The Role of School Medicine Doctors in Health Education in Croatia – Past, Present and Future

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ABSTRACT

Croatia never had a separate vocation (occupation) of a health educator. Health education is one of the main tasks in the long tradition of preventive work of doctors-school medicine specialists. Additionally, in the school curriculum in the Republic of Croatia the health-educational contents are integrated into various subjects, and are conducted by teachers. However, there are requests to introduce a new subject into schools called Health Education. We asked physicians of school medicine their opinion on the introduction of this new subject. 30% of the physicians were dissatisfied with the current condition, 10% were satisfied, while there were no very satisfied school medicine doctors. They believe that health education goals are oriented solely to passing on knowledge (facts), while efforts are not done to change habits and attitudes of young people. They recognize themselves as persons mostly involved in health education in schools. Half of the school medicine doctors believe that the school curriculum should contain both a separate subject as well as integration of health education into other subjects. Before introducing any changes into healthcare or education system, it is necessary to examine the attitudes of students and parents, to direct the changes towards the promotion of the cooperation between the healthcare system, education, civil society, school and community where investing into the health of young people is done through comprehensive and holistic programmes.

Key words: health education, school medicine, health promoting schools, children and youth

Educating children at school on health should be given the highest priority, not for their health per se, but also from the perspective of education, since they are to learn their need to be in good health.

Hiroshi Nakajima, WHO former president

Background

Investing into children and youth means investing into the future. For that reason, the World Health Organization, setting up its goals for the 21st century, dedicated special attention to children and youth1,2. In Croatia, school children and students make up 15.5% of the entire population3. Very often they are described as its healthiest part, if the measure for health is taken from the specific mortality and the leading morbidity. However, the education, development, maturing and schooling period makes this population particularly sensitive to health disorders in its widest extent4. Since in that period of socialization they adopt attitudes and habits of a healthy lifestyle and develop responsibility for their own health, it is important to work with school-age children and youth actively and continuously5.

The war and the post-war periods in the Republic of Croatia still influence the population’s health. The children and the youth were victims of the war times – lost childhood, life in exile, loss of close people and family members are not easily forgotten6. Today, the intense economic, political and social changes influence the youth health directly and indirectly. Parents losing jobs, the concentration on the market economy (privatisation), less

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and less time parents spend with their children, and value system changes in families and the society itself, are only a part of the intense changes leading to new health needs and problems of young people, in addition to the traditional and already existing ones⁷.

School Medicine in Croatia: The story so far

Croatia has a long tradition in the development and the organization of the health care for children and youth⁹. Croatia is one of the first countries which organized the Master Program in School Health in 1955, at the Andrija Stampar School of Public Health, Medical School, University of Zagreb, as well as a specialization in School Medicine, organized by the Ministry of Health.

During the last years, the Programs have been renewed according to the dynamics of changes and the prevalence of current problems. School Medicine in Croatia has had different positions within health care systems⁸:

1. **Until 1979**: School health care team (doctor and 1 or 2 nurses), responsible for preventive and curative health care for school children, located in School dispensaries in Health Centres

2. **1980–1997**: School health care team (doctor and 1 or 2 nurses) for every primary and secondary school and faculty, responsible for preventive and curative health care for all school children (exception – for curative health care family doctors and/or paediatricians), located in School Medicine Services in Health Centres.

3. **1998–2003**: School health care team (doctor and nurse) for every primary and secondary school and university students, responsible only for preventive health care, located in School Medicine Services in County Institutes of Public Health.

The reactions of the profession/school medicine specialists to the latest changes in the law were different. A part of them immediately decided to work only the preventive care, choosing school as the «setting» for their work. The rest chose only the curative care, oftentimes not only for the children but for their parents, as well as other adults, i.e. they stopped being school medicine specialists and became general practitioners, most often, lease-holders. Discussions whether such a decision within the health care system reform was the twilight or the renaissance of the school medicine have been going on for some time⁹. In summary, a school medicine specialist in Croatia, at present, is a medical doctor able to independently perform specific, preventive work in the field of school children and youth health care. The curative health care for school children and youth is conducted by the chosen general practitioner and/or paediatrician. Today, the doctor of school medicine is one of the main carriers of health educational work with the youth, using an active approach aimed at (a) gaining healthy life habits, (b) the primary addiction prevention, (c) mental health protection, (d) family planning, (e) timely and early detection of disorders and diseases, (f) welfare for children with disabilities and chronic health conditions. The doctor of school medicine does his tasks in health education through individual counselling, small groups, discussions and lectures, while the topics cover from growth and development topics to leading health problems of the youth, risky behaviour and mental health¹⁰.

