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Stan zdrowia młodzieży studiującej w świetle badań prowadzonych w Polsce w latach 1970-2010

Streszczenie

Wstęp. Zdrowie to jedno z podstawowych praw jednostki ludzkiej, a także – jak zapisano w „Narodowym Programie Zdrowia na lata 2007-2015" – najważniejszy sprzymierzeńca człowieka w drodze do samorealizacji, w dążeniu do sukcesów zawodowych i szczęścia osobistego oraz satysfakcjonującego pełnienia ról społecznych i dobrej adaptacji do zmian środowiska.

Cel. Celem pracy jest charakterystyka stanu zdrowia młodzieży akademickiej, na podstawie badań prowadzonych w różnych środowiskach w latach 1970-2010. Wybór tak szerokiego, obejmującego prawie 40 lat, przedziału czasowego podyktowany został chęcią wskazania zmian zachodzących w sferze stanowiącej przedmiot zainteresowań artykułu.

Materiał i metody. Opracowanie zawiera porównanie przedstawionych w literaturze przedmiotu, wyników badań prowadzonych w latach 1970-2010. Kondycja zdrowotna młodzieży akademickiej zostanie zaprezentowana z dwóch perspektyw, tj. od strony subiektywnych ocen respondentów, jak i w świetle wyników obiektywnych badań lekarskich.

Wyniki. Wśród młodzieży akademickiej pod koniec lat 70. XX wieku wśród schorzeń wykazujących tendencję wzrostową w ilości zachorowań wymieniano: zaburzenia psychiczne, choroby układu oddechowego, trawiennego, nerwowego i narządów zmysłu. Obecnie do najczęstszych należą: schorzenia ortopedyczne, schorzenia narządów ruchu, wady postawy ciała i skrzywienia kręgosłupa, choroby układu krążenia i układu oddechowego, cukrzyca i nasilające się zaburzenia psychiczne. 40% studentów kwalifikuje się do grup dyspanseryjnych.

Wnioski. Polska jest jednym z krajów, w których znacznie obniżył się potencjał zdrowotny młodzieży. Zaprezentowane i opisane wyżej wyniki badań wskazują na potrzebę ciągłego monitorowania stanu zdrowia młodzieży akademickiej z uwagi na polskie priorytety przedstawione w Narodowym Programie Zdrowia na lata 2007-2015. Zgromadzona wiedza może pozwolić na podjęcie działań zmierzających do kształtowania prozdrowotnego stylu życia oraz może wpłynąć na poprawę stanu zdrowia młodzieży akademickiej.

Słowa kluczowe: zdrowie, profilaktyka, choroby, studenci.

Health status of University students in the light of the research carried out in Poland in years 1970-2010

Abstract

Introduction. Health is one of the primary rights of humans and, as evidenced in the "National Health Programme for 2007–2015", the key human ally in the pursuit of self-fulfilment, success at work, personal happiness and the satisfying performance of the social roles, as well as a good adaptability to any environmental changes.

Aim. The present article is an attempt to describe the health status of the Polish university students studying in years 1970-2010 .The choice of such a wide period of time covering nearly 40 years was dictated by the willingness to indicate the changes that have occurred in the area of interest covered in this article.

Material and Methods. The study contains the comparison introduced in the literature on the subject analysis of findings in years 1970-2010. The subject of the article is presented from two different perspectives: as the respondents' subjective assessment and in the light of the results provided by the objective medical research.

Results. The increase in the disease incidence rate observed among the university students at the end of the 1970s was related to diseases such as mental disorders and diseases of the respiratory, digestive, and nervous systems, as well as disorders of the sense organs. The diseases that are observed most frequently today are orthopaedic impairments, disorders of the motor organs, postural defects and abnormal spinal curvature, diseases of the blood circulation and respiratory systems, diabetes, and growing mental disorders. Forty per cent of the students qualify for the groups of patients with chronic conditions.

Conclusions. In Poland a large deterioration of health in young people has been observed. The analysis of the young Poles' condition presented in this study points to the necessity of not only raising their awareness of the existing hazards, but also forming the proper habits, manners and conduct in young students as they approach adulthood. It is also important that they should constantly improve their knowledge on how to prevent various illnesses.

