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Attitudes and knowledge of third year medical students in Croatia about tobacco control strategies: results of the Global Health Professionals Pilot Survey in Croatia, 2005

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Tobacco use is the single largest preventable cause of death worldwide. Every year, nearly 5 million people die from tobacco-related illnesses.1 In its preamble, the World Health Organization Framework Convention on Tobacco Control (FCTC) emphasizes the special contribution and vital importance of participation of health professional bodies and academic and healthcare institutions in national and international tobacco control efforts.2 Health authorities, rather than the legislature, are largely responsible for designing, regulating and implementing specific tobacco control policies.3 Non-government organizations, medical societies, public health advocates and other entities can provide advocacy and technical assistance in many areas, including science and policy formulation. Medical students have an important role to play in these efforts, as they represent the future health authorities; this puts them in a position to influence social norms regarding smoking.4 However, few data regarding the knowledge and attitudes of medical students about general and specific tobacco control policies and legislations are available. As such, this study investigated third year medical students' attitudes towards banning smoking and other tobacco control measures, and their knowledge of general and specific tobacco control policies in Croatia and in medical schools and clinics.

These results represent part of the Croatian pilot survey of the Global Health Professionals Survey (GHPS), which was conducted by the European Medical Students' Association in 2005. The GHPS is part of the Global Tobacco Surveillance System under the FCTC.5

This article will focus on two sets of results from the GHPS survey in Croatia on third year medical students: results concerning their knowledge about official smoking policy at school and clinics, and enforcement of such policy; and results concerning their attitudes towards banning smoking and other tobacco control measures.

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The sample included all third year medical students in four medical schools in Croatia (Zagreb, Rijeka, Osijek and Split). In total, 409 students were eligible to take part in the study. The response rate was very high (404/409, 98.5%). The sample had high age homogeneity (95.5% of the surveyed students were aged 20–24 years), 68.5% were female and 31.5% were male.

In total, 83.1% of students reported that they attend a school with an official policy banning smoking in school buildings and clinics. Females were significantly more likely to attend such a school than males (86.9% vs 74.5%). Three-quarters (73.8%) of students who attend a school with a ban on smoking in buildings and clinics reported that the policy is enforced. Females reported the enforcement of this policy more often than males (77.0% vs 65.1%). Almost two-thirds of students (64.4%) reported that they attend a school with an official policy banning smoking in indoor public or common areas, and three-quarters of students (75.0%) reported that this policy is enforced. Again, females reported the enforcement of this policy more often than males (79.2% vs 66.2%).

The vast majority of students supported a smoking ban in a variety of public areas including hospitals and schools. Percentages ranged up to 97% for a smoking ban in hospitals (Table 1). Nearly 90% of students supported a smoking ban on buses and trains, and over 80% in gyms and sports arenas. While nearly 70% and 60% of the students supported a smoking ban in restaurants and playgrounds, respectively, only 41% would also support a ban in discos, bars and pubs; places which students frequent and where they smoke. Males were significantly more likely to support a smoking ban in discos, bars and pubs than females (49.2% vs 37.5%). Nearly six out of ten students (57.7%) reported that tobacco use should be banned from all public places. In addition, 87.8% of students reported that tobacco sales to minors should be banned, and 79.2% thought that there should be a total ban on advertising of tobacco products. Compared with males, females were significantly more likely to support a smoking ban in gyms and sport arenas (85.9% vs 79%), and a complete ban on advertising of tobacco products (82.2% vs 72.2%).

These findings add to the pool of evidence that Croatia's tobacco control plan should be strengthened and expanded. Restricting smoking in public places and on school premises protects nonsmokers from secondhand smoke exposure, creates a strong incentive for smokers to quit, and reinforces the cessation efforts among smokers trying to quit. Previously, the authors' group found that the majority of medical students reported secondhand smoke exposure at home (>50%) and in public (>95%).6 This exposure has a direct impact on their health and can be reduced by expanding smoke-free areas and enforcing current restrictions.7,8 As well as the national legal framework, there is no specific official tobacco policy in all medical schools. Only the internal fire regulations of the Medical School of Osijek forbid smoking and the placement of ashtrays in the school premises, especially in laboratories. However, the vast majority of students reported that their institutions had such a policy and that it is enforced. Given the envisaged high support for school regulations, school officials should work with tobacco control experts to design effective school-specific policies, ban smoking in common areas and ensure the enforcement of these rules.

