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Chapter

An Appropriate Quit Smoking Program for Thai People during the Covid-19 Pandemic

Thawalsak Ratanasiri, Chanchanok Aramrat, Somnuk Apiwantanagul, Bangonsri Jindawong, Thanawan Sirisuk and Amornrat Ratanasiri

Abstract

To find an appropriate quit smoking program on the spread of Covid-19 in Thailand during 2019–2021. To synthesize contents from Khon Kaen University (KKU) staffs' and students' research studies and projects from 1989 to 2021 about smoking problems and quit smoking programs and suggest appropriate quit smoking programs for Thai people during the Covid-19 pandemic. Fifteen publications and five projects presentation by the KKU staff and students were retrieved, reviewed, and analyzed. Smoking problems in Thai people were concerned. The Ministry of public health has disseminated knowledge of the dangers of smoking and has organization carried out all projects and campaigns of anti-smoking and had an anti-smoking act in the workplace on the Covid-19 pandemic during 2019–2021. Projects and research studies were able to help reduce these smoking problems. An appropriate quit smoking program needs to be developed and implemented. An appropriate quit smoking program needs to be implemented suitable for Thai people, in the hospitals, private clinics, families, and in the communities during the Covid-19 outbreak in Thailand.

Keywords: smoking problems, Covid-19 pandemic, appropriate quit smoking program, Thai people

1. Introduction

An appropriate quit smoking program is needed for Thai people because smoking is life-threatening and toxic to society. It affected others to be second-hand or third-hand smokers. So, it is a danger to the nation and people who get cigarette smoke from the public, in the workplaces, or in their houses. During the Coronavirus disease 2019 (Covid-19) outbreak, it was found that smokers who get diseases from smoking including cardiovascular diseases, chronic lung diseases, and diabetes are much more likely to be hospitalized or die if they catch coronavirus [1].

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Covid-19 has triggered a global pandemic [2]. As of September 30th, 2021, 324 million cases had already been registered worldwide. The pandemic of Covid-19 has been very stressful, but there has never been a better time to quit smoking [3].

Quitting smoking is an important step to reduce the risk of developing cardiovascular complications. Smoking cigarettes makes the wall of the arteries sticky from the chemicals, so fatty material can stick to them. If the arteries that carry blood to the heart or brain get damaged and clogged, it leads to heart attack or stroke [4]. Smoking impairs lung function, making it harder for the body to fight off coronavirus and other diseases [5]. It is increasing the risk of severe illness, hospitalization, and death after being infected [3].

Smoking is different from other addictive drugs such as heroin, marijuana, and amphetamine, which have strict control by state and law and have a clear treatment. To protect people from smoking, the governments over the world only ask for operations and have a slogan, motivated to act and campaign to quit smoking since they found that smoking cigarette is an important cause of morbidity and mortality. Before the year 1981, there were 50,000 excess deaths per year in Britain, and 325,000 in the United States of America (USA) [6–8]. In Thailand, 10,000,000 Thai people were smokers in 1981, and at the time, most of them were teenagers [9]. The harms of tobacco use are well established, it causes 8 million deaths every year from cardiovascular diseases, respiratory diseases, cancers [10].

Since 2000, many countries chose the health of people instead of cigarettes: People in the USA had concerned of to be nonsmoking societies. The government of Canada had a smoking cessation program for the young generation. In Belgium, smoking had been prohibited in the public. Hong Kong and Singapore had created tobacco-free societies. India had prohibited smoking in close areas such as cinemas, on public transportations, in institutions, and in hospitals by law [11].

World Health Organization (WHO) has been concerned about smoking problems and set "the World No Tobacco Day." The first date was May 31, 1988, and has a slogan every year to persuade people to quit smoking. Most slogans since 1987 have encouraged people to be aware of their health and others' health. However, since 2020, the slogan needs people to quit smoking to avoid the severity of coronavirus infection. In 2020, it was "Addicted to Cigarettes, Addicted to Covid-19, High risk of Death# Quit Smoking, Reduce the Risk," and in 2021, it was "Quit Smoking, Reduce the Risk, You Can" [12].

This study aimed to find an appropriate quit smoking program for Thai people on the spread of Covid-19 in Thailand during 2019–2021.

2. Objectives

- 1. To synthesize contents from Khon Kaen University (KKU) staffs' and students' research studies and projects from 1989 to 2021 about smoking problems and quit smoking programs.
- 2. To find an appropriate quit smoking program for Thai people during the Covid-19 pandemic.

3. Methods

Fifteen publications and five project presentations by the KKU staff and students were retrieved, reviewed, and analyzed in two steps, to synthesize, and to find appropriate smoking programs.