Key words: health, prevention, illness, students.

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INTRODUCTION

Health is one of the primary rights of humans and, as evidenced in the "National Health Programme for 2007–2015", the key human ally in the pursuit of self-fulfilment, success at work, personal happiness and satisfying performance of the social roles, as well as a good adaptability to any environmental changes. The World Health Organisation (WHO) refers to health not only as a lack of any illness or disability, but also as a good physical, mental and social state. In view of the above, health should be considered not only as the aim and condition, but also as the value to be cared for. The above care should be primarily understood as the protection, or disease prevention; secondly it should be understood as the improvement through health promotion, and thirdly, the recovery as a result of treatment and rehabilitation. The most important factors that affect the condition of our health include: lifestyle (about 50%), physical environment (natural and created by man) and social life environment (approx. 20%) and genetic factors (approx. 20%). The least important actions are medical, accounting for approx. 10-15% [1].

AIM

The purpose of this study is to characterise the state of young students' health on the basis of research conducted in different environments in 1970-2010.

MATERIAL AND METHODS

This article contains the comparison of the research results carried out in 1970-2010 and presented in the subject literatur0. The selection of such a wide time span, covering more than 40 years, was dictated by the willingness to show changes that occur in the sphere constituting the focus of this article.

The analysis takes account of the results of research of students from the following universities: Medical Universities of Poznań, Gdańsk, Łódź, Lublin and Warsaw, Physical Education Academies in Wrocław and Gdańsk, The Faculty of Physical Education in Biała Podlaska, Teacher Education Schools in Częstochowa, Zielona Góra, The Jan Długosz Academy in Częstochowa, The Academy of Economics in Katowice, The Lublin Catholic University, The Marii Curie-Skłodowsja University in Lublin and The Zielona Góra Technical University (Table 1).

The health condition of the university students will be presented from two perspectives: the subjective assessments of respondents and in the light of objective medical test results.

RESULTS

According to the Central Office of Statistics, favourable changes in the area of health of the Polish society have been noticed in the last decade. However, the results are not satisfactory enough to place Poland on an equal footing with the highly-developed countries.

A very important factor that has an impact on improving the level of citizens' health is undoubtedly prevention and the provision of health care from the early years of life. The properties of thinking, lifestyle, and the foundations of the individual's health are formed during the prenatal period and in early childhood. All the irregularities that occurred during the said period may cause poorer social and intellectual development of a child, which in turn poses a risk of a poorer state of both physical and mental health. The above negligence will not pass away by on its own but it will affect, to a lesser or greater extent, the child's intellectual and emotional functioning in the adult life. Therefore, it is very important to regularly monitor the young people's development and diagnose their health state [2].

The most popular and most effective tool used in the identification and detailed assessment of the scope of positive and negative health phenomena are certainly the common routine preventive check-ups and screenings. The aim of the routine check-up is to assess the development of student's health, identify the factors (e.g. environmental) that favour and pose a threat to student's health, plan the necessary diagnostic or corrective and treatment actions. The routine medical check-ups are preceded by a series of screenings. The screening is preliminary identification of the diseases, disorders and defects unidentified thus far based upon the quick action methods. The aim of any screening test is the early detection and treatment of disorders observed in the period when the effects of a disease process may still be prevented or the rate of the development of the disease progress can be stopped. The screenings are basically used for the detection of the disorders in: physical development, motor organs, organs of vision and hearing, blood pressure. The routine health care also covers the dentalexaminations, orthodontic diagnostics, compulsory preventive vaccinations, health education and the promotion of a healthy lifestyle [1].

The preventive health care in Poland covers children and young people aged below19 years. The preventive examinations are conducted during primary school education at the age of 7 years (where no medical examination was done at the age of 6) and at the age of 10. During the lower secondary school children are examined at the age of 13, and in secondary schools at the age of 16 and in the last year of secondary school. At the age of 18-19, the doctor assesses the somatic and mental health in the last period of development in respect of the procreation health and the ability for further study.