Croatian Network of Health Promoting Schools (CNHPS)

According to the principles stated in Ottawa Charter for Health Promotion, Council of Europe (CE), Commission of the European Communities (CEC) and World Health Organization/Office for Europe (WHO/EURO) started a joint project entitled «European Network of Health Promoting Schools (ENHPS)» in the early 90-ies¹¹,¹². At the beginning, the main aim for development several model (pilot) schools in different European countries was to demonstrate the impact of Health Promotion in the school settings and to disseminate experiences and information to the health and education sectors, influencing policy and practice, both nationally and internationally. During the last fifteen years, the project grew up into a movement for the promotion of health in schools, and the conclusion of the First Conference on Health Promoting Schools in 1997 was that «every child and young person in Europe has the rights and should have the opportunity to be educated in a health promoting school» ¹².

To sum up, there are three components or domains of activities that characterized the Health Promoting Schools approach: (a) the formal health curriculum that gives school-aged children the essential knowledge and social skills that will allow them to make enlightened choices affecting their physical and psycho-social health, (b) the school environment, which refers to the quality of the physical environment and the school climate, the health services and policies of the school, and finally, (c) the school/community interactions¹⁴,¹⁵.

In 1993, Croatia was still at war, suffering and trying to solve many essential problems and the development of the program based on the principles of health promoting schools was not on the list of priorities. However, both ministries – Croatian Ministry of Health and Ministry of Education and Sports recognized the value of the investment in health for children and youth and a great need to act immediately. Both ministers signed the official document (agreement) to join European Network of Health Promoting Schools, accepting their concepts and principles and promising to do their best, in extremely difficult political and economic circumstances. Croatian Network of Health Promoting Schools (CNHPS) was formally inaugurated in September 1993¹⁶.

Problems

Last year, the Croatian minister of science, education and sports founded a working group with the aim of making a proposal for introducing sexual education into schools. The initiative caused numerous reactions in the
public. The discussions ended with the minister’s announcement that health education will be introduced into primary and secondary schools as an obligatory part of the class. A positive side thing is that the minister has realized that the sexual education cannot be excluded from teaching and developing attitudes and health habits in general. The decision on introducing health education into schools seems justified, but there are several problems related to it:

1. The Republic of Croatia is one of the few countries in the world which does not have the vocation of a «health educator» neither is there the vocation of a «health educator in school». This tradition is present from the times of Andrija Stampar who, at the beginning of the 20th century, said that the task of every doctor is to be a teacher: the word «doctor» has its root in the Latin word «doceo, docere» which means «to teach». Stampar based his approach on the fact that it is easier to make oneself master of a «tool» than learn facts on health and illness. This knowledge requires a background in medical sciences. Since then, health education became a health care measure which is integrated into doctor’s everyday work. If a new subject should be introduced, the problem refers to its carrier, i.e. whether Croatia needs «health educators» as a new expert profile or additional education of teachers or somebody else will be sufficient for this responsible role?

2. Health educational contents are traditionally integrated into the curriculum of the regular primary and secondary school in the Republic of Croatia, especially in the subjects such as «Nature and Society», «Biology» and «Physical and Health Culture». The official documents of the Ministry of Education contain aims of the methodical units, the time of their taking place, the teaching method, and the responsible carriers of such contents are teachers. Additionally, the same documents state that the school is an important place for promoting health and that it should follow the guidelines of health promoting schools. The problem is whether there is a need for extra health contents or whether the method of conducting the planned programs should be changed?

