THE ROLE AND CHALLENGES OF PHYSICAL EDUCATION AT THE CROATIAN UNIVERSITIES

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Review paper

Abstract
The most determinative segment of a healthy lifestyle in education is an organised framework where the teacher (especially in the field of physical education) has a key position. Physical Education (PE) in higher education varies across regions and countries according to the university policy and tradition. Croatian Universities have long tradition of the compulsory subject PE for students in the first and second year of BS study programme. During past years, some of the universities (Zagreb and Rijeka) started important activities (new curriculum of PE, the strategy of sport and physical activity) which could improve the position of the PE as well as the physical exercise and health for the whole academic society. The purpose of the present article is to document current literature and the European documents related to health enhancing physical activity as well as best practices from different countries with the aim to explore the challenges of PE in higher education. Across Europe, there are different statuses and time allocation of the PE in the university curriculum. At the Croatian Universities the Physical education professors tends to use the student's time spent at the universities for promotion and maintenance of regular physical activity and healthy lifestyle. /Since 1963/1964 Physical education has been a compulsory subject for the students in the first and second year of study at the University of Zagreb./ This academic year the University of Zagreb will celebrate 50 years of the Physical education tradition.

Key words: *Physical Education, academic society, health enhancing physical activity*

Introduction

The majority of 18-year old students, living away from parents for the first time, discover independence. /Enhancing the Student Experience, 1994 Group Policy report, 2007/ The quality of life of student population is influenced by a variety of factors; psychological problems such as depression, poor social interactions, low self-esteem that have significant implications on student's lives, academic performance and behaviour (Pekmezović et al., 2011). It is known that university students have a high risk of making unhealthy lifestyle choices that could affect their health and well-being (Niekerk and Barnard, 2011). Many young people are engaged in a wide range of unhealthy habits (such as inadequate nutritional intake, rest, and exercise) and risk behaviours (such as tobacco and drug use) that lead to adverse health outcomes (Lee & Yuen Loke, 2005, Ćurković, 2010, Pekmezović at al 2011). Many of these unhealthy habits are associated with serious health problems in later life, such as cardiac or respiratory diseases, cancer, complicated pregnancies or deliveries, and psychological disorders, etc (Walker & Townsend, 1999). During the academic years of college and university, sedentary lifestyle tends to be typical, the direct outcome of which is the change in body composition and cardio-respiratory performance. The most determinative segment of a healthy lifestyle in education is an organised framework where the teacher (especially in the field of PE) has a key position. Due to the student's lack of healthy behaviour, the same group of authors supports the need for including obligatory PE classes in university curriculum and the importance of education and promotion of healthy behaviour among students during the whole study period (Konczos et al, 2012). Within general education systems, a majority of countries (89% primary schools, 87% secondary schools) has legal requirements for PE in schools. The main problem in most countries is insufficient curriculum time for PE, especially for the 17-18 year age group (Hardman, 2008). Unfortunately there is no evidence about the PE status at universities on European level. PE in higher education varies across regions and countries according to the university policy and tradition. The purpose of the present article is to document current literature and the documents related to health enhancing physical activity as well as best practices from different countries with the aim to explore the role and challenges of PE in higher education.

Literature review

Several studies provide evidence of decline in physical activity from high school to the first year of university (Bray and Born, 2004, Kwan et al, 2009, Kwan and Faulkner, 2011). The transition from high school to university encompasses many changes including the need for adaptations in lifestyle. Kwan et al (2011) found, on the sample of 1212 first year students of the University of Ontario, past behaviour to be the only significant predictor of physical activity during the first semester of university.

