

การศึกษาเปรียบเทียบการบริโภคยาสูบในนักศึกษาทันตแพทย์
มหาวิทยาลัยเชียงใหม่ ระหว่างปีการศึกษา 2548 กับ 2554
โดยใช้แบบสำรวจการบริโภคยาสูบสำหรับกลุ่มนักศึกษาวิชาชีพสุขภาพระดับโลก
Comparison of Dental Students' Tobacco Use
at Chiang Mai University in Academic Years 2005 and 2011
using the Global Health Professions Student Survey

ปิยะนารถ จาติเกตู¹, วิกุล วิสาธเสถ², วาสนา ใจคำแปง³

¹สาขาวิชาทันตกรรมชุมชน คณะทันตแพทยศาสตร์ มหาวิทยาลัยเชียงใหม่

²สำนักทันตสาธารณสุข กรมอนามัย กระทรวงสาธารณสุข นนทบุรี

³คณะทันตแพทยศาสตร์ มหาวิทยาลัยเชียงใหม่

Piyanart Chatiket¹, Wikul Visalseth², Wasana Jaikhampaeng³

¹Division of Community Dentistry, Faculty of Dentistry, Chiang Mai University

²Division of Dental Public Health, Department of Health, Ministry of Public Health, Nonthaburi

³Faculty of Dentistry, Chiang Mai University

ชม. ทันตสาร 2558; 36(1) : 41-51

CM Dent J 2015; 36(1) : 41-51

บทคัดย่อ

วัตถุประสงค์: การศึกษานี้มีวัตถุประสงค์เพื่อเปรียบเทียบการบริโภคยาสูบในนักศึกษาทันตแพทย์ มหาวิทยาลัยเชียงใหม่ ระหว่างปีการศึกษา 2548 กับ 2554 โดยใช้แบบสำรวจการบริโภคยาสูบสำหรับกลุ่มนักศึกษาวิชาชีพสุขภาพระดับโลก

วัสดุและวิธีการ: เป็นการสำรวจภาคตัดขวาง 2 ครั้ง ในนักศึกษาทันตแพทย์ระดับปริญญาตรีใน 2 ปีการศึกษา คือ ปีการศึกษา 2548 และ 2554 เก็บข้อมูลโดยใช้แบบสำรวจการบริโภคยาสูบสำหรับกลุ่มนักศึกษาวิชาชีพสุขภาพ

Abstract

Objective: This study aimed to compare tobacco use in two academic years, 2005 and 2011, by dental students at Chiang Mai University using the Global Health Professions Student Survey.

Materials and methods: Two cross-sectional surveys of all dental undergraduates were conducted in academic years 2005 and 2011. A Thai language version of the self-reporting form of the Global Health Professions Student Survey (GH-

Corresponding Author:

ปิยะนารถ จาติเกตู

ผู้ช่วยศาสตราจารย์ ทันตแพทย์หญิง ดร. สาขาวิชาทันตกรรมชุมชนทันตกรรม
คณะทันตแพทยศาสตร์ มหาวิทยาลัยเชียงใหม่ 50200

Piyanart Chaiket^u

Assist. Prof. Dr. Division of Community Dentistry,
Faculty of Dentistry, Chiang Mai University, Chiang Mai 50200,
Thailand

E-mail: pichatiket^u@yahoo.com

ระดับโลกฉบับภาษาไทยซึ่งเป็นแบบสอบถามชนิดตอบด้วยตนเอง ในช่วงเดือนมกราคม-กุมภาพันธ์ 2549 และ 2555 วิเคราะห์ข้อมูลโดยใช้โปรแกรมสำเร็จรูป SPSS version 17.0 และ OpenEpi version 2.3 เพื่อคำนวณความชุก ช่วงความเชื่อมั่นที่ระดับ 95% และใช้สถิติไคสแควร์ในการเปรียบเทียบโดยทดสอบความแตกต่างที่ระดับนัยสำคัญ 0.05

ผลการศึกษา: ในปีการศึกษา 2548 นักศึกษาตอบแบบสอบถามครบถ้วน จำนวน 354 คน (ร้อยละ 81.8) และในปีการศึกษา 2554 จำนวน 530 คน (ร้อยละ 86.9) ผลการศึกษาแสดงถึงแนวโน้มการการบริโภคยาสูบในนักศึกษาทันตแพทย์ไทยใน 5 ด้าน ได้แก่ (1) พฤติกรรมการบริโภคยาสูบ (2) การได้รับควันบุหรี่มือสองในรอบสัปดาห์ที่ผ่านมา (3) ทศนะต่อการห้ามสูบบุหรี่ในที่สาธารณะ (4) ความคิดเห็นเกี่ยวกับบทบาทในฐานะนักวิชาชีพสุขภาพและผลของการให้คำปรึกษาแก่คนไข้ และ (5) ประสบการณ์การเรียนรู้หัวข้อที่เกี่ยวกับบุหรี่ในมหาวิทยาลัย โดยผลการเปรียบเทียบระหว่างปีการศึกษา 2548 กับ 2554 พบว่า การบริโภคยาสูบลดลงในทุก ๆ ด้าน การได้รับควันบุหรี่มือสองในรอบสัปดาห์ที่ผ่านมาทั้งที่บ้านและในที่สาธารณะเพิ่มขึ้น มีทัศนคติต่อการห้ามสูบบุหรี่ในที่สาธารณะในเชิงบวกเพิ่มขึ้น มีความตระหนักต่อบทบาทของตนเองเพิ่มขึ้น และประสบการณ์การเรียนรู้หัวข้อที่เกี่ยวกับบุหรี่ในมหาวิทยาลัยในปีการศึกษา 2554 มีมากกว่าปีการศึกษา 2548

