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AN EVALUATION OF IMPLEMENTATION OF THE NATIONAL STRATEGIC PLAN FOR TOBACCO CONTROL NO. 2 (NSPFTC NO.2) YEAR 2016-2019

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ABSTRACT

This study's objective is to assess the performance of the Second National Tobacco Control Strategy 2559-2562 B.E. (2016-2019) vis-à-vis the target set. This research was a combined method evaluation research by collecting both quantitative and qualitative data from October to December 2562 B.E. (2019). The studied population in group 1 was the Thai population aged 15 years and over. A total of 6,660 people and group 2 were youths who were 15-19 years old. A total of 6,965 subjects were recruited using the stratified two-stage cluster sampling method in the provinces with the median of the highest and lowest smoking rates. The past 3 years of the 12 health districts and 25 Bangkok provinces. The results showed that the prevalence of tobacco use among the Thai population aged 15 years and over was 16.3% (95% CI: 14.2, 18.5) with the prevalence value adjusted according to the Age Standard Structure (ASR) accounted for 16.1 percent which can be reduced according to the target (not more than 16.7%). Males have 11.6 times higher smoking rates than females (29.0% and 2.5%, respectively) and the protection of public health from the dangers of tobacco smoke the prevalence of seeing smokers / using tobacco products or having been exposed to secondhand smoke in public places is required by law to be 100% non-smoking in five places: markets, public bus stations, religious institutions, lower level higher education, and public health facilities. They were equal to 20.1%, 16.3%, 7.2%, 6.5% and 4.8%, respectively which decreased more than the target set. It was concluded that the results of the Second National Tobacco Control Strategy Plan 2559-2562 B.E. (2016-2019) achieved the target designated.

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INTRODUCTION

The tobacco epidemic is one of the biggest public health threats, killing more than 8 million people annually worldwide, of which more than 7 million are directly attributable to tobacco use. Another 1.2 million people are the result of nonsmokers' exposure to secondhand smoke (World Health Organization, 2020). The World Health Organization ranks tobacco smoking as one of its top priorities. All countries must cooperate to urgently prevent and resolve, in conjunction with the Member States to establish the World Health Organization Framework Convention on Tobacco Control (World Health Organization, 2004) as an international legal mechanism for the deterrence of tobacco products that have spread all over the world and keep the population safe from the harmful effects of tobacco consumption and tobacco smoke inhalation. The Department of Disease Control is the main agency with a mission to monitor, prevent and control diseases and public health hazards. Together with the government and private sector partners, the Second National Tobacco Control Strategy 2559-2562 B.E. (2016-2019) has been formulated and approved by the Cabinet on 19 April 2559 B.E. (2016), consisting of 6 strategies to ensure that all related sectors, at the central and regional levels, serve as a framework and direction for linking and driving the joint country's tobacco control operations. Its aim is to reduce the prevalence of tobacco use among the Thai population and protect public health from the dangers of tobacco smoke the said strategic plan ended in September 2562 B.E. (2019).

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According to the 2560 B.E. (2017) survey of 55.9 million people aged 15 years and over in Thailand, it was found that as many as 10.7 million (19.1%) of the smokers were regular smokers: 9.4 million (16.8%) (National Statistical Office,2018) and a 2015 survey of youth students aged 13-15 years found that 15.0% of tobacco product users were high (21.8% boys, 8.1% girls.), and as high as 14.0% of smokers (20.7% boys, 7.1% girls) (Chotbenjamaporn & Haruhansapong & Jumriangrit & Pitayarangsarit & Agarwal and Garg R.,2017). According to the study of disease burden, smoking/tobacco is the leading risk factor for mortality (attributable death) and is the main cause of loss of health throughout the year. It is the number one highest in the country (BOD Thailand,2016). This include people who smoke or experience secondhand smoke in public places, including markets, restaurants, religious sites, public transport stations and government offices, even though they are non-smoking areas (Pitayarangsarit & Chotbenjamaporn and Punkrajang,2016). And 33.8 percent of youth were exposed to secondhand smoke in their homes; 38.6 percent were exposed to secondhand smoke in public places; and 47.9 percent saw smokers in school areas. (4) Also, the global NCDs risk factor reduction target set by 2025 wants Thailand to reduce tobacco consumption by 30% (from that of 2010) by the rate of tobacco consumption in the Thai population aged 15 and over must not exceed 15% or the number of smokers up to 8.4 million (from 12 million) (World Health Organization,2020). Strategies and measures for tobacco control in both the central and regional areas cover all factors that are continual and effective. Therefore, the researcher collected the data and analyzed to evaluate the results of the implementation of the Second National Tobacco Control Strategy 2559-2562 B.E. (2016-2019) after the end of the plan compared to the stated goals. This is to be used in the formulation of the National Tobacco Control Strategy Plan for the third generation to be more effective.

