Abstract

Problem Statement: Due to unsatisfactory medical and demographic situation in Ukraine, more attention should be paid to all educational disciplines related to child’s health. Purpose of Study: To assess the Physical Culture and Basics of Health teachers’ qualification level. Methods. The pedagogues (322 teachers of Physical Culture and 406 teachers of Basics of Health) who teach in primary school of Ivano-Frankivsk region (Ukraine) were surveyed. The peculiarities of in-service teacher training, using of innovative technologies, the methodical and material support etc. were evaluated. Life quality was assessed by MOS SF 36 questionnaire. Findings and Results: Most respondents (75%) have been involved in the teaching of Physical Culture and Basics of Health in the primary school for over 10 years. However, only 41.0% have appropriate education in the field of Physical Education, Sport and Health and specialization of Physical Culture teacher. The necessary education and specialization of Basics of Health teacher did not have any respondent. It was found effective studying method skills could be applied by 15.8% of respondents. In-service teacher training in preventive and life skills education had 53.2% teachers of Basics of Health. The Basics of Health teachers have low life quality according to scales related to mental and physical health. Conclusions: Insufficient qualification level, the inability to implement innovative technology and interactive teaching methods, low health preserving competence are the main obstacles in the implementation of subjects of health profile in primary school.

Keywords: Physical Culture; health; teacher.

1. Introduction

The roles, functions and responsibilities of teachers have been changing in nowadays society. The new professional profile of the teacher is forming, and it is tightly connected with social and educational changes. Thus the teacher should be oriented on continuous personal and professional development, must promote the values of a healthy society, participate in community affairs, provide...
effective management of learning environment and resources, and approximate school curricula to the needs of society (Павлова, 2012).

The low birth rate, the negative population growth, the reducing of life expectancy, the increasing of mortality are the main causes of negative medical and demographic situation in Ukraine. The amount of population decreased on 2.5 million during 1991-2005. The high blood pressure and level of cholesterol, smoking, alcoholism, high body mass index, the low consumption of fruits and vegetables, lack of physical activity, use of narcotics, unsafe sex, and smoky apartment are the main causes of mortality and morbidity in Ukraine (Pavlova & Shyyan, 2011). Also the problem of high morbidity caused by HIV/ AIDS, tuberculosis, sexually transmitted diseases are unsettled. The level of social culture is low; unsatisfactory is the health of children and adults. According to statistic data, every third child has different diseases already before the school entering.

10-20% of preschool children are overweight, 30-40% have nasal diseases, 20-40% have posture violations with spine deformity, 30-40% suffer from diseases of the circulatory and respiratory systems (Балакірєва et al., 2008). The appearance of such problems coincides with beginning of school education. In school, child must strictly regulate own behaviour and motor activity (for example to sit still, do not talk, do not run along the corridor, do not walk, etc.).

Further increasing of studying activities leads to the reduction of physical activity, walking and sleep, violate adaptation processes, cause the growth of cardiovascular diseases and metabolic disorders. Thus, 30% of first graders have chronic diseases, the amount of such children in 5th grade is 50%, and 64% of 9th grade schoolchildren have poor health. The 1.5-2 times increasing of chronic diseases can be observed during the period of school education.

In Ukraine, 45% of boys and 35% of girls smoke, 68% of boys and 64% of girls take an alcohol; 13% of young people take light narcotics. It is known the health of children and the level of formation of healthy habits are the important prognostic indicators of future well-being of the country (Pavlova & Shyyan, 2011). Due to unsatisfactory medical and demographic situation in Ukraine, more attention should be paid to all educational disciplines related to child’s health. That is why the health education of children that demand the professional development and training of teachers requires special attention.

Purpose of study was to assess the Physical Culture and Basics of Health teachers’ qualification level.

2. Materials and methods

The pedagogues (322 teachers of Physical Culture and 406 teachers of Basics of Health) who teach in primary school of Ivano-Frankivsk region (Ukraine) were surveyed. The peculiarities of in-service teacher training, using of innovative technologies, the methodical and material support etc. were evaluated. Life quality was assessed by MOS SF 36 questionnaire according 8 scales (Фещенко et al., 2002):

- Physical Functioning (PF) – subjective assessment of everyday physical activity; the higher is the score, the more physical work can perform the respondent;
Role-Physical (RF) – the influence of health status on daily work during last four weeks; the higher indexes indicate the less problem with daily activity limited by physical health.

Bodily Pain (BP) – the impact of pain on daily limitation during the last four weeks; if the index is high, then pain feelings do not obstruct the respondent’s daily activities.

Vitality (V) – the evaluation of respondent’s vital tone for the last four weeks.

General Health (GH) – the subjective assessment of respondent’s health.

Social Role (SR) – the assessment of social activity level and relationships for the last four weeks; low scores indicate significant limitation of social contacts due to unsatisfactory emotional and physical state.

Role-Emotional (RE) – the influence of emotional problems on respondents’ daily work for the last four weeks.

Mental Health (MH) – the characteristics of respondent’s mood and emotional state.