บทสรุป: แนวโน้มการบริโภคยาสูบในนักศึกษาทันตแพทย์ มหาวิทยาลัยเชียงใหม่ มีการเปลี่ยนแปลงทั้งในเชิงบวกและเชิงลบ

คำสำคัญ: การบริโภคยาสูบ การสูบบุหรี่ นักศึกษาทันตแพทย์ การสำรวจ

PSS) was used to collect data during January and February in 2006 and 2012. SPSS version 17.0 and OpenEpi version 2.3 were used to compute prevalence and 95% confidence intervals. Statistical analysis and comparison were carried out using the Chi-square test and were considered statistically significant at a p-value of less than 0.05.

Results: In 2005, 354 students (81.8 %) and in 2011, 530 students (86.9%) completed questionnaires. The results illustrated tobacco use trends in dental students in terms of (1) tobacco use (behavior), (2) exposure to secondhand smoke in the past week, (3) attitudes toward banning smoking in public places, (4) opinion about health professional roles and the effect of patient counseling by health professionals and (5) learning experiences on smoking topics in dental school. These five trends of tobacco use were compared between academic year 2005 and 2011. All categories of tobacco use (behavior) declined. The exposure to secondhand smoke both at home and in public places increased. There was an increase in positive attitudes toward banning smoking in public places. The students in 2011 were more concerned about their roles than in 2005. The students' learning experiences on smoking topics in dental school significantly increased.

Conclusions: Tobacco use by dental students at Chiang Mai University revealed changes, both in favourable and unfavourable trends.

Keywords: Tobacco Use, Smoking, Dental Students, Survey

Introduction

The prevalence of tobacco use is continuously increasing among young people and women in low-income and middle-income countries.^(1,2) Meanwhile, tobacco use is slightly decreasing in some countries. For example, in the United States, data from the National Health Interview Survey during 1965-2008 indicate that smoking is declining among adults.⁽³⁾ The prevalence of cigarette smoking among adults decreased at a slow rate during 2005-2010 from 20.9% to 19.3%. The trend of daily smokers who smoke one to nine cigarettes per day increased from 16.4% to 21.8%, whereas the percentage of adults who smoked more than 30 cigarettes per day declined from 12.7% to 8.3%.⁽⁴⁾ In comparison, data from the National Statistical Office and the Tobacco Control Research and Knowledge Management Center in Thailand during 1991-2011 showed that the prevalence of cigarette smoking among adults dramatically decreased from 32.0% to 21.36%. However, tobacco use is the third most common risk factor for causing death in Thailand. Emphysema and lung cancer are the major causes of tobacco-related death amounting to 42,000-52,000 people each year.^(5,6,7,8)

Dentists, including dental students, can play a critical role in reducing tobacco use by assessing their patients' tobacco use, and by advising and encouraging cessation.^(9,10,11,12) Dentists' role in tobacco cessation is also related to their perceptions.^(13,14) They should be nonsmoking role models for their patients.^(11,12,15) The prevalence of current tobacco smoking among dental students from different countries during 1970-2006 varied from 3% in Canadian dental students (in 1997) to 47% in Greek dental students (in 2004).⁽¹⁶⁾ Data on current smoking from different countries during 2005-2009 have also shown that Cambodian dental students (in 2005) had the lowest prevalence (2.1%) and the Republic of Moldova's dental students (in 2008) had the highest prevalence (43.5%). Meanwhile, the

current smoking rate among Thai dental students (in 2006) was 3.9%.^(17,18)

According to these previous publications^(16,17,18), the most significant survey form for collecting data on tobacco use among dental students was the Global Health Professions Student Survey (GHPSS). Since 1998, data on tobacco use have been collected by several survey forms, such as the Global Tobacco Surveillance System (GTSS), the Global Youth Tobacco Survey (GYTS), the Global School Personnel Survey (GSPS), the Global Health Professions Student Survey (GHPSS) and the Global Adult Tobacco Survey (GATS). Each form was used for a different purpose and target group. The GHPSS was the most appropriate form for this study, which was intended to collect data on tobacco use by dental students. The GHPSS was developed by the World Health Organization (WHO), the Centers for Disease Control and Prevention (CDC), and the Canadian Public Health Association (CPHA) in 2005 for collecting data on tobacco use and cessation counseling among health profession students. The original GHPSS was intended to be used as a school-based survey of third-year students pursuing advanced degrees, including dental students. The GHPSS questionnaire included 42 questions covering six categories: demographics of students, prevalence of cigarette smoking and other tobacco use, knowledge and attitudes about tobacco use, exposure to secondhand smoke, desire for smoking cessation, and training received regarding patient counseling on smoking-cessation techniques. The GHPSS collected data through an anonymous and self-administered format. The questionnaires were translated into the Thai language and back-translated into English to check for accuracy by the Tobacco Control Research and Knowledge Management Center. In 2006, the first Thai version of GHPSS was used to survey Thai dental students.⁽¹²⁾

