Smoking, alcohol consumption and attitudes towards tobacco use cessation among dental students at the University of Helsinki

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Dental students at the University of Helsinki answered a 25-item questionnaire during spring 2008 that investigated their alcohol consumption, smoking habits and knowledge about the risk factors of smoking and alcohol consumption. This allows one to estimate how well future oral health care professionals would follow the recommendations they give and how hazardous they consider the risk factors of smoking and alcohol consumption to be. In addition, their attitudes towards tobacco use cessation and their opinions on who is responsible for education on tobacco use cessation were elicited to determine how anti-tobacco counselling might work in the future.

Current smoking was reported by 17% of the participants and current alcohol consumption by 90% of participants. The majority of dental students (92%) considered education on tobacco use cessation to be the responsibility of dentists/doctors. Fairly high number of participants (43%) reported receiving inadequate information on tobacco cessation during their studies. Dental students should be taught and encouraged early on to routinely discuss with smokers the impacts of smoking on health.
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1 Introduction

Dentists play an important role in tobacco use cessation by educating patients about the hazardous effects of smoking – especially on oral health.

In 2005, 26% of working men and 18% of working women reported being regular smokers, bringing the total number of smokers in Finland to one million (KTL 2007). Finnish adolescents are apparently introduced to smoking at 12-14 years of age. By the age of 14 years, 41% of boys and 44% of girls reported trying smoking. Of 16-year-old Finnish adolescents, 67% reported that they had tried smoking, and regular smoking was more common among girls (27%) than boys (23%). Among 18-year-olds, the difference between genders was no longer significant, but the number of regular smokers had increased among both genders to one-third of the age group (KTL 2007).

Degree in dentistry is a five-year program at the University of Helsinki. The first two years (study years 1 and 2) comprise preclinical studies in which dental students take premedical courses alongside medical students. This is followed by the clinical phase of studies (years 3-5), which focuses on dental courses.

1.1 Aims of the study

The aims of the study were to investigate alcohol consumption and smoking habits of students attending the University of Helsinki Institute of Dentistry. Knowledge about the risk factors of smoking and alcohol use was also investigated. This allowed the estimation of how well future oral health care professionals would follow the recommendations they give and how hazardous they consider the risk factors of smoking and alcohol consumption to be. Students’ attitudes towards tobacco use cessation were also elicited, as was their opinion on who has the main responsibility for education on tobacco use cessation. This enabled to evaluate how anti-tobacco counseling might work in the future. A good attitude and knowledge about tobacco use cessation can be expected to enhance reduction of smoking in Finland. The results of this study can be applied to develop the curriculum of dental studies to give future dentists better tools for promoting tobacco cessation.
2 Review of the literature

2.1 Smoking among adolescents in Europe

The European School Survey Project on Alcohol and Other Drugs (ESPAD) 2003 report (Hibell et al. 2004) compared the consumption of alcohol and drugs among European adolescents with a mean age around 16 years. The proportion of teenagers who reported smoking 40 cigarettes or more in their lifetime was in Finland 32%, where as in Austria, the Czech Republic, the Faroe Islands, Greenland, Germany, Lithuania, and Russia (Moscow) the corresponding figure was 40%. According to the same survey, the prevalence was 13% in Turkey, 16% in Malta and 18% in Iceland and Portugal.

2.2 Alcohol consumption among adolescents in Europe

The prevalence of reported alcohol consumption 40 times or more in a lifetime was according to the ESPAD report in Denmark, Austria, the Czech Republic, the Netherlands, and the United Kingdom between 43% and 50%, where as the reported prevalence was 20% in Finland, 7% in Turkey and between 13% and 15% in Greenland, Iceland, Norway and Portugal (Hibell et al. 2004).