RESEARCH OBJECTIVE

- To evaluate the performance of the Second National Tobacco Control Strategy 2559-2562 B.E. (2016-2019).
- To study problems and obstacles in the implementation of the Second National Tobacco Control Strategy 2559-2562 B.E. (2016-2019).

RESEARCH METHODOLOGY

Conducting mixed research to supplement documentary research by collecting various secondary related data and a quantitative research by survey (survey research) from the collection of primary data. The obtained data are used for evaluating the aggregate result (summative evaluation) vis-à-vis the goals determined at the end of the plan. By studying a cross-sectional survey between October - December 2562 B.E. (2019), details are as follows:

The population and samples were divided into two groups: group 1, Thai population aged 15 years and over, a total sample of 6,660 people and group 2, youth who were students aged 15-19 years in the school, a total of 6,965 people. Stratified two-stage cluster sampling (11) in provinces with the highest and lowest historical three-year median smoking rates (2554, 2557 and 2560 B.E. (2011, 2014 and 2017)) to represent the population of the 12 districts. Health and Bangkok, 25 provinces, and selected districts/districts from representatives of 25, each of 5-10 districts/districts according to the size of the province. After that, 1-2 sub-districts were randomly selected for data storage by using a simple sampling. The subjects were independently recruited from the municipal and non-municipal areas. The subjects were randomly recruited at the village level and the interviewees were randomly recruited. To determine the sample size, using the Crazy and Morgan formula to calculate the number of subjects of each group in each case, about 400 people each: Chiang Rai, Lamphun, Tak, Uttaradit, Phichit, Kamphaeng Phet, Pathum Thani, Nakhon Nayok, Nakhon Pathom, Prachuap Khiri Khan, Chachoengsao, Sa Kaeo, Mahasarakham, Kalasin, Sakon Nakhon, Nong Khai, Buriram. Nakhon Ratchasima, Ubon Ratchathani, Sisaket, Phuket, Krabi, Pattani, Satun and Bangkok, a total of 25 provinces with a total number of subjects of approximately 10,400 people, a total of 13,625 people.

Research Tools:

- Questionnaire for Thai population aged 15 years and over consisted of basic population data, tobacco consumption;
- Questionnaire for youth aged 15-19 years, consisting of basic population information; and,
- Report on the results of operations related to the 2nd National Tobacco Control Strategic Plan 2559-2562 B.E. (2016-2019) of the related agencies.

Data collection

Part 1: Primary information Conducted interviews with sample groups during 1 October – 30 December 2562 B.E. (2019), by 50 interviewees with experience in data collection and through meetings to clarify and understand questionnaires,

Part 2 secondary information: Data were collected from the performance reports related to the Second National Tobacco Control Strategic Plan 2559-2562 B.E. (2016-2019) of the relevant agencies.

Data analysis: the quantitative data were analyzed using descriptive statistics such as number, percentage, mean, standard deviation, 95% confidential range, age adjusted rate or age standardize rate plus qualitative analysis of the data content.

THEORETICAL FRAMEWORK

The researcher used the concept of public policy to explain through the model created to understand the ideas and the results of public policy implementation. How have the past actions been in the best interests for society? In this work, two models will be used as a conceptual framework for explanation, i.e., the Institutional Model and the Group Model which are as follows:

The Institutional Model focuses on the activities of government institutions. With the view that government policy is an activity of government institutions, the state institution will decide the policy. The policy is implemented and implemented in society, that is, political activities are often centered on state institutions such as government, ministries, courts, etc., and the interests of various groups are brought to government institutions. Government institutions then make policy, act and enforce it. Three public policies are established by government institutions, first of all, so that established public policies are justified; second, policies established by such governmental institutions and organizations are generally usable. And thirdly the public policy established by such institutions is mandatory, only public organization institutions are justified to punish violators or violate them. However, this model has its weaknesses: it is a study that focuses on a specific structure without any regard to the obligation or behaviour of political institutions, this makes the study a possible mistake (Dye, 1984).