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The research review was approved by the Ethics Committee for Human Research at Khon Kaen University, Thailand (HE500637, HE513257, HE531310, HE551346, HE591188, Institutional Review Board Number (IRB 00001189), and Nepal Health Research Council (Reg. No 148/2021). Most of the research studies were based on secondary data. Those who volunteered had signed the consent form.

4. Results

There were two steps to these research results as follows:

In step 1: To synthesize contents from Khon Kaen University (KKU) staffs' and student's research studies and projects from 1989 to 2021 about smoking problems and quit smoking programs. It found that there were five groups of Thai people, for example, Thai males, Thai females, pregnant women, the youth and the students, and the workers, who need to quit smoking. Doctors who work in quit smoking clinics in hospitals or in private clinics can help them by treatment and counseling. Families and their communities can mentally support them as follows:

4.1 Synthesize contents of smoking problems

Research studies reported smoking problems presented; those Thai males smoke more than females in the universities [13–16] and in the factories [17–19]. Cigarette smoking was caused by substance abuse, for example, nicotine, tar, carbon monoxide, hydrogen cyanide, nitrogen dioxide, ammonia, formaldehyde, and cadmium [20]. Most of this substance abuse is caused by cancer and easily to be addicts [20]. Unfortunately, these reported that most of the smoking and drug addicts were the youth, 95.0% were males [19]. One hundred presented of drug addicts, 40.3% were unemployed, 15.5% were students [19]. Most of them got addicts as experimental (56.8%), harmful (24.2%), dependent (13.9%), and psychosis (5.1%) [19].

Smoking and substance abuse did people uncomfortable from chronic cough, tremor, and heart palpitation, no appetite, headache, moodiness, sleeplessness, wakefulness, and easy to get an accident, less of condom used risk to HIV/AIDS [21] and also were threatened by the law [18]. In the case of carbon monoxide (CO), measurement of breath CO level can be used in confirming smoking status, oral health, and factors related [22–25]. Some research reported that tobacco smoking is a risk indicator for periodontitis [26]. More dentists advised their patients to quit smoking [26].

The drug treatment system in Thailand has been classified into three types, namely the voluntary system, the correctional system, and the compulsory system. The compulsory system is under inhalant law and drug addict rehabilitation AC [27]. The research from the compulsory treatment system in Khon Kaen and Yasothon province about a relapse of methamphetamine users reported that 13 cases out of 65 cases were relapsed, and the left 52 cases were non-relapsed [17].

Researchers reported that family relationships and community participation can help children and youth from stressful and prohibit them from smoking or substance abuse. These research studies presented those children whose mothers look after them very closely had better growth development and better health than whose mothers worked outside the communities and left them to stay with their relatives [28]. In addition, it was found that marital status, occupational, and income were correlated in ascendant order to community participation in the youth's mental health [29].

4.2 Reviewed cases reported

Reviewed cases reported of quit smoking successful in each group of Thai people were as follows:

4.2.1 Thai male

One case reported that a Thai male who smoked since 1976 and was able to quit smoking in 2019 because of his health problem from an acute heart attack and need to insert three out of four catheters entering the heart. His doctor told him to stop smoking because it is a high risk of death from heart diseases and infected coronavirus. Before this, his parent and his family told him to stop smoking, because most of his family members are doctors. He cannot stop smoking, because he got stressed so easily. However, he prevented his family member from passive smoking when he smoked.

4.2.2 Thai female

One case reported a Thai female who smoked since she was very young, because of a broken family. She lived alone in the dormitory for study. During that time, she met her friends who have the same problems as her. Her friend persuaded her to smoke. She felt it made her comfortable and reduced her stress. She can quit smoking because she visited one beauty clinic, after she had a boyfriend, she found that her face looks older than other girls who were of the same age as her. Doctors in the beauty clinic told her that cigarette smoking made smokers look older than the others for 10 years. After she stops smoking, she looks younger and pretty. She was married and planned to have a baby, safe from passive smoking.

4.2.3 The pregnant woman

One case reported that it was very difficult for her to quit smoking because five people of her family member both males and females are smokers. They smoked in her house. She felt it was harder for her to quit smoking and avoid passive smoking. Because she loves her first baby very much, she can quit smoking by herself. But for the second and the third babies, she cannot stop smoking by herself, she needs to use candy and gum. However, she cannot stop smoking because her environment and the people around her are smokers. Finally, she quit smoking in 2010, after smoking since 2003 with helping from the Health Promotion Foundation (Thailand National Quitline: call 1600) [30].