2.3 Smoking and alcohol consumption among European dental students

Plasschaert et al. (2001) found that the majority of Dutch dental students reported consuming alcohol (88% of students during the last month) compared with other substances, with the second most popular substance being tobacco (24% of students during the last month). Barber et al. (2006) compared substance use between dental and law students in the United Kingdom. They described alcohol consumption to be at about the same level (86% of students), but only 19% of law and 7% of dental students reported currently smoking. The majority of law and dental students also reported binge drinking (women 4 alcohol portions and men 5 alcohol portions) (Barber et al. 2006). Mian et al. (2003) studied the sensation-seeking of dental and biology students of Manchester University. Biology students mean score in disinhibition was 5.72 and in experience seeking 5.44. The same scores for dental students were 4.38 for disinhibition and 4.60 for experience seeking (Mian
et al. 2003). Dumitrescu et al. (2007) noted that among Romanian dental students about 37% reported being smokers and 71% reported consuming alcohol regularly. Interestingly, of those who reported smoking daily, 10% were first-year students and 24% were sixth-year students. McCartan et al. (2008) surveyed the smoking habits and attitudes of dental, dental hygienist and dental nursing students towards tobacco use cessation. Approximately 12% of dental students reported smoking cigarettes regularly.

2.4 Impact of smoking on general health
Smoking has many effects on general health. It is a major risk factor for premature death, causes 80-90% of all lung cancers and is a risk factor for such cardiovascular diseases as coronary heart disease, thrombosis formation and high blood pressure (WHO 2007). In addition, the risk of chronic obstructive pulmonary disease (COPD), chronic pneumonia, miscarriage, premature delivery, infertility, osteoporosis, type 2 diabetes, surgical complications, premature ageing of the skin, damage to the gastrointestinal mucosa and cancers of the bladder, larynx, esophagus, pancreas, stomach, liver and uterine cervix increases when one smokes (KTL 2007).

2.5 Impact of smoking on oral health
Smoking increases the risk of oral cancer and periodontal diseases, suppresses oral immunity against infections and impairs the wound healing process in the mouth (WHO 2007). In addition, smoking increases the accumulation of dental calculus, coloring of the gums and risk of metaplasia in oral cells, weakens the sense of smell and taste and weakens the tissue healing process (Tupakkaverkko 2007).

2.6 Tobacco use cessation in dental studies
According to WHO (2007), there are several reasons why oral health care professionals should put an effort into anti-tobacco counselling. Firstly, they spend on average more time with patients than do many other clinicians. Secondly, they can show the changes tobacco use causes in the mouth, thus encouraging patients to quit smoking. Thirdly, they usually meet with patients on a regular basis, which enables them to monitor the progress of
tobacco cessation (WHO 2007). In addition, the results concerning tobacco cessation tend to improve when health care professionals from several different fields educate patients about the hazardous effects of smoking (WHO 2007). The attitudes of dental students towards anti-tobacco counselling get better the more they know about how effective this counselling is. These attitudes can be affected by emphasizing for dental students the importance of tobacco cessation (Vanobbergen et al. 2007). In Ireland, 80% of dental students and newly graduated dentists thought that dentists should be involved in tobacco use cessation counselling (McCartan et al. 2008). Victoroff et al. (2004) studied in USA the attitudes of incoming dental students towards tobacco cessation promotion in a dental setting. They reported that 81% of students agreed that encouraging patients to quit smoking is the duty of dental professionals, while 99% agreed that telling patients about the risk factors of smoking on oral health is the responsibility of dental professionals.

2.7 Measures to reduce substance use among dental students
Events should be arranged where discussions could be held on the risks of substance abuse (alcohol, tobacco, etc.) (Barber et al. 2006). Dental schools should also educate their students about reasonable alcohol consumption, teach them how to recognize substance abuse cases and inform them where help can be sought in case of substance abuse (Plasschaert et al. 2001).

2.8 Dental team and tobacco cessation
Tobacco use interventions conducted in the dental office after oral examination may increase tobacco abstinence rates among smokers (Carr et al. 2006). The dental team should advise patients to quit smoking before smoking-related diseases arise, inform patients with oral diseases about the positive effects that tobacco cessation has on the resolution of oral diseases and monitor the progress of smokers in tobacco cessation (Johnson 2004). Members of the dental team can succeed in getting smokers to quit smoking by using the five “A” approach: ask patients about their smoking habit, advise them on the importance of quitting, agree with them on a quit date, assist them in achieving cessation, and arrange a follow-up (Johnson 2004). John et al. (1997) found that about 9% of dentists in the United
Kingdom reported always discussing smoking with patients with no major oral health problem. By contrast, some 51% of dentists in the United Kingdom reported always discussing smoking with patients with periodontal problems (John et al. 1997). It is recommended to give an opportunity for patients to discuss about smoking in every patient contact with health care personnel and success in tobacco cessation can be enhanced by having multiple conversations about smoking with patients who smoke (Duodecim, Käypä hoito 2006).

