

HEALTH EDUCATION OF CHILDREN AND YOUTH AS A PART OF PUBLIC HEALTH STRATEGY THE CHALLENGE FOR PHYSICAL EDUCATION TEACHERS

Maria ZADARKO-DOMARADZKA

*Faculty of Physical Education, University of Rzeszów
mzadarko@ur.edu.pl*

Keywords:

- health education,
- physical education
- teachers,
- health.

Abstract:

Background. Physical education teachers have had the obligation to conduct health education classes since 2009. For this reason, it is necessary to monitor the implementation of health education in schools.

Aims. The assessment of teachers' needs to be trained in the field of health education based on opinions of the teachers working in school in the Subcarpathian province.

Materials and methods. The research was done in the beginning of 2014 among physical education teachers (N=299) employed in lower and upper secondary schools in the Subcarpathian province. The method used was a diagnostic survey (with the author's own questionnaire). The chi-square independence test was also applied.

Results. The topics concerning psychosocial health were most difficult for teachers. The topics which they found easy were physical activity, personal hygiene and nutrition. Half of the surveyed teachers conducted health education classes in the gym. Most frequently in the form of a causerie. Most head teachers don't control the classes.

Conclusions. Health education is mostly understood as a physical activity. There is a need to educate teachers in the field of psychosocial health.

INTRODUCTION

Health promotion and disease prevention are areas in which the World Health Organization sees the largest reserves for the protection and strengthening of health of the individual and society. It is especially important to take such actions towards children and youth. One of the components of health promotion is health education which is aimed at shaping in people the habit of taking care of their health and other people's health, making the right health choices and creating environment that will foster health [Tannahill 2009]. In recent years, the issue of health education in relation to Polish school has become an area of interest to many authors [Woynarowska 2008 and 2013; Huk-Wieliczuk et al., 2009; Kowalska 2010; Kubińska 2010 and 2013; Ostrowska 2010; Wolny 2010; Wiśniewska-Śliwińska et al., 2010; Sokołowska 2011; Wrona-Wolny et al., 2011; Żołyński 2011; Nowak 2012a and 2012b; Woźniak-Holecka et al., 2013]. The published research in the field of health education relates to the new core curriculum for general education, including physical education as well as the new role of the teacher of physical education and his or her competence in the field of health education. It also relates to the issue of graduates majoring in physical education – whether they are prepared to the new role.

The common goal of public health and physical culture is health. While in the first case it seems obvious, in the second it is obvious as well, although not for everyone. A new core curriculum, implemented gradually from 2009, puts the requirement of health education on physical education teachers of lower and upper secondary schools. The guidelines for the implementation of this thematic block on the third and fourth stage of education are contained in the 'Regulation of the Minister of National Education of 27 August 2012 on the core curriculum of pre-school education and general education in particular types of schools' [MEN 2012].

'The core curriculum with comments: Physical Education and Education for safety, Volume 8' (MEN 2009) as well as numerous publications by B. Woynarowska describe thematic areas and particular requirements for students, the optimal number of hours, forms and methods of work, the way of student assessment, and also diagnosis and evaluation, such important in health education [Woynarowska 2012a; 2012b; 2012c]. Among five thematic areas recommended for implementation are: 1. 'physical activity, work and leisure, nutrition'; 2. 'physical development during puberty and adolescence'; 3. 'taking care of the body, safety, disease prevention'; 4. 'health and care for health' and 5 'psychosocial health, life skills'. The areas above are identically worded for lower and upper secondary schools, but differ in terms of specific requirements for various stages of education [Woynarowska 2012a].

Six years have passed since the implementation of the new core curriculum in lower secondary schools, and four years in upper secondary schools. Therefore there is a need to monitor and diagnose opportunities and constraints in the implementation of school health education carried out in the framework of physical education.

The aim of this study was to define the difficulties in the implementation of health education in physical education lessons and to assess the needs of vocational training for physical education teachers for their implementation of health education in the Subcarpathian schools.

