

KNOWLEDGE OF THE INDICATORS OF A HEALTHY LIFESTYLE AMONG STUDENTS OF THE TEACHING PROFESSION

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Abstract: *A new trend in education at primary schools in The Czech Republic requires cohesion between a subject and its practical applicability. One of new educational areas is a piece of knowledge called „A Man and Health“. At the Pedagogical Faculty of the University of Ostrava we have been preparing students in the programme of Health Education in Bachelor's and Master's degrees since 2007. Our study deals with the investigation and comparison of the Pedagogical faculty students and wider population of university students as regards the knowledge about health. The results of our investigation provide documentary evidence of the need of information dissemination especially within the population of prospective teachers.*

Keywords: *health education, health indicators, knowledge of health*

Introduction

Health is the source of the quality of life; it enables us to achieve our aims in life and in the hierarchy of values health is just such an aim. Health in itself cannot be defined without being related to other concepts. Probably the best known definition of WHO specifies that health is physical, mental and social well-being, not the absence of disease or infirmity. In the social understanding of health the given indicators merge into one common denominator which is the way of life. This term contains the value that various people assign to the phenomenon of health, health care, environment and life conditions in the society.

An important concept of the way of life and its relation to human health is the concept of salutogenesis coined by A. Antonovsky and the concept of hardiness formulated by S. Kobasová. They are based on goal-directed arousal of interest in working at oneself and in this way shaping and strengthening one's own health. Salutogenesis is also comprehended as a principle of the lifestyle where the condition of working at oneself means to devote attention not only to the physical and mental components, but also to intellectual ones. The individual does not always have to be healthy to have a feeling

of well-being and dignity. In this sense health education should be focused on personal responsibility towards a meaningful life.

Problem

The transformation of the Czech school began at the beginning of the new millennium with the passing of the document Framework educational programme for primary education which gives preference to the development of key skills of pupils. The quotation of J. A. Komenský: “It is necessary to learn not a number of things but what is essential for life” captures the concept of this programme. In this context also health education is interpreted in the given document which should prepare pupils for a healthy lifestyle.

In the school programme the educational field Man and Health contains the standard for primary education. The topic of the support of health in education also requires proper training of methodically erudite teachers. In addition to postgraduate programmes in the past five years the subject Health Education was accredited to the Faculties of Education both as bachelor and master studies. At the Ostrava University in the academic year 2009/2010 the first students of these subjects will graduate as bachelors specialised in education and master graduates in Teaching of Health Education at lower secondary schools.

Our present study canvasses how groups of students studying subjects where different attention is devoted to the issue of health are oriented in the health issues. We chose three groups of university students, students of teaching at primary and lower secondary schools (in subjects other than Health Education), bachelor students of the subject Health Education and bachelor students of the subject Protection of Public Health.

Research question, method of investigations and the investigated group

We asked the question to what extent does information about health differ among university students. We go by the approach to generating skills on the basis of their orientation in essential knowledge about the activity where the skills are to be applied. It involves particularly the level of knowledge of protective and risk factors of health which are the substance of a healthy lifestyle.

In the investigated group we were seeking answers to the following questions:

1. What are the differences in knowledge about health between students of the teaching profession for primary and lower secondary schools with the exception of the specialisation in Health Education and students specialising in Health Education?
2. What are the differences in knowledge about health between students of the educational subject Health Education and the medical subject Protection of Public Health?

For the collection of data we used J. Šimíček's didactic questionnaire named Civilisation Diseases and a Healthy Lifestyle. The questionnaire contains 23 questions which are focused on two areas of knowledge about health, i.e. the causes of civilisation diseases and their prevention. Some questions contain more than one correct answers. (The maximal number of correct answers is 34.)

Examples of questions:

7. Heart attack results from diseases

- a) coronary arteries closure by thrombus
- b) strong positive emotions
- c) strong negative emotions
- d) great physical exertion

19. What kind of exertion protects from coronary

- a) any kind
- b) walking
- c) tennis, football and other ball games
- c) long-distance run

15. Diabetes mellitus I is produced by

- a) a deficit of insulin
- b) inherent disposition
- c) overeating
- d) lack of exercise

22. Cancer is a threat particularly to

- a) smokers
- b) excessively obese people
- c) persons with a deficiency of proteins in food
- d) alcoholics

The tested group consisted of students of the Teaching Faculty (PdF) and Faculty of Medical Studies (FZS) of Ostrava University. Tab. 1 contains basic data on the group.

