

Impact of Tobacco Control Campaigns on Smoking Behaviors in Thai Medical Schools

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Objective: To explore the changes in the prevalence of smoking behavior, attitudes, and cessation training among medical students after the establishment of the Thai Health Professional Alliance against Tobacco (ThaiPAT) and its major campaigns by using the nationwide Global Health Professions Student Surveys (GHPSS).

Material and Method: Multiple cross-sectional studies were conducted after three major campaigns were launched between 2007 and 2011, the Deans' Summit on Tobacco Control, implemented tobacco control into the medical curriculum, and 100% smoke-free hospitals and medical schools. The results of two rounds of GHPSS among third year medical students across the nation in 2006 and 2011 were compared.

Results: Overall prevalence of active cigarette smoking remained unchanged at 2.6%. Passive cigarette smoke exposure in public areas appeared to decrease slightly over time. In the most recent national survey, the prevalence of passive smoke exposure was 53.7%. Moreover, the number of student that agreed with the smoking ban in pubs, bars, and nightclubs increased significantly from 80.8 to 90.5%. There was significant improvement in the cessation training among medical students ($p < 0.001$). A significant increase in the number of student that agreed that healthcare personnel needed specific training in cessation techniques ($p = 0.004$) and should always advise their patients to quit smoking ($p < 0.001$).

Conclusion: Nationwide tobacco control campaigns in Thai medical schools significantly improved the attitudes toward smoking cessation and cessation training among their students, although overall prevalence of active and passive cigarette smoking was unchanged.

Keywords: Campaigns, Cessation training, Curriculum, Medical students, Thailand, Tobacco use

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Tobacco use is one of the major causes of chronic diseases and death. Each year, approximately five million people worldwide die from the use of tobacco and its products^(1,2). In Thailand, approximately 50,000 deaths are reported annually⁽³⁾. Healthcare providers (HCP) play an important role in helping their patients quit smoking. The Global Adult Tobacco Survey (GATS) in 2011 found that 34.6% (4.5 million) of all Thai smokers visited their HCP at least once; however, only 1.6 million (22.5%) were advised to quit smoking⁽⁴⁾. This implied that almost three million smokers had missed vital opportunities to be warned about the dangers of tobacco use and received help to quit smoking. Physicians and medical students, therefore, can be agents for social change and play pivotal roles in preventing their patients from using tobacco and reduce tobacco-related deaths by made

them aware of their critical role and were adequately trained in tobacco cessation treatment⁽⁵⁾.

Previous studies on smoking prevalence and its correlation, particularly, knowledge, attitudes, and behavior (KAB) of health professionals have been undertaken on a worldwide scale⁽⁶⁻¹⁵⁾. However, research on the interventions necessary or helpful in solving these problems and their effectiveness in Thailand and the Southeast Asia region are still limited^(14,15). The Thai Health Professional Alliance against Tobacco (ThaiPAT) was established in late 2005 to fill this gap. Three major campaigns were launched nationwide by the ThaiPAT from 2007 to 2011: the Deans' Summit on Tobacco Control in 2007, implemented tobacco controls into the medical schools' curricula, and aiming for 100% smoke-free hospitals and universities.

Campaigns between 2007 and 2011

The ThaiPAT was established in the late 2005 to raise awareness and improve knowledge of tobacco control and cessation among HCP. The campaigns launched in 2006 were directed towards hospitals and

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their leaders. After the official results of the first round of GHPSS became available, three major campaigns aimed towards medical students were implemented:

(a) The Deans' Summit on Tobacco Control, held for the first time in Thailand in May 2007. This national meeting aimed to gain consensus on implementing tobacco controls into the HCP fields, including medical practice, curriculum, and achieving 100% smoke-free schools. Of the 185 deans from health professional schools nationwide participated, 13 represented all of the medical schools in Thailand, signed a memorandum of understanding (MOU) and agreed to implement the measures. After that, working groups were established at each institution to pursue these issues.

(b) All medical schools participated in the Deans' Summit reported that they had implemented tobacco control into their curricula between 2007 and 2008. None of them had specific modules on tobacco control; however, the topics were integrated into the pre-existing modules, for example, respiratory pathology, oncology, toxicology, and substance abuse. Lectures were the most common form of teaching (70.6%). Class time devoted to tobacco controls was reported as 30 to 60 minutes per week in nine schools (52.9%), the rest reported 60 to 120 minutes per week. Five out of 13 medical schools (38.4%) did not provide any assessment for these topics. Moreover, these topics were integrated into Part I of the Basic Medical Sciences section in the National License Examination, conducted by the Thai Medical Council, which all medical students must pass before continuing into their fourth-year studies.