MATERIAL AND METHODS

The study was conducted in the first quarter of 2014 among physical education teachers working in lower and upper secondary schools of the Subcarpathian region. The method of diagnostic survey was adapted using the author's own questionnaire in electronic form. A link to the questionnaire with the information about the study was placed on the website of the Subcarpathian Board of Education in Rzeszów and Subcarpathian Provincial School Sports Association. Statistical analysis was based on 299 responses of the respondents, with the majority of lower secondary schools (N = 209). The survey questions had a closed character, with the exception of one. Among closed questions were both single choice questions as well as multiple choice ones, but with a limited number of choices, up to three. The subject of questions oscillated within two main areas: attitudes and self-evaluation of teachers towards a new role of health educator imposed on them and methods, content and forms of implemented activities in the field of health. Therefore, to discuss this topic only part of the data and the results were used. The test results relating to, among others, self-evaluation of physical education teachers, the scope of knowledge concerning health and the implementation of the block 'health education' in schools of the Subcarpathian province were published in other articles¹. An estimate of the level of significance of selected dependencies was based on the results of the Chi-square Test of Independence. The following rules of statistics were adopted:

¹ Zadarko-Domaradzka M., Matłosz P., Warchoń K. (2014) Edukacja zdrowotna w szkolnej praktyce procesu wychowania fizycznego, *Problemy Higieny i Epidemiologii*, 95,(3), 673–678.

Zadarko-Domaradzka M. (2015) Realizacja edukacji zdrowotnej w podkarpackich szkołach po reformie programowej w opinii nauczycieli wychowania fizycznego, *Rozprawy Naukowe AWF we Wrocławiu*, 48, 119-126.

$p > 0.05$ - the lack of statistical significance, $p < 0.05$ - significant statistical relationship (*), $p < 0.01$ - a highly significant statistical relationship (**), $p < 0.001$ - highly important statistical relationship (***)).

RESULTS

Table 1. presents the detailed characteristics of the respondents representing the material of the presented research results. Among 299 teachers, the largest group consisted of lower secondary school teachers (69.9%). In the analyzed group, the percentage of women was lower (35.8%) than men (64.2%). Among all participants, most people were in the age group 31-40 (42.5%) and 41-50 (38.8%). The majority (42.8%) of surveyed teachers are graduates of the Academy of Physical Education, (37.8%) university graduates and (19.4%) graduates of other higher education institutions, respectively. Most people had work experience of at least 10 years and the professional title of chartered teacher (75.9%).

Table 1. Characteristics of the analyzed group

characteristic	overall N=299	%
Workplace		
lower secondary school	209	69.9
upper secondary school	90	30.1
Gender		
male	192	64.2
female	107	35.8
Age (years)		
20 - 30	8	2.7
31 - 40	127	42.5
41 - 50	116	38.8
51 - 60	47	15.7
61 - 70	1	0.3
Seniority in school (years)		
0-3	5	1.7
4-7	15	5.0
8-12	66	22.1
13-18	77	25.8
19-25	70	23.4
26-30	41	13.7
>30	25	8.4
Promotion title for teaching staff		
trainee teacher	2	0.7
contract teacher	15	5.0
nominated teacher	55	18.4
chartered teacher	227	75.9

The test results summarized in table 2. showed that the content of health education concerning psychosocial health causes the greatest difficulties for physical education teachers - almost three quarters of teachers indicated this. According to respondents, the content they do not have major problems with are, in turn: physical activity (45.8%), personal hygiene (38.8%) and the principles of healthy eating (33.4%).

Table 2. Content from the ‘health education’ block of physical education core curriculum, indicated by teachers as causing the major and minor problems

Content from the ‘health education’ block	the most problematic		causing no difficulties	
	Number of indications	% of indications	Number of indications	% of indications
psychosocial health	224	74.9	32	10.7
principles of healthy eating	28	9.4	100	33.4
first aid	28	9.4	91	30.4
harmful addictions	22	7.4	57	19.1
personal hygiene	15	5.0	116	38.8
maintaining the safety rules	13	4.3	93	31.1
work and leisure	12	4.0	33	11.0
physical activity	5	1.7	137	45.8
other	47	15.7	19	6.4

Table 3. presents the issues of the block ‘health education’ which in the opinion of physical education teachers are interesting for students. Among them, the most common are nutrition (35.8%), physical activity and physical fitness diagnosis (27.8%) and first aid (19.7%).

Table 3. Content from the ‘health education’ block of physical education core curriculum, indicated by teachers as interesting for the pupils

Content most interesting for students	Number of indications	% of indications
nutrition	107	35.8
physical activity / fitness diagnosis	83	27.8
first aid	59	19.7
addictions	46	15.4
health / disease	24	8.0
personal hygiene	20	6.7
work and leisure	6	2.0
self-assessment / strengths and weaknesses	6	2.0
stress	2	0.7
other	10	3.3

In addition to the scope of thematic requirements in health education, great importance is attached to how to implement these types of activities, including space, forms and methods of work. Therefore Table 4. summarizes the results for the organization and implementation of school health education.