It should be emphasised that the preventive health care is provided to students of all school levels up to the age of 19, therefore the examinations of this kind do not cover the university students. Upon the completion of school education, the preventive medical care consists above all in compulsory preliminary examinations. A young man who continues his/her education at a university or decides to take up a job, is obliged to undergo the preliminary medical examinations which will allow the evaluation of the candidate's general state of health and his/her capabilities and suitability to receive education in the specific type of school (tertiary school, job) or to take up a job in the selected position. The medical certificate issued by the occupational medicine specialist (or – for the preliminary tests before taking up studies – family

TABLE 1. Scope and purpose of research of young students in selected academic centres in 1970-2010.

Year of research	University	Location	N	Purpose of Research
1969/78	Medical Academy Agricultural Academy Technical University Teacher Education School	Szczecin	3613	Evaluation of degree of satisfaction of the students' health needs, selected health indicators
1985/86	Medical Academy Medical Academy Medical Academy	Gdańsk Poznań Warsaw	547 467 635	Evaluation of the state of students' health
1992/97	Medical Academy	Bydgoszcz	1318	Attempt to evaluate the activity in the physical education classes
1994 and 1999	Agricultural and Technical Academy	Olsztyn		Problems encountered by the employees of the Physical Education and Sports Studies in the promotion of physical education
1995-2005	Jan Długosz Academy	Częstochowa	3194	Dynamics of changes in the BMI indicator and frequency of occurrence of underweight, overweight and obesity
1996/97	Technical University	ZielonaGóra	869	Causes of students'exceptions from physical education classes
1997/98	Medical Academy	Poznań	233	Evaluation of lifestyle in health aspect
1996/99	Teacher Education School	ZielonaGóra	431	Description of groups of students released from physical education classes
1999	Institute of Physical Education and Sports Lublin Catholic University	BiałaPodlaska Lublin	1528	Students' health culture
2002/03	Medical University	Łódź	285	Evaluation of health condition, lifestyle and social and accommodation conditions
2003	Medical Academy	Lublin	389	Evaluation of health behaviour
2004	Jagiellonian University Opole University Świętokrzyska Academy	Kraków Opole Kielce	228 195 228	Frequency of occurrence of underweight and overweigh
2004/05	Lublin Catholic University Agricultural Academy Medical Academy Maria Curie-Skłodowska University Technical University	Lublin	49032	Evaluation of the scope and quality of motorcorrective and compensatory classes
2007	Academy of Economics	Katowice	302	Body posture evaluation
2007	Academy of Physical Education	Wrocław	81	Evaluation of selected activity parameters

Source: own study

practitioner) as per the applicable regulations, is expected to confirm the existence or non-existence of contraindications for taking up studies with the major chosen by the candidate. Also, the employer, during the later stages of life, cannot employ a person who does not have the valid medical certificate stating the lack of contraindications for doing the specific job. Pursuant to the Polish Law, the examinations shall be conducted every 2, 3or 4 years depending on the kind of performed job and the conditions of its performance [3].

The research on the university students has a many years' tradition in Poland and their early development dates back to the beginning of the 20th Century. The first analyses were related to the state of health, somatic development, and the hygiene manners observed in the students of the University of Warsaw. The comprehensive research on the first year students was carried out in 1954. Students from various universities in Poland underwent physical examinations, including somatic measurements and body posture evaluation. The analysis of the received results proved that male students showed stable movement ability, whereas a regress in skills was observed in female students [4].

The notion of "health" is understood by the young university students chiefly through the prism of philosophical concept. A relatively small number of respondents opt for the traditional understanding of the term as the lack of disease. The majority of respondents interpret health as the active action, the avoidance of threats and the result of lifestyle [5]. It is interesting that the people who during their studies took up classes related to health and diseases preferred the holistic and functional model, which is understood as the state of a dynamic balance in the relation between human and his environment, more often than the biomedical meaning of lack of disease [6].