(c) A 100% smoke-free environment in hospitals and medical schools was launched by all medical schools. No smoking has been allowed on any of the schools' premises since. However, none of the student health clinics offered smoking cessation services or provided related medications during that period of time.

The purpose of the present study was to assess tobacco use, attitudes, and cessation training among medical students in Thailand between 2006 and 2011 after the campaigns.

Material and Method

The Institutional Review Board of Srinakharinwirot University approved the study protocols. The Global Health Professions Student Surveys (GHPSS) are the standardized surveys among a variety of third year healthcare professional students

in medical, dental, pharmacy, and nursing schools in 31 participating countries. To ensure that all surveys follow the standard protocols, the research coordinators from each country have to attend a training workshop hold by the World Health Organization (WHO). The present study had a specific focus on the survey among Thai medical students. The total number of respondents in 2006 and 2011 were 1,081 and 1,837, respectively.

Instrument

Global Health Professions Student Survey (GHPSS)

The GHPSS has a standardized methodology, data processing procedures and uses a core questionnaire⁽⁷⁾. In Thailand, a multiple cross sectional study of GHPSS was conducted across the nation in 2006 and 2011. Both rounds of GHPSS were administered during regular lectures and classes using anonymous, self-administered data collection procedures. The original English questionnaire was translated into Thai, and then back-translated into English to check the accuracy⁽⁷⁾. The questionnaires included data concerning demographics, cigarette smoking status and the use of other tobacco products, exposure to passive cigarette smoking, and cessation training among students.

Prevalence of smoking, attitudes toward tobacco use, and cessation training and education

For active cigarette smoking, the prevalence of smoking is the proportion of medical students who smoked either daily or occasionally, expressed as a percentage. The prevalence of other tobacco products' usage was also asked and calculated by the same method. For passive cigarette smoking, the prevalence was the proportion of medical students exposed to smoke at least one day in the previous week in a public area, including the university grounds.

Establishing attitudes towards tobacco use and cessation comprises of seven statements, to which respondents can agree: 1) banning tobacco sales to persons under 18 years, 2) the complete banning of tobacco advertising, 3) a smoking ban in pubs, clubs, nightclubs, and bars, 4) the need for healthcare personnel to undergo specific training on cessation techniques, 5) being role models for their patients and the public, 6) always advise their patients to quit smoking cigarettes, and 7) advise their patients to quit using other tobacco products.

Cessation training for medical students includes a variety of training in their regular classes.

Training should mainly focus on counseling techniques on tobacco cessation, and could be case-based learning. Regarding their experiences with cessation training, medical students were asked whether they received cessation training and were they involved in community outreach activities to support such cessation. In addition, they were also specifically asked if they were taught about the following skills to support tobacco cessation: to record tobacco use as part of patients' medical history, to provide educational materials on tobacco cessation, to use nicotine replacement therapy (NRT), to use antidepressants, and to learn more about the marketing strategies of the tobacco industry.

Statistical analysis

Statistical analysis was performed using SPSS for Windows® (version 19.5; SPSS Inc., Armonk, NY). Descriptive statistics of each variable, including frequency, and percentage were analyzed. Between the two periods, a comparison of demographic and other characteristics such as changes in prevalence of smoking, secondhand smoke (SHS) exposure, and the attitude and cessation training among medical students after implementing the ThaiPAT campaigns were analyzed by a Chi-square or Fisher's exact test. The differences of prevalence were considered statistically significant when p -value < 0.05 .

Results

In 2006, the medical school response rate was 100%. The number of respondents was 1,081 (98.4%). In 2011, for the second round of GHPSS, four more new medical schools were participated. The school response rate remained at 100%. The third-year student response rate dropped to 81.7% (Table 1).