This study found that Croatian medical students are very supportive of tobacco control efforts. Bearing in mind that there is a strong initiative in Croatia, supported by the Government, to introduce a comprehensive law to completely ban the use of tobacco in all public places, including bars, pubs and restaurants (such as those already implemented successfully in Norway, Ireland, Italy etc.), these data show that medical students support this effort.

In respect of comparatively low support for a smoking ban in discos and bars, it is important to note that male students are significantly more likely to support a ban than female students. This quite unexpected result may be a further indicator for the increased prevalence of social tobacco use among female students.

Eight out of ten students reported that there should be a complete ban on tobacco advertising. This sends a strong message to national legislators to enforce respective regulations and adapt them further to minimize the possibilities of circumventing the advertising ban in the tobacco control law. Close to nine out of ten students supported banning sales of tobacco products to minors. However, although sales of tobacco to minors in Croatia were banned in 1999, evidence from the 2002 Croatia Global Youth Tobacco Survey (GYTS) suggests that enforcement of this ban is weak.9

These findings are important because they suggest that medical students in Croatia have positive attitudes regarding the control of tobacco use and exposure, sending a strong message to national legislators to enforce respective regulations.

This study revealed the need to develop effective school-specific policies, introduce smoking bans in common areas, and further improve enforcement of these rules in collaboration with school officials and tobacco control experts.

Recommendations to improve and effectively implement the existing plans and strategies for anti-tobacco actions in Croatia, based on the study results, are as follows:

- strengthen legislation for tobacco control in hospitals and put more effort into law enforcement;
- expand restrictions on tobacco use in restaurants, discos, bars, pubs and other public places to reduce secondhand smoke;
- enforce the ban on tobacco sales to minors and a complete ban on tobacco advertising;
- Croatia’s Ministry of Health should use this evidence based on very-high-quality data to expand current tobacco control efforts because restricting secondhand smoke exposure, sales to minors and tobacco advertising would reduce the social acceptability of tobacco use and foster a smoke-free environment;
- regular surveillance should be conducted to monitor the effectiveness of tobacco control and prevention programmes, campaigns and policies. Furthermore, the dissemination of research findings from GHPS and other tobacco surveillance activities should be promoted to provide policy makers with evidence to improve tobacco control efforts in Croatia; and
- ratify the WHO Framework Convention on Tobacco Control that was signed on 2 June 2004.10

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Table 1

Attitudes of third year Croatian medical students towards banning smoking in public places[a]

	Percentage supporting a smoking ban in:								Percentage supporting a ban on tobacco sales to adolescents	Percentage supporting a complete ban on advertising of tobacco products
	Hospitals	Restaurants	Buses and trains	Schools	Playgrounds	Gyms and sports arenas	Discos, bars and pubs	All enclosed public places		
Total	97.0 (95.9–97.7)	69.8 (67.4–72.1)	89.6 (87.9–91.1)	93.9 (92.6–95.0)	58.5 (56.0–61.0)	83.8 (81.8–85.6)	41.4 (38.8–43.9)	57.7 (55.1–60.2)	87.8 (86.0–89.4)	79.2 (77.0–81.2)
Male	94.4 (91.8–96.1)	69.3 (65.0–73.4)	85.4 (81.9–88.4)	93.6 (90.9–95.5)	59.7 (55.1–64.2)	79.0 (75.1–82.5)	49.2 (44.6–53.7)	58.8 (54.2–63.2)	87.0 (83.6–89.8)	72.5 (68.2–76.4)
Female	98.2 (97.1–98.8)	69.9 (66.9–72.6)	91.5 (89.6–93.1)	94.1 (92.4–95.4)	57.8 (54.7–60.9)	85.9 (83.6–87.9)	37.5 (34.6–40.6)	57.0 (53.9–60.1)	88.1 (85.9–90.0)	82.2 (79.7–84.5)

[a] Prevalence and other statistics are described with 95% confidence intervals (CIs) for the estimates. Statistical significance existed if the CIs did not overlap.