The program OriginPro8.1 was used for statistical processing of the data. The nonparametric Kruskal-Wallis test (Kruskal-Wallis ANOVA) was applied for comparing the independent samples. Reliable differences at the level of significance at least 95% (p< 0.05) were analysed.

3. Results

Most respondents have been teaching the subject “Basics of Health” for a long period. Only 10.3% have been working as teacher for three years, 10.8% – for 4-6 years, 12.8% – for 7-9 years, 66.0% – more than 10 years (Fig. 1). However, the methodology of life skills could be applied only by some pedagogues. 15.8% passed appropriate training and received the certificate. Such ratio can be observed also for Physical Culture teachers. 14.2% have 3 years of work experience, 10.5% have been working for 4-6 years, 74.8% – more than 10 years. Only 41.0% of all respondents have appropriate education in the field of Physical Education, Sport and Health (specialization “Physical Culture teacher”). No one of interviewed pedagogues have specialization “Basics of Health teacher”. In elementary school, the “Basics of Health” was taught by specialist of Primary Education (the pedagogue who teaches all subjects in elementary school and usually has no experience in preventive education).
In-service teacher training in the field of school preventive education or life skills formation was passed by 53.2% of Basics of Health teachers during certification period. 27.0% of respondents visited traditional studying courses about realization of preventive programs in school conditions, 12.8% were involved to innovative training activities (Fig. 2). Naturally, only 11.8% can construct training lessons, while 77.8% prefer traditional forms of lessons. 66.0% of teachers received information about improving the quality of subject learning in accordance with requirements of the new state standard to primary education on the basis of personally oriented approaches exactly during in-service teacher training courses, workshops or other events (seminars, meetings, etc.).
In-service teacher training courses in regional Institute are essential for improving the school lessons. 69.4% of teachers reported that useful for their professional development were “refresh” courses organized in in-service teacher training institution, 65.1% – methodical association and meetings, 23.1% – training courses on bases of In-service teacher training institute.

Basics of Health teachers accessed the level of supply by textbooks and teaching aids as high. 75.9% of teachers were provided by textbook on high or sufficient level, 57.9% had enough methodical literature useful for life skills development. 40.1% of teachers noted about the presence of visual materials in school. It should be noted that most manuals, tables and other teaching aids were bought by teachers’ own cost (86.2% of answers), 5.9% buy it with the help of parent committee, public organizations or sponsors, 6.9% – within the school budget. The specialized Basics of Health classes are only in 22.2% of schools. 62.1% of pedagogues taught pupils in unspecialized classrooms. Only 3.4% of respondents indicated that special training classroom for Basics of Health lessons had passed the certification. More than half of the teachers noticed that their working place was not equipped with computers (67.0%), printer (75.1%), scanner (75.1%), interactive board (72.1%), copy machine (72.1%), multimedia projector (69.0%).

The teachers of Physical Culture (65.2%) accessed the level of methodological and material support as low. Only 22.0% consider it as sufficient and confirm that school community has all necessary equipment for Physical Culture lessons. Material and methodological support for Physical Culture lesson is replenished mainly by teachers’ cost (61.5%), also by public funds (5.0%), by non-profit organizations (13.0%), by the parent committee cost (18.0%).

The differentiated approach to Physical Culture lesson that consider health status, level of physical development, training abilities can realize 47.2% of teachers. In particular, 41.0% of respondents noted the specialized complex exercises were planned for every medical group, 1.2% of respondents pointed that individual pedagogues teach schoolchildren of various medical groups, 4.3% noted about separate schedule for different medical groups.

Additional sport and recreational activities for elementary schoolchildren were organized by 81.9% of respondents. Those activities during last academic year were focused on physical skills development (55.9% of answers), and on motor skills formation and improvement (46.6%).

The main problems that occur during pedagogues’ work are omissions of lessons by schoolchildren without valid reason (25.0%), aggressive behaviour and tendency to violence (25.0%). It should be noted that, according to this problem, special meetings for parents are organized. The main themes of such meetings are prevention of harmful habits (92.0%), prevention of violence (67.2%), sex education of schoolchildren (44.1%), security of web and social networks (78.0%) (Fig. 3). However, a few parents during academic year have questions about the content of such topics: child’s physical health (17.0%), prevention of unhealthy habits (21.0%), prevention of violence (19.1%), formation of hygiene practices (25.0%), security and web network (36.1%). 93.1% of respondents note that parents encourage them in popularization of healthy lifestyle.
Fig. 3. The preventive work with parents. 1 – The problem of identification of physical health level, 2 – unhealthy habit prevention, 3 – prevention of violence among schoolchildren, 4 – formation of hygiene practices, 5 – sex education of primary schoolchildren, 6 – security in internet and social network

The average rates on scale Physical Functioning were within 76.2-88.8 points (Table 1). That indicated the absence of significant limitations on respondent’s daily work. Also the indexes according to scale Role-Physical were low – 59.0-66.7 points. For Basics of Health teachers, insufficient were indexes of Bodily Pain (51.6 points) and General Health (49.3 points) scales. This indicates about poor health status and significant decreasing of daily activity by pain feelings. Physical Culture teacher had the highest life quality scores. Thus, the regular physical activity training has positive impact on pedagogues’ life quality and wellness. Statistically significant difference between life quality of Physical Culture teachers and Basics of Health teachers was indicated according to scales Physical Functioning, Role-Physical, Bodily Pain and General Health.