4.2.4 The youth and one student

One case of the youth reported that he smoked and drank with his friends very often. He looked at his friend who smoked and drank, was very smart, and had the power over his group. One night he got into a motorcycle accident and needed to operate his dental and jaw. His parent felt so sad, he decided to quit smoking and drinking alcohol for his parent. In the case of one student, he smoked during his study in high school. He was able to stop smoking because he wants to be a good doctor and help the patient to quit smoking.

4.2.5 The worker

One case of a construction worker who smoked and drank every day since he was aged only 15 years old. His family asked him to stop smoking and drinking alcohol because he had one boy child aged 3 years old. His wife did not want his child to be passive smoking and feel that smoking and drinking are not good for his life. He cannot stop smoking and drinking until he was arrested and fined for drunk driving with serious penalties during the happy new year celebration for 2021. He can stop drinking, but smoking he cannot because his life was very stressful, smoking helped him to relax.

4.3 Reviewed five leading factors related

Reviewed five leading factors related to quitting smoking from five groups of Thai people. It prescribed that there are five leading factors as follows (see **Figure 1**).

- a. Thai males' reasons for quitting smoking were (1) for their health, (2) to avoid diseases related to smoking and Covid-19 infected, (3) for their families, (4) for their friends, and (5) for their workplaces.
- b. Thai females' reasons for quitting smoking were (1) for their self-image, (2) for their children and families, (3) for their health, (4) for their workplaces, and (5) to avoid diseases related to smoking and Covid-19 infected.
- c. The pregnant women's reasons for quitting smoking were (1) for their babies, (2) for their self-image, (3) for their families, (4) for their friends, and (5) to avoid diseases related to smoking and Covid-19 infected.
- d. The youths' reasons and the students' reasons for quitting smoking were (1) for their parent and their studies, (2) for their friends, (3) for their health, (4) to avoid diseases related to smoking and Covid-19 infected, and (5) for their societies.
- e. The workers' reasons for quitting smoking were (1) for their health and employment, (2) for their workplaces, (3) for their employers, (4) to avoid diseases related to smoking and Covid-19 infected, and (5) for their families.

In step 2: To find an appropriate quit smoking program for Thai people during the Covid-19 pandemic: to develop an appropriate quit smoking program for each group of Thai people were three steps as follows (see **Figure 1**).

1. First step

- 1.1 Reviewed research results about the smoking problems
- 1.2 Concluded of factors related to smoking
- 1.3 Reviewed of past cessation of quit smoking programs

2. Second step

2.1 History taking of bibliography, and smoking habits

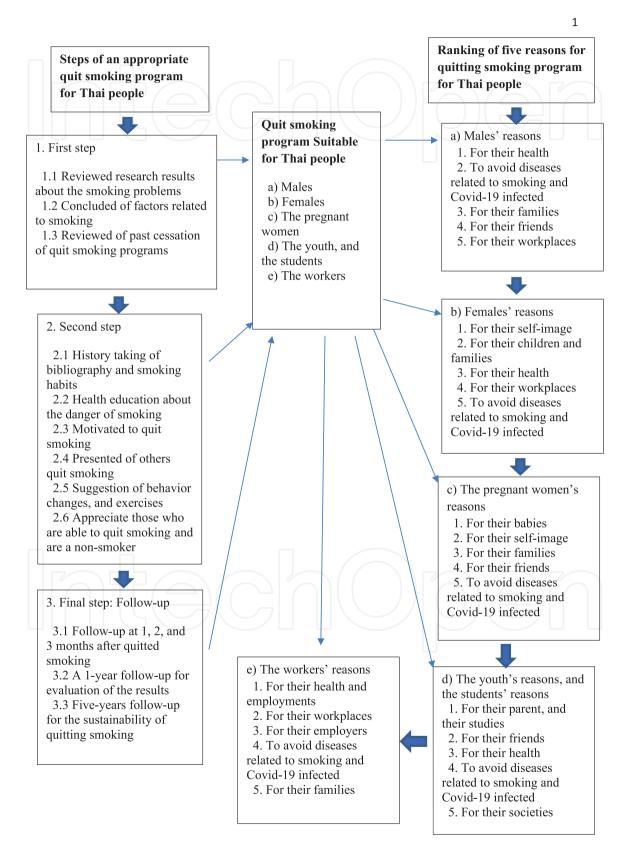


Figure 1.An appropriate quit smoking program for Thai people in the year 2020–2021.

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- 2.2 Health education about the dangers of smoking
- 2.3 Motivated to quit smoking
- 2.4 Presented of others quit smoking
- 2.5 Suggestion of behavior changes, and exercises
- 2.6 Appreciate those who are able to quit smoking and are a non-smoker.
- 3. Final step
 - 3.1 Follow-up at 1, 2, and 3 months after quitted smoking
 - 3.2 A 1-year follow-up for evaluation of the results
 - 3.3 Five-years follow-up for the sustainability of quitting smoking

Appropriate Quit Smoking Program for Thai males, Thai females, the pregnant women, the youth and the students, and the workers need to the concerned of five reasons suitable for each group of Thai people, for example, the first leading related to quitting smoking for males was for their health, for females was for their self-image, for the pregnant women were for their babies, for the youth and the students were for their parents, and their studies, and for the workers were for their health and employment (see **Figure 1**).