Table 1. Number and response rates of GHPSS among 3rd year medical students, 2006 and 2011

Variable	2006	2011
Number of medical schools	13	17
School response rate (%)	100	100
Total number of 3 rd year students	1,099	2,249
Number of 3 rd year students who responded		
Total	1,081	1,837
Male	341	795
Female	740	1,042
Student response rate (%)	98.4	81.7

GHPSS = Global Health Professions Student Survey

Trend of tobacco use among medical students

Overall, the rate of cigarette smoking among medical students did not change significantly when comparing 2006 to 2011 (Table 2). The prevalence of current cigarette smokers remained 2.6% in both rounds of GHPSS. Conversely, passive cigarette smoking in public areas, including the university, slightly reduced from 59.7% in 2006 to 53.7% in 2011 ($p = 0.002$). Although the percentages of both male and female current and passive smokers tended to decrease in 2011, it was not statistically significant. Interestingly, the use of other tobacco products (e.g. electronic cigarettes, Shisha) among medical students appeared to increase in the 2011 GHPSS. The prevalence of respondents using other tobacco products were more than doubled, 1.0% in 2006 to 2.1% in 2011 ($p = 0.033$).

A small proportion of students reported having smoked cigarettes on the university premises in both rounds. There was no statistical significant difference between both rounds regarding this aspect. Only 0.5% of medical students had ever smoked other tobacco products on university grounds.

Attitudes of medical students towards tobacco use, tobacco control, and cessation

Over 90% of medical students agreed with the banning tobacco sales to adolescents in both rounds of GHPSS, but their agreement on this aspect decreased slightly in 2011 (94.7% in 2011 vs. 96.5% in 2006; $p = 0.028$). Most students agreed with a complete advertisement ban in both rounds of GHPSS (89.8% in 2011 vs. 89.5% in 2006; $p = 0.753$). More students agree with the smoking ban in pubs, clubs, nightclubs, and bars, in comparison to those found in the first round of GHPSS (90.5% in 2011 vs. 80.8% in 2006; $p < 0.001$).

The attitude towards the roles of healthcare personnel in tobacco cessation, a significant higher percentage of students in 2011 agreed that HCP needed to undergo specific training in cessation techniques (95.5% in 2011 vs. 93.0% in 2006; $p = 0.004$) and should advise their patients to quit smoking (97.9% in 2011 vs. 92.0% in 2006; $p < 0.001$). In both rounds of GHPSS, a high percentage of students agreed that HCP should be role models for their patients and the public (98.0% in 2011 vs. 98.8% in 2006; $p = 0.103$), and should always advise their patients to quit other tobacco products as well (90.1% in 2011 vs. 90.8% in 2006; $p = 0.508$).

Cessation training and education among medical students

Cessation training notably increased among respective groups of medical students, from 22.6% in

Table 2. Prevalence of current tobacco use and passive smokers among 3rd year medical students, 2006 and 2011

Variables	2006 (n = 1,081) n (%)	2011 (n = 1,837) n (%)	p-value
Current cigarette smokers			
Total	28 (2.6)	48 (2.6)	0.970
Male	25 (7.3)	46 (5.8)	0.324
Female	3 (0.4)	2 (0.2)	0.655
Current users of other tobacco products			
Total	11 (1.0)	38 (2.1)	0.033
Male	7 (2.1)	24 (3.0)	0.360
Female	4 (0.5)	14 (1.3)	0.095
Ever smoked cigarettes on the university premises			
Total	19 (1.8)	24 (1.3)	0.329
Male	16 (4.7)	22 (2.8)	0.098
Female	3 (0.4)	2 (0.2)	0.655
Ever smoked other tobacco products on the university premises			
Total	8 (0.7)	10 (0.5)	0.514
Male	5 (1.5)	8 (1.0)	0.546
Female	3 (0.4)	2 (0.2)	0.655
Prevalence of passive smokers in public areas, including at the university			
Total	645 (59.7)	986 (53.7)	0.002
Male	195 (57.2)	432 (54.3)	0.377
Female	450 (60.8)	554 (53.2)	0.001

2006 to 36.9% in 2011 ($p < 0.001$) (Table 3). More students learned to provide educational materials to support tobacco cessation during their classes (56.8% in 2011 vs. 47% in 2006; $p < 0.001$). Regarding smoking cessation aids, there was a significantly higher number of students learning about the use of antidepressants to aid tobacco cessation (60.7% in 2011 vs. 49.3% in 2006; $p < 0.001$); whereas the percentage of students learning about NRT remained unchanged (83.3% in 2011 vs. 82.9% in 2006; $p = 0.780$). Notably, a higher percentage of medical students reported involving community outreach activities to support tobacco cessation (24.3% in 2011 vs. 18.6% in 2006; $p < 0.001$). No change was noted in the percentage of medical students being taught to record tobacco use as part of their patients' medical history in 2006 and 2011. A significant lower percentage of medical students knew about the marketing strategies of the tobacco industry in 2011 than in 2006 (21.2% in 2011 vs. 25.3% in 2006; $p = 0.010$).