In addition, most of the previous studies were collected in cross-sectional surveys.^(11,14,15,16,17,18)

19,20,21,22,23,24,25,26,27,28) No studies had compared data among dental students in different years in the same university using the same survey form. The GHPSS was also helpful to improve the evidence base for effective tobacco-related curricula.^(17,18) However, in the curriculum for undergraduate students at Chiang Mai University before academic year 2011, tobacco use was taught as a risk factor for periodontal disease and oral cancer. Since 2011, the specific topic for smoking cessation, “the role of the dentist in smoking cessation”, has been taught in a periodontal course for the fifth year dental students. This topic is covered in two hours divided among three main contents: (1) why people quit smoking, (2) why dentists should help their patients to quit smoking and (3) techniques for smoking cessation and related behavioral theory.⁽²⁹⁾ Thus, this study used the Global Health Professions Student Survey (GHPSS) to collect data on tobacco use and to compare the results between two academic years, 2005 and 2011 among dental students at Chiang Mai University in terms of (1) tobacco use (behavior), (2) exposure to secondhand smoke in the past week, (3) attitudes toward banning smoking in public places, (4) opinion about health professional roles and the effect of patient counseling by health professionals and (5) learning experiences on smoking topics in dental school.

Subjects and Methods

A cross-sectional survey of all dental undergraduates studying in years 1 to 6 at Chiang Mai University was conducted for academic year 2005, and repeated with a different set of students, six years later, for academic year 2011. A Thai language version of the Global Health Professions Student Survey (GHPSS) was used to collect data during January and February in 2006 and 2012. The GHPSS questionnaire also followed an anonymous, self-administered format for data collection. Data were analyzed on SPSS version 17.0 and OpenEpi version 2.3, which were used to compute prevalence and 95% confidence intervals. The chi-square test was used to compare data. Differences in proportions were considered statistically significant at a p-value of less than 0.05.

Results

Of the 433 dental students in academic year 2005, 354 completed questionnaires were analyzed, a response rate of 81.8%. In academic year 2011, a usable response rate of 86.9% was achieved, with 530 students out of 610 responding. Most respondents were female, 84.6% in 2005 and 88.5% in 2011 (Table 1).

Table 1 Numbers and percentages of dental students who answered the questionnaire by class and gender in academic years 2005 and 2011.

Dental students		2005		2011	
		Total	Number of respondents (%)	Total	Number of respondents (%)
Total		433	354 (81.8)	610	530 (86.9)
Class	1	91	82 (90.1)	110	87 (79.1)
	2	62	57 (91.9)	113	94 (83.2)
	3	72	66 (91.7)	106	90 (84.9)
	4	66	38 (57.6)	101	91 (90.1)
	5	61	48 (78.7)	94	89 (94.7)
	6	81	63 (77.8)	86	79 (91.9)
Gender	Male	160	123 (76.9)	229	193 (84.3)
	Female	273	231 (84.6)	381	337 (88.5)

Tobacco use (behavior)

The number of dental students in 2011 who had ever smoked cigarettes was significantly less than in 2005, 12.5% and 20.3% respectively. The difference in prevalence of students who started daily cigarette smoking before age 15 years was not significant, 38.9% in 2005 and 39.4% in 2011. The prevalence of students who had ever used other tobacco products decreased from 8.2% in 2005 to 7.9% in 2011. The reduction was not significant. The current cigarette use in one month declined significantly from 5.1% to 1.3% (Table 2).

Exposure to secondhand smoke in the past week

In 2005, 27.4% of students reported that they had been exposed to secondhand smoke at home in the past week. This percentage slightly increased to 31.6% in 2011. Regarding exposure to secondhand smoke in public places, 61.3% of students had experienced such exposure in the past week in 2005. This percentage increased significantly to 69.4% in 2011 (Table 3).

Students' attitudes toward banning smoking in public places

In both years, over 95% of students favoured banning smoking in restaurants and all enclosed public places. However, students' preference for banning smoking in discos, bars and pubs increased significantly from 75.4% in 2005 to 91.3 in 2011. Approximately 95% of students in 2005 thought tobacco sales to adolescents should be banned and the percentage slightly increased to 96.8 in 2011. The students' preference for a complete ban on advertising of tobacco products increased significantly from 87.0% in 2005 to 93.0 in 2011 (Table 4).

Students' opinions about health professional roles and effect of patient counseling by health professionals

The percentages of all opinions about health professional roles and the effect of patient counseling were greater in 2011 than in 2005. The students overwhelmingly (97.5% in 2005 and 98.5% in 2011) believed that health professionals served as role models for their patients and the public. The majority

Table 2 Prevalence of tobacco use (behavior) among dental students in academic years 2005 and 2011.

