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Problem nikotynizmu oraz palenia biernego występujący wśród studentów Uniwersytetu Medycznego w Lublinie

Streszczenie

Wstęp. Bierne palenie to inhalowanie dymu tytoniowego innych palaczy. Bierny palacz wdycha więc dym tytoniowy pochodzący zarówno ze strumienia bocznego papierosa, jak i dym wydychany przez palacza. Prawie co trzeci dorosły Polak pali papierosy, co powoduje narażenie wielu osób na palenie bierne. Działanie dymu tytoniowego nie jest ograniczone tylko do palaczy tytoniu, ale także dotyczy wszystkich osób przebywających razem z osobami palącymi.

Cel pracy. Celem pracy była analiza stopnia uzależnienia od nikotyny osób palących oraz narażenie na palenie bierne osób niepalących.

Materiał i metoda. Badaniem objęto 738 studentów Uniwersytetu Medycznego w Lublinie w roku akademickim 2007/2008. Udział w badaniach był dobrowolny i anonimowy, a dobór respondentów losowy. W celu zebrania niezbędnych informacji opracowano ankietę. Część pierwsza obejmowała pytania o wiek, płeć, miejsce zamieszkania, stan cywilny, sytuację ekonomiczną, liczbę osób palących w rodzinie itp. Cześć druga zawierała właściwą ankietę, czyli test Fageström'a

Wnioski:

1. Nikotynizm i palenie bierne to problem powszechnie występujący wśród młodzieży akademickiej.
2. Redukcja narażenia na palenie bierne pozwoli uchronić młodzież przed poważnymi skutkami zdrowotnymi w przyszłości.
3. Należy zastanowić się nad kampanią informacyjną na temat skutków palenia biernego.

Słowa kluczowe: palenie bierne, studenci, papierosy.

Problem of nicotine addiction and passive smoking among students of Medical University of Lublin

Summary

Introduction. Passive smoking means inhaling nicotine smoke from other smokers. Consequently, passive smoker inhales smoke coming from side stream of cigarette as well as smoke exhaled by smoker. Almost every third Pole smokes cigarettes which put many people at risk of passive smoking. Influence of cigarette smoke is not limited only to those who smoke but it also affects those who are present in the surroundings.

Aim of the work. Analysis of smoking addiction level among smokers as well as evaluation of expose to passive smoking, was the aim of the study.

Materials and Methods. Studies were conducted among 738 students of Medical University of Lublin during academic year 2007/2008. Participation in research was voluntary and anonymous and sampling of respondents was random. Questionnaire was created in order to obtain necessary data. The first part included questions concerning age, sex, place of living, marital status, financial situation, number of smokers in the family etc. The second part included the right questionnaire, Fageström's test.

Results:

1. Nicotine addiction and passive smoking occurs frequently among students
2. Reduction of exposure to passive smoking will help to protect youth against serious health problems in the future.
3. Information campaign dealing with effects of passive smoking should be considered.

Key words: passive smoking, students, cigarettes.