3 Subjects and methods

3.1 Subjects
Dental students at the University of Helsinki answered a 25-item questionnaire (Appendix 1) during spring 2008. The proportion of filled questionnaires was around 80% for study year 1, 92% for study year 2, 86% for study year 3, 79% for study year 4 and 86% for study year 5. The total number of filled questionnaires for all study years was 150. In other words, about 85% of the students enrolled answered the questionnaire. Participants did not write their name on the survey, and thus none of the questionnaires is identifiable. This ensures the privacy of all participants and eliminates any ethical issues.

3.2 Methods
The questionnaire was given to all dental students enrolled in the 2007-2008 academic year. The survey was held during compulsory teaching sessions to maximize the number of people answering the survey. The questionnaire dealt with smoking habits, alcohol consumption, attitudes towards anti-tobacco counselling and knowledge of the hazardous effects of tobacco and alcohol consumption. Age, study year, gender and accommodation were used as background variables. The questions were based on a similar survey conducted in spring 2005 at the University of Helsinki Institute of Dentistry. Some additional questions were taken from a joint survey conducted in December 2007 by the
Dental Public Health Department, University of Helsinki Institute of Dentistry and the University of Krakow Dental School.

The percentage of each option chosen by the participants was calculated, and Microsoft Excel was used for statistical analysis. The difference in amount between male and female smokers was analysed. Only participants reporting never having smoked were considered non-smokers. In addition, the opinion of smokers about the health impact of smoking was compared with that of non-smokers. Similarly, the opinion of alcohol-consumers about the health impact of alcohol was compared with that of abstainers. The accommodation of smokers was also compared with that of non-smokers.

4 Results
The majority of students answering the survey in each study year were female. About 40% of participants in study year 1 and 30% in study years 2 to 5 were male.

4.1 Smoking among dental students
The majority of dental students in all study years reported being non-smokers (Figure 1). Around 15% of preclinical and 18% of clinical students reported that they had smoked during the last 30 days. Of all dental students at the University of Helsinki, about 17% reported smoking during the last 30 days.

Study year 3 students reported the highest frequency of smoking during the last 30 days. Of male students, about 30% in study year 1, 20% in study years 2, 4 and 5 and 60% in study year 3 reported being smokers. Of female students, around 40% in study years 1 and 4, 20% in study year 2 and 30% in study years 3 and 5 reported being smokers.
None of study year 4 students reported smoking more than one cigarette on average per day, while around 10% of students in study years 3 and 5 reported smoking less than half a packet per day (Figure 2).
Figure 2. Reported amount of tobacco consumed by dental students according to study year.

The majority of smokers in each study year, except year 5, reported starting smoking between the ages of 13-15 years. Most of the study year 5 smokers reported starting smoking at the age of 16 year or at the age of 19 years or over. About 15% of smokers in the preclinical and 20% of smokers in the clinical phase of studies reported having tried five times or more to quit smoking during the last 12 months, while some 55% of preclinical and 65% of clinical smokers reported not having tried to quit smoking during the last 12 months.
As we can see from Figure 3, around 17% of study year 5 smokers reported smoking every day, while all study year 4 smokers reported smoking less than 5 days during the last 30 days. In addition, about 15% of smokers in the preclinical phase and 25% of smokers in the clinical phase of studies reported smoking on 10 or more days during the last 30 days.

Figure 3. Reported frequency of smoking during the last 30 days among dental students according to study year.
About 35% of smokers in the preclinical and 60% of smokers in the clinical phase of studies reported living in a relationship, while the corresponding figures for non-smokers were 52% and 55% (Table 1).

Table 1. Accommodation of smokers and non-smokers according to study year. The values of non-smokers are in parentheses. All values are percentages.

