give up smoking? *

Yes		No		Hard to say		Total	
n	%	n	%	n	%	N	%
200	79.05	50	19.76	3	1.18	253	100.00

*total refers to smokers only

Table 5. *Students' opinions on stressful situations encountered during studies and methods of coping with stress*

Attitudes towards stressful situations	**N**	**%**
I consider stressful situations to be unavoidable	567	75.90
Stressful situations are common but I am able to cope with them	82	10.98
I am very anxious about stressful situations	91	12.18
I cannot answer unequivocally	7	0.94
Total	747	100.00

Number of indicated methods of coping with stress

1		2		3		4		5		Total	
n	%	n	%	n	%	n	%	n	%	N	%
438	57.94	134	17.72	114	15.08	54	7.14	16	2.12	756	100.00

Methods*	**N**	**%**
Relaxation methods (yoga, breathing exercises, massage)	122	9.41
Doing sports	284	21.91
Proper nutrition	32	2.46
Meeting friends	276	21.29
Listening to music	168	12.96
Talking to a psychologist	4	0.30
Sleeping	56	4.32
Alcohol, nicotine and drug use	51	3.93
Sweets	58	4.47
Sauna	15	1.15
Walking	92	7.09
Talking to a friend	58	4.47
Reading books	5	0.38
Shopping	46	3.54
Sex	23	1.77
Watching TV	6	0.46
Total	1,296	100.00

*respondents could indicate more than one answer

stituted 7.55%, and those who smoked more than 10 cigarettes a day 9.16%. A marginal percentage of students smoked more than one pack a day (0.81%). The students mentioned the following reasons for smoking: 'it is fashionable' (76.24%), 'it helps to reduce nervous tension (15.70%) and 'make social contacts' (7.66%). Out of the students who smoked, a very high percentage were willing to give up the habit (79.05%), and almost 20% had no intention of doing so. A small percentage (1.18%) had no opinion on the matter.

Stress

As Table 5 shows, a marked majority of students (75.90%) believed that stressful situations are unavoidable, 10.98% admitted that stress is likely to happen but if so they would be able to cope with difficulties. Over 12% of women were anxious about encountering problems, and a small percentage (0.94%) was unable to give a clear answer to the question. Almost 60% of women knew only one method of overcoming stress, and much fewer – two (17.72%), or three (15.08%). The most common method the students mentioned were sports (21.29%), meeting friends (21.29%), listening to music (12.96%), indulging in relaxation techniques (9.41%), and going for a walk (7.09%).

DISCUSION

The research revealed that PA is not very popular with the female students as only 21% of them felt the need for compulsory PE classes throughout the university education and almost half opted for recreational form of PE classes. The research carried out by Starosta (10) provides the daily PA norms as specified by several authors, which indicate how the biological minimum of daily PA and its influence on human health should be understood. For instance, the Surgeon General's weekly recommendation of PA for children and youth is approximately 60 min. of intense effort almost every day (31). However, our research revealed that the vast majority of female students participated only in obligatory PE classes in the form of 15 sessions during the whole semester, lasting 90 minutes each and conducted on a weekly basis. Although the students see the need for organizing PE classes at university (32), their involvement in physical culture is rather small (5, 33). The sharpest decrease in the level of students' PA was observed during the transition period from high school to university (34, 35), however, as our research demonstrated, it was also low at high school. The fact that female students took no interest in physical culture at high school was confirmed by the earlier research conducted with Polish female students at UWM (29) and in Lithuania (36). A lower level of the students' PA during their studies may be accounted for by several reasons including a shortage of time as a consequence of schoolwork overload, and the necessity to undertake a part-time job so as to pay the cost of university education (37). This seems to correspond with an alarming global trend towards decreasing PA and excessive eating which is particularly noticeable in highly developed countries such as the United States. As the most recent epidemiological data in the Unites States indicate, 33.8% of adults are now considered obese and 68% are either overweight or obese (38).

