Short Communication

TOBACCO SMOKING IN HOTEL WORKERS AND THE NECESSITY TO PROMOTE NON-SMOKING POLICY AT THE WORKPLACE

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This investigation aimed at evaluating the prevalence of active smokers in hotel workers to underline the need for a non-smoking campaign at the workplace. Data on smoking habit were collected in a questionnaire which included 398 subjects of whom 170 were men and 228 women aged in average 29 and 35 years, respectively. Seventy-six men and 134 women declared themselves regular tobacco smokers. In average, they started to smoke at the age of 17 and 18, respectively and had been smoking for 21 and 16 years, respectively. Although the number of smokers was high, it is encouraging that 29 % of men and of 51 % women tried and did not succeed in quitting smoking, whereas 30 % of men and 12 % of women did quit smoking. The authors advocate reducing tobacco use and controlling environmental tobacco smoke exposure at the workplace, which should include a non-smoking company policy, implementation of smoking cessation programmes, social support programmes, trade union support, as well as the assistance of health professionals during regular check-ups.

KEY WORDS: active smoking, environmental tobacco smoke, smoking cessation programme, tobacco use restriction

Tobacco smoking is a very important public health problem, as much in Croatia as all over the world. Tobacco consumption appears to be one of the main preventable causes of morbidity and mortality in the modern world. It is associated with a number of cardiovascular and respiratory diseases, some of which are chronic or malignant. Some may cause early death both in smoking men and women (1-7).

Long-term tobacco smoking is a risk not only for the development of chronic obstructive lung disease, but also for its exacerbation and consequent death. Half of the sudden deaths recorded among smokers are associated with the diseases of the heart and blood vessels (2, 3). Smoking is also one of the risk factors for developing atherosclerotic processes, cerebrovascular diseases, and diseases of peripheral circulation (4-6). A thirty-three year survey conducted in Sweden on a large cohort of men and women showed that they were equally susceptible to the hazards of smoking (ischaemic heart disease, aortic aneurysm, bronchitis, emphysema, and cancer of the lung, upper aerodigestive sites, urinary bladder and pancreas) when the sex differential in smoking habit was accounted for (7).

Tobacco smoke contains more than 4,500 compounds in particle phase, which include more than 40 known or suspected human carcinogens. Tobacco smoke constituents may have pharmacological and toxic effects and may act as irritants. Some of them are very potent carcinogens. They target specific organic systems in the body, causing primarily lung and bronchial cancer. The risk of developing lung and bronchial cancer is twenty times higher in tobacco smokers than in non-smokers, and of people who die of cancer of the respiratory organs, 90-95 % are smokers (8).

Average smoking prevalence reported for 1995 in Croatia was 31 % for adults, 35 % for health

professionals, and 9 % for youth (9). According to data collected by the Croatian Medical Association (HLZ), there are more than one million active tobacco smokers in Croatia, 400,000 of whom are residents of its capital Zagreb (10). A large cross-sectional study of health attitudes, knowledge, behaviour and risks in the post-war Croatian population (The First Croatian Health Project 1995-1997) showed that 34 % men and 27 % women aged 18-65 were active smokers. At the same time, there were 26 % men and 22 % women tobacco smokers in the USA (1, 11).

Involuntary exposure of non-smokers to secondhand environmental tobacco smoke is another preventable cause of significant morbidity and mortality associated with tobacco use. Passive smokers are exposed to a qualitatively different and possibly even more dangerous portion of cigarette smoke, that is, to side-stream smoke which is released from the burning tip of a cigarette. Mainstream smoke, a portion of environmental tobacco smoke that is exhaled by the smoker, and side-stream smoke are qualitatively similar in composition, but differ in the concentration of their constituents because of their different combustion characteristics. Side-stream smoke is a result of less complete combustion than the mainstream smoke and thus contains considerably higher concentrations of carcinogenic and toxic substances (12). Passive smokers are also at risk of getting the same diseases, and they even run the same risk of death as do active tobacco smokers. The risk of death caused by coronary disease is 25 % higher in passive smokers than in non-smokers. Some studies suggest that women exposed to environmental tobacco smoke have higher mortality than men passive smokers (10, 13-15).

Tobacco consumption in many developed countries, including the United States, United Kingdom, and Australia has steadily been declining since 1950s. However, this drop has been overturned by its strong increase in Eastern Europe, South America, Africa, and Asia. In global terms, certain enterprises such as tourist providers face the dilemma either to follow the rapidly growing demand for smokefree public areas or to accommodate for growing economic significance of nations where tobacco smoking in public is conventional (16).

In the Republic of Croatia, tourism is a principal economic activity. Evidence points to a positive trend in an increasing number of restaurants and hotels which provide smoke-free areas and rooms for their guests. Demands for smoke-free workplaces and public areas in Croatia do not leave any dilemma for the Croatian tourist providers regarding public tobacco smoking policy. The aim of this survey was to evaluate tobacco smoking among hotel workers in a Croatian coastal town by determining the prevalence of tobacco smokers and the distribution of smokers as to whether they tried to quit smoking and whether they succeeded in that attempt. The intention was to underline the necessity of non-smoking policy at the workplace in these professions, as it affects not only the employees, but also the customers.