The results show that 51.2% of physical education teaches run health education classes in the gym and most of them (67.6%) in the form of a talk. A third of the respondents does not diagnose the needs of students and does not evaluate classes, and school principals mostly do not supervise the implementation of the content of health education. Only 32.8% of the surveyed teachers admitted being observed while running classes. The vast majority of respondents declared their wish to improve their skills in the field of health education. The largest percentage of those surveyed teachers (45.5%) would benefit from the form of the several-hour course on school premises, 34.8% would decide on a 30 to 100 hour course, and 11% would accept a 1-year postgraduate course.

Analysis of the collected data showed a statistically significant correlation between the location of the course of health education, the gender of the teacher ($p = 0.0029^{**}$) and the type of school ($p = 0.0001^{***}$). The details are presented in Table 5.

Table 4. The organization and implementation of health education at schools

	Overall N=299	%
Place of classes		
gym	153	51.2
classroom	101	33.8
other	45	15.0
Preferred methods of work		
talk	202	67.6
discussion	146	48.8
multimedia presentation	101	33.8
work in groups	98	32.8
presentation	57	19.1
lecture	56	18.7
case problem methods	33	11.0
other	10	3.3
work with book	6	2.0
Diagnosis of needs		
Yes	197	65.9
No	102	34.1
Evaluation of classes		
Yes	204	68.2
No	95	31.8
The use of new teaching aids		
Yes	195	65.2
No	66	22.1
I do not know such aids	29	9.7
no answer	9	3.0
Observation of classes by the school head		
Yes	98	32.8
No	192	64.2
no answer	9	3.0
The form of improvement of qualifications		
several-hour course in school	136	45.5
30 to 100 hour course	104	34.8
course over 100 hours	16	5.4
1-year postgraduate course	33	11.0
2-year postgraduate course	4	1.3
no answer	6	2.0

Table 5. Selected correlations

Place of classes	Gender $p = 0,0029^{**}$				Type of school $p = 0,0001^{***}$				Overall
	Male		Female		lower secondary school		upper secondary school		
	N	%	N	%	N	%	N	%	
gym	95	49.5	58	54.2	112	53.6	41	45.6	153
classroom	76	39.6	25	23.4	78	37.3	23	25.6	101
other	21	10.9	24	22.4	19	9.1	26	28.8	45
overall	192	100	107	100	209	100	90	100	299

p –result of the χ^2 independence test

In addition, it has been shown that the gender of teachers is also a significant factor that differentiates the types of working methods in health education (Table 6).

Table 6. Correlation between teaching methods used in health education classes and teachers' gender

Teaching methods	Gender				p
	Male		Female		
	N	%	N	%	
talk	137	71.4	65	60.7	0.0604
discussion	97	50.5	49	45.8	0.4332
multimedia presentation	58	30.2	43	40.2	0.0803
work in groups	49	25.5	49	45.8	0.0003***
presentation	28	14.6	29	27.1	0.0082**
lecture	45	23.4	11	10.3	0.0052**
case problem methods	17	8.9	16	15.0	0.1067
other	5	2.6	5	4.7	0.3402
work with book	2	1.0	4	3.7	0.1109

p –/ result of the χ^2 independence test

Women often choose methods activating students (e.g. group work) whereas men prefer expository methods (e.g. a lecture). It turned out that factors such as gender, age, work experience, job title or type of school, do not differentiate in a statistically significant way the choice of the form of qualifications improvement in health education.

DISCUSSION

The cross-sectoral nature of the activities in the field of public health goes far beyond the Ministry of Health. Among the entities that should be involved in health issues is also the Ministry of Education. The most important change introduced in recent years, related to the concern for public health is a new core curriculum, progressively introduced from the 2009/2010 school year. It is assumed that it will really contribute to the popularization of knowledge of health among children and young people [Biuletyn Forum Debaty Publicznej 2013].