Lack of time was often mentioned in many studies as the main barrier, but the results in this study determined that many students lack the confidence in time management. As potential barriers to physical activity are influence of parents and new social environment: academic activities were the student's primary focus and alternative ones became secondary. Similar barriers have been reported in the study of Gomez-Lopez et al. (2010) where the authors highlighted the lack of time, stress and tiredness incited by the work or study overload, not having facilities nearby or suitable for the practice of physical activities and the lack of social support. One of the principal objectives of university is to prepare students for functioning in the society, and for an active reception of and participation in culture, including physical culture. At present there is no evidence on European level related to PE at universities. In many countries students may participate in optional courses organized by the faculty or by various students sport associations (Biernat, 2011). Considering the analysis of different articles it is still a compulsory subject on some of the universities in Poland, Hungary, Czech Republic and Croatia. Some of the universities in other European countries (Slovenia, Germany and Finland) provide some of organized sports for students in/of campus in optional or some other way in students' free time but not as a compulsory subject. Hardman (2008) emphasized that access to PE programmes ends at an earlier age, pupils are vulnerable to disengaging from physical activity with a consequence that they do not continue with it in later life and there may be insufficient time to embed either the skills or the habits for regular engagement in physical activity throughout the full lifespan. In addition, some evidence from the longitudinal studies conducted in Canada, Finland and Israel confirmed that sport participation during childhood or adolescence has a positive effect on adult physical activity, although the extent of such tracking is limited (Trudeau and Shepard, 2008). The level of physical activity among university students is disconcerting (Irwin, 2007). Several studies from different countries have confirmed that nearly 40-60% of the university students were sufficiently active (Leslie et al, 2001, Ćurković 2010, Pekmezovic et al 2011). Similar results related to the period of study at university and a decrease in the practice of moderate to vigorous physical activity have also been found in Gomez-Lopez et al., 2010. Researchers, Baxter at al., 2008, Ćurković, 2010 and Niekerk and Barnard, 2011 have determined the presence of different risky health behaviours such as tobacco use, alcohol consumption, stimulants (drugs) and eating habits and sexual behaviour. Existing researches suggest that college and university students face several health risks due to the lack of adequate information on many health topics relevant to their well being. They need the knowledge about health promotion and safety to lead healthy lives (Silvestri and Bonis, 2009). Recent studies have determined more interesting and specific determination about physical activity and barriers, health status and risk behaviour among college and university students. The majority of researchers identified college or university years as the time that can be influenced to make changes in their lives to improve the knowledge about health and the level of physical activity. In line with these facts, we collected data from several studies from different universities that differ in aim, design and methodology but concern the same population – university students (Table 1a and 1b).

Conclusions

This literature review found that university students' population is aware of the health benefits of physical activity, but according to the results in the mentioned studies, the majority of them (approximately 40-60%) did not meet the recommended level of physical activity and bad habits manifested through cigarette smoking, alcohol consumption and drug use are spread among students.

Table 1_a Review of different World regions

UNIVERSITY/ AUTHORS	SAMPLE	RESULTS	MAIN CONCLUSIONS
Minnesota (Silvestri and Bonis, 2009)	10.000	38,5% were in the overweight, obese or extremely obese category, 25% used tobacco and 70,5% used alcohol in the previous 30 days	universities should be aware of the need for effective intervention programs
Canadian university community, Quebec (Perusse-Lachance et al., 2009)	3143	on-line questionnaire: physical activity, health, food habits and other relevant lifestyle factors 22,9% students and 37,3% staff members were overweight or obese	overweight and obesity are problem in a university community – associated with many health related lifestyle behaviors call for the development of health promotion programs with specific targeting strategies
South Africa, Stellenbosh (Niekerk and Barnard, 2011)	941 female students 18-27	questionnaire: exercise performance, health status, smoking habits motivators, barriers weight management and weight loss are very important reasons to exercise at a 45% indication 5% lower back pain, 4% asthma, 4% cholesterol problem	a result highlights the importance of monitoring health related practices among students in university and college settings
Toronto, Canada (Kwan et al, 2010)	1202	How students obtained health related information and perceived believability of those sources: 46% reported not receiving any information, 0,5% received info on all health topics, Internet was the most common source but as the last believable source, The most believable are health centre medical staff and university health educators.	Future practice should focus on delivering health information through believable messengers utilizing the most commonly reported sources of information. Internet in combination with the campus staff was found to be channel for health promotion on university.