<table>
<thead>
<tr>
<th>Study year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td>17 (15)</td>
<td>0 (7)</td>
<td>8 (16)</td>
<td>10 (0)</td>
<td>0 (5)</td>
</tr>
<tr>
<td>Relationship</td>
<td>40 (50)</td>
<td>29 (54)</td>
<td>50 (42)</td>
<td>60 (59)</td>
<td>83 (63)</td>
</tr>
<tr>
<td>Alone</td>
<td>40 (35)</td>
<td>70 (40)</td>
<td>42 (42)</td>
<td>30 (41)</td>
<td>17 (32)</td>
</tr>
</tbody>
</table>

4.2 Alcohol consumption among dental students

No significant difference was present between reported alcohol consumption of preclinical and clinical students (87% vs. 93%) during the last 30 days.

The majority of students in each study year, except year 5, reported drinking between 3 and 5 days during the last 30 days (Figure 4). Study year 4 had the highest percentage of students reporting drinking on 10 or more days within the last 30 days.
Figure 4. Reported frequency of alcohol consumption among dental students during the last 30 days according to study year.

Around 60% of study years 1 and 5, 45% of study year 2, 30% of study year 3 and 70% of study year 4 students reported usually having five or more portions of alcohol (binge drinking) during an evening when they go out. Overall, about 50% of both preclinical and clinical students reported usually engaging in binge drinking when they go out. About 5% of study years 1, 2 and 4, 15% of study year 3 and none of study year 5 students reported usually abstaining from alcohol consumption when they go out.

In Figure 5, we can see that about 40% of study years 1, 4, and 5, 30% of study year 2 and 20% of study year 3 students reported consuming five or more portions of alcohol on the same occasion once within the last two weeks. Around 6% of all dental students reported consuming five portions of alcohol three times or more within the last two weeks. The
highest percentage of students (60%) choosing the response option “not at all” was from study year 5.

Figure 5. Reported frequency of consumption of five or more portions of alcohol on the same occasion by dental students during the last two weeks according to study year.

Around 10% of students of study years 1, 3 and 4 and 5% of those of study years 2 and 5 reported that their alcohol consumption was higher than that of other students. However, about 30% of study year 1, 60% of study year 2, 50% of study years 3 and 5 and 20% of study year 4 students reported that their consumption was lower than that of other students. About 50% study years 1, 2, 3 and 5 and 80% of study year 4 students reported that their
consumption was about the same as that of their friends. Only 10% of study year 1 students reported consumption higher than that of their friends.

Around 30% of study years 1, 3 and 5, 20% of study year 2 and 40% of study year 4 students reported having had a hangover four or more times during the last six months. About 24% of participants reported having no hangovers during the last six months (Figure 6).

Figure 6. Reported number of hangovers during the last six months among dental students at the University of Helsinki according to study year.
However, around 85% of study years 1 and 4, 95% of study years 2 and 3 and 100% of study year 5 students reported not being absent from work or studies during the last six months because of a hangover. In other words, about 7% of participants reported being absent from work or studies during the last six months due to the effects of alcohol.

4.3 Opinions of dental students on risk factors of smoking and alcohol consumption

Some differences between upper and lower study year students emerged (Figure 7). For example, only about 50% of study year 1 students reported smoking as a risk factor for brain stroke, while almost every study year 5 student chose this option.
Figure 7. Opinions of dental students on the risk factors of smoking according to study year.
4.4 Opinions of dental students on the degree of harmfulness and addiction of smoking and alcohol

Higher or equal percentages of non-smokers chose score 5 compared with smokers in each study year, except study year 4 (Table 2). Alcohol consumption, on average, was ranked as less harmful than smoking (Table 3).

Table 2. Opinions of smokers and non-smokers on how harmful smoking is on a scale from 1 to 5, with 5 being the most harmful. The values of non-smokers are in parentheses. All values are percentages.