Students who answered "Yes"	2005		2011		p-value
	Total	n (%)	Total	n (%)	
Ever smoked cigarettes	354	72 (20.4)	530	66 (12.5)	0.001**
Smokers who initiated daily cigarette smoking before age 15 years	72	28 (38.9)	66	26 (39.4)	0.952
Ever used other tobacco products	353	29 (8.1)	530	42 (7.9)	0.905
Current cigarette use in 1 month	354	18 (5.1)	530	7 (1.3)	0.001**

* p-value < 0.05, ** p-value < 0.01

Table 3 Prevalence of exposure to secondhand smoke in the past week among dental students in academic years 2005 and 2011.

Students who answered "Yes"	2005		2011		p-value
	Total	n (%)	Total	n (%)	
Exposure to secondhand smoke at home	354	97 (27.4)	528	167 (31.6)	0.179
Exposure to secondhand smoke in public places	354	217 (61.3)	529	367 (69.4)	0.013*

* p-value < 0.05, ** p-value < 0.01

of students in 2011 thought that health professionals should routinely advise their patients who smoke to quit smoking (97.7%), a significant increase from 2005 (84.5%). Similarly, 91.9% of the students in 2011 thought that health professionals should routinely advise their patients who smoke to quit using other tobacco products, a significant increase from 2005 (81.4%). The students also believed that patient's chances of quitting smoking would increase if health professionals gave patients advice to quit, significantly increased from 86.7 in 2005 to 91.5% in 2011. However, they reported that they required specific training on cessation techniques (81.1% in 2005 and 93.6% in 2011). (Table 5).

Students' learning experiences on smoking topics in dental school

In 2005, the percentage (86.4 %) of students who reported that they were taught in at least one class about the dangers of smoking was higher than in 2011 (80.2%), a significance decrease. The students who discussed in at least one class the reasons why people smoke significantly increased from 46.5% in 2005 to 57.4 % in 2011. The percentage of students who learned to record patients' tobacco use in the medical history also significantly increased from 57.8% to 69.2%. The difference in percentage of students who learned how to approach patients for smoking cessation was signifi-

Table 4 Percentages of students' attitudes toward banning smoking in public places in academic years 2005 and 2011.

Students who answered "Yes"	2005		2011		p-value
	Total	n (%)	Total	n (%)	
Smoking should be banned in restaurants	353	344 (97.5)	530	524 (98.9)	0.110
Smoking should be banned in discos, bars, pubs	354	267 (75.4)	530	484 (91.3)	< 0.01**
Smoking should be banned in all enclosed public places	353	346 (98.0)	529	522 (98.7)	0.442
Tobacco sales to adolescents should be banned	353	335 (94.9)	529	512 (96.8)	0.160
There should be a complete ban on the advertising of tobacco products	354	308 (87.0)	529	492 (93.0)	0.003**

*p-value < 0.05, ** p-value < 0.01

Table 5 Percentages of students' opinion about health professional roles and effect of patient counseling by health professionals in academic years 2005 and 2011.

Students who answered "Yes"	2005		2011		p-value
	Total	n (%)	Total	n (%)	
Do health professionals serve as role models for their patients and the public?	354	345 (97.5)	530	522 (98.5)	0.274
Should health professionals routinely advise their patients who smoke to quit smoking?	354	299 (84.5)	530	518 (97.7)	< 0.01**
Should health professionals routinely advise their patients who smoke to quit using other tobacco products?	354	288 (81.4)	529	486 (91.9)	< 0.01**
Are patients' chances of quitting smoking increased if a health professional advises him/her to quit?	353	306 (86.7)	530	485 (91.5)	0.022*
Should health professionals get specific training on cessation techniques?	354	287 (81.1)	529	495 (93.6)	< 0.01**

* p-value < 0.05, ** p-value < 0.01

cant, 12.5% in 2005 and 29.5% in 2011. In addition, 29.5% of the students learned to provide educational materials for patients who want to quit in 2005 and increased to 51.9% in 2011. The percentage of dental students in 2011 who had heard of nicotine replacement therapies was significantly higher than in 2005, 72.5% and 62.0% respectively. Similarly, 26.5% of the students in 2005 had heard of antidepressants to support tobacco cessation and increased to 50.9% in 2011 (Table 6).

Discussion

The prevalence of current cigarette use in one month in this study (5.1% in 2005 and 1.3% in 2011) seemed to be lower than the prevalence in other studies. For example, data from 15 countries show that during 2001-2006 the smoking prevalence in dental students ranged from 4% in the United States, in 2004, to 47% in Greece, also in 2004.⁽¹⁶⁾ Meanwhile, data during 2005-2009 from 48 countries showed that the prevalence was between 2.1% in Cambodia, in 2005, to 65.2 % in the Republic of Moldova, in 2008.^(17,18) In 2010, smoking prevalence in dental students in difference countries was reported to be 17% in Israel⁽²¹⁾, 23% in Iran⁽²²⁾, 32.8% in Italy⁽²³⁾ and 39.1% in Greece.⁽²⁴⁾ In 2011, the prevalence

of current smoking was 12.8% in Tanzania⁽¹⁹⁾ and ranged from 10.3% to 42.5% in Bangladesh.⁽²⁵⁾ In addition, the significant reduction rate of smoking in this study showed the same trend as in other countries, such as in England and in India. In England, current smoking was reported by 7.5% of dental students in 1998 and 6.7% in 2008.⁽³⁰⁾ In India, 9.6% of dental students in 2005⁽²⁶⁾ currently smoked cigarettes, a rate that decreased to 6.5% in 2009.⁽²⁸⁾