The group model is the equilibrium of fighting between groups. The group model proposes the idea that policy is an equilibrium arising from the conflict of interest groups by politics, as a matter of influence on each other among different groups, as a struggle for influence on state policy. Policy formulation to deal with conflicts between these groups can be done by (Bentley, 1949).

- Establishing rules and fights between groups;
- Compromising, as well as balancing interests;
- Displaying the results of the competition; and,
- The enforcement of agreements in the said public policy.

However, this model has major weaknesses: considering public policy as a result of the bargaining of various interest groups means that the importance of policy-makers overlooks the importance of policy-

makers. Often, governments may make policy decisions, perhaps not as a result of the bargaining of various groups in society. As for guidelines for the management of public policy, especially in health-related issues according to Professor Dr. Prawet Wasi 's concept, we believe thatthe public policy process should consist of 3 aspects (Prawet Wasi, 2009) :

- It is an intellectual process that uses evidence from past facts that are well synthesized and analyzed that form "knowledge" which is known as knowledge-based policy formulation.
- It is a social process as the policy has high impact to the society. Stakeholders, that is, society should play a role in learning and contributing to the policy. It is a transparent process that allow people to get involved in policy formulation.
- It is a moral process, i.e., the public policy process should be idealized for the righteousness, virtue and health of all people.

DATA ANALYSIS AND FINDING

Evaluate the performance of the 2nd National Tobacco Control Strategy 2016-2019.

Part 1: General characteristics of the subjects:

Group 1: Thai population aged 15 years and over totaling 6,660 people, 52.2% male, mean age 28.7 ± 16.6 years, marital status 53.0%, education level at high school and primary school as well. (23.5% and 23.2%) employed 29.6% in general employment and lived in municipal areas 54.9% and 45.1%, respectively.

Group 2: Youths who were students aged 15-19 years totaled 6,965, most of them were female, 58.0%, their mean age 16.5 ± 1.2 years; most of them had income of 101-300 baht per week; 33.7% were living with their parents; 63.9 percent and 63.9 percent were staying in the municipal areas, and 64.7 percent staying in the municipal area more that outside, and 35.6 percent outside of the municipal areas, respectively.

Part 2: Information on Tobacco Consumption and Smoking Behaviors:

Thai population aged 15 years and over: Most subjects had smoked cigarettes / tobacco (currently non-smokers); 31.8 percent and are current smokers / tobacco (covers regular and occasional smokers); 16.3 percent were males had 11.6 times higher smoking rates than females, 29.0 percent and 2.5, respectively. The age group of 25-44 years had the highest smoking / tobacco product consumption use rate at 18.0%, followed by age group 45-59 years and age group 60 years and over, 16.9% and 14.8% respectively; most of them were employed in the group of general employment 23.9%. The mean age of starting smoking was 18.0 ±. 4.8 years and the smoking rates of non-municipal and municipal population were similar, 16.8% and 16.0%, respectively. (Table 1)

Youth group 15-19 years old: Most subjects had smoked/used tobacco products (currently non-smokers); 11.5 percent and are smokers/tobacco product users (regular and occasional smokers); 4.6% male had 8.6 times higher smoking rates than females, 9.5% and 1.1, respectively. The mean age at first smoking was 13.9 ± 2.3 years. The average daily cigarette smoking was 4.4 ± 4.1 cigarettes (minimum 1 cigarette/day and maximum 20 cigarettes/day) and the smoking rate of youth outside the municipality was 2.6 times higher than in the municipality, 7.7% and 3.0, respectively. Regarding smoking behavior, it was found that the most common reason for smoking was the subject's curiosity to smoke/tobacco 61.4%; followed by the friend persuasion 19.1%. Majority preferred packed cigarettes/manufactured from factory 630 percent. And 19.6 percent informed that and in the past 30 days the majority smoked daily, 22.4 percent and 64.3 percent purchased cigarettes by themselves. Most of them purchased from retailers/grocery stores, 64.0 percent. The most popular smoking place was at home, 50.6 percent. (Table 2)

Part 3: Compliance Tobacco Products Control Act 2560 B.E. (2017): It was found that the place that the operator provided has a sign to clearly show that it is a non-smoking area at the main entrance and exit. And the place where the sign is clearly shown as a non-smoking area within most areas/buildings is the health service center. As for the most likely places where smoking equipment or facilities (such as ashtrays or cigarette butts) are still available are restaurants, government offices and tourist attractions. These were accounted for 38.9 percent, 37.7 percent and 36.1 percent, respectively. And in the past 30 days, smokers have violated or violated the rights of non-smokers in their homes/residences, and tourist attraction places. The places where the most law-abiding cooperation for not smoking/using tobacco products in these locations were gaming shops and educational institutions, 74.2 percent and 73.9 percent, respectively.