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INTRODUCTION

Nicotine addiction in Poland is estimated to be the cause of every second death of men at age between 35-69 years, therefore taking one of the leading positions in the world [1]. It is said to be one of the major pathogenic factor of chronic obstructive pulmonary disease; it increases three times the risk of heart attack and apoplexy. Nicotine rises up level of cholesterol, develops advance plaque and illnesses of peripheral vessels. It is also considered to be the reason for male impotence, female fertility disorders, it increases complications during contraception therapy and decreases efficiency of hypertension's treatment. Moreover, nicotine might contribute to the development of osteoporosis and Crohn disease. In case of pregnant woman, smoking fumes which penetrates trough placenta, can be the reason for neonatal death [2]. Particularly the following systems are susceptible to cigarette smoke: circulatory, pulmonary, urinary as well as pancreas, kidneys, stomach and therefore nicotine can cause cancer in the mentioned systems and organs [1]. Around 10 mln Poles do smoke 15-20 cigarettes per day. Generally, people in Poland smoke annually 4.5 billion of cigarette packages [2]. Four thousand of chemical substances are released to atmosphere from cigarette smoke. Exposition to cigarette smoke might develop cancer among passive smokers. So far, lung cancer is the most common result of smoking. Many of research studies present relationship between passive smoking and bronchitis as well as asthma. Passive smoking means passive exposition to cigarette smoke in the presence of active smokers. Such people are exposed to risk of cigarette smoke in micro-environment [3]. Passive smoking includes inhalation of cigarettes coming from other smokers. Therefore, passive smoker breathes smoke from side stream of the cigarette as well as smoke exhaled by smokers. It has to be noticed, that the influence of cigarette smoke is not only limited to active smokers but it also refers to all of the people present in smokers' surrounding. Domestic environment where for many years parents put their children at risk of breathing toxic substances, accounts for serious problem. Frequency of exposure to passive smoking in domestic environment is high and associated with numbers of smokers, which account for 30-40 of adult population. It's also associated with general public acceptance of smoking, even with regard to pregnant woman as well as with lack of active healthy behaviuor in the society [4]. Passive smoking is not related to cigarette smoke itself but also to all substances left and culminated in the air. There are no limits for smoke and air filled up with it is in constant circulation. Ventilation of the room can remove unpleasant smoke however it will not completely eliminate toxic substances from the surroundings. The examination of hair samples coming from mothers who smoke in the presence of their children showed that kotynin stayed longer and in higher concentration in children's hair than in their mothers [5]. Nicotine is the major factor responsible for development of smoking addiction and for all difficulties in giving up this habit. The amount of cigarettes which one smokes depends on the level of nicotine metabolism which further causes certain pharmacological effect [6, 7]. Smoking is widely known in the world and appears in many societies especially in those industrialized. It is the most popular and the most frequently given example of anti-health behavior [8]. It was proved that chances for development of smoking addiction at mature age doubles in case of teenagers who had their first cigarette at young age, despite the time period which has passed since their first contact with cigarettes. Therefore susceptibility to smoking is said to remain hidden [9]. WHO named smoking addiction as the most dangerous threat to human life in worldwide scale. Poland leads in the amount of nicotine products' usage. It is estimated that Poles, including 20% of woman and 40% of men smoke annually 90 milliards cigarettes [10].

AIM OF THE WORK

The research aims to analyse students'nicotine-addiction level as well as to evaluate the exposure to passive smoking.

MATERIALS AND METHODS

Studies were conducted among 738 students of Medical University of Lublin in the academic year 2007/2008. Participation in the studies was voluntary and anonymous and sampling of respondents was random. A survey was developed in order to collect all the necessary data. First part of the survey includes questions concerning age, gender, place of living, marital status, financial situation and the number of smokers in the family, etc. The second part includes the essential survey consisting of Fagerström test which measures the nicotine addiction level.[11] The results of the survey were classified as follows: 0-4 points – low level of addiction, 5-7 points – medium level, 8 and more points – significant level of addiction. The results were statistically analysed. The value of analysed parameters was characterized in numbers and percentages. To identify the distinctions and dependences the Chi^2 test with adopted 5% interference error, was used. Statistical analysis was made on the basis of STATISTICA V.6.0 software.

RESULTS

Among the examined students, 29.2% smoke regularly and 8.4% occasionally. All smokers inhale cigarette smoke and the nicotine contents usually accounts for: less than 0.9 mg in case of 56.1% of smokers and up to 1.0-1.2 mg among 43.9% of smokers ($p=0.00001$). Smoking men accounts for 51% and smoking women for 23.8% ($p=0.00001$). Its is assumed that parents who smoke (71.6% of all parents) are negative patterns. Low level addiction subjects accounted for 33.5% of men and 21.3% of women in the group, whereas 10.2% of men and 0.7% of women belong to group of medium and high-level addicts ($p=0.00001$). Summarizing, 79.1% of all smokers are slightly addicted to nicotine and 10.9% are in medium or strongly addicted group respectively and most of them are men ($p=0.00001$). The place of living, financial situation and civil status did not influence smoking level. The conducted studies show that almost all of the students, i.e. 99.6% ($p=0.00001$) were exposed to passive smoking the week before. Some proportion of students accounting for 67.9% ($p=0.00001$) visited pubs, clubs and discos during the weekend. Some of them (33%) were exposed to passive smoking at home due to their smoking parents or

brothers and sisters. Significant number of students, which accounts for non-smoking one (58.12%) (p=0.00001) was exposed to passive smoking at home as well as during social meetings. Further, we analyzed what made students begin smoking. Social meetings were the most frequently reported as smoking origin (41.86%); next it was stress (24.13%) and entertainment (34.01). The group of non-smokers also includes those who used to smoke but who have not been smoking for one year (8.12%). Among smokers only 21.27% of respondents were trying to quit smoking, however they did not succeed in their attempts. Abstinence syndrome as well as fast gaining on weight was the most popular reason for the need to return to smoking habit. Other respondents claim that they were not giving up smoking due to the fact that they are able to do it anytime. All non-smokers were against smoking in their surroundings.