3. Schools are essential in achieving health literacy and have responsibility for developing lifelong learning skills. Also, there is no doubt that health promoting schools have the potential to empower pupils, teachers, parents and health professionals to achieve and have control over their health. But, the setting’s approach still has many challenges to be discussed and managed. The materials on the effectiveness of health promoting schools state that the programs are (a) effective in transmitting knowledge, skills and supportive health choices, (b) most effective when they are comprehensive, linking the school with other partners in community and (c) depend on health policy and contextual factors influenced by decision-makers. According to the evaluation results, there are many different health programs in schools, but they are mainly focused on disease prevention and health protection. The problem lies in whether only curriculum changes (most often in the cognitive domain) can fulfill the task of the school in investing into the health of the youth?

4. In the recent years, the civil society movement has been rapidly developing in Croatia. During the war, many foreign non-governmental organizations, autonomously or cooperating with the newly-founded national NGOs, worked on various programs offering psycho-social support to children and youth with the aim of alleviating war traumas. The number of the psychologists in schools grew as well as their role; many teachers went through the additional education on innovative and interactive workshops in the classroom relating to the youth mental health promotion, self-esteem and self-consciousness development. A part of the national non-governmental organizations is still very active in schools, very often with programs related to health. The problem which is ever more present in the present situation is a lack of activity coordination, ignorance of the others’ activities and the lack of cooperation between the health care sector, the education sector and the civil society.

What Do School Medicine Doctors Think?

The decision of the minister of education was made before asking for an opinion and expectations from those to whom health education in school is intended for (pupils, their parents) and for an opinion and expectations of those who are currently involved in its conducting (teachers and doctors – school medicine specialists).

Taking into consideration their competencies and work description, doctors-school medicine specialists are important carriers of such tasks. Therefore, we interviewed 98 or 74.2 % of the total number of school medicine doctors working in the institutes of Public Health of the Republic of Croatia in 2004/2005. The majority of the examinees were female (95.9%), 39.6% have been working for more than 20 years, while 27% have been working for more than 20 years.

We examined:
1. the satisfaction of the doctors-school medicine specialists with the current condition of health education in the school;
2. the opinion on the aims, contents and the carriers of health education in the school today;
3. the opinion of the school medicine doctors regarding the future health education organization in schools, if changes are necessary.

The survey was anonymous and used a questionnaire with questions containing offered answers as well as those with free answers.

The majority of the examined doctors (58 from total number of 98) are partially satisfied with the present
health education status in the school, regardless of the fact who conducts it, what its goal is and what its contents are. None of the examinees is very satisfied with the situation, while there were 29 or 29.6% of those who were dissatisfied or very dissatisfied (Figure 1).

When asked in which subjects of the school curriculum health education is integrated, the school medicine doctors replied that those subjects are «Biology» (87.6%), then, «Physical and Health Culture» (38.7%) and «Nature and Society» (33.6%). This result shows that they are well acquainted with the elementary school and secondary school curriculum. According to the doctors’ free answers, the most common contents taught in the integrated health education are sexuality and contraception, addictions and proper nutrition, all equally represented with 32%. The other specified contents (hygiene, safety, physical activity etc.) were present in less than 5% of the answers.

When asked which are the goals of health education in schools today, the doctors estimate that the most present one is knowledge (67.3%), while habit and attitude development (18.4%) or skill gaining (13.3%) are far less present. The answers to the question which goals health education in the future should aspire to were exactly opposite (Figure 2).

When asked who is in charge of health education in school today (average work grade from 1 – not at all to 5 – mostly), the doctors put themselves on the first position (average grade of 3.7), followed by Biology teachers (average grade of 3.16), Nature and Society teachers (average grade of 3.07), and finally class teachers in the lower grades of the primary school (average grade of 2.82). Class masters are insufficiently involved (average grade of 2.5) and Physical and Health Culture teachers (average grade of 2.2) (Figure 3).

Is there a need for health education as a separate school subject or as integrated contents in the school curriculum? Half of the examined doctors (57%) think that both methods should be combined, i.e. integrate contents into other subjects and additionally introduce a new subject under that title; 24% of the examinees opted only for a separate subject, while 17% were against the separate subject (Figure 4).