<table>
<thead>
<tr>
<th>Harmfulness 0 to 5</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study year 1</td>
<td>0 (0)</td>
<td>8 (5)</td>
<td>0 (0)</td>
<td>50 (35)</td>
<td>42 (60)</td>
</tr>
<tr>
<td>Study year 2</td>
<td>0 (0)</td>
<td>0 (4)</td>
<td>14 (0)</td>
<td>14 (25)</td>
<td>71 (71)</td>
</tr>
<tr>
<td>Study year 3</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>8 (0)</td>
<td>42 (37)</td>
<td>50 (63)</td>
</tr>
<tr>
<td>Study year 4</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (6)</td>
<td>50 (47)</td>
<td>50 (41)</td>
</tr>
<tr>
<td>Study year 5</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (11)</td>
<td>50 (16)</td>
<td>50 (74)</td>
</tr>
</tbody>
</table>

Table 3. Opinion of alcohol consumers and abstainers on how harmful alcohol consumption is on a scale from 1 to 5, with 5 being the most harmful. The values of non-smokers are in parentheses. All values are percentages.

<table>
<thead>
<tr>
<th>Harmfulness 0 to 5</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study year 1</td>
<td>0 (0)</td>
<td>23 (0)</td>
<td>47 (50)</td>
<td>20 (50)</td>
<td>10 (0)</td>
</tr>
<tr>
<td>Study year 2</td>
<td>4 (0)</td>
<td>25 (14)</td>
<td>43 (43)</td>
<td>21 (43)</td>
<td>7 (0)</td>
</tr>
<tr>
<td>Study year 3</td>
<td>0 (0)</td>
<td>23 (0)</td>
<td>46 (0)</td>
<td>19 (20)</td>
<td>12 (80)</td>
</tr>
<tr>
<td>Study year 4</td>
<td>4 (0)</td>
<td>15 (0)</td>
<td>50 (100)</td>
<td>23 (0)</td>
<td>8 (0)</td>
</tr>
<tr>
<td>Study year 5</td>
<td>0 (0)</td>
<td>8 (0)</td>
<td>56 (0)</td>
<td>28 (0)</td>
<td>8 (0)</td>
</tr>
</tbody>
</table>

Dental students were also asked to rate on a scale from 1 to 5 how addictive smoking is physically, psychologically, socially and habitually. In all categories, the scores 4 and 5
were the most popular, except in the “physically” category, where the scores 3 and 4 were more common.

4.5 Dental students and tobacco cessation

The majority of students in study years 3, 4 and 5 reported having enough information on how to make an active smoker quit smoking (Figure 8). The majority of students in study years 4 and 5 reported having enough information on how to use tobacco cessation methods in practice (Figure 9).

![Figure 8](image_url)

Figure 8. Opinions of dental students on whether they had enough information during their studies on how to make an active smoker quit smoking.
Figure 9. Opinions of dental students on whether they had enough information during their studies on how to use tobacco cessation methods in practice.

The majority of students (80-100%) reported that it is the duty of doctors and dentists to encourage people to quit smoking. About 30% of study years 1 and 4, 40% of study year 2, 70% of study year 3 and 50% of study year 5 students reported wanting more information on tobacco use cessation after they graduate. The majority of participants reported that smokers expect to get information from doctors and dentists on how to quit smoking.
5 Discussion

The proportion of dental students (17%) reporting smoking during the last month is slightly lower than that found by Plasschaert et al. (2001) (24%) or Dumitrescu et al. (2007) (37%). However, this figure is somewhat higher than in Barber et al. (2006) (7%) or McCartan et al. (2008) (12%). A reason for lower proportions of smokers in the latter two studies might be because the authors use the terms “currently” and “regularly” smoking. Clearly, someone might not smoke regularly even if he/she has smoked during the last 30 days. A noteworthy issue to remember is that the reported amount of tobacco consumed among all participants was less than half a packet per day. Thus, all of those who reported smoking were occasional smokers, and no heavy smokers were present among the University of Helsinki dental students. This makes sense, bearing in mind the information dental students should have about the risk factors of smoking.

Interestingly, the percentage of smokers reporting not having tried to quit smoking during the last 12 months is higher for smokers in the clinical phase of studies (65%) than in smokers in the preclinical phase (55%). In addition, the percentage of smokers who reported smoking ten or more days during the last 30 days is higher for clinical phase smokers (25%) than for their preclinical phase peers (15%). One could expect the opposite because students in their clinical phase of studies should generally have a more profound knowledge about the hazardous effects of smoking – especially on oral health. One reason for these results could be the constant stress and increased workload of clinical phase students. Gorter et al. (2008) found that stress increased among undergraduate dental students while they advanced in their studies. Certainly, preclinical phase students also have a tremendous amount of work, but the hours spent at school are far less than for clinical phase students.

