



Smoking Behavior among Youth in the Deep South of Thailand.

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Abstract

The objective of this research was to study the smoking behavior among youth in a deep southern border province. The population of this survey were 1,613 males youth aged 19-24 years who lived and were listed on the household registration of 13 villages of Sateng Nok Subdistrict of Mueang Yala, Yala Province. A stratified sampling technique for 13 village as strata was employed to take 346 youths, according to the Krejcie & Morgan table. The questionnaire about smoking behavior was adapted from the nicotine addiction assessment with the Index of Item – Objective Congruence (IOC) of 0.92. The statistics used in data analysis were mean, percentage, standard deviation, median, maximum and minimum. Out of 346 samples, 66.5 % were smokers, started smoking at 10 years old. For smokers, 58.3% smoking 1-9 cigarettes/day, 53.9% smoking while in stress or anxiety, 68.8% smoking at 5 minutes after getting up in the morning, and 51.7% smoking even during hospitalization. In addition, by nicotine addiction level, 86.5 % were non-addict, followed by 10.5%, a very high trend of developing nicotine addiction, and 3.0% moderately addicted to nicotine. From the research, the youth's smoking problem is important and need to be solved immediately especially the youth who have hazard level of nicotine addiction must be consulted by a physician for quitting smoking.

Keywords: Smoking behavior, Nicotine addiction, Youth, The deep southern border provinces.

Introduction

Smoking is part of causes of non-communicable disease (NCD). Currently, NCD is a common disease in the adult group, especially cardiovascular disease (CVD). In global found CVDs is the first cause of death and cancer is the second leading cause of death. (World Health Organization, 2019: Online). The situation of NCD in Thailand, from a study by Srivanichakorn (2017, pp. 382-383), found that population dying from CVD about 44.84 per 100000 population follow by ischemic heart disease about 31.84 per 100000 population as well as found in male higher than female and have tended to increase. This has caused the serious situation of CVD in Thailand that needs more specific and effective interventions in the prevention and control of diseases. With a view of the Center for Disease Control and Prevention (2010, Online), it was indicated that there was a relationship between tobacco use and cardiovascular disease.



Smoking accounted for 33 percent of all deaths from CVD and 20 percent of deaths from ischemic heart disease. Cigarette smoking also influences other cardiovascular risk factors, such as glucose intolerance and low serum levels of high-density lipoprotein cholesterol. Moreover, smoking increases the risk of CVD more than other risk factors. As a part of solving prevalence of CVD, a study of smoking behavior can be summarized as information to construct draft guidelines for reducing risk factors for disease, according to “National non-communicable disease prevention and control plan and action plan 5 years (2017-2021)”. World Bank showed smoking rate of all countries decreases from 23 percent in 2007 to 21.99 percent in 2011 (The World Bank, 2016, Online).

It was also found that the deep southern border provinces where the majority of the population was Muslim. The rate of smoking increased from 24.86 percent in 2007 to 27.00 percent in 2011 (Pitayarangsarit, *et al.*, 2011, pp. 9-11). Some statistics from the Provincial Health Office in the deep southern border provinces showed that the rate of cardiovascular patients had increased to 1,603 per 100000 population in 2017 (Department of Disease Control, 2017, p. 4). Since the youth aged 19-24 years old (Definition of Youth by The United Nation) (The United Nation, 2013, Online) had a smoking rate that was higher than other age groups (Pitayarangsarit, *et al.*, 2011, p. 16), and young adults became regular smokers after the age of 18 years old (Hammond, 2005, p. 184). The researcher is interested in doing research in “Smoking behavior among youth in the Deep South of Thailand”. The benefits from this research can be useful to make a decision about a preventive and control policy on the basis of the youth’s smoking behavior.

Objectives

The objective was to study the level of smoking behavior among youth aged 19-24 years old in the Deep South of Thailand.

Material and methods

1. Research design

This study was a descriptive research study using survey method.

2. The sample

Stratified Random Sampling was used with Mooban as a strata. The population of this survey were 1,613 males youth aged 19-24 years who lived and were listed on the household registration of 13 villages of Sateng Nok Subdistrict of Mueang Yala, Yala Province. Sample consist of 346 youths according to the Krejcie & Morgan table in the sample which was allocated into 13 Mooban in Sateng-Nok based on proportional allocation concepts as table 1.