Interestingly the results of the examinations in which students were expected to create their own system of values and health were mentioned in the first or second place depending on the type of university. The highest value for the first year students of the Medical Academy in Poznań was the family (31%), health (25%); what counts the most for the fifth-year students is health (39%) and family (24%) [5]. The carried out research allow us to observe that a vast majority of students from the Faculty of Physical Education in Biała Podlaska (78.9%) show an active attitude in relation to their own health, in an effort to improve or maintain its condition. The above attitude is also characteristic for 45.1% of the students from Lublin Catholic University, even though half of respondents stated that they do not care about their health for as long as nothing ails them. Considering the specific character of the Academy of Physical Education, it should also be noticed that its students include people who do not care about their health until it becomes necessary [7]. The majority of students in Poland think that their state of health

is good and satisfying and care about their health in an effort to improve their fitness [5-8]. Amongst the students of the Lublin Medical Academy surveyed in 2003, 72% of respondents positively evaluated their health condition whereas a mere 3.3% described their health as bad [9]. Similar examination results were observed in the students of the Poznań Medical Academy: 73% of 1st year students and 78% of 5th year students described their health state as good, whereas 2% of 1st year students and 5% of 5th year students described their health state as bad [5].

The respondents (male and female students) from the Lublin Medical Academy aged between 23 and 28 evaluated their health state as worse than the younger group surveyed [9]. The female students of the Lublin Medical Academy aged 26-31 also signalled their dissatisfaction with their health state, which probably resulted not as much from the factual state as from the fact that they show a more mature attitude towards their own organism [10]. In general, older students describe their health state as moderate.

There are many factors which have an impact on the way the respondents perceive health. According to Kornafel [11], the above include: sex, age, certain elements of the social and economic environment, as well as the lifestyle. A higher percentage of people satisfied with their health state is observed in students from large environments. Women and men from the rural areas are less likely to formulate any evaluation of their health state (very good, bad) compared to people from other environments. Furthermore, the important factor which has an impact on the health self-evaluation is wealth. Research shows that the greater the wealth the higher the self-evaluation. Students, when asked about their ailments, most often mentioned irritation, tiredness, headache, spine ache [8,12,13]. The state of health of the students of the Bydgoszcz Academy in terms of chronic diseases is definitely a cause for concern. An overwhelming 31% of young people claim that they have at least one of the chronic diseases, which most often is back pain. The analysis of research carried out among the students of the Institute of Physical Education and Sports of Szczecin University, proves that 60% of students complained about back pains which most often were low back pains. At the same time, for the majority of respondents the pain was short and intermittent, 32% of the students covered by the survey feel the above-mentioned ailments after intensive training or physical exercises [14].

The results used in the above analysis relate to the subjective assessment of the respondents' state of health. It should be noticed that these are not always connected with the results of specialist medical examinations, which will be presented later on in this study.

According to the research carried out at the end of 1970s, mental disorders were observed as predominant among the students of four universities from Szczecin. With respect to the people who showed a growing tendency in the period of eight years of observation (1970-1978), diseases of the digestive, muscular, nervous and respiratory systems, the diseases of connective tissue and sense organs were mentioned in addition to mental disorders [15].

In 1985–86, according to the research carried out at the Medical Academies in Warsaw, Gdańsk and Poznań, chronic ailments that require constant medical care were observed in over 10% of men and about 25% of women, the most frequent of which being respiratory and digestive system diseases (mainly peptic ulcer),skin diseases and nervous disorders, and gynaecological ailments in women. Nervous disorders and osteoarticular system diseases were observed more often in women than in men [16,10].

The results of research carried out among the students of the Technical and Agricultural Academy in Olsztyn in 1994 and 1999 show that the ailments observed most frequently were defects of body posture and osteoarticular system, chronic bronchial and lung disease, eye diseases and peptic ulcer disease [17].

According to the research conducted among the students of the Medical Academy in Bydgoszcz in 1992-97, the most frequent cause of inability to do physical exercises was exemption due to: diseases (kidneys, rheumatoid, and skin) and vision defects, as well as exemptions as a result of injuries and operations [18].