The proportion of dental students at the University of Helsinki who reported drinking alcohol during the last 30 days (90%) is about the same as in Plasschaert et al. (2001) (88%) and Barber et al. (2006) (86%). The proportion is, however, higher than in Dumitrescu et al. (2007) (71%). The proportion of participants reporting usually engaging in binge drinking
when they go out (50%) is less than in Barber et al. (2006) (71%). In addition, the percentage of students reporting binge drinking more than once a week during the last two weeks (6%) is less than in Barber et al. (27%).

Interestingly, the proportion of students who reported being absent from work or studies during the last six months (7%) is quite low compared with the proportion reporting having a hangover in the same period (76%). Bearing in mind the unpleasant feeling of a hangover, one might expect a higher percentage of participants being absent from work or studies. One obvious reason for this could be that hangovers occur during weekends or holidays, although many student parties also take place during the middle of the week.

Socially acceptable answering (Sjöström et al 2002) may have occurred due to the fact that all respondents were dental students. In other words, the results on this survey might be too optimistic.

As we can see from Tables 2 and 3, alcohol consumption is on average ranked as less harmful than smoking. Moreover, very few people reported not drinking alcohol. This means that the opinion on the harmfulness of alcohol consumption is given mainly by those who consume it.

The percentage of dental students (92%) reporting that it is the responsibility of dentists/doctors to encourage people to quit smoking is slightly higher than that found by McCartan et al. (2008) (80%). If we look at the proportion of incoming dental students (study year 1) (81%) who reported that encouraging people to quit smoking is the duty of dentists, we see that it is same as that of Victoroff et al. (2004). This clearly shows that the great majority of dental students realize that they are key players in tobacco use cessation. The important question is are they willing to take on this role in clinical practice? The timetable of a dentist during clinical work can often be so tight that no time is left for any discussions with patients about smoking. Nevertheless, there is decent evidence to show that even brief interventions from health professionals can enhance tobacco cessation (Lancaster et al. 2000).
6 Conclusions

The results on smoking among dental students are not really alarming because there were no reported cases of heavy smokers. However, the rate of current smoking reported is within those found in other studies among European dental students. This situation calls for health promotion during dental undergraduate training. Dental students appear to have a good knowledge of the risk factors of smoking. This is essential in view of these future dentists educating their patients about the hazardous effects of smoking on health. It would be beneficial to conduct a similar survey within a couple of years. This would allow the monitoring of possible changes in answers after dental students have advanced from, for example, the first study year to the third one.

One of the main aims of this study was to shed light on the knowledge and attitudes of dental students on tobacco use cessation. The number of students (43 %) – especially in study years 1-3 – reporting that they received inadequate information during their studies on how to use tobacco cessation methods in practice is fairly high. On the other hand, the attitude of these future dentists does not seem to be the problem – almost every participant reported that tobacco use cessation is the duty of dentists/doctors. This implies that more time should be dedicated to teaching dental students how to use these tobacco cessation methods for patients who smoke. In addition, dental students should be encouraged early on to quit their own smoking and to routinely discuss with smokers the impacts of smoking on health.
References


• Tupakkaverkko 2007.
  http://www.tupakkaverkko.fi/index.php?option=com_content&task=view&id=34&Item id=50


• WHO: Risks to oral health and intervention: Tobacco 2007.

• WHO: Cancer prevention 2007.

• WHO: Cardiovascular diseases 2007.
Appendix 1

A survey on dental students’ smoking habits, alcohol consumption and attitudes towards tobacco use cessation.