Part 4: Overall assessment results against the goals set out in the Tobacco Control Strategic Plan: The overall assessment results to meet the goals and targets set out in the Second National Tobacco Control Strategy 2559-2562 B.E. (2016 – 2019) after the plan are as follows:

Goal 1: Reduce the prevalence of tobacco use among the Thai population and the target is the prevalence of tobacco use among Thai people aged 15 years and over at the end of 2562 B.E. (2019), not more than 16.7 percent. According to the report of the Office of National Statistics of 2017, the prevalence of tobacco consumption of the Thai population aged 15 years and over was 19.1% (95% CI: 18.5, 19.8), with 16.8% of regular smokers, 2.2% of infrequent smokers, but this still lacks the result of survey at the end of 2560 B.E. (2017). Due to the Covid-19 epidemic, however, this study found that the prevalence of tobacco use among Thai people aged 15 years and over was 16.3% (95% CI: 14.2, 18.5) and when adjusted for the prevalence according to the age standard structure or Age-Standardized prevalence Rate (ASR) between the National Statistical Office of the year 2560 B.E. (2017) and that of this study. The prevalence was 19.1% and 16.1% respectively, which was not different from crude prevalence, indicating that the prevalence of tobacco use among the Thai population aged 15 years and over was reduced as the target. (not more than 16.7%) (Table 3).

Goal 2: Protecting public health from the dangers of tobacco smoke, the goal is to reduce the prevalence of cigarette smoke exposure by 25% (from 2557 B.E. (2014)) by 2562 B.E. (2019), as this evaluation is limited, making it impossible to calculate the prevalence. Public exposure to secondhand smoke in all public places as a whole is possible. Therefore, the method used is to assess the sighting of smokers / using tobacco products or who have been exposed to secondhand smoke in public places as required by law to be a 100% non-smoking area of the Thai population aged 15 years and over by location by descending frequencies: markets, public transport stations, religious establishments, lower educational establishments, and public health facilities. It was found that the prevalence was 20.1%, 16.3%, 7.2%, 6.5% and 4.8% respectively, which was lower than the target. (Table 4).

Problems and obstacles in the implementation of the Second National Tobacco Control Strategy *2599-2562 B.E. (2016-2019)*

The results show that:

- Eighty percent of the provinces adopted the National Tobacco Control Action Plan, but did not complete all tactics/activities, depending on the availability and context of each area.
- Seventy percent of the provinces had in sufficient staff who are overwhelmed by workload, because there are many other duties such as the prevention of chronic non-communicable diseases, road accident prevention, prevention of child drowning, etc., and
- Too little enforcement of law enforcement. It was also seen smokers in public places. And retailers also sell / share cigarettes among young people, partly because of the lack of man power rates, some of them are not skeptical / not versed in the law or even fear of influence of powerful people in the local areas.

Table 1. Shows the tobacco consumption data of the population aged 15 years and over

