KNOWLEDGE, ATTITUDES AND PRACTICES (KAP) ON CIGARETTE SMOKING AMONG ADULT MYANMAR MIGRANT WORKERS: A CASE STUDY IN RATCHABURI PROVINCE, THAILAND

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ABSTRACT: A cross-sectional study was carried out in Bann Leuk and Nongree Sub-district, Ratchhaburi province, Thailand in March, 2011. The main purposes of this study were to identify the prevalence of smoking and to identify the association between demographic characteristics, level of knowledge, level of attitudes and practices of smoking of adult Myanmar migrant workers aged between 18 to 59 years who lived in Ratchaburi province, Thailand. This study was conducted with 385 samples by using a structured interview questionnaire. The overall prevalence of cigarette smoking was 40% with the prevalence of males was 55.3% and of females was 9.4%. Among respondents, 39.7% had high level of knowledge about cigarette smoking and its harmful health consequences while 30.4% had moderate level of knowledge. For attitude toward smoking, 59% of respondents had high level of positive attitude towards risks and prohibition of cigarette smoking and 37.4% had moderate level. Smoking behavior was high significant difference with age (<0.001), gender (<0.001) and duration of staying in Thailand (<0.001). There was an association between knowledge of smoking and cigarette smoking behavior (<0.001) while there was also statistical different between attitude towards smoking and cigarette smoking behavior (<0.001). This study was done with the expectation that the information obtained from this study can be used as a baseline data for further studies. Interventions are needed to be considered for behavioral change and to conduct prevention and control measures of smoking among adult Myanmar migrant workers in Thailand.

Keywords: Smoking, Myanmar, Migrant workers, Ratchaburi province, Thailand

INTRODUCTION

It is well-known that smoking is hazardous in the world. It is also one of the preventable causes of death in the world [1]. Globally, 1.3 billion people smoke currently. More than 1 billion of them are males and the rests are females [1]. Prevalence of smoking is increasing day by day in the developing countries but decreasing in developed ones. In developing regions, a cigarette smoking is rising by 3.4% per year. Most of the smokers started smoking at younger age (13-15 years). WHO estimated that between 80,000 and 100,000 children worldwide start smoking everyday [2].

Among the six WHO regions, the South-East Asia has the second highest (2.8 per cent) annual per capita growth rate among adults for cigarette consumption, over a decade. The current consumption rates of South-East Asia range from 50% to 80% for men and about 1% to 71% for women [3].

It is stated that tobacco is the second major cause of death in the world in WHO report published in 2005. Annually, about 5 million deaths were due to tobacco and cigarette smoking (one in ten adult deaths). In the 20th century, one hundred million people worldwide were killed by cigarette and tobacco smoking. WHO estimated that smoking will threaten one billion of current smokers' life in 21st Century [1]. Currently, tobacco and cigarette smoking kills more people worldwide than malaria, maternal and childhood conditions and tuberculosis combined [4].

According to the economic disparity between Myanmar and Thailand, since 2000, many migrants from Myanmar have entered into Thailand for working and over 1.2 million migrants staying in Thailand are Myanmar [5]. Ratchaburi located in the central Thailand is one out of ten provinces which border Myanmar. Population of Ratchaburi province is 835,231 people. Out of them, 20,307 people are registered Myanmar migrants, 16,070 migrants have work permit and registered camp population is 8,353 people in 2005. But there are 10,000 to 20,000 non-registered Myanmar migrants in Ratchaburi province [6].

Due to migration, migrants have to face many problems like poverty, stigma, problems of housing and education, social exclusion, differences in language and culture, separation from family and socio-cultural norms. Some migrated illegally and it also makes them afraid to being arrested. Depression, anxiety and stress caused by the problems may

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become a reason for them to smoke.