Table 1 Population and Sample size in survey.

Muban	Youth age 19-24 years old	Percentage from population	Simple size
Ban-Berseng	148	9.18	31
Ban-Melayubangkok	124	7.69	26
Ban-Pohyani	245	15.19	49
Ban-Nuttomong	134	8.30	28
Ban-Bangobada	80	4.96	20
Ban-Pongbuluh	119	7.38	25
Ban-Nibongbaru	136	8.43	27
Ban-Kampungbuket	54	3.35	18
Ban-Kelaemah	183	11.35	38
Ban-Teboh	99	6.14	21
Ban-Kampungtengo	88	5.46	18
Ban-Bakoh	129	7.9	27
Ban-Prama	74	4.59	18
Total	1,613	100	346

3. Instrument and its quality

3.1 Instrument

A questionnaire was used as a tool in this research which was adapted from “Fagerstrom Test for Nicotine Dependence” (Terry, 2000, Online) and expanded some questions about the factors affecting smoking behaviors in the PRECEDE framework by researcher (Green and Kreuter, 1999 cite in Bonni & Donna, 2005, pp. 37-44). There are nine parts included; part 1: Personal data included age, religion, education, career and income; part 2: Smoking knowledge; part 3: Smoking attitude; part 4: Perception on smoking’s disease; part 5 Perception on Islamic-doctrine about smoking; part 6: Perception of non-smoking place policy; Part 7: Access to smoking cigarettes; Part 8: Smoking of intimate people; and part 9: Youth’s Smoking behavior.

3.2 Instrument validity and reliability

The content validity was considered by 5 experts who have worked in Public Health and the Index of Item – Objective Congruence was evaluated as 0.92 as well as the reliability level was in total 0.81 by Cronbach’s Alpha coefficient. The study protocol was approved by the Institutional Ethical and Review Board of Naresuan University

4. Data collection

After entering the area of study, the researcher explained the nature of the survey and how the results were going to be used. The participants were invited to participate in the survey and were told



that it would take only 10 to 15 minutes to fill out the questionnaire. It was emphasized that their participation was voluntary and their responses would be kept unanimous and confidential. Before the informed consent and questionnaire were handed to the participants, the participants were told that should they wish not to participate in the survey, they did not have to sign the informed consent nor fill out the questionnaire

5. Data analysis

This article analyzed some part of the questionnaire to answer the objective and is also one part of my Ph.d dissertation. Descriptive statistics as mean, standard deviation, number and percentage were used to answer the research objective.

Result

Characteristics of youth samples found that they have an average age 22 years old. The income average was 9,889 Baht/month with minimum income 1,000 Baht/month and maximum income 25,000 Baht/month, as table 2. Most of the sample 270 were Muslim (78.0%) followed by Buddhist 74 people (21.4%). The highest education level was secondary school at 214 people (61.8%) followed by diploma 49 people (14.2%) and primary school 42 people (12.1%). Most of them were workers around 95 people (27.5%), followed by students 74 people (21.6%) and private/government employees 69 people (20.2%). There were 316 people or 21.6% who did not have chronic health conditions, as shown in table 3.

On the smoking behavior of youth, it was found that most of youth were smokers 66.5 %, followed by those who had never smoked 22.8% and those who had ever smoked 8.1%. An average starting youth age of smoking was 10 years old with 3.76 standard deviation as well as minimum and maximum age of 5 and 20 years old respectively. Smoking behavior according to “Fagerstrom Test for Nicotin Dependence” found that the youth smoke 1-9 and 10-19 cigarettes/day with 58.3% and 40.0% respectively. The youth reportedly smoked when stressed or anxious 53.9%, some smoked within 5 minutes after getting up in the morning 68.8% and others smoked even when sick in hospital bed 51.7%. Most participants 80.9% would hate to give up cigarette smoking at any other time than smoking first in the morning as shown in table 3. In addition, the result of smokers' nicotine addiction found that 86.5 % of the participants were not addicted to nicotine, followed by high level at risk at 10.5%, as shown in table 4.