	Sample group	Didn't smoke, but used to smoke		Smoking / Tobacco	
		Number (percentage)	95% CI	Number (percentage)	95% CI
Total	6,660	2,115 (31.8)	(29.6, 33.9)	1,087 (16.3)	(14.2, 18.5)
Sex					
Male	3,477	1,909 (54.9)	(51.3, 58.5)	1,008 (29.0)	(25.4, 32.6)
Female	3,183	246 (7.7)	(7.0, 8.5)	79 (2.5)	(1.8, 3.2)
Age group (years)					
15-19 years	540	112 (20.7)	(19.3, 22.2)	55 (10.2)	(8.7, 11.7)
20-24 years	496	126 (25.4)	(23.8, 27.0)	70 (14.1)	(12.6, 15.7)
25-44 years	2,729	869 (31.8)	(29.9, 33.8)	491 (18.0)	(16.1, 19.9)
45-59 years	1,985	687 (34.6)	(32.2, 37.1)	336 (16.9)	(14.5, 19.4)
60 years and over	910	361 (39.7)	(36.2, 43.1)	135 (14.8)	(11.4, 18.3)
Career					
Farmers	1,711	683 (39.9)	(37.1, 42.8)	332 (19.4)	(16.6, 22.3)
Serve	367	73 (19.9)	(17.8, 22.0)	17 (4.6)	(2.5, 6.8)
Trading / personal business	690	186 (27.0)	(24.7, 29.2)	74 (10.7)	(8.5, 13.0)
Student / student	688	103 (15.0)	(13.9, 16.1)	48 (7.0)	(5.9, 8.1)
General contractor	1,973	803 (40.7)	(38.4, 43.0)	471 (23.9)	(21.5, 26.2)
Employee / Government employee / State enterprise / Private	1,040	257 (24.7)	(23.0, 26.4)	129 (12.4)	(10.7, 14.1)
No occupation (unemployed)	191	50 (26.2)	(23.7, 28.7)	16 (8.4)	(5.9, 10.8)
Administrative area					
In the municipality	3,654	1,076 (29.4)	(27.6, 31.3)	583 (16.0)	(14.1, 17.8)
Outside the municipality	3,006	1,079 (35.9)	(33.2, 38.6)	504 (16.8)	(14.1, 19.4)
Average age at first smoking start (years)					18.0 ± 4.8

Table 2. Smoking behavior among youth aged 15-19 years

Smoking behavior	Number (percentage)	95% CI
Reasons why students smoke/ use tobacco products (n = 803)		
Curiosity to smoking	493 (61.4)	(59.7, 63.1)
Friend's persuasion	153 (19.1)	(17.3, 20.8)
Want to relieve stress	91 (11.3)	(9.6, 13.1)
Others (e.g., socializing, the irony of life, unsolvable problems, etc.)	53 (6.6)	(4.9, 8.3)
During the past 30 days, what type of tobacco products/ tobacco products did you use? (N = 322) (More than 1 answer)		
Cigarette pack/cigarette factory	203 (63.0)	(60.3, 65.8)
Electric cigarette	63 (19.6)	(16.8, 22.4)
Self-rolled cigarettes/ tobacco	58 (18.0)	(15.2, 20.8)
Hookah / Electric Hookah	12 (3.7)	(0.9, 6.5)
During the past 30 days, on how many days did you smoke/ use tobacco products? (N = 322)		
1 to 2 days	61(18.9)	(18.1, 19.8)
3 to 5 days	52(16.1)	(15.3,17.0)
6 to 9days	48(14.9)	(14.1, 15.7)
10 to 19 days	51 (15.8)	(15.0, 16.7)
20 to 29days	38(11.8)	(11.0, 12.6)
All 30 days	72(22.4)	(21.5, 23.2)
Methods by which students obtain cigarettes/ tobacco products for smoking (n = 322)		
Self-purchase	207 (64.3)	(61.7, 66.8)
Asking a friend/ acquaintance	101 (31.4)	(28.8, 33.9)
Gift from others	14 (4.3)	(1.8, 6.9)
The most chosen sources of cigarettes/ smoking products (n = 283)		
Retail/ Grocery Store	181 (64.0)	(60.6, 67.3)
Convenience store	48 (17.0)	(13.6, 20.3)
Online store	12 (4.2)	(2.4, 6.1)
Hawking shops/ stalls/ flea markets	12 (4.2)	(2.4, 6.1)
NA	30 (10.6)	-
During the past 30 days, where did students typically smoke/use tobacco products? (The order of the top 5 pumping locations) (n = 322)		
At home	163 (50.6)	(48.7, 52.5)
At a friend's house	116(36.0)	(34.2, 37.9)
In school	89(27.6)	(25.7, 29.5)
Shopping center / department store	20 (6.2)	(4.3, 8.1)
The park	45(14.0)	(12.1, 15.9)
Bus stop / Bus station	8 (2.5)	(1.9, 3.1)
Restaurant	15 (4.7)	(2.8, 6.5)
Religious place	10 (3.1)	(1.2, 5.0)
Government office	5 (1.6)	(0.9, 2.2)
Gymnasium / Stadium	12 (3.7)	(1.9, 5.6)

Table 3. Results of assessment according to Goal 1, reduce the prevalence of tobacco use among the Thai population