1) Your gender?
   a) Female
   b) Male

2) Your age?
   a) 18-20
   b) 21-22
   c) 23-24
   d) 25-30
   e) 30+

3) Your accommodation?
   a) Campus
   b) Own real estate, alone
   c) Own real estate, in relationship
   d) With parents
   e) Rent, alone
   f) Rent, in relationship
   g) Shared apartment

4) What study year are you in?
   a) First study year
   b) Second study year
   c) Third study year
   d) Fourth study year
   e) Fifth study year

5) How often do you smoke?
   a) I have never smoked, GO TO QUESTION 10
   b) I have not smoked for the last 12 months
   c) I have not smoked for the last 30 days
   d) I have smoked during the last 30 days

6) How many cigarettes you smoke on average per day?
   a) Less than one cigarette per day
   b) Less than half a packet per day
   c) About half a packet per day
   d) More than half but less than one packet per day
   e) One packet per day
   f) More than one packet per day

7) At what age did you start smoking?
   a) 12 or younger
   b) 13-15
   c) 16
   d) 17
   f) 18
   g) 19 or older
8) How many times during the last 12 months you have tried to quit smoking and managed to go without smoking for at least 24 hours?
   a) I have not tried
   b) Once
   c) Twice
   d) Three times
   e) Four times
   f) Five times or more

9) On how many days have you smoked during the last 30 days?
   a) Not at all
   b) 1-4 days
   c) 5-9 days
   d) 10-19 days
   e) 20-29 days
   f) every day

10) On how many days have you consumed alcohol during the last 30 days?
    a) Not at all
    b) 1-2 days
    c) 3-5 days
    d) 6-9 days
    e) 10 or more days

11) How many alcohol portions you usually drink during an evening when you go out?
    a) 0
    b) 1
    c) 2
    d) 3
    e) 4
    f) 5
    g) 6
    h) 7
    i) 8
    j) 9 or more

12) How many times have you consumed five or more portions of alcohol on the same occasion during the last two weeks?
    a) Once
    b) Twice
    c) Three times
    d) Four times or more
    e) Not at all

13) How many times have you consumed no more than four portions of alcohol on the same occasion during the last two weeks?
    a) Once
    b) Twice
    c) Three times
    d) Four times or more
    e) Not at all
14) How you compare your alcohol consumption with that of other students?
   a) My consumption is higher
   b) My consumption is about the same
   c) My consumption is lower

15) How you compare your alcohol consumption with that of your friends?
   a) My consumption is higher
   b) My consumption is about the same
   c) My consumption is lower

16) How many times you have had a hangover in the last 6 months?
   a) 0
   b) 1
   c) 2
   d) 3
   e) 4 or more

17) How many times have you been absent from work or studies because of a hangover in the last 6 months?
   a) 0
   b) 1
   c) 2
   d) 3
   e) 4 or more

18) In my opinion, smoking is a risk factor for the following conditions:
   a) Infarct
   b) Gastric cancer
   c) Cancer of oral/pharyngeal region
   d) Miscarriage
   e) Lung cancer
   f) Gingivitis
   g) Brain stroke
   h) High blood pressure
   i) Constriction of blood vessels
   j) Impotence

19) In your opinion, how harmful is smoking and alcohol consumption on a scale from 1 to 5, with 5 being the most harmful?
    Smoking ______________ (1...5)
    Alcohol consumption ____________ (1...5)

20) In your opinion, how addictive is smoking on a scale from 1 to 5, with 5 being the most harmful?
    Physically _____________ (1...5)
    Psychologically ____________ (1...5)
    Socially _____________ (1...5)
    Habitually _____________ (1...5)

21) Have you received enough information during your studies on how to make an active smoker quit smoking?
    a) Yes
    b) No
22) Have you received enough information during your studies on how to use tobacco cessation methods in practice?
   a) Yes
   b) No

23) Who do you think is responsible for encouraging people to quit smoking? You can have multiple choices.
   a) Doctors/dentists
   b) Pharmacists
   c) Other healthcare professionals
   d) Someone else, who ________________________?

24) Would you like to receive more information on tobacco use cessation after you graduate?
   a) Yes
   b) No
   c) I don’t know

25) From whom do you think smokers expect to get information on how to quit smoking? You can have multiple choices.
   a) Doctors/dentists
   b) Pharmacists
   c) Other healthcare professionals
   d) Someone else, who ________?

In addition, I want to say that ____________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________