Approximately 30% of the dental students in this study (27.4% in 2005 and 31.6% in 2011) were exposed to secondhand smoke at home. Similarly, 30.4% of dental students at Prince of Songkla University were exposed to secondhand smoke at home in 2011⁽³¹⁾, whereas a survey from 48 countries during 2005-2009 illustrated that the percentage of dental students who had been exposed to secondhand smoke at home ranged from 15.2% (in Latvia, in 2009) to 84.4% (in Albania, in 2005).^(17,18) However, in 41 of the 48 countries (85.4%) more than 31% of students were exposed to secondhand smoke at home.⁽¹⁸⁾ In India, the percentage of students who had been exposed to secondhand smoke decreased from 56.4% in 2005⁽²⁶⁾ to 40.0 % in 2010.⁽²⁸⁾ In contrast to the other studies, in this study, the percentage of students exposed to secondhand smoke at home

Table 6 Percentages of students' learning experiences on smoking topics in dental school in academic years 2005 and 2011

Students who answered "Yes"	2005		2011		p-value
	Total	n (%)	Total	n (%)	
Were you taught in any class about the dangers of smoking?	352	304 (86.4)	529	424 (80.2)	0.017*
Did you discuss in any class about the reasons why people smoke?	353	161 (46.5)	528	303 (57.4)	0.001**
Did you learn to record patients' tobacco use in medical history?	353	204 (57.8)	526	364 (69.2)	0.001**
Did you learn how to approach patients for smoking cessation?	353	44 (12.5)	528	156 (29.5)	< 0.01**
Did you learn to provide educational materials for patients who want to quit?	353	104 (29.5)	528	274 (51.9)	< 0.01**
Have you heard of nicotine replacement therapies?	353	219 (62.0)	530	384 (72.5)	0.001**
Have you heard of antidepressants to support tobacco cessation?	347	92 (26.5)	530	270 (50.9)	< 0.01**

* p-value < 0.05, ** p-value < 0.01

slightly increased from 2005 to 2011.

However, 54.7% of dental students at Prince of Songkla University in 2011 were exposed to secondhand smoke in public places.⁽³¹⁾ The dental students in this study were exposed to secondhand smoke in public places increased significantly from 61.3% in 2005 to 69.4% in 2011. A similar situation, where the prevalence of students who were exposed to secondhand smoke in public places was greater than 60%, was also reported in 37 of 48 countries (70.1%) during 2005-2009.^(17,18) In contrast, 68.4% of dental students reported being exposed to secondhand smoke in public places in India in 2005 and decreased to 52.5% in 2011.⁽²⁸⁾

The students in this study reported strongly positive attitudes toward banning smoking in restaurants and all enclosed public places (over 95%). A similar result was reported in India (in 2005) where over 80% favoured banning smoking in restaurants, schools, playgrounds, and gyms; and almost 90% favoured banning smoking in all enclosed public places.⁽²⁶⁾ Conversely, the situation in Bangladesh was slightly different. Almost three quarters (74.7%) of Bangladeshi dental students in 2010 supported banning smoking in restaurants, whereas 86% supported a ban on smoking in enclosed public places.⁽²⁵⁾ Three quarters (75.4%) of students in this study favoured banning smoking in discos, bars and pubs, in 2005, a similar result to that found in India (75%).⁽²⁷⁾ However, the attitude increased significantly to 91.3% in 2011. Preferences for banning adolescent tobacco sales (almost 95% in both years) and advertising tobacco products (87.0% in 2005 to 93.0% in 2011) were similar to those in India⁽²⁶⁾ and slightly different from in Bangladesh.⁽²⁵⁾

In this study, most students considered their roles to include serving as role models for their patients and the public (97.5% in 2005 and 98.5% in 2011), advising their patients who smoke to quit smoking (80.6% in 2005 and 97.7% in 2011), rou-

tinely advising their patients who smoke to quit using other tobacco products (81.4% in 2005 and 91.9% in 2011). Similar roles were reported in many studies, which concluded that dental students could play an effective role in assessing their patients' tobacco use and encouraging them towards tobacco cessation.^(17, 18,20,21,23,24,25,26,27,28,32)

Additionally, specific training on cessation techniques was identified as being necessary. This study revealed that formal training in school on cessation approaches to use with their patients significantly increased between 2005 and 2011. In 2011, the Department of Periodontology added the specific topic for smoking cessation, "the role of the dentist in smoking cessation", in a periodontal course for the fifth year dental students. This topic consisted of (1) why people quit smoking, (2) why dentists should help their patients to quit smoking and (3) techniques for smoking cessation and related behavioral theory.⁽²⁹⁾ This evidence showed that in 2011 the school was more concerned about the role of specific training on cessation techniques than in 2005.