Table 2 Characteristics of youth samples classified by age and income/month

Characteristics of sample group	\bar{X}	Med	S.D.	Min	Max
Age	21.89	22.00	1.42	19	24
Income (baht/month)	9,889	9,000	4,701	1,000	25,000



Table 3 Characteristics of youth samples classified by religion, education level, career and chronic health conditions.

Characteristics of sample group	Frequency	Percentage
Religion		
Islamic	270	78.0
Buddhism	74	21.4
Christianity	2	0.6
Education		
Primary education	42	12.1
Secondary education	214	61.8
Diploma education	49	14.2
University education	40	11.6
Career		
Worker	95	27.5
Gardener	60	17.5
Private / government employees	69	20.2
Civil servants	25	7.3
Business	19	5.6
Student	74	21.6
Missing	4	1.2
Chronic health conditions		
Yes	25	7.3
No	316	92.7
Total	346	100

Table 4 Smoking behavior of youth samples in the past 30 days

Smoking Behavior	Frequency	Percentage
How many cigarettes a day do you smoke?		
1-9	134	58.3
10-19	92	40.0
20-25	3	1.3
More than 25	1	0.4
When you often smoke?		
After waking up in the morning	35	15.2
Serious concerns/anxious	123	53.5



Table 4 (Cont.)

Smoking Behavior	Frequency	Percentage
Other	16	7.0
Missing	2	0.9
When you smoke first cigarette after waking?		
More than 60 minutes	7	20.0
31-60 minutes	3	8.6
6-30 minutes	-	-
5 minutes after get up	24	68.8
Missing	1	2.9
Which cigarette would you hate to give up?		
Any other	186	80.9
The first in the morning	30	13
Missing	14	6.1
Do you smoke even if you are sick in bed most of the day?		
Yes	119	51.7
No	101	43.9
Missing	10	4.3
Total	230	100

Table 5 Nicotine addiction level of youth in the sample.

Nicotine addiction	Frequency	Percentage
Low	199	86.5
Medium	7	3
High	24	10.5
Total	230	100

Discussion

This study on the smoking behavior of youth in the deep southern border provinces found that most youth were smokers 66.5%, consistent with the study of Hammond (2005, p. 184), which found that approximately 28% of young adults in Canada have the highest prevalence of smoking than other age groups and more than double the proportion of youth smokers. The average starting age of smoking was 10 years old and the lowest age was 5 years old. It shows that starting age of smoking has reduced and become less than 5 years old. This finding was not consistent with the study of Pitayarangsarit & Iamanon (2011, p. 20) studied in 2011 and Kason, et al (2013, p. 1077), in 2013 who found that starting age of smoking was 6 years old. This is because the 5-year-old children were social development by showing



conflict behaviors with others, he demands social responses from friends. They imitate gestures from other children or adults with whom they feel recognition. This is consistent with the study of Anjum *et al.*, (2016, p. 82) and Pittayarangsarit *et al.* (2011, p. 15) who found that usually smoking habit starts in youth out of their curiosity.

Considering the youth's smoking behavior by nicotine addiction, the majority of the youth approximately 86.5% were non-addict, followed by 10.5%, a very high trend of developing nicotine addiction, and 3.0% moderately addicted to nicotine. The psychological effect of addiction towards nicotine is an alteration of moods of the smokers. The nicotine acts on the chemistry of the brain and central nervous system, affecting the smoker's mood and create pleasant feelings that make the smoker want to smoke more. From our study, 53.9% smoke when feeling stressed/anxious and most will smoke after getting up in the morning within 5 minutes with 68.8%. This is consistent with the study of Baharudin *et al.*, (2015, p. 44) which found that 37.4% feel restless or anxious if they do not smoke.

Conclusion and Suggestion

The majority of youths sample was most likely to get attracted toward smoking habit and become addicts in the future. The youth's smoking problem is important and need to be solved immediately, especially the youth who have hazard level of nicotine addiction must consult a physician for quitting smoking. For the youth who have a low or a moderate level of nicotine addiction, they can cease smoking and indulge in some activities for developing their life skills from the family, community and educational institutions. For non-smoking teenagers and the youth who have started smoking, there should be community counseling services for cessation which can be as well serve parents and adolescents who want to resolve smoking problems.

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