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Should a separate subject of health education (Health Education class) be introduced, the doctors believe that there are differences between the primary and the secondary school. Such a separate subject is necessary in secondary schools (according to 43% of the examinees) and senior primary school grades (38% of the examinees), and less necessary in junior primary school grades (19%). Under the assumption that health education is introduced as a separate subject, 42% of the examined doctors consider that it should be evaluated (marked) as other subjects, while 55% is against such an evaluation.
As the carriers of the special subject of health education, the doctors propose themselves (44% of the answers), and then specially educated health educators (25%). That would mean the development of a new vocation in Croatia. The teachers with an additional education are put on the third place (14%), while other suggested carriers they propose rarely or never (Figure 5).

How do the school medicine doctors view themselves in the school health education and that work methods do they consider important? The doctors answered to this question on a scale from 1 (very important) to 10 (least important) for every offered work method, so that based on those answers a ranking was made of how they view themselves in conducting health education and what methods they consider important (Table 1).

The results show that the school medicine doctors see themselves primarily working individually with pupils and working in groups with pupils with health problems, as well as lecturers in the classroom or the teacher’s council. They recognize themselves least and think least of the work with the teachers of single subjects and with parents. Taking into consideration the fact that the majority of school medicine doctors recognized themselves as carriers of the separate subject of health education in school, an additional question was asked of how they viewed their role of the carrier. The majority (39.8%) see their role as a responsible coordinator of the school activities or a class lecturer (33.7%). Fewer examinees think that they should have a role of a counsellor to other carriers of the new subject (16.3%) or a task of educating the pupils or teacher educators (10.2%).

**Discussion**

The tradition in Croatia (the position of health education and the organization of the school health and school medicine) are simultaneously an advantage as well as a disadvantage. The organization of the school children medicine according to which every school has »its« doctor and a nurse who continuously work with children, parents and teachers has many advantages – from knowing well those they work with to knowing well the specific needs of every school. The presence of doctors in school also facilitates the development of positive attitudes of the youth and the adults (teachers) according to the

**TABLE 1**

<table>
<thead>
<tr>
<th>Work form and method</th>
<th>Average value from 1 – very important to 10 – not important</th>
<th>Value ranking from 1 – very important to 10 – not important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecturing to pupils</td>
<td>5.19</td>
<td>3</td>
</tr>
<tr>
<td>Active workshops with pupils</td>
<td>5.36</td>
<td>5</td>
</tr>
<tr>
<td>Group work with pupils with health problems</td>
<td>4.98</td>
<td>2</td>
</tr>
<tr>
<td>Individual pupil counselling</td>
<td>4.90</td>
<td>1</td>
</tr>
<tr>
<td>Lecturing to parents</td>
<td>5.80</td>
<td>7</td>
</tr>
<tr>
<td>Working with parents of the pupils with health problems</td>
<td>5.81</td>
<td>8</td>
</tr>
<tr>
<td>Individual parent counselling</td>
<td>5.84</td>
<td>9</td>
</tr>
<tr>
<td>Lecturing to all the teachers</td>
<td>5.33</td>
<td>4</td>
</tr>
<tr>
<td>Lecturing to class teachers</td>
<td>5.56</td>
<td>6</td>
</tr>
<tr>
<td>Working with teachers of single subjects</td>
<td>6.14</td>
<td>10</td>
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</tbody>
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positive and preventive health behaviour, and additionally, we are talking about health professionals who have gained knowledge and skills of the health education work during their postgraduate study and specialization.

However, this approach has its flaws. In order to fulfill the plans, it is necessary to procure work conditions as well as a high motivation of the health workers. Besides health education, a school doctor has other tasks in the school, and has regular checkups, vaccinations, etc. as the work normative. Therefore, oftentimes his/her health-educational work is indirect (individual counselling during these tasks), and remains non-recognized, not only in the school environment, but by doctors themselves. In addition, we should not forget that a part of the school medicine doctors chose working in prevention not because of a high personal motivation, but for other reasons. Professionals in the school medicine still recognize themselves more as «doctors», and less as «educators/teachers», which is confirmed by the results of this research: they more often recognize their role in lecturing and working with students on «medical» topics, for example, puberty, contraception, sexuality, AIDS, addictions, and less in contents promoting youth health through a comprehensive holistic approach. Regardless of the flaws of this approach, the fact is that in the first year after changing work contents in the school medicine, health education encompasses 18% more students than before (9).