Nutrition is a behavioural category which to a lesser extent than alcohol consumption, smoking or physical exercise depends on personal choices and decisions. Eating habits are formed by numerous factors, therefore, students' nutrition type must by conditioned by the place of residence during their university time, their schedules, the budget at their disposal, and whether they use a university canteen. The opinions expressed by the students on the subject of nutrition are inconsistent with their eating habits. Although the majority of students stressed the importance of a proper diet, their daily basic meals (especially breakfasts and dinners) are neither regular nor enriched with supplements. Furthermore, over a half consume fruit less than once a week. Most of the students wished they could modify their eating habits and vary their diet, yet their current behaviour in this respect does not reflect what they overtly declare. This seems to be only the wishful thinking, as their life is governed by priorities such as physical appearance (good looks). This assumption has been confirmed by the findings of our research which indicated that in the opinion of the students the most essential pro-health activities are connected with daily body care and body hygiene whereas nourishing diet and motor fitness were important to a marginal number of respondents (less than 2%). A similar hypothesis has been put forward by Brumberg (39), and Cash (40). In view of the above mentioned facts, it is of great importance to urgently alter the eating habits of Polish female university students taking into account the following in particular:

- maintaining energy balance;
- excluding animal fats from the diet and replacing them with vegetable oils, cutting down on highly processed products such as sugar, salt, white flour, sweets, and fast food;
- eating large amounts of fruit and vegetables;
- reducing the meals with high cholesterol content (41).

The figures of the average alcohol consumption by 1st year students are even more worrying. Although the majority of women admitted occasional drinking during the 1st year of their studies, a relatively considerable percentage confessed drinking regularly or even every day. Another piece of shocking data shows that more than 12% of the respondents drank to unconsciousness during their 1st year of the study. According to the Institute of Alcohol Studies (IAS), binge drinking has become notorious especially among young people in the United Kingdom as compared with other countries (42). In addition, earlier research proved binge drinking to be particularly prevalent among young British women (43). The research conducted by IAS (42) also revealed that in Finland, the consumption of alcohol among youngsters is one of the highest in Europe.

The American national research on university studies shows that nearly 60% of full-time college students drink excessively. They are more likely to be involved in binge or heavy drinking than their peers who are not enrolled at college (44). As a result of such a high drinking rate, college students are at a greater risk of running up against problems associated with drinking such as weak academic performance, unsafe sex, driving under the influence, injury, or even death (45, 46). Primitive culture of alcohol drinking may be explained by the fact that students can usually afford to buy only beverages of inferior quality such as beer and cheap wine; yet, what shows the real scale of the danger is almost common consent for the availability of the alcohol at the campus. Therefore, in the light of our findings, we advocate

monitoring and restricting alcohol sales on the premises of the campus. First-year students in particular tend to consume huge amounts of alcohol, and the availability of alcohol at the campus simply favours excessive drinking (12, 14).

The research also indicated that over 65% of female students abstained from smoking, about 16% smoked occasionally and the other smoked with no defined regularity. As a rule, women smoke fewer cigarettes than man, as can be illustrated by the research from Jordan (47) and China (48), where the percentage of female students – smokers (11.4% and 26.0%, respectively) was significantly smaller than that of male students – smokers (56.9% and 66.9%, respectively). Another picture was presented by the data concerning tobacco use among Swedish young adults. The research conducted with Swedish youth as participants indicated that during the period from 1989 to 2003 girls in general smoked twice as much as boys (49). The data concerning smoking rate among European women is contradictory. According to Rodu and Cole (50), smoking prevalence among women in Sweden resembles that of European women in general, and they have similar mortality rates from smoking-related diseases. On the other hand, according to the other research, there are no gender differences in terms of smoking by Finnish (51) and Czech students (52). These studies showed that approx. 5% of Finnish university students (women and men) smoked on a daily basis, and a total of 83% of university students were non-smokers, whereas, in the Czech Republic 37% of women and 38% of men were smokers. Curiously enough, it was also observed that smoking was the most prevalent addiction among medical female students (53). This research also indicated that smoking in general was less prevalent in Asian medical schools than in European ones. The main reason for occasional smoking might be a common trend of smoking while socializing (53), which our research also confirmed. Apart from this, our findings proved that the reason behind smoking is the students' inability to cope with stressful situations as many respondents admitted smoking in order to relieve the tension caused by difficulties that arise during the studies, including those connected with learning (54). This observations bear special significance since, according to some researchers, women are potentially more susceptible to stress than men (55). According to the previous research, the overwhelming majority of Polish female students considered smoking to be trendy (56). Nevertheless, the students seem to be aware of the pernicious influence of smoking on their health, as the vast majority of them wanted to withdraw from the habit. The research conducted with the university students in the UK revealed that 71% of them never smoked (57), which is slightly higher number than in the USA where 65% of the surveyed students reported that they never used cigarettes (58).