Table No. 1: Description of the investigated group

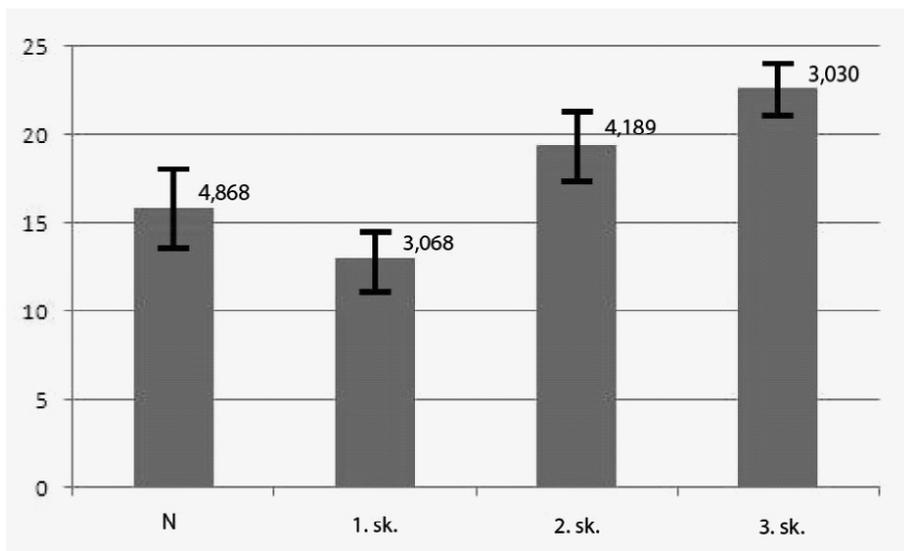
Faculty	Study subject	Number	Age
PdF OU	1. Primary and lower secondary school teachers	147	19 – 23
PdF OU	2. Health education	40	19 – 23
FZS OU	3. Protection of public health	40	19 - 26

Results

Tab. 2 gives a survey of data on the knowledge of students about health issues from the area of civilisation diseases and healthy lifestyle.

Table No. 2 and its graphic representation: Results of the group

Group	Number	Results		M	s
		minimum	maximum		
N	227	4	29	15.855	4.868
1.	147	4	20	13.020	3.068
2.	40	13	25	19.475	4.189
3.	40	15	29	22.725	3.030



Tab. 3 and 4 show the distribution of results in groups and statistically significant difference.

Table No. 3 and its graphic representation: Distribution of results in groups.

Groups	Results	
	M1 below-average	M2 above-average
1.	116	31
2.	6	34
3.	1	39

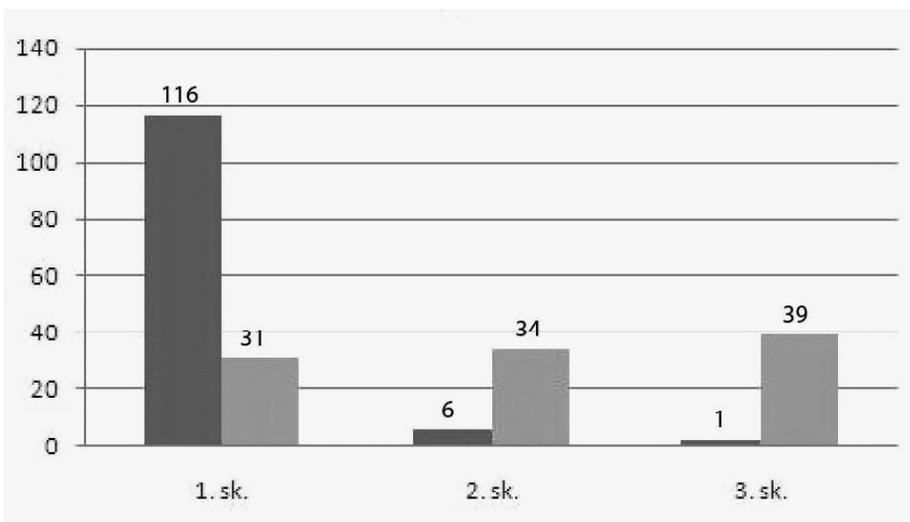


Table No. 4: Significance of difference in results

Groups	χ^2	P
1 : 2	56.638	0.0001
2 : 3	3.914	0.0479
3 : 1	78.389	0.0001

M1 results below the average of all groups

M2 results above the average of all groups

In the questionnaire the distribution of results of the groups shows that below-average knowledge on health was four times higher in the group of students of the teaching profession who come across health-related issues in their learning process only marginally. Although health protection issues for teachers of primary schools are incorporated in the educational programme, they are largely focused on nutrition, sex education and the prevention of drug abuse. For students of the teaching profession for lower secondary schools the programme of the subject Man and Health is included only as an the optional subject. Comparison of results on knowledge about health and health support between students of the specialisation Health Education and students of the medical subject Protection of Public Health show similar results. It is true that a statistically significant difference was proved but only on the threshold of statistical significance.