DISCUSSION

Passive smoking includes inhaling cigarette smoke coming from other smokers. This means breathing in of many of toxic substances released from cigarette, tobacco-pipe and cigar. The obtained results show that students of Medical University of Lublin are exposed to passive smoking at home as well as while meeting friends. Since scientists prove the increase of incidence of diseases with smoking origin among active smokers, prohibition of smoking in the public places is more and more often introduced. Effects of passive smoking are observed at every stage of life. Children of smokers are more likely to suffer from infection diseases of pulmonary system, middle ear, sinuses. They also complain about non-specific symptoms such as cough, hoarseness and cold. Passive smoking causes disorders in immune system and impairs general health condition of youth. Studies conducted by Jonson regarding prevalence of breast cancer among smoking women, prove harmful effects of passive smoking. Long-term and regular smoking increases the risk of breast cancer by 27%, whereas during pre-menopausal period it can be increased to 68% [12]. One can assume that smoking among medical students as well as those doing regular sports is disapproved; however research from Robert Wood Johnson Foundation, report that 28% of sport-active people smoke cigarette [13]. So far, factors which contribute to smoking were the most frequent aims of studies. Examination of factors determining appropriate growth and development of youth and which can influence prevention from smoking, is rarely conducted [14]. Domestic background is said to be among those preventing factors which can reflect on attempts for smoking and its continuation. Both, family habits regarding smoking as well as general family atmosphere is essential [15]. Growing number of smokers confirms the influence of environment and especially of parents on smoking initiation [16]. Disapproval of smoking coming from parents as well as implementation of healthy habits in the family, can effectively prevent youth from initiation of smoking. Toleration of smoking at young age as well as smoking parents, affect youth's consciousness, lead to negative habits and therefore contribute to high statistical values. It can not be expected that children brought up in the atmosphere of cigarette smoke will not become addicted to nicotine or considered it negatively. There are more than billion of cigarette-smoking people in the world (including 200 mln of women). In Poland, almost one fourth of population are smokers, out of which half accounts for women [17]. However, the examined group differs from given statistical data. Among medical students, men account for significant group of smokers. It should be highlighted that the effects of smoking such as nicotine-related diseases can be mostly noticed among adults; however addiction usually refers to younger age. Despite wide knowledge associated with negative influence of smoking on health, the number of smokers, especially among youth, still remains high and accounts for 20-30% [18]. Therefore, due to 29.2% of students from Medical University of Lublin who smoke regularly, smoking addiction seems to be a problematic issue. In Great Britain the number of smoking youth accounts for 17.9% [19]. Promoting healthy behavior, not only at home but also at the university, can significantly contribute to prevention of smoking among students. Therefore, it is worth highlighting negative effects of active and passive smoking during classes. What seems to be worrying, is the fact that youth from Lublin claim they can stop smoking any time. Nicotine addiction develops unpredictably. After the very first cigarette, one takes the second one and non-specifically it can expand into one package of cigarettes smoked daily. Subsequent habit and biological addition comes along with time. Smokers rarely realize that giving up smoking does not release all toxic substances from their organism. Re-building process takes time. It takes around 9 months for pulmonary system of former smoker to regain its working efficiency [20]. Studies show that despite determination of 70% of smokers to give up their habits, only a small percentage succeeds. Nicotine therapy increases the number of annual cigarette abstinences to 30% [21]. It is estimated that if the smoking level runs steady, in the next 50 years it will cause 450 million of deaths in the world [22]. So far, most of the conducted studies show there is not any safety to health nicotine concentration in the environment [23]. Decrease in the number of smoking students of Medical University could become a good example for their future patients. One can not trust a smoking therapist during nicotine addiction treatment.

CONCLUSIONS

1. Nicotine addiction as well as passive smoking is a significant problematic issue among students.
2. Decrease of exposure to passive smoking will help to protect youth from serious health effects in their late age.
3. Society should be provided with necessary information about influence of passive smoking.

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