SUBJECTS AND METHODS

The survey included 398 hotel workers (kitchen and waiting staff), of whom 170 were men and 228 women. The subjects answered an anonymous questionnaire about smoking habits (created by the Public Health Institute of the County of Istria, Pula, Croatia) on the regular annual check-up in March 2002. The questions included data on sex and age and details about the smoking habit such as the age when they started to smoke tobacco and the number of cigarettes smoked per day. The subjects were also asked whether they had ever tried to quit smoking and whether they had succeeded. Before inclusion in the survey, the subjects gave their informed consent.

RESULTS

Our subjects were generally in good health. Seven men who smoked between 10 and 35 years suffered from illnesses related to high total blood cholesterol, that is, high blood pressure, diabetes mellitus, and psoriasis. One 43-year-old man survived a cerebral stroke in 2001 after 20 years of tobacco smoking. Five women who smoked tobacco between four and 30 years developed chronic gastritis, anorexia, Hashimoto's syndrome, hyperthyroidism and cardiac arrhythmia.

Table 1 shows the smoking habit in 398 examined subjects. Two hundred and ten (53 %) were active tobacco smokers. Among them, 76 (45 %) were men aged 29 in average and 134 (59 %) women aged 35 in average.

The average starting age for tobacco smoking was 17 years for men and 18 years for women. Of current smokers, 74 % of men smokers (56 of 76) and 69 % of

women smokers (93 of 134) started to smoke before the age of twenty.

 $\label{eq:table1} \textbf{Table 1} \textit{Smoking habit in hotel workers in a Croatian coastal town }$

Subjects	Total	Non- smokers (never smoked)	Tobacco smokers	
			Current smokers	Former smokers
Men	170	61 (36)	76 (45)	33 (19)
Women	228	76 (33)	134 (59)	18 (8)
Total	398	137 (32)	210 (53)	51 (13)

Results are expressed in absolute numbers (percentages in brackets)

Table 2 shows the distribution of tobacco smokers according to whether they tried to quit smoking and whether they succeeded in it. Among all examined tobacco smokers, 29 % of men (32 of 109) and 51 % of women smokers (78 of 152) tried and failed to quit smoking. Thirty per cent of men (33 of 109) and twelve per cent of women (18 of 152) succeeded in quitting smoking ("former smokers") after in average 21 and 16 years of smoking, respectively. In addition, it may be interesting to note that before quitting all women smokers uniformly smoked 20 cigarettes per day.

 Table 2 Former and current tobacco smokers among hotel workers

 according to whether they tried to quit smoking and whether they

 succeeded

Tobacco smokers	Total	Current smokers		Former
		Never tried to quit	Tried and failed	(succeeded in quitting)
Men	109	44 (40)	32 (29)	33 (30)
Women	152	56 (37)	78 (51)	18 (12)
Total	261	100 (37)	110 (41)	51 (20)

Results are expressed in absolute numbers (percentages in brackets)

Figure 1 shows daily cigarette consumption in the examined tobacco smokers. The average daily tobacco consumption in all subjects was 20 cigarettes per day. Most women smoked less than 20 cigarettes per day: 38 % (51 of 134) smoked less than 10 and 58 % (77 of 134) smoked 11-20 cigarettes per day. Men showed lower rates in these two categories: 24 % (18 of 76) smoked less than 10, and 53 % (40 of 76) smoked 11-20 cigarettes per day. However, more men (24 % or 18 of 76) than women (4 % or 6 of 134) smoked over 21 cigarette per day. It is worth noting that 20 % of men smoked as many as 30-60 cigarettes per day.



Figure 1 Daily cigarette consumption in regular tobacco smokers identified among hotel workers: ≤10, 11-20, ≥21 cigarettes smoked per day

Figure 2 shows the distribution of former men and women tobacco smokers in relation to the non-smoking period. Twelve men (36 %) and eight women (44 %) did not smoke for up to one year, 15 men (45 %) and nine women (50 %) did not smoke between one and nine years, six men (18 %) did not smoke 10-19 years, and one woman did not smoke for more than 20 years.



Figure 2 Former men and women tobacco smokers identified among hotel workers by the length of non-smoking period: ≤1, 1-9, 10-19, ≥20 years

DISCUSSION

We found a high prevalence of tobacco consumption in hotel (kitchen and waiting) staff. It is higher than reported for the Croatian postwar population and 33 % higher than tobacco consumption reported in England for subjects of corresponding education. Another difference in the examined cohort was that there were more women than men tobacco smokers. These findings are quite different from those in the general population of Croatia. Furthermore, the portion of women smokers in hotel workers in Croatia is 20 % higher than in the United States (1, 9-11, 17).