Target	2560 B.E. (2017) *		2562 B.E. (2019) **	
	crude prevalence	ASR ***	crude prevalence	ASR ***
	Percentage (95% CI)	Per cent	Percentage (95% CI)	Per cent
The prevalence of tobacco uses among Thai people aged 15 years and over at the end of 2562 B.E. (2019) was not more than 16.7 per cent	19.1 (18.5, 19.8)	19.1	16.3 (14.2, 18.5)	16.1

** Survey results from the National Statistical Office*
*** The study of the Tobacco Products Control Division, Department of Disease Control*
**** Age-Standardized prevalence Rate (ASR)*

Table 4: Results of assessment according to Goal 2, protecting public health from the dangers of tobacco smoke

Target	Target value	Assessment results (N = 6,660)	
	Percentage	Number (per cent)	95% CI
The sighting prevalence of cigarette smoking, using tobacco products or exposure to secondhand smoke in the public places where the law to be a 100% totally ban smoking reduced by 25% (from 2557 B.E. (2014))			
Market	49.5	1,338 (20.1)	(18.9, 21.3)
Bus terminal	18.2	1,085 (16.3)	(15.2, 17.4)
Worship and religious gatherings	20.7	480 (7.2)	(6.4, 8.1)
School	8.2	433 (6.5)	(5.7, 7.3)
Public health facility	10.4	321(4.8)	(4.2, 5.5)

DISCUSSION AND CONCLUSION

In creating a public policy as activities, actions or decisions are made and decisions in advance to guide the actions to achieve the stated goals the concept of public policy has three dimensions: policy theory or model, policy area, and policy process (Dror, 1968). The study indicates that the overall performance of the Strategic Plan has successfully achieved the goals. This is because Thailand has adopted the National Tobacco Control Action Plan as a framework and direction to drive the country's tobacco control operations, transforming the Second National Tobacco Control Strategy 2016-2019 into the implementation of six strategies. The strategy applied and evolved from the World Health Organization's core strategy, MPOWER: A policy package to reverse the tobacco epidemic (World Health Organization, 2020) , has been studied as a very important and effective policy for tobacco control by Goal 1, reducing the prevalence of tobacco use among the Thai population the prevalence of tobacco use among Thai people aged 15 years and over was found to be 16.3% (95% CI: 14.2, 18.5), which reduced the target (up to 16.7%). This is because there has been a development of structures/mechanisms driving tobacco control operations from central to provincial and clear district levels.

The Department of Disease Control, as the secretary of the National Tobacco Products Control Committee, is responsible for preparing and transmitting policies, strategic plan measures on the control of tobacco products protecting the health of non-smokers and the treatment and rehabilitation of addicts to tobacco products from the central region to be implemented in the region by driven through the mechanism of the Bangkok Tobacco Products Control Board, Provincial Tobacco Products Control Committee, government agencies, state enterprises, educational institutions International and non-governmental organizations. There is a regional-level mechanism to support provincial supervision and monitoring in implementing measures under the tobacco control strategy at the local level and has a working group/committee for supervising and monitoring the operation at the provincial level there are strategies/activities such as 7 measures to operate a smoke-free school, public relations campaigns on harm and be aware of tobacco industry strategies, creating an environment to facilitate youth's non-smoking training, development, strengthening of networks of teachers/personnel in educational institutions and all leaders in all networks to campaign to prevent and monitor the epidemic of tobacco among young people to prevent new smokers. There is a treatment system for treating tobacco addiction in public health facilities. By integrating with the NCDs clinic, Fa Sai Clinic, and developing the potential of volunteer health personnel to know how to help quit tobacco in the community by linking with the implementation of the project “3 million 3 years quit smoking throughout Thailand. The King Laudation Project” has produced media campaigns to promote tobacco use control and communicate through radio, television and social media to lead to behavior change and to reduce health risk factors. However, youth age 15-19 years of age smoked e-cigarettes increased by 20.9% (Table 2), in line with the Northern Tobacco Control Research and Academic Unit, Naresuan University that surveyed the smoking behavior of youths in Thailand in 2562 B.E. (2019) smoke e-cigarettes, accounting for 18.1% (Kongsakon & Pattanateepon,2020) because manufacturers/distributors employ an online marketing strategy aimed at children and young people using an influencer to advertise and promote e-cigarette sales by publishing fake news and misrepresent the information referring to people or misleading research that can lead young people to believe and have positive attitudes towards e-cigarettes, such as “e-cigarettes are safer than conventional cigarettes, 95%” “electronic cigarettes can make smoking more effective”(Glantz,2017), in line with Sriraj Loysamut’s study that found e-cigarettes most popular and widely available online. It is motivated by propaganda and spreading false information by perceived motivation through social media. This had a significant effect on the urge to try e-cigarettes (Loysmut,2019 pp.13-29),but only 22.9% of youths saw a campaign of harm/help to reduce and quit smoking online. More favorable online channels to raise awareness and values of non-smoking / e-cigarettes, and Goal 2 to protect people's health from the dangers of tobacco smoke. The prevalence of sightings of smokers / using tobacco products or those who have been exposed to secondhand smoke in public places as required by law, including markets, bus stations, religious establishments, lower-level educational establishments and public health facilities, have decreased. This was the result of increasing the penalty rate and increasing the role of the owner of the facility to keep smoking away. By making clear no-smoking signs and ask for cooperation not to smoke mandated by the non-smoking law. Otherwise, the owner of the premises will be guilty. And a manpower mechanism has been developed to drive the tobacco control law enforcement area. Together with the use of community measures to create a smoke-free environment, in addition, there are also strong supportive factors for the social mobilization of tobacco control networks across all sectors, such as the No-Smoking Campaign Foundation. National Network Confederation for Thai Society Smoke-Free Center for Research and Knowledge Management for Tobacco Control Parties in the Health Professions Network for a Smoke-Free Society the Youth Institute of Thailand the National Smoking Cessation Service Center, etc., by joining together to think and drive the tobacco control operations together according to the roles, duties and contexts of each party to create sustainable change. Including the supporting budget of the Office of the Health Promotion Foundation that makes driving possible and can be a catalyst for change. The results of this study are a policy process, which is aimed at governments or other stakeholders who express themselves in the policy process, known as the "Life Cycle" of Dror (1968). And this also complies with the model policy stage policy formulation and the post-policy phase of Lindblom (1980). In addition, this study is consistent with the concept of Dye (1984) in terms of the policy formation stage, policy formulation, policy decision in implementing the policy and policy evaluation as well.