MATERIALS AND METHODS

A cross-sectional study was conducted in 8 factories at Bann Leuk and Nongree sub-districts, Ratchaburi province, Thailand in March 2011. The respondents were adult Myanmar migrant workers (aged 18 – 59 years) both males and females who resided in the study site. To recruit participants, purposive sampling method was used with the inclusion criteria that respondents were adult Myanmar migrant workers aged between 18 – 59 years (both male and female), who could communicate in Burmese language and who were willing to participate in the study. Three hundred and eighty-five respondents were interviewed with structured interview questionnaire with ethical view protocol no. 146.1/53 which was approved by the Ethical Review Committee for Research Involving Human Research Subjects, Health Sciences Group, Chulalongkorn University, Bangkok, Thailand on February, 2011. The structured interviewed questionnaire was validated by three experts from from Ratchaprachasamasai Institute, Ministry of Public Health, for the accuracy, clarity, and appropriateness of the questionnaire. The respondents had to answer four parts of the questionnaire: demographic characteristics, knowledge about cigarette smoking, attitude towards cigarette smoking and practices of cigarette smoking. For data analysis, Chi-square test was used to determine the relationship between demographic characteristics – age, gender, marital status, education, occupation, monthly income, duration of staying in Thailand and Thai language skill; knowledge about smoking such as diseases associated with smoking, effects on pregnancy and children, passive smoking and air pollution and laws and legislations about smoking ;and attitude towards smoking which included conception about smoking and dangerous effects of smoking ; and cigarette smoking behaviors.

RESULTS

For demographic characteristics, the age of all participants were ranged from 18 to 54 years. The mean age of the participants was 27.38 years, median was 26 years and SD was 7.11. Male were 66.8% and 33.2% were female. More than half of participants were Burma (66%). Twenty eight point eight percent of participants were illiterate and 41.3% had primary education. Total monthly household income ranged from 2,000 Bahts to 10,000 Bahts and average household income was 5,876.62 Bahts. Most of the participants (52.2%) had monthly income between 5,001 Bahts and 7,000 Bahts.

Table 1 showed the prevalence of cigarette smoking behavior. The overall prevalence of cigarette smoking was 40% with the prevalence of males was 55.3% and of females was 9.4%.

Table 1 Prevalence of cigarette smoking behavior

	n	%
Over all prevalence	154	40
Male	142	55.3
Female	12	9.4

Table 2 Level of knowledge and level of attitude (n=385)

	Level of knowledge	Level of positive attitude
	N(%)	N(%)
Low	115(29.9)	14(3.6)
Moderate	117(30.4)	144(37.4)
High	153(39.7)	277(59.0)
Total	385(100)	385(100)

The scores of knowledge about cigarette smoking and attitude towards cigarette smoking were categorized into 3 levels according to Bloom classification [7]: low, moderate, and high. The cutting point for high level was more than 80% of total scores, moderate level was 60% - 80% of total scores, and low level was less than 60% of total scores. Among participants, 39.7% had high level of knowledge concerning about cigarette smoking and more than half (59%) of participants had high level of attitude towards cigarette smoking (Table 2).

For the practices of smoking, mean of cigarette smoking per day was 4.09 and median was 4 and then SD was 2.069. Cigarette smoking per day ranged from 1 stick to 10 cigarettes. Sixty eight point two percent of smokers smoked 3 – 5 cigarettes per day. Mean of the age which started smoking were 16.47 and SD was 2.235. The smoking starting age ranged from 12 years – 23 years. Seventy two point seven percent of smokers started smoking under the age of 18. Concerning about the reasons for smoking, 44.8% of smokers smoked due to being loneliness and 40.3% were due to stress. Regarding about types of cigarette, 81.1% of smokers smoked hand-rolled cigarettes which were made by themselves.

Table 3 showed the relationship between demographic characteristics of participants and cigarette smoking behavior. Cigarette smoking behavior was statically significant with age ($p<0.001$) and gender of participants ($p<0.001$) and their duration of staying in Thailand ($p<0.001$). Table 4 described that relationship between levels of knowledge and levels of attitude with cigarette smoking behavior. Concerning the knowledge about smoking, there was highly significant difference between knowledge of smoking and cigarette smoking behavior ($p<0.001$). Regarding the attitude towards smoking, there was highly significant difference between attitude towards smoking and cigarette smoking behavior ($p<0.001$).