This study was aimed to show the current status of school health education and the competence of teachers of physical education from the perspective of its implementation on regional level, but reflecting the situation nationwide [Nowak 2012b; Wiśniewska-Śliwińska et al., 2010; Woynarowska 2013]. Thematic scope of health education in the new core curriculum was expanded to include psychosocial health issues, which is extremely important but often underestimated, and the leading subject in health education became physical education. The question therefore arises whether teachers teaching the subject physical education coped with a new challenge?

The results of the author's own research presented in the paper show that mental and social health issues, including life skills, as well as elements of public health, pose considerable difficulty for physical education teachers. Almost 75% of teachers participating in the survey admit it. Respondents teaching physical education in the Subcarpathian schools declare that they have no difficulties with the subject matter, which as shown by the results, only refers to physical health issues. This proves that in the mentality of many of them the paradigm of biomedical approach to health is still very strong. However, health has not only its physical dimension, but also psychological, social, sexual and spiritual. It is therefore necessary to overcome stereotypes concerning physical education and change approaches to health. Modern physical education teacher, in light of the content and requirements posed by the new core curriculum, is obliged to change his or her attitude to health from pro-somatic to

holistic. The perception of physical education classes must be changed by teachers themselves, as well as by society from pro-sports pro-health classes.

The results also show that a big challenge for physical education teachers turns out to be a change in the conditions and methods of teaching classes from a block of 'health education', including the use of activating methods. As was rightly observed by Charzyńska-Gula (2012) 'methods used in the curriculum very clearly affect its effectiveness.' Health education compatible with the new core curriculum requires the use of activating methods and is based on learning through experience [Woynarowska 2012a]. Based on the results of this own study it can be concluded that teachers, however, are more willing to use expository methods such as a talk, rather than activating methods.

The above-described difficulties in the implementation of school health education overlap with the opinions of university teachers, gathered before schools began to apply the new core curriculum. Even then three sources of these difficulties were predicted. At first physical education teachers themselves were indicated - their incompetence in terms of activating methods, conduct of classroom activities, perception of physical education classes as a sports training and understanding health education as such, the shortcomings of their own health behaviors, which in turn translates to the credibility of the educator. The second source of problems was seen in the school management, other teachers and parents and their approach to the new role of the physical education teacher and still low position of the subject in the hierarchy of school tasks. Last source of difficulty was related to the organization of the school, its insufficient number of classrooms and poor equipment [Woynarowska 2008]. Despite the fact that 6 years have passed since the introduction of the new core curriculum, the difficulties defined by university teachers remain equally relevant today. As the results of the own study have shown school principals do not supervise the implementation of classes from the block 'health education'. Three quarters of interviewed teachers were neither observed nor checked on how they manage with the new role of the health educator and to what extent they fulfill the recommendations of the new core curriculum. Most teachers continue to run health education in the gym, not in the classroom, using expository methods, not activating ones and implement mainly the content relating to health in the physical dimension. All this shows that the inclusion of physical education teachers in health education in the form specified in the new core curriculum for general education is and will be a long process. It is optimistic that they declare their willingness to take part in vocational training in health education. However, the basis for any change in practice is first a change in the mentality and stereotypes, holistic health perception and understanding that good health is the capital and investment for the future for both the individual and society.

CONCLUSIONS

1. There is a need for skills improvement of physical education teachers in terms of psychosocial health issues.
2. Health education implemented within the framework of physical education is perceived by the teachers of this subject mostly in the context of physical exercise.
3. School health education requires appropriate pedagogical supervision if it is to be the basis of public health.

REFERENCES

1. Charzyńska-Gula M., (2012), *Szkolna edukacja zdrowotna jako priorytet zdrowia publicznego*, w: Szymborski J. (red.), *Zdrowie publiczne i polityka ludnościowa*, Rządowa Rada Ludnościowa, Warszawa: 121.