The period of studies often abounds with stressful situations intensified during the exams sessions and before tests (59). Research carried out with American college students demonstrates that exam stress can even lead to a marked increase in depression and others forms of psychopathology (23). Acute depressive moods while studying frequently result from poor or no academic achievement (26). In our research more than 12% of the students were anxious about such situations, although a marked majority considered them to be unavoidable. Worryingly, most of the respondents pointed to only one method of coping with stress. It is also curious why the highest percentage of women regard practicing sport as the most relaxing method, even though, the vast majority of the subject attended only obligatory PE classes. This may stem from the fact that although the students have acquired essential knowledge in this respect, they put it into practice only to a small extent. For this reason women burdened with stressful situations should be given an opportunity to participate in specifically designed programmes included in the academic curriculum. Such people should be offered easy access to psychological support available at the counselling centre located at the campus.

Although our research comprised 1st year students of only one university in Poland, its findings should not be limited to only one centre. On the contrary, they could reflect a more general tendency. UWM is one of the biggest Polish institutions of higher education with over 32 thousand students enrolled in the academic year 2009/2010. This multi-profile university is attended by people from all over Poland studying a wide range of subjects such as humanities, social sciences, agriculture, technical sciences, biology, medicine, and fine arts. Furthermore, the data on health behaviour gathered at other Polish schools of higher education indicate very similar tendencies (1, 60).

Summarizing the results of the studies, it should be noted that young people studying in Poland should be offered more assistance on behalf of the authorities in extensive health education so that future graduates are able to represent a more productive economic sector of the country. The effects of the unhealthy lifestyles can be immediate or postponed. As for the former, unhealthy lifestyle frequently results in greater difficulties while studying as healthy individuals are believed to boast better academic achievements (61). In the case of long term effects, cultivating habits and attitudes that are harmful to health may lead to the situation when the cost of the education that was borne by the state will not be completely restituted because of poor condition of health of the educated employees. In consequence, the state will spend even more on their health care.

School promoting health is an ideal, the pursuit which seems to be continuous and attainable only by means of undertaking long-term activities. The effectiveness of activities concerning the promotion of health among university youth should be based on the programmes which will be successful as long as they are systematic and adjusted to personal development of the students. Only in such a case there is a high likelihood of shaping long-lasting habits with life-long beneficial effects for health. On the other hand, there is a potential setback to the effectiveness of health promoting programmes, which is the susceptibility of the students beginning their studies to pernicious models of behaviour negatively affecting their lifestyles. Apart from rising awareness about some specific areas of health education (including sexual maturation and stress reduction) such programmes should influence the students' lifestyles (e.g., personal hygiene, physical exercise, nutrition etc.) based on the three basic rules:

- a diagnostic rule allowing to estimate the initial condition including the needs and expectations of both students and teachers who have agreed to create a health promoting university;
- a monitoring rule which currently updates the changes made at school and analyzes the influence of the tasks undertaken in the programme on students' behaviour;
- an evaluation rule which would include the feedback from students and teachers as well as university authorities in the form of both constructive criticism and expectations for the future closely related to the health education aspects.

Incorporating such procedures into university life will encourage teachers to reflect on themselves so as to develop their professional performance and become more attentive listeners. It is of great importance that all members participating in the programme should be in a systematic and active relationship assuming psycho-social factors. It is typical of health promoting university to integrate both teachers and students into finding sources that would fulfill their needs, respect their values and form personal responsibility for the individuals and collective pro-health lifestyles. Therefore, a health promoting university unites the efforts of both teachers and students as well as other staff.

CONCLUSIONS

The research presents an alarming picture of mostly undesirable habits and attitudes of 1st year female students attending UWM with regard to healthy lifestyle. The students attached more importance and care to the appearance instead to pro-health activities such as sufficient PA and proper nutrition. In addition, it is a common tendency among the tested women to drink alcohol on a regular basis. It may be well that such inappropriate lifestyle is a consequence of the students' inability to alleviate stress. For this reason, the epidemiological assessment of health attitudes and habits seems to be valid, especially during the first-year of studies, as this is the final stage of formal education which allows pro-health habits to be established and cultivated. Overall, there is a growing need to implement adequate health-promoting programmes at the university level to help counteract the negative tendencies presented in the current research.

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Received October 24, 2013
Accepted in revised form May 12, 2014