In the available references, the opinions on health education as a separate school subject or integrated health-educational contents in school curricula are various. If a separate subject should be introduced, the question is who will be the carrier? The response is complex, because in the available researches, examinees often relate certain contents with the role of the subject carrier. For example, researches show that teachers are confused when they have to teach sexual health or addiction contents ask for health educators and/or school medicine doctors who have the expert knowledge and credibility to convey specific contents. The introduction of a health educator into schools would mean a development of a new vocation in the Republic of Croatia.

The next question is do we need health education in schools or health promoting schools? The research showed that students acquire knowledge and attitudes faster, while habit and lifestyle change requires longer work. Present health education is more paternalistic and less supportive and participatory. The evaluation of the network of European Health Promoting Schools shows that the majority of schools identified health promotion with an enhanced health education. There are, however, important differences between health education and health promotion in schools and it is insufficiently highlighted that the learning process itself is salutary. The question is, whether, in the times of the positive experience of health promoting schools, and regardless of the limiting impacts of the «setting» approach, vertical programs of disease prevention should be continued or the idea of every child in Europe having a right of education in a health promoting school should be developed?

Conclusions

The research conducted among school medicine doctors in the Republic of Croatia showed that they are relatively dissatisfied with the way health education is present in schools today. They believe that there are too many facts and knowledge, while not enough work is done on developing habits and attitudes. At the same time, they recognize themselves as persons who are most involved into health education in schools, and also see themselves as carriers of the separate subject of health education. Half of the examinees believe that the school curriculum should contain both a separate subject as well as an integration of health education into other subjects, 24% consider that only a separate subject is necessary, while 17% is against the introduction of a new subject. The results are in accordance to a very specific tradition and very positive experiences of the school medicine in Croatia, and a specific tradition in health education which does not include health educators. It is necessary to examine the expectations of those the program is intended for (pupils and parents) and the opinion of those who are currently involved in its conducting (teachers in the integrated health contents in the regular school curriculum and the carriers of the vertical, often sporadic governmental and non-governmental health projects in schools). The decision should be based on the good experiences from the practice and the tradition. In this way, health education in schools which dominates today should be, at least, less paternalistic and more empowering and participatory.

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ULOGA LIJEČNIKA ŠKOLSKE MEDICINE U ZDRAVSTVENOM ODGOJU U HRVATSKOJ – PROŠLOST, SADAŠNJOST I BUDUĆNOST

SAŽETAK

U Hrvatskoj nikada nije postojao poseban profil (zanimanje) zdravstveni odgajatelj. U dugoj tradiciji preventivnog rada liječnika-specijalista školske medicine, zdravstveni odgoj je jedna od glavnih zadaća. Dodatno, u školskom kurikulumu u Hrvatskoj, zdravstveno odgojni sadržaji su integrirani u razne predmete, a provode ga učitelji. Danas, međutim, postoje zahtjevi da se u škole uvede poseban predmet Zdravstveni odgoj. Stoga smo pitali liječnike školske medicine o svojoj smisli uvođenja ovog novog predmeta. Sadašnjim stanjem je nezadovoljno 30%, 10% ih je zadovoljno, dok vrlo zadovoljnih nema. Liječnici školske medicine smatraju da su ciljevi zdravstvenog odgoja orijentirani samo na dačanje znanja (činjenice), a ne radi se na promjenama navika i stavova mladih. Sebe prepoznaju kao osobe koje najviše rade na zdravstvenom odgoju u školi. Polovica liječnika školske medicine smatra da treba uvesti i poseban predmet i uklopiti zdravstveni odgoj u postojeće školske sjednice. Prije bilo kakvih promjena u sustavu zdravstva i školstva, potrebno je ispitati mišljenje učenika i roditelja, promjene usmjeriti na unapređenje suradnje između zdravstva, prosvjete, civilnog društva, škole i zajednice te investiranje u zdravlje mladih raditi kroz sveobuhvatne i holističke programe.