2. Huk-Wieliczuk E., Marcinkowski J. T. (2009), *Uczelnie wyższe wychowania fizycznego wobec aktualnych potrzeb edukacji zdrowotnej*. Problemy Higieny i Epidemiologii, 90 (4): 470-476.
3. *Jak wspierać zdrowie Polaków? Zdrowie publiczne na rzecz zdrowia społeczeństwa*. (2013), Wydawnictwo Kancelaria Prezydenta Rzeczypospolitej Polskiej, Biuletyn Forum Debaty Publicznej 26, Warszawa. <http://www.prezydent.pl/archiwum-bronislawa-komorowskiego/fdp/biuletyny-fdp/>
4. Kowalska J. E. (2010), *Zajęcia z edukacji zdrowotnej – koncepcja i realizacja praktyk studentów Uniwersytetu Łódzkiego*. Wychowanie Fizyczne i Zdrowotne, 10: 10-17.
5. Kubińska Z. (2010), *Nauczyciel wychowania fizycznego promotorem zdrowia?*, w: *Wychowanie fizyczne i sport w szkole*, w: Szaleniec Z., Bergier J. (red.). Komisja Nauki, Edukacji i Sportu Senatu Rzeczypospolitej Polskiej. Kancelaria Senatu, Warszawa, Probl Nauk Wych: 50-58.
6. Kubińska Z. (2013), *Koordinator edukacji zdrowotnej w szkole w opinii nauczycieli wychowania fizycznego*. Seria Monografie i rozprawy nr 1, Wyd. Państwowa Szkoła Wyższa im. Papieża Jana Pawła II w Białej Podlaskiej, Biała Podlaska.
7. MEN z dnia 27 sierpnia 2012 r., *Rozporządzenie Ministra Edukacji Narodowej w sprawie podstawy programowej wychowania przedszkolnego i kształcenia ogólnego w poszczególnych typach szkół*, www.men.gov.pl
8. Nowak P. F. (2012a), *Model edukacji zdrowotnej w polskiej szkole w opiniach nauczycieli*. Hygeia Public Health, 47 (2): 207-210.
9. Nowak P. F. (2012b), *Realizacja edukacji zdrowotnej w szkole w opiniach nauczycieli*. Medycyna Ogólna i Nauki o Zdrowiu, 18 (3): 171-175.
10. Ostrowska M. (2010), *Szkolna edukacja zdrowotna - szanse i zagrożenia*. Wychowanie Fizyczne i Zdrowotne, 3: 4-6.
11. Sokołowska M. (2011), *Edukacja zdrowotna w wychowaniu fizycznym - szanse i bariery*. Remedium, 7/8: 42-44.
12. Tannahill A. (2009), *Health promotion; the Tannahill model revisited*. Public Health, 123: 396-399.
13. Wiśniewska-Śliwińska H., Marcinkowski J. T., Wiśniewski S. A. (2010), *Opinie nauczycieli wychowania fizycznego względem ustanowienia ich głównymi edukatorami zdrowotnymi w szkołach*. Hygeia Public Health, 45 (2): 206-2012.
14. Wolny B. (2010), *A physical education teacher as a part of school health education*. Human Movement, 11 (1): 81 –88.
15. Woynarowska B. (2008), *Edukacja zdrowotna w szkole w Polsce. Zmiany w ostatnich dekadach i nowa propozycja*. Problemy Higieny i Epidemiologii, 89 (4): 445-452.
16. Woynarowska B. (2012a) *Edukacja zdrowotna. Poradnik dla nauczycieli wychowania fizycznego w gimnazjach i szkołach ponadgimnazjalnych*. Wydawnictwo Pedagogiczne ZNP, Kielce.
17. Woynarowska B. (2012b), *Organizacja i realizacja edukacji zdrowotnej w szkole. Poradnik dla dyrektorów szkół i nauczycieli szkół ponadgimnazjalnych*. Wydawnictwo ORE, Warszawa.
18. Woynarowska B. (2012c), *Organizacja i realizacja edukacji zdrowotnej w szkole. Poradnik dla dyrektorów szkół i nauczycieli szkół gimnazjalnych*. Wydawnictwo ORE, Warszawa.
19. Woynarowska B. (2013), *Blok „edukacja zdrowotna” – wdrażanie w wychowaniu fizycznym w gimnazjach*. Wychowanie Fizyczne i Zdrowotne, 10: 4-8.
20. Woźniak-Holecka J., Sobczyk K. (2013), *Organizacja szkolnej edukacji zdrowotnej dotyczącej otyłości u dzieci*. Environmental Medicine, 16 (4): 64-70.

21. Wrona-Wolny W., Makowska B. (2011), *Opinie studentów - przyszłych nauczycieli wychowania fizycznego dotyczące realizowanych przez nich zajęć z edukacji zdrowotnej w szkole*. Hygeia Public Health, 46 (4): 477-483.
22. Żołyński S. (2011), *Edukacja zdrowotna - szansa na zmianę niekorzystnych tendencji i wskaźników zdrowotnych polskiego społeczeństwa*. Lider, 1: 23.