Furthermore, the results in this study seemed to reflect the impact of tobacco control in Thailand. Since parliament passed the Tobacco Products Control Act and the Non-Smokers' Health Protection Act in 1992, many activities and policies emerged to decrease the cigarette smoking rate, decrease the number of new smokers and protect non-smokers' rights: policies such as a cigarette advertising ban, health warnings and ingredient disclosure on cigarette packages, provision of smoke-free places and taxation.⁽³³⁾ Collaboration with the media and networking, especially health professional networks, were emphasized for the anti-tobacco movement in Thailand.⁽³⁴⁾ The results in declination of tobacco use (behavior) and an increase in positive attitudes toward banning smoking in public places showed a positive impact. However, the increased rate of exposure to secondhand smoke both at home and in public

places seemed to cast doubt on the enforcement of the Non-Smokers' Health Protection Act.

This study had some limitations. The Global Health Professions Student Survey was used for collecting data. The GHPSS was developed as a school-based survey of third-year students pursuing advanced degrees in health sciences, such as dentistry, medicine, nursing or pharmacy.⁽¹²⁾ This study did not comply directly with the GHPSS. In Thailand, the educational system for undergraduate dental students involves three years of pre-clinical and three years of clinical study.⁽³⁵⁾ To compare the results from the GHPSS between two academic years, all dental undergraduates studying in years 1 to 6 in both 2005 and 2011 were selected. Additionally, the GHPSS was based on the self-report of students. There was a risk of bias, both through underreporting and through over-reporting of behaviors or attitudes. Furthermore, the results from one dental school (there are nine schools in Thailand) may not be representative of all Thai dental students. Factors and contexts related to the change of prevalence should be considered in further studies.

Conclusions

This study compared data on tobacco use and illustrated trends among dental students at Chiang Mai University in two academic years, 2005 and 2011. Five trends in tobacco use were compared: (1) tobacco use (behavior), (2) exposure to secondhand smoke in the past week, (3) attitudes toward banning smoking in public places, (4) opinion about health professional roles and the effect of patient counseling by health professionals and (5) learning experiences on smoking topics in dental school. There were favourable trends in tobacco use (behavior), attitudes toward banning smoking, concern of their roles and training courses, whereas there was an unfavourable trend in exposure to secondhand smoke. The GHPSS was useful for evaluating and following the

behaviors and attitudes of dental students regarding tobacco use. In addition, the results should be helpful for dental schools in revising the undergraduate curriculum to enable their students to be smart professionals in society.

Acknowledgements

This study was supported by the Thai Health Promotion Foundation, the Thai Dentists Against Tobacco Network and the Faculty of Dentistry, Chiang Mai University, Chiang Mai, Thailand. The authors would like to thank all of the students who responded to the questionnaires. We also wish to thank Dr. M. Kevin O Carroll, Professor Emeritus of the University of Mississippi School of Dentistry, USA and Faculty Consultant at Chiang Mai University Faculty of Dentistry, Thailand, for his assistance in the preparation of the manuscript.

References

1. World Health Organization. *WHO report on the global tobacco epidemic, 2008*. Geneva: World Health Organization; 2008.
2. World Health Organization. *WHO report on the global tobacco epidemic, 2013*. Geneva: World Health Organization; 2013.
3. Garrett BE, Dube SR, Trosclair A, Caraballo RS, Pechacek TF. Cigarette smoking-United States, 1965-2008. *MMWR* 2011; 60(Supplement): 109-113.
4. King B, Dube S, Kaufmann R, Shaw L, Pechacek T. Vital signs: Current cigarette smoking among adults aged ≥ 18 years- United States, 2005-2010. *MMWR* 2011; 60(35): 1207-1212.
5. Tobacco Control Research and Knowledge Management Center. *Tobacco use situation in Thailand 1991*. Bangkok: Tobacco Control Research and Knowledge Management Center; 1992. (in Thai).