In conclusion, smoking problems in Thai people were a concern. The Ministry of Public Health has discriminated knowledge regarding the dangers of smoking and has organization carry out all domeht and campaigns of anti-smoking and had Anti-Smoking Act, in the workplace on Covid-19 pandemic during 2019–2021. Projects and research studies were able to help reduce these smoking problems. An appropriate quit smoking program was developed and implemented to be suitable in each group during the Covid-19 pandemic as presented in **Figure 1**.

5. Discussions

From our study, it found that Thai males smoke more than Thai females, similar to Ji's report of the opposite idea of quitting smoking among Korean men and women, women smoked less than men and had a trend to quit smoking more than men [31]. Most of the smoking and drug addicts in Thailand were youth of 15 years old and older [9, 19]. They were unemployed (40.3%), and 15.5% were students [19]. The same as Karlan found that Filipinos aged 15 years or older were smokers up to 28.3%, and 22.5% smoked daily in 2009 [32]. About relapse of methamphetamine users in Northeast of Thailand reported that 13 cases out of 65 cases were relapsed, and the left 52 cases where non-relapse is closely reported of prior research with Filipinos that 72%, they wanted to stop smoking at some point, only 18% reported that they wanted to stop smoking now [32]. Our studies reported that family relationships and community participation can prohibit youth from smoking, similar to Garcia's report, which found that cessation programs for a smoking group should focus on changing

the smokers' social environment and perception regarding the positive consequences of smoking in a way that is culturally sensitive and appropriate and considering the different levels of acculturation [33]. Complete prohibition of smoking in the household was one of the strongest correlates of successful quitting [33].

From our in-depth interview with women, one of them presented that she can quit smoking because she is concerned about her self-image. She found that her face looked older than her friends. She consulted doctors in a private clinic and desired to quit smoking. Similar to the government policy of the Philippines that persuades people to quit smoking for the self-image as "A Cigarette may out weight," results in the Philippines because some of them could quit smoking [32].

Our report of an appropriate quit smoking program for Thai people during the Covid-19 pandemic was reviewed from our research and our projects [34–38]. We are concerned about the individual differences for Thai males and females, the pregnant women, the youth and the students, and the workers. It found that the reasons for quitting smoking are in five leader reasons, but the difference in the first reason, most Thai males concerned of their health, Thai females concerned of their self-image, the pregnant women concerned of their babies, the youth and students concerned of their parents and their studies, and the workers concerned of their health and employment. Our quit smoking program had three steps, for example, first step, second step, and final step with 1, 2, and 3-month follow-up after quitting smoking, similar to the study of Nakhum District Hospital staffs [38] but in this study had another 1-year follow-up for evaluated the results of quitting, and 5-years follow-up for sustainable quit smoking. In our setting in the northeastern province such as Khon Kaen and Sakon Nakhon, they follow the Thai government policy and persuade people to quit smoking.

6. Conclusions

Smoking is an important problem in Thailand and over the world. It is a drug addict that causes severe diseases more than 200, such as lung cancer, chronic obstructive pulmonary disease (COPD), esophageal cancer, peptic cancer, gastrointestinal cancer, colon cancer, periodontitis, and asthma, it causes death from cancer.

Cigarette smoking and Covid-19 are complex interactions. During the pandemic, some reported that smokers are less likely to get the Coronavirus, while others reported smoking increased the risk of severe illness from it. A review by the World health Organization (WHO) found that smoking is associated with more severe illness and increased risk of death in people who need hospital treatment for Covid-19. Current smokers who get Coronavirus are twice as likely to attend hospital and tend to report more symptoms than non-smokers.

To control smoking, many countries had policies of Anti-Smoking Act, in the public, hospitals, institutions, in the families, in the communities, and in the workplaces. An appropriate quit smoking program needs to be developed and implemented, suitable for all Thai people in the hospitals, private clinics, families, and communities.

Strongest Thai government policies are of Anti-Smoking Act and control of Covid-19 pandemic. The physician and health personnel's role is to help patients to quit smoking and protect themselves from Coronavirus infection. Good family relationships participated from communities and societies with mental support can help reduce the problems of smoking, substance abuse, and also the Covid-19 pandemic.

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Conflict of interest

All authors declare that they have no conflicts of interest.

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