Table 3 Relationship between demographic characteristics of participants and cigarette smoking behavior

Characteristics	Current smoker		Non-smoker		χ^2	p-value
	Frequency	%	Frequency	%		
Age					29.024	<0.001
≤25 years	55	29.9	129	70.1		
26 – 35 years	62	42.6	87	58.4		
>35 years	37	71.2	15	28.8		
Gender					74.934	<0.001
Male	142	55.3	115	44.7		
Female	12	9.4	116	90.6		
Staying in Thailand					23.171	<0.001
≤ 2 years	23	37.7	38	62.3		
3 – 5 years	59	29.9	138	70.1		
>5 years	72	56.7	55	43.3		

Table 4 Relationship between levels of knowledge and levels of attitude with cigarette smoking behavior (n=385)

Characteristics	Current smoker		Non-smoker		χ^2	p-value
	Frequency	%	Frequency	%		
Level of Knowledge					18.780	<0.001
High knowledge	49	32.0	104	68.0		
Moderate knowledge	40	34.2	77	65.8		
Low knowledge	65	56.5	50	43.5		
Level of Attitude					57.340	<0.001
High attitude	55	24.2	172	75.8		
Moderate attitude	90	62.5	54	37.5		
Low attitude	9	64.3	5	35.7		

DISCUSSION

The overall prevalence of smoking among adult Myanmar migrant workers was 40% with the prevalence of males was 55.3% and of females was 9.4%. Adult smoking was quite high. Male cigarette smoking was more common than female smoking because women cigarette smoking is blemish due to social restriction. Age and gender of respondents were highly significant associated with cigarette smoking behavior. It was similar to the study done in Magway Township, Myanmar [8]. There was also a statistical difference between the duration of respondent's staying in Thailand and their cigarette smoking behavior. But the result was controversial to the study done in Samut Sakhon province, Thailand [9]. Among all the respondents, 86.5% were under the age of 35 years because all respondents came into Thailand for working and mostly were at working age. In terms of marital status, 42.5% of smokers were married and 37.9% of smokers were single, widowed and separated. So married workers smoked more than other workers and it could be due to being struggle for their family and facing more stress than others. As the migrants from Myanmar tend to be less educated and less literate than their population of origin [5], most of migrants had low level of education: 28.8% of workers were illiterate and 41.3% had primary education in this study. More than half of the respondents (52.2%) had monthly income from 5,001 Bahts to 7,000 Bahts. This might be happened because most of respondents had low level of education and they had to work manual labors. Eighty four point two percent of participants stayed in Thailand for more than 3 years, so that 67.5% of participants could speak Thai language basically.

There was highly significant difference between knowledge of smoking and cigarette smoking behavior. While 70.1% had high and moderate level of knowledge, 32% in high knowledge and 34.2% in moderate knowledge were smokers. This could be occurred because of being loneliness and stress as Indian Tobacco Prevention and Cessation stated that smokers had higher stress level than non-smokers [10]. Therefore good knowledge cannot change smoking behavior; and community participation and perception about the danger of smoking is needed to reduce prevalence of smoking and also need to obey tobacco control laws.

There was also highly significant difference between attitude towards smoking and cigarette smoking behavior. Among 59% of respondents who had high level of attitude, 75.8% were non-smokers. Therefore non-smokers had high score about positive and negative statements of attitude and smokers had low score about statements of attitude.

This study was done with the expectation that the information obtained from this study can be used as a baseline data for further studies. And interventions are needed to be considered for behavioral change and to conduct prevention and control measures of smoking among adult Myanmar migrant workers in Thailand. Affective interventions are needed to control and reduce smoking prevalence in all

population. Non-Government organizations (NGOs), health authorities and staffs from Ministry of Public Health, authorities from Ministry of Interior, migrant health officers, volunteers and communities should be collaborate with each other to implement for intervention of smoking in all population.

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