It has been reported that men who started smoking tobacco before their 20s are under a greater risk of developing lung cancer than those who started smoking after the age of 25. Women who smoke less than 10 cigarettes per day run four times greater risk of myocardial infarction than non-smokers. According to the European Heart Net, more people die of tobaccorelated diseases than of AIDS, car accidents, alcohol, and recreational drugs (18, 19).

Due to a high early death rate in smokers, who lose approximately 20-25 years of expected life span, the Croatian Ministry of Health has initiated and sponsored a campaign entitled "Say yes to non-smoking" whose idea is to promote smoking cessation. The campaign is related to the Stability Pact Partnership Project to Reduce Tobacco Dependence in the Region for the period 2000-2004 and is conducted by the School of Public Health "Andrija Štampar" in Zagreb.

In 1991, the World Health Organisation Regional Office for Europe issued a document reporting that 41 % of workplaces in the European Union implemented health promotion programmes, whereas only 28 % did the same in other, non-EU countries. The collected knowledge about the smoking habit in Croatian population, who is generally not stimulated to attend smoking cessation programmes, has urged our Institute to take steps toward tobacco smoking prevention similar to those taken by Germany, Greece, Ireland, Italy, the Netherlands, Spain and the United Kingdom between 1989 and 1991, known also as "Innovative Actions for Health at Work" (20, 21).

The implementation and enforcement of the Croatian Work Safety Act and of the Restricted Use of Tobacco Products Act should be able to lessen active tobacco consumption and to control environmental tobacco smoke at workplaces and public areas. These regulatory acts should provide legal basis for healthy lifestyle, which has already been reached in the European Union and other developed countries in the world (22-26).

CONCLUSION

Although the number of smokers among hotel workers in our survey was high, it is encouraging that many of them showed intention to quit smoking. This is why we believe that stricter non-smoking company policies, well-organised smoking cessation programmes, social support programmes and support from trade unions can help these people to achieve that goal. Regular annual health check-up of hotel and catering workers is yet another occasion for health professionals to advocate non-smoking as essential for healthy lifestyle.

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Sažetak

PUŠENJE DUHANA U HOTELSKIH RADNIKA I NUŽNOST PROMICANJA NEPUŠENJA NA RADNOME MJESTU

Cilj istraživanja bio je procijeniti zastupljenost aktivnih pušača duhana i potvrditi nužnost promicanja nepušenja u radnika zaposlenih u hotelskim turističko-ugostiteljskim djelatnostima. Analizirani su podaci o pušačkim navikama skupljeni anketnim upitnikom osmišljenim u Zavodu za javno zdravstvo Istarske županije u Puli tijekom godišnjeg pregleda u ožujku 2002. godine. (Ikupno je bilo 398 ispitanika među kojima 170 muškaraca i 228 žena. (Itvrđeno je da su aktivni pušači 76 (45 %) muškaraca prosječne dobi 29 godina i 134 (59 %) žena prosječne dobi 35 godina. Postoci pušača bili su viši od utvrđenih za stanovništvo Hrvatske u poslijeratnom razdoblju 1995. godine (34 % pušača i 27 % pušačica u dobi od 18 do 65 godina). Prije dvadesete godine života počelo je pušiti 56 (74 %) muškaraca i 93 (69 %) žena. Prosječna dob na početku pušenja bila je 17 godina u muškaraca i 18 godina u žena. Prosječan broj popušenih cigareta tijekom 24 h u svih ispitanika bio je oko 20 cigareta. Više žena pušilo je prosječno do 20 cigareta (u žena je 38 % pušilo do 10 cigareta i 58 % od 11 do 20 cigareta na dan, a u muškaraca 24 % je pušilo do 10 cigareta i 53 % od 11 do 20 cigareta na dan. Više muškaraca pušilo je više od 20 cigareta na dan (24 % muškaraca i 4 % žena). Oko petine muškaraca pušilo je 30 do 60 cigareta na dan. Pokušalo je prestati pušiti, a nije uspjelo 29 % muškaraca i 51 % žena. Prestalo je pušiti 33 od 109 (30 %) muškaraca i 18 od 152 (12 %) žena nakon prosječno 21 godine (muškarci) odnosno 16 godina (žene).

Rezultati istraživanja pokazali su zabrinjavajuće visoki udjel pušača i pušačica među ispitanicima. Velik broj pokušaja da se prestane pušiti upućuje na potrebu organiziranog promicanja nepušenja na radnome mjestu provođenjem zakonski utemeljenih mjera ograničavanja pušenja duhana na radnome mjestu, programa odvikavanja od pušenja, socijalnih potpora nepušačima te pomoć i potporu strukovnih sindikata. Redoviti godišnji zdravstveni pregledi za obnavljanje dozvole za rad (sanitarne iskaznice) dodatna su prilika za stručno medicinsko savjetovanje o prednostima nepušenja u očuvanju zdravlja.

KLJUČNE RIJEČI: aktivno pušenje, ograničenje uporabe duhana, pasivno pušenje, program odvikavanja od pušenja

REQUESTS FOR REPRINTS:

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