The number of diseases diagnosed during the medical examination among the students of the Medical University in Łódź in 2003 significantly exceeded the number of diseases treated; in 28% of cases students did not use any medical care despite their ailments. The diseases that were diagnosed and treated most frequently were allergies, cataract, and eyeball diseases [12].

A relatively frequent indicator used to assess the state of students' health is the Quetelet's index based on the individual's weight and height, also known as the Body Mass Index. Whereas the fact that a relatively low percentage of the occurrence of obesity and overweight was observed in 2004-2008 among the Polish students can be considered as positive; what causes concern is the increasing percentage of underweight people [19]. Obesity occurs far more often in women whereas overweight is observed more frequently in men [20]. Underweight is a serious problem, which is often underrated. On the basis of research carried out in Norway, it was found that the reduction of the relative body mass becomes dangerous for human health. There is an increase in mortality due to oncological and cardiovascular diseases, and the biological age becomes increasingly enhanced [21].

A relatively common practice at the universities analysed in this study is to conduct corrective gymnastics classes for students exempted from compulsory physical education classes. The most frequent causes of participation in the motor rehabilitation classes include spine ailments and scoliosis, post-injury and post-operation exemptions, and sight defects [13]. The said classes are expected to ensure optimum motor activity form for students with specific needs resulting from defects of the motor organs, respiratory and blood circulation system, nervous system and internal organs.

Ronkier [22] claims that an astounding 40% of students qualify for dispenser groups with the main disorders related to the motor organs and the statics of the body, somatic disorders, and vision diseases. There is a large percentage of body posture defects and spine curvatures among the university students[14,23]. This kind of abnormalities is related to a considerable group of females of the 1styear students of the Katowice Academy of Economics (97.4%). Body posture defects found in childhood or puberty occurred in 27%

of the Institute of Physical Education at the Szczecin University [24].

When we accept sick leaves as the measure of health state, we may observe that the percentage of people exempted from physical education classes significantly dropped. The studies conducted in the academic year 1993/94 in the Lublin universities show that 15.8% (n=1557) of the group of students obliged to attend the classes did not take part in them due to a bad state of health [25]. However, 10 years later (2005), the students' disability evaluated as per the number of sick leaves exempting them from doing exercises during the physical education classes, accounts for 8.5%, which was more than a half less. The research shows that 5.3% of the Lublin students are exempted from participating in any form of motor exercises (even in kinetic physical therapy groups) due to a very bad state of health [26].

The results of the research carried out in the Agricultural and Technical Academy show a growing percentage of sick leaves. In 1994, the number of sick leaves was 38, reaching 220 in 1999. Podstawski [18] thinks that the cause of the increasing number of sick leaves was the health reform conducted in 1998. The Student Medical Clinic operating on the premises of the given university lost its capacity to perform a thorough examination of the state of students' health.

CONCLUSIONS

According to the assessment by Bulicz and Murawow, Poland belongs to the countries in which the health potential of young people has dropped drastically. Thirty years ago, the morbidity rate among the people aged 21-26 was far greater than the respective indicators of people from older age groups. The incidence rate related to diseases that require hospitalisation among young people aged 15-19 is 4.09%, whereas during the period of physical development (20-34 years of age), it is three times as big and amounts to 14.03% [27].

The presented analysis of the state of health of young Poles points to the necessity of making them aware of the existing hazards and creating lifestyle and behaviour at the threshold of adult life. Care should also be taken to learn how to prevent various ailments.

What becomes of particular importance among the university students is the conducting of research on defects in body posture and making young people realise that not every form of movement is appropriate, on the contrary – some of them can cause the adverse spine disease processes to become deeper [19]. The people who conduct any kind of physical exercises should possess expert knowledge related to the physical exercises which favour spine disease prevention [18].

The research results referred to above indicate that it is necessary to monitor constantly the state of university students' health due to the Polish priorities presented in the National Health Programme for 2007-2015. The gained knowledge may allow us to take appropriate actions aiming at promoting healthy lifestyle and may have an impact on the improvement of state of university students' health.

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