Table 1. Pedagogues’ Life Quality

<table>
<thead>
<tr>
<th>Scales</th>
<th>Points, M ± m</th>
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<tr>
<td></td>
<td>Teacher of Physical Culture</td>
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<tr>
<td>PF *</td>
<td>88.8 ± 12.0</td>
</tr>
<tr>
<td>RF *</td>
<td>66.7 ± 8.1</td>
</tr>
<tr>
<td>BP *</td>
<td>63.2 ± 7.5</td>
</tr>
<tr>
<td>V</td>
<td>55.2 ± 6.3</td>
</tr>
<tr>
<td>GH *</td>
<td>60.5 ± 11.2</td>
</tr>
<tr>
<td>SR</td>
<td>75.5 ± 5.8</td>
</tr>
<tr>
<td>RE</td>
<td>65.3 ± 9.5</td>
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<tr>
<td>MH</td>
<td>62.4 ± 11.3</td>
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* There is significant difference (p < 0.05) between the results of Physical Culture teachers and Basics of Health teachers.
4. Discussions and conclusions

Physical Culture and Basics of Health are the only subjects in Ukrainian school education whose main aim is to develop and preserve the child’s health. The school subject “Basics of Health” is based on an understanding of human life and health as the greatest value, on the necessity to use really effective educational technologies that help in formation of useful for health values and skills. In Ukraine, the education based on life skills is implemented only within subjects “Basics of Health” and “Physical Culture”. This pedagogical technology associates the functions of education (formation of identity, values and beliefs) with the development of psychosocial competencies that promote a sort of behavioural “immunity” to negative social influence and risky behaviour. Such life skills education (especially in health area) helps children and youth to apply the knowledge and develop some attitudes and obtain specific skills that are useful for a positive decision and actions for disease prevention. Thus, the quality of teacher education and in-service teacher training has a determining role for promotion and development of health preserving competence. The teacher of Physical Culture and Basics of Health must possess not only the knowledge about healthy lifestyle, methods of preservation and promotion of health, but also follow a healthy lifestyle and attitude with responsibility to own health.

The quality of teacher training is the key factor that determines the effectiveness of such study. For maximizing the study effectiveness, the teacher must know not only modern concept of health or child’s development or principles of study that are based on life skills, but also must master the modern pedagogical techniques (especially training method), the ability to use high-quality teaching materials and modern sources of information, the ability to understand the interests and needs of children of different age groups, the capability to cooperate with teaching staff and the community. Teacher of the highest category must show not only high level of professionalism or initiative or creativity, but must be able to use the effective innovative educational methods and technologies, to produce original, innovative ideas, non-standard forms of physical training and sports events, actively implement forms and methods of health promotion.

The problem of in-service teacher training and improvement of professional level is especially acute because of the relatively recent introduction of the subject “Basics of Health” in school education. No respondent has the appropriate professional education according to diplomas. That is why the development of intensive retraining curricula is topical for Ukrainian teachers.

The formation and development of health preserving competence of Physical Culture and Basics of Health teachers and the direction of educational process at preserving and improving the schoolchildren’s health are important. It can be examined as a complex of knowledge and skills directed at developing, strengthening and improving the health. Health preserving competence can be viewed in two aspects – personal (responsible attitude to own health) and professional (awareness of health value of all subjects of the educational process). Motivational and volitional component of health preserving competence involves wilful efforts to improve and harmonize health and sustainable needs of individual to maintaining not only own health but also the health of others.

The core part of life quality is the health. Thus, the life quality indexes are an indirect indicator of health-preserving competence formation. The life quality indexes of Ukrainian pedagogues are
significantly lower than for United Kingdom or Canada elderly residents or patients with chronic diseases from England (Hopman et al., 2000; Jenkinson, Coulter, & Wright, 1993). The Role-Physical of Canadian residents was 76.2 points, Vitality – 67.7 points, Social Role – 87.0 points, Role-Emotional – 83.4 points, Mental State – 79.3 points (Hopman et al., 2000). The life quality of Ukrainian teachers is similar to respondents with continuous illness condition (Jenkinson et al., 1993). It indicates about the non-formed personal part of health-preserving competence.

The difficulties in health preserving competence or application of methods for life skills formation are the results of insufficient possession of theory and methodology of teaching. For the improving of professional level, it is important to construct the training lessons, to acquire the techniques of working with children who have problems with physical or psychological health. The less frequently teachers mentioned the problem of material and technical support. However, the possibility to use computer, the presence of an appropriately equipped cabinet, the access to specialized websites will effect positively on studying process.

The main problems of studying process are caused not only by low material and technical support, but also by:

• absence of specialized basic education;
• inability to implement innovative technology and interactive teaching methods;
• inability to master life skills technique according to new technologies;
• low level of health-preserving competence that is connected with poor health, declarative attitude to own health, lack of practical action for health improving.

References