POLICY RECOMMENDATIONS:

To reduce the prevalence of tobacco consumption in Thai people aged 15 years and over to up to 15% by 2025 and protect public health from the dangers of tobacco smoke. Therefore, the policy recommendations are as follows:

- Develop a comprehensive service system for the treatment and rehabilitation of addicts of tobacco products in all affiliated hospitals to be concrete and clear which is set to be a policy at the ministry level.
- Encourage the national major drug list of tobacco products to be included in the National Major Drug List to help users access the tobacco cessation system successfully.

- Promote and support the Sub-District Health Promotion Hospital. Provide community-based service to help reduce, quit tobacco use, and build community empowerment and strong networks for the treatment and rehabilitation of tobacco addicts.
- Encourage the promotion of non-smoking educational establishments as one of the indicators of the Ministry of Education and integrate the knowledge about the dangers and serious harms of cigarettes, e-cigarettes or new types of tobacco products in the curriculum of teaching and learning of all educational institutions from the primary school level to prevent the occurrence of new tobacco users and to monitor tobacco businesses aimed at children and young people.
- Push for the issuance of ministerial regulations to control the components of tobacco products and disseminate information about the hazardous substances of tobacco products to the public so that the public is aware of the harmful substances in tobacco products.
- Propose to continuously raise the cigarette excise tax rate for tobacco control and review the price to be equal in line with the principle of reduced tobacco consumption because the tax measure is the most effective measure to reduce tobacco consumption by especially among young people, which is the main target of the tobacco industry. And find measures to remedy the impact of tax increases directly on tobacco farmers.
- Recommend the government to sign the Protocol to Eliminate Illicit Trade in Tobacco of the Framework Convention on Tobacco Control for use as a measure for tracking and tracing tobacco products (Track & Trace) to crack down on smuggled cigarettes and reduce tobacco consumption.
- Propose to add a whistleblowing channel, setting rewards for arrests, enforcement of the law by increasing the penalties and prosecuting the offenders to the end.
- Propose to relevant government agencies such as local government organizations. The Ministry of Education budget to be allocated to support and drive tobacco control operations at the local level.
- Propose to continuously develop a database of tobacco product consumption behavior survey of Thai population in the Health Data Center (HDC) of the Ministry of Public Health regularly every year to be used in the formulation of the country's tobacco control strategy to keep pace with the situation.

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