Discussion

Physicians as well as medical students play important roles in helping patients stop smoking. It is crucial, therefore, to minimize the number of medical students who smoke, and improve their knowledge and attitudes towards tobacco cessation. To fulfill these objectives, three major campaigns were launched

by the ThaiPAT between 2007 and 2011, included the Deans' Summit on Tobacco Control, implementing tobacco control into the medical curriculum, and 100% smoke-free hospitals and medical schools. Of these, the Deans' Summit on Tobacco Control appeared to be the most important because it targeted the deans of medical schools, leaders of university hospitals, and others who wielded great influence over their institutions' policies. Once the leaders agreed with the need for all three campaigns at their institutions, the latter two were then subsequently launched. These second and third campaigns were directed towards different levels of action: towards the medical students themselves and policy changes, respectively. Although these campaigns had three different target levels of their own, all of them were expected to cause positive changes among all medical students in the country.

The authors found that all three national campaigns significantly improved attitudes towards tobacco control and cessation among medical students, and enhanced cessation training. However, they did not successfully reduce the smoking rate among medical students. Both rounds of GHPSS indicated that the prevalence of cigarette smoking remained unchanged, particularly among male medical students. This could be due to several reasons. Firstly, there were no resources for medical students to quit smoking in Thailand. No student health clinics in the nation

Table 3. Cessation training and education among 3rd year medical students, 2006 and 2011

Variables	2006 (n = 1,081) n (%)	2011 (n = 1,837) n (%)	p-value
Ever-received cessation training			
Total	244 (22.6)	677 (36.9)	<0.001
Male	89 (26.1)	321 (40.4)	<0.001
Female	155 (20.9)	356 (34.2)	<0.001
Learned to record tobacco use as part of patients' medical history			
Total	835 (77.2)	1,386 (75.4)	0.272
Male	248 (72.7)	584 (73.5)	0.798
Female	587 (79.3)	802 (77.0)	0.237
Learned to provide educational materials to support tobacco cessation			
Total	508 (47.0)	1,044 (56.8)	<0.001
Male	167 (49.0)	460 (57.9)	0.006
Female	341 (46.1)	584 (56.0)	<0.001
Learned to use nicotine replacement therapy (NRT) to support tobacco cessation			
Total	896 (82.9)	1,530 (83.3)	0.780
Male	257 (75.4)	644 (81.0)	0.031
Female	639 (86.4)	886 (85.0)	0.434
Learned to use antidepressants to support tobacco cessation			
Total	533 (49.3)	1,115 (60.7)	<0.001
Male	161 (47.2)	488 (61.4)	<0.001
Female	372 (50.3)	627 (60.2)	<0.001
Involved in community outreach activities to support tobacco cessation			
Total	201 (18.6)	446 (24.3)	<0.001
Male	62 (18.2)	186 (23.4)	0.051
Female	139 (18.8)	260 (25.0)	0.002
Learned about marketing strategies of tobacco industry			
Total	274 (25.3)	390 (21.2)	0.010
Male	89 (26.1)	187 (23.5)	0.353
Female	185 (25.0)	203 (19.5)	0.005

provided smoking cessation services. Other pre-existing smoking cessation services in the country such as the national quit line which having limited capacity and did not fit the needs of medical students. The cessation clinics provided their services only during government official hours, and were located only in major hospitals. To reach the smoking cessation services would take at least 4 to 8 hours per visit, which would be inconvenience for medical students. Moreover, smoking cessation medications are too expensive for students. The national 'quit line' also has a limited budget, which leads to few qualified telephone counselors and limited capacity of the systems to handle the calls⁽¹⁶⁾. This could easily prevent medical students from reaching effective cessation services.

Secondly, our campaign directly affected the administrative leaders of medical schools, curricula, and policies; as all the above-mentioned campaigns were directed at the whole group of medical students, not individual ones. Students would, therefore, not be motivated enough by the campaigns to stop smoking.

Thirdly, the use of other tobacco products, including hookah, electronic cigarettes, and roll-your-own cigarettes have been increasing popular among the youth⁽¹⁷⁾. In fact, over the past few years, the global use of electronic nicotine devices (END) has increased dramatically. In the United Kingdom, the number of END users has risen remarkably, from 2.7% in 2010 to 17.7% in 2013⁽¹⁸⁾. As in several other countries, the use of END in Thailand rose significantly, too.