The questionnaire Civilisation Diseases and a Healthy Lifestyle contains questions related to the causes and prevention of civilisation diseases; therefore we compared the level of knowledge in these two areas. Questionnaire 25 contained the maximal number of correct answers in the area of aetiology, causes or origin of civilisation diseases, and questionnaire 9 in the area of prevention. Table 5 gives the statistical results.

Table No. 5 Results of the knowledge of causes and prevention of civilisation diseases

Group	Causes of civilisation diseases				Prevention of civilisation diseases			
	M	s	min.	max.	M	s	min.	max.
1.	9.87	2.55	4	15	3.40	1.30	0	8
2.	14.67	3.21	8	22	4.52	1.53	0	7
3.	17.02	2.87	11	24	4.97	1.09	2	8

The difference between group 1 and 2 is significant both in terms of aetiology and lifestyle ($\chi^2 = 33.59$, $P = 0.00001$). Between group 1 and 3 the result was similar ($\chi^2 = 71.41$, $P = 00001$) and between group 2 and 3 it is $\chi^2 = 8.81$ and $P = 0.03$ (degree of freedom for all groups equals 1). The difference between group 2 and 3, i.e. students of Health Education, and students of the Protection of Public Health is again statistically significant, but the probability level is considerably lower. Tests of the significance of differences between knowledge of aetiology of civilisation diseases and knowledge of the lifestyle provided similar results in the groups as well as in the entire complex. Groups 2 and 3 whose results in aetiology were better also showed better results in issues of prevention and lifestyle.

Students of the entire body showed that they had the best command in the issue of the negative effect of smoking on the origin of civilisation diseases (89.1 % correct

answers). Another issue with which the students seem to come across quite often and have a good knowledge of is cardiovascular diseases; 87.1 % of the respondents are familiar with heart attack; 81.6 % of the respondents know about the risk of acute cardiac infarction, 81.0 % of the respondents know the correct cause of death when afflicted with cardiac infarction and 71.4 % of the respondents indicated high blood pressure as a civilisation disease.

The students are not so familiar with prevention of cardiovascular diseases. Only 1.4 % of the respondents indicated long-distance running as a prevention of coronary disorders, and only 0.6 % of the respondents indicated a weekly running burden in kilometres after myocardial infarction. Only 1.6 % of the respondents see a lack of exercise as the potential risk of second-type diabetes. We also see gaps in the students' knowledge about the regimen; for instance only 18 % of the respondents indicated butter as the fat with the highest content of cholesterol.

Conclusions and summary

On the basis of knowledge of the indicators of a healthy lifestyle the students of teaching at primary and lower secondary schools showed that their command of the subject in the educational area Man and Health was insufficient and therefore their qualification for the profession of teacher was also insufficient, particularly when teaching the pupils personal responsibility for taking care of their health and boosting the healthy lifestyle.

Similar results in the knowledge of indicators of a healthy lifestyle of students of the medical subject Protection of Public Health support our concept of education of teachers in the study subject Health Education. Getting experts qualified in this area to schools may have a positive effect on the atmosphere in the sense of a healthy lifestyle in the entire school.

By and large, insufficient orientation in health issues of students of the teaching profession provides incentives for contemplation of how to extend the general basis in the educational programme in the sense of the Man and Health concept.

ZNALOSTI INDIKÁTORŮ ZDRAVÉHO ŽIVOTNÍHO STYLU STUDENTY UČITELSTVÍ

Abstrakt: Nový trend ve vzdělávání na základních školách v České republice vyžaduje provázanost mezi subjektem a praktickou aplikací. Jedna z nových vzdělávacích oblastí je předmětem známým pod označením „Člověk a zdraví“. Na Pedagogické fakultě Ostravské univerzity připravujeme studenty v programu Výchova ke zdraví v bakalářských a magisterských studijních programech od roku 2007. Naše studie pojednává o výzkumu, jenž srovnává studenty pedagogické fakulty se širším okruhem univerzitních studentů s ohledem na jejich znalosti o zdraví. Výsledky našeho výzkumu poskytují zřejmý důkaz pro nutnost rozšíření informovanosti o problematice především v řadách budoucích učitelů.

Klíčová slova: výchova ke zdraví, indikátory zdraví, znalosti o zdraví