Table 1_b Review of different European regions

EUROPE			
UNIVERSITY/ AUTHORS	SAMPLE	RESULTS	MAIN CONCLUSIONS
Warshaw, Poland (Biernat, 2011)	1100	Questionnaire: participation in competitive sports and in recreational motor activities throughout the last year 8% participate in competitive sports, 5% are members of clubs, 53% practicing leisure motor activities regularly, 29% seasonally and 11% occasionally. Higher engagement in 2nd year	Higher engagement of 2nd then 4th year students in motor activities may result from obligatory, curricular PE activities Future steps should be taken to improve the accessibility of sport objects, their equipment and attractiveness
Zagreb, Croatia (Ćurković, 2010)	1.651	28.3% of the students smoke regularly, more than half of the students consumed alcohol Some types of drugs with marijuana being the most popular one amongst students (37.85%). 20.2% were active at the recommended level (at least 3 times the minimum duration of 30 minutes).	Student doesn't have a high degree of awareness about preserving their own health. Physical activities as an important promoter of preserving health in this population are not satisfactory, and bad habits manifested through cigarette smoking, alcohol consumption and drug use are spread among students.
Sarajevo, Bosnia and Herzegovina (Pozderac, 2011)	students ages 1983-1991	Medical history, subjective symptoms, previous disease, cardiovascular heredity in family Analysis of style and way of life of students	Hypertension has a significant place in the young student population, smoking and diabetes are the leading risk factors for cardiovascular and cerebrovascular diseases
Belgrade, Serbia (Pekmezović et al., 2011)	1624	Cross-sectional study: SF-36 questionnaire (physical functioning, general health, vitality, social functioning, mental health... and Back depression inventory (BDI) 36,5% reported weekly practice of physical activity...	Multiple factors are adversely associated with students health-related quality of life, appropriate health education programs to target modifiable risk factors may improve students' HRQoL

Results also showed that overweight and obesity are problems in a university community. According to Niekerk and Barnard, (2011) exercise behaviour is a key factor and an important motivator to bring about change in the healthy lifestyle. All of these facts highlight the importance of PE programme among students in university. This findings support the need to develop effective university strategies about physical activity, sport and health based on the documents such as: Global Consensus Statement (GoFPEP 2010), (Edginton et al, 2011), A Health for Growth Programme - programme of EU action in the field of health for the period 2014 - 2020 and EU Physical Activity Guidelines should. One of the recommendations in the new Strategy of Sport and physical activity at the University of Zagreb is to seriously consider the role of PE and University sport and to improve the accessibility of sports infrastructures, equipment and appropriate funding with the aim to increase the number of students and academic staff in various types of sports activities as much as possible. With the aim to raise awareness about the importance of regular physical activity and healthy lifestyle we hope that the University will accept the idea proposed in the Strategy to celebrate the "University day of sport and health". Actions by PE professors, university leaders and policymakers in cooperation with health professionals (doctors, health decision makers) should influence on developing a healthy academic society.

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Documents

1. Proposal for a Regulation oft he European Parlament and of the Council on establishing a Health for Growth Programme, the third multi-annual programme of EU action in the field of health for the period 2014-2020 (Brussels, 2011).
2. The State of Men's Health in Europe, Report Directorate General for Health and Consumers, EU 2011.
3. Special Eurobarometar; Sport and Physical Activity, European Commision, 2010.

TJELESNA I ZDRAVSTVENA KULTURA NA HRVATSKIM SVEUČILIŠTIMA – ULOGA I IZAZOVI

Sažetak
Vrlo važan segment u promicanju zdravlja i zdravog stila života u obrazovanju ima kvalitetno osmišljen nastavni program u kojem nastavnici, osobito nastavnici iz primijenjenih područja kineziologije, imaju ključnu ulogu. Provođenje programa tjelesnog vježbanja (odgoj) u visokom obrazovanju različito je organizirano na nacionalnoj i regionalnoj razini ovisno o zakonodavnom okviru i tradiciji. Hrvatska sveučilišta imaju dugu tradiciju obvezne nastave Tjelesne i zdravstvene kulture za studente prve i druge godine preddiplomskih studija. Posljednje dvije godine pojedina sveučilišta (Zagreb i Rijeka) započele su sa vrlo važnim aktivnostima (novi kurikulum, izrada strategije sporta i tjelesnog vježbanja) koje mogu unaprijediti poziciju predmeta kao i tjelesno vježbanje i zdravlje u cijeloj akademskoj zajednici. Cilj ovog rada je dokumentirati postojeću literaturu i dokumente koji se odnose na zdravlje i primjereno tjelesno vježbanje studentske populacije kako bi se istražila uloga i izazovi ovog predmeta u visokoškolskom obrazovanju. U europskim državama ovaj predmet je različito organiziran i propisan. Na hrvatskim sveučilištima, nastavnici nastoje maksimalno iskoristiti vrijeme dok su studenti uključeni u redoviti nastavni proces kako bi studente informirali o važnosti redovitog tjelesnog vježbanja i zdravstveno usmjerene tjelesne aktivnosti.

Ključne riječi: *Tjelesna i zdr. kultura, akademska zajednica, zdravstveno usmjerena tjelesna aktivnost*

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