A local survey was performed among 2,426 high-school students in Bangkok, Thailand, showing that 44% of the students knew about and used electronic shisha, and 12% used electronic cigarettes⁽¹⁹⁾. It is worrisome that the prevalence of medical students using other tobacco products, mainly END, more than double (from 1.0 to 2.1%) in the second round of GHPSS. The popularity and acceptability of END among students might play a role in reducing the perceived need and motivation of medical students to stop smoking. Therefore, before the next round of GHPSS, one goal is to reduce the smoking rate among

medical students in three ways: student-aimed campaigns, denormalization of both cigarette smoking and END use, and improving the facilities of student health clinics to provide better cessation services.

The prevalence of SHS exposure showed no statistically significant change, despite the effects of the existing campaigns. In fact, the exposure rate is still high, even though the rate of medical students smoking on university grounds was low; the exposure source might be from other public areas. This could be due to poor law enforcement in Thailand. The 2011 report of the WHO Joint National Capacity Assessment on the Implementation of Effective Tobacco Control Policies in Thailand clearly stated that not only the compliance to 100% smoke-free laws in Thailand was suboptimal, but there were also shortages of punitive measures to fine or prosecute violators by government officials or police officers⁽¹⁶⁾. To address this problem effectively, a systematic enforcement plan needs to be established, such as a collective, multi-sectoral integration of institutions, people, and ideas directed toward its solution. This has not yet occurred. The proportion of Thai people exposed to SHS, therefore, remains unacceptably high. The exposure in medical students when they were young could well be a cause of chronic non-communicable diseases in the future.

These campaigns clearly can improve several aspects of students' attitudes towards tobacco control. They can significantly raise the agreement on a smoking ban in pubs, clubs, nightclubs, and bars; and more importantly, they enhance students' perceptions to be responsible physicians. Up to 98% of students agreed that HCP should be role models for their patients and the public. More important, after the campaigns were launched, there was significantly more agreement among the students that all HCPs need to undergo specific training on cessation techniques, and should always advise their patients to quit smoking. The improved attitudes will raise motivation for both medical students and their instructors to further study and learn more about tobacco cessation.

The authors also suggested that these campaigns could possibly improve the cessation training and knowledge for medical students. The rate of cessation training went up significantly, from 22.6 to 36.9% ($p < 0.001$). More medical students learned to provide educational materials and antidepressants to support cessation, and became more involved in community outreach activities. Although the overall training rates and other related parameters appeared to be in the low range, all rates improved significantly

after the campaigns. In fact, the cessation training rate improved up to 63.3% through these campaigns, as compared to the first round. More important, one has to keep in mind that the GHPSS is done globally only among third-year medical students, who are in their pre-clinical year of the Thai medical curriculum. So, the students included in these surveys had not yet studied clinical clerkships, including tobacco cessation and its related training. This could be another reason that the training rates in both surveys appeared in the low range. Therefore, another survey includes medical students in their clinical years or when they graduate seems mandated. Previous studies in training among these population demonstrated effectiveness^(20,21). Nevertheless, the present study has found that these campaigns can clearly improve cessation training and knowledge among the pre-clinical year students. More learning materials and online tools will help both instructors and students access training more easily in the coming years.

Some limitations of the present study should be noted. First, in the surveyed population, as mentioned above, the medical curriculum in Thailand lasts six years. The third-year medical students were in their pre-clinical years. Certain survey questions related to the clinical clerkship, training and knowledge could be problematic and lead to inaccurate results. The same medical students should be included in the next round of GHPSS, but the learning effect or intervention effect is difficult to differentiate. Secondly, the implementation of tobacco control into the medical curricula of every medical school did not occur at the same time. The results may, therefore, still be variable in the second round of GHPSS. The results of the next round of GHPSS may better represent the clear effects of these campaigns. A further study should additionally focus on qualitative research into deeply learning about the process of successful tobacco controls in medical schools, to improve the understanding of the management of their particular learning environment, and then to expand their knowledge to other populations.

In conclusion, the nationwide campaigns directed towards the administrative leaders of medical schools, implementing tobacco control into the medical curriculum, and 100% smoke-free environment campaigns significantly improved medical students' attitudes towards tobacco control and cessation, and enhanced the cessation training among medical students. Whether these campaigns can affect the trend of tobacco use among medical students still needs further investigation using different study design.

What is already known on this topic?