6. Tobacco Control Research and Knowledge Management Center. *Tobacco use situation in Thailand 2009*. Bangkok: Tobacco Control Research and Knowledge Management Center; 2010. (in Thai).
7. National Statistical Office. *The smoking and drinking behavior survey 2011*. Bangkok: National Statistical Office, Ministry of Information and Communication Technology; 2012. (in Thai).
8. Pitayarangarit S, Iamanan P, Sommit K. *Tobacco use situation in each province in Thailand 2007*. Bangkok: Tobacco Control Research and Knowledge Management Center; 2011. (in Thai).
9. Johnson NW. The role of the dental team in tobacco cessation. *Eur J Dent Educ* 2004; 8: 18-24.
10. Stacey F, Heasman PA, Heasman L, Hepburn S, McCracken GI, Preshaw PM. Smoking cessation as a dental intervention - Views of the profession. *Br Dent J* 2005; 201(2): 109-113.
11. Alomari Q, Barrieshi-Nusair K, Said K. Smoking prevalence and its effect on dental health attitude and behavior among dental students. *Med Princ Pract* 2006; 15: 195-199.
12. Warren CW, Lee J, Lea V, Goding A, O'Hara B, Carlberg M, et al. Evolution of the Global Tobacco Surveillance System (GTSS) 1998-2008. *Glob Health Promot* 2009; 16: 4-37.
13. Tomar SL. Dentistry's role in tobacco control. *J Am Dent Assoc* 2001; 132: 30S-35S.
14. Albert D, Ward A, Ahluwalia K, Sadowsky K. Addressing Tobacco in Managed Care: A Survey of Dentists' Knowledge, Attitudes, and Behaviors. *Am J Public Health* 2002; 92(6): 997-1001.
15. Burgan SZ. Smoking behavior and views of Jordanian dentists: A pilot survey. *Oral Surg Oral Med Oral Pathol* 2003; 95(2): 163-168.
16. Smith DR, Leggat PA. An international review of tobacco smoking among dental students in 19 countries. *Int Dent J* 2007; 57: 452-458.
17. Warren CW, Jones NR, Chauvin J. Tobacco use and cessation counselling: cross-country. Data from the Global Health Professions Student Survey (GHPSS), 2005-7. *Tob Control* 2008; 17: 238-247.
18. Warren CW, Sinha DN, Lee J, Lea V, Jones N, Asma S. Tobacco Use, Exposure to Secondhand Smoke, and Cessation Counseling Training of Dental Students Around the World. *J Dent Educ* 2011; 75(3): 385-405.
19. Amemori M, Mumghamba EG, Ruotoistenmaki J, Murtomaa H. Smoking and drinking habits and attitudes to smoking cessation counseling among Tanzanian dental students. *Community Dent Health* 2011; 28: 95-98.
20. Rikard-Bell G, Groenlund C, Ward J. Australian dental students' views about smoking cessation counseling and their skills as counselors. *J Public Health Dent* 2003; 63: 200-206.
21. Vered Y, Livny A, Zini A, Shabaita S, Sgan-Cohen HD. Dental students' attitudes and behavior toward smoking cessation as part of their professional education. *Teach Learn Med* 2010; 22(4): 268-273.
22. Khami MR, Murtomaa H, Razeghi S, Virtanen J. Smoking and Its Determinants among Iranian Dental Students. *Med Princ Pract* 2010; 19: 390-394.
23. Pizzo G, Licata ME, Piscopo MR, Coniglio MA, Pignato S, Davis JM. Attitudes of Italian dental and dental hygiene students toward tobacco-use cessation. *Eur J Dent Educ* 2010; 14: 17-25.
24. Barbouni A, Hadjichristodoulou C, Merakou K, Antoniadou E, Kourea K, Miloni E, et al. Tobacco Use, Exposure to Secondhand Smoke, and Cessation Counseling Among Health Professions Students: Greek Data from the Global Health Professions Student Survey (GHPSS). *Int J Environ Res Public Health* 2013; 9: 331-342.

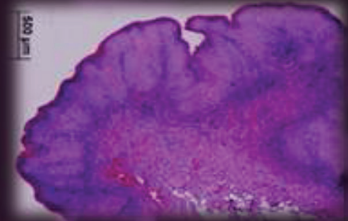
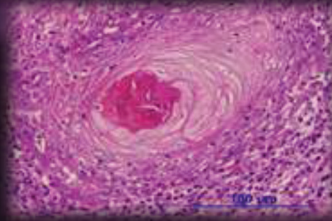
25. Chowdhury MTH, Pau A, Croucher R. Bangladeshi dental students' knowledge, attitudes and behaviour regarding tobacco control and oral cancer. *J Cancer Educ* 2010; 25: 391-395.
26. Shah MN. *Health Professionals in tobacco control: Evidence from Global Health Professional Survey (GHPS) for dental students in India, 2005*. New Delhi: World Health Organization South-East Asia Region Office, 2005.
27. Rajasundaram P, Sequeira PS, Jithesh JJ. Perceptions of dental students in India about smoking cessation counseling. *J Dent Educ* 2011; 75(12): 1603-1610.
28. Surani NS, Pednekar MS, Sinha DN, Singh G, Warren CW, Asma S, Gupta PC, Singh PK. Tobacco use and cessation counseling in India-data from the Global Health Professions Students Survey, 2005-09. *Indian Journal of Cancer* 2012; 49(4): 425-430.
29. Department of Periodontology, Faculty of Dentistry, Chiang Mai University. *Course syllabus of Periodontics 3 for academic year 2011*. Department of Periodontology, Faculty of Dentistry, Chiang Mai University, 2011 (in Thai).
30. Underwood B, Fox K, Manogue M. Tobacco, alcohol and drug use among dental undergraduates at one English university in 1998 and 2008. *Br Dent J* 2010; 208(E8): 1-8.
31. Kintarak S, Visalseth W. Mental Health and Associated Factors in Dental Students in Prince of Songkla University. *Songkla Med J* 2013; 31(5): 217-225.
32. Victoroff KZ, Dankulich-Huryrn T, Haque S. Attitudes of incoming dental students toward tobacco cessation promotion in the dental setting. *J Dent Educ* 2004; 68(5): 563-568.
33. Vateesatokit P. Tobacco control in Thailand. *Mahidol Journal* 1997; 4: 81.
34. Chantornvong S, McCargo D. Political economy of tobacco control in Thailand. *Tob Control* 2001; 10: 48-54.
35. Faculty of Dentistry, Chiang Mai University. *Curriculum details Doctor of Dental Surgery Program, Improved curriculum 2010*. Faculty of Dentistry, Chiang Mai University, 2010 (in Thai).