Physicians and medical students can be agents of social change and play important roles in preventing their patients from using tobacco and reduce tobacco-related deaths. However, in Thailand, almost 80% of smoking patients missed their vital opportunities to receive help to quit smoking from their physicians, despite the fact that they are ready to proceed. Whether nationwide campaigns aiming to improve KAB of Thai HCP, particularly medical students, would be effective remain unknown.

What this study adds?

This study showed that nationwide tobacco control campaigns aiming to improve KAB of Thai medical students are effective. More campaigns directed towards the medical students and HCP would be needed.

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Potential conflicts of interest

None.

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ผลของการรณรงค์ควบคุมยาสูบในโรงเรียนแพทย์ของประเทศไทยต่อการบริโภคยาสูบ

สุทัศน์ รุ่งเรืองหิรัญญา, ฉัตรชัย เอกปัญญาสกุล

วัตถุประสงค์: เพื่อศึกษาการเปลี่ยนแปลงของความชุกของพฤติกรรมการสูบบุหรี่ ทักษะคิด และการฝึกรอบมเพื่อให้บริการเลิกบุหรี่แก่นิสิตนักศึกษาแพทย์ หลังจากที่ได้รับข้อมูลข่าวสารสุขภาพเพื่อสังคมไทยปลอดบุหรี่ได้ก่อตั้งและจัดกิจกรรมรณรงค์ต่างๆ ขึ้นในโรงเรียนแพทย์ ด้วยข้อมูลการสำรวจ GHPSS ในนิสิตนักศึกษาวิชาชีวะสุขภาพทั่วประเทศ

วัสดุและวิธีการ: เป็นการศึกษา ณ จุดเวลาใดเวลาหนึ่งหลังจากที่ได้มีการรณรงค์ใน 3 แคมเปญใหญ่ ในระหว่าง พ.ศ. 2550 และ พ.ศ. 2554 ได้แก่ การประชุมสุดยอดคณบดีในด้านการควบคุมยาสูบ การรณรงค์ให้มีการสอดแทรกเนื้อหาด้านการควบคุมยาสูบในหลักสูตรแพทยศาสตรบัณฑิต และการรณรงค์ให้โรงพยาบาลและโรงเรียนแพทย์เป็นสถานที่ปลอดบุหรี่ 100% โดยเปรียบเทียบการเปลี่ยนแปลงของผลของการสำรวจ GHPSS ทั่วประเทศในระหว่าง พ.ศ. 2549 และ พ.ศ. 2554

ผลการศึกษา: ความชุกของการสูบบุหรี่ของนิสิตนักศึกษาแพทย์ไทยในภาพรวมไม่เปลี่ยนแปลง คืออยู่ที่ร้อยละ 2.6 ในขณะที่การได้รับควันบุหรี่มือสองในสถานที่สาธารณะลดลงเล็กน้อยลงมาอยู่ที่ร้อยละ 53.7 จำนวนของนิสิตนักศึกษาแพทย์ไทยที่เห็นด้วยกับการห้ามสูบบุหรี่ในผับ บาร์ และสถานบันเทิงยามค่ำเพิ่มขึ้นอย่างมีนัยสำคัญจากเดิมร้อยละ 80.8 เพิ่มขึ้นร้อยละ 90.5 ในขณะที่การรณรงค์ยังช่วยให้มีการฝึกรอบมเพื่อช่วยเลิกบุหรี่ในนิสิตนักศึกษาแพทย์มีเพิ่มมากขึ้นอย่างมีนัยสำคัญทางสถิติ ($p < 0.001$) นอกจากนี้ ยังช่วยให้มีนิสิตนักศึกษาแพทย์ไทยจำนวนมากขึ้นเห็นด้วยให้จัดการฝึกรอบมด้านนี้ให้กับบุคลากรทางการแพทย์ ($p = 0.004$) และเห็นด้วยว่าบุคลากรทางการแพทย์ทุกคนควรให้คำแนะนำแก่ผู้ป่วยของตนในการเลิกบุหรี่ ($p < 0.001$)

สรุป: การรณรงค์ควบคุมยาสูบในโรงเรียนแพทย์ทั่วประเทศส่งผลให้นิสิตนักศึกษาแพทย์ไทยมีทัศนคติต่อการให้บริการเลิกบุหรี่และการฝึกรอบมด้านนี้ดีขึ้นกว่าเดิม แม้ว่าความชุกของทั้งการสูบบุหรี่และการได้รับควันบุหรี่มือสองในนิสิตนักศึกษาแพทย์ยังคงไม่เปลี่ยนแปลงนัก