หลักสูตรบัณฑิตศึกษา

แขนงวิชา วิทยาการวินิจฉัยโรคช่องปาก

- วิทยาศาสตร์มหาบัณฑิต
- ประกาศนียบัตรบัณฑิตชั้นสูง



วิทยาการวินิจฉัยโรคช่องปาก

เป็นศาสตร์ที่ครอบคลุมงานในหลายสาขาวิชา ซึ่งจะนำไปสู่การวินิจฉัยโรคในบริเวณกระดูกขากรรไกรและใบหน้า และการจัดการรักษาผู้ป่วยได้อย่างถูกต้องเหมาะสมต่อไป วิทยาการวินิจฉัยโรคช่องปาก เป็นศาสตร์ที่ประกอบไปด้วยหลายสาขาวิชาได้แก่ สาขาวิชาพยาธิวิทยาช่องปาก (ORAL PATHOLOGY) เวชศาสตร์ช่องปาก (ORAL MEDICINE) รังสีวิทยาช่องปากและแม็กซิลโลเฟเชียล (ORAL AND MAXILLOFACIAL RADIOLOGY) รวมทั้งงานทางด้านระบบบดเคี้ยวและข้อต่อขากรรไกร (OCCLUSION AND TEMPOROMANDIBULAR JOINT) นอกจากนี้ยังประกอบไปด้วยสาขาวิชาชีววิทยาช่องปาก ซึ่งเป็นการนำเอาความรู้พื้นฐานด้านวิทยาศาสตร์มาอธิบายสมมติฐานการเกิดโรค ทำให้เข้าใจกลไกการเกิดโรค และยังนำไปสู่การพัฒนาการรักษาโรคที่ดีขึ้นต่อไป

คณะทันตแพทยศาสตร์มหาวิทยาลัยเชียงใหม่

มีศักยภาพ และความพร้อมอย่างสูงในการเรียนการสอนระดับบัณฑิตศึกษา มีคณาจารย์ และบุคลากรที่มีความชำนาญในทศสาขาวิชาของวิทยาการวินิจฉัยโรคช่องปาก มีทุนสนับสนุนการทำวิจัย การทำวิทยานิพนธ์ และการค้นคว้าอิสระ รวมถึงสนับสนุนการไปประชุมวิชาการและเผยแพร่ผลงานทางด้านวิชาการ ทั้งใน และนอกประเทศ

นอกจากนี้ยังมีห้องปฏิบัติการ รวมทั้งวัสดุ อุปกรณ์ และครุภัณฑ์ที่เอื้อต่อการเรียนการสอนและการบริการผู้ป่วย พร้อมทั้งสิ่งแวดล้อม บรรยากาศที่สวยงาม เอื้อต่อการเรียนรู้อย่างมีความสุข



หลักสูตร ประกาศนียบัตรบัณฑิตชั้นสูง

ระยะเวลาศึกษา : 1 ปี

ตัวอย่างกระบวนวิชาในหลักสูตร ได้แก่

- Advanced oral diagnosis sciences, radiology, oral medicine, pathology, occlusion, and laboratory in oral pathology, and etc.
- Basic sciences: biomedical sciences, oral biology, and etc.
- รายละเอียดหลักสูตร

<http://www.dent.cmu.ac.th/web/UserFiles/File/course/WK0XK1>

CB.pdf

สอบถามข้อมูลเพิ่มเติม

ผศ.ทพญ.ดร.อภิรุณ จันทน์หอม

โทร.053-944-454 e-mail: aganhom@gmail.com

หลักสูตร วิทยาศาสตร์มหาบัณฑิต

ระยะเวลาศึกษา : 2 ปี วัตถุประสงค์ : เพื่อให้ทันตแพทย์

- มีความรู้ ความสามารถและทักษะในการดูแลสุขภาพช่องปากให้แก่ผู้ป่วยได้อย่างถูกต้องเหมาะสมในฐานะผู้เชี่ยวชาญเฉพาะทางในสาขาวิชาวิทยาการวินิจฉัยโรคช่องปาก
- มีความสามารถในการค้นคว้าหาความรู้ ความก้าวหน้าทางวิชาการหรือเทคโนโลยี เพื่อนำไปประยุกต์ใช้อย่างเหมาะสม
- มีความสามารถในการพัฒนาความรู้ทางวิชาการให้สูงขึ้น จากประสบการณ์การทำงานวิจัยอย่างมีคุณภาพ

สอบถามข้อมูลเพิ่มเติม

รศ.ทพ.สุรวุฒน์ พงษ์ศิริเวทย์

โทร.053-944-451 e-mail: surawut1@yahoo.com