

## ORIGINAL ARTICLE

# Knowledge, Attitude and Practice Towards Available Anti-Smoking Campaign Among Adults in Kuantan

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## ABSTRACT

**Introduction:** This study was conducted to determine the association between knowledge, attitude and practice among Kuantan community towards anti-smoking campaign. An anti-smoking campaign can be referred to as a series of ads programs that are introduced through various objective approaches to give awareness to people on the negative impacts of smoking behavior. The objectives of this study are (i) to investigate the association between socio-demographic data (gender, income, education level) and level of knowledge towards anti-smoking campaign; (ii) to find out the association between socio-demographic data (gender, income, education level) and level of attitude against anti-smoking campaigns; (iii) to study the association between socio-demographic data (gender, income, education level) and level of practice towards anti-smoking campaigns; and (iv) to find out the correlation between level of knowledge with level of attitude, level of knowledge with level of practice, and level of attitude with level of practice towards anti-smoking campaigns. **Methods:** A descriptive cross-sectional study was conducted among adult Kuantan community and convenience sampling was used to collect the data. A validated questionnaire was used to collect data. Statistical analysis of the data was carried out using SPSS and association of variables was analysed using Chi-square test. **Results:** This study found that level of knowledge did not affect the attitude level of the community. However, level of knowledge did affect the level of practice towards the anti-smoking campaign. **Conclusion:** It revealed that respondents with high level of knowledge also had good level of practice towards anti-smoking campaign.

**Keywords:** Anti-smoking campaign, Attitude, Knowledge, Practice, Smoking

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## INTRODUCTION

Smoking is an issue that has become a crucial debate by governments worldwide. Therefore, much effort has been given to promote awareness among communities on the harmful effects of smoking, either nationally or internationally. In Malaysia, The Ministry of Health already launched a campaign known as 'TAK NAK' — meaning "Say No" in February 2003. The government spent a few millions for the "Tak Nak" anti-smoking campaign, with youths as its target group but the result was not encouraging (14). Smoking prevalence as reported by Institute for Public Health (IPH) 2015, revealed that approximately 22.8% (4991, 458) of the Malaysian population aged 15 years old and above were smokers (3). Data showed that 43% (4.85 million) of them were men and 1.4% (143,566) were women smokers who smoked manufactured cigarettes, hand-

rolled and smokeless cigarettes. As many initiatives have been carried out by many organizations to control smoking in Malaysia, the community is expected to have at least a basic knowledge of the negative effects of smoking on health and people nearby.

Recent studies that measure knowledge, attitude and practice among community towards anti-smoking campaign are limited. There is also lack of study related to awareness towards anti-smoking campaigns and community's perception towards such campaigns. In the research done by S. M. Yasin, et al (13), the assessment was only for the knowledge, attitude and practice towards smoking among a group of students. The students' knowledge in anti-smoking campaigns was not studied. Most current studies also have not measured the knowledge and attitude within a community and only focus on a group of samples only.

A review by S. Jiang & C. Beaudoin, (5) on anti-smoking social media campaign reported that education on anti-smoking messages should be effectively delivered. An example would be how China's government used an online channel on a social media application called

‘Sina Weibo’ as a platform to effectively deliver its anti-smoking campaign. There, the government could easily update anti-smoking related materials with full graphics.

A study conducted by M.Noor et al (9), found that the reason why workers failed to quit smoking was due to cravings for cigarettes, impatience and also frustration. In the study done by M. Obtel et al.,(10) on Moroccan nurses who smoked and those who did not, it was interesting to find differences in practices. Nurses who smoked were less likely to consider the role of nurses in tobacco cessation activities or to motivate and help patients quit. The study conclude that in order to promote smoking cessation to community, nurses must become a role model and stop smoking.

**MATERIALS AND METHODS**

This study used a quantitative cross sectional research design to study knowledge, attitude and practice towards available anti-smoking campaign among Kuantan community. This study was based in Kuantan, Pahang. Kuantan district is the state capital of Pahang and located in the east of Malaysia. The three places chosen to distribute questionnaires were Taman Gelora, Teluk Cempedak and East Coast Mall (ECM). The selection of areas was mainly due to the mixture of community types with different daily social activities, lifestyles, and prefer places for leisure activities in Kuantan especially during weekend.

Convenience sampling was conducted on eligible respondent that fulfilled inclusion criteria such as belonging to the Kuantan community and aged between 13 to 75 years old, able to understand and read in Malay or English. Meanwhile, exclusion criteria are non-Malaysian and incomplete answering of questionnaire. This study was carried out by distributing validated questionnaires to the voluntary/consented participants. The questionnaire consists of four parts. Part A is the demographic data that consists of participants’ age, race, and education background. Part B to part D are about participants’ knowledge, attitude and practice towards anti-smoking campaign. The validity and reliability of the questionnaire was tested using content expert and pilot study.

**RESULTS**

**Socio-demographic characteristics**

A total of 200 respondents had participated in this study. Majority of the respondent were female; which was 109 respondents (54.5%) and the rest were male respondents (45.5%). In addition, this study found that majority of the respondents were Malay (87%) and the rest were from other races; Chinese (12%) and Indian (1%).

This study identified that respondents come from various education background. Most of the respondents were

Bachelor Degree students (60.5%), followed by SPM level (18.5%), Diploma (10%), SRP or PMR level (5%), primary education (3%) and STPM (2%). Majority of the respondents had monthly income less or equal than (RM)1000 which were (78%) and the rest ( 22%) earned RM1001- RM5000 each month. Detailed demographic characteristics are shown in Table I.

**Table I: Socio-demographic data of respondents (n=200)**

Variables	Category	Frequency	Percentage (%)
<b>Gender</b>	Male	91	45.5
	Female	109	54.5
<b>Education level</b>	Primary school	6	3
	SRP/PMR	10	5
	SPM	37	18.5
	STPM	4	2
	Matriculation	2	1
	Diploma	20	10
	Bachelor Degree	121	60.5
	Master	0	0
<b>Income</b>	Phd	0	0
	Less than RM1000	156	78
	RM1001-RM5000	44	22
<b>Race</b>	RM5001 and above	0	0
	Malay	174	87
	Chinese	24	12
	Indian	2	1
	Others	0	0

**Association between socio-demographic data (gender, income, education level) and level of knowledge towards anti-smoking campaign**

Table II shows the association of the respondents’ socio-demographic data with and level knowledge. It was found that there is significant association between gender (p=0.013). While, there is no significant association between knowledge and education background (p=0.884) and monthly income (p=0.325).

**Table II: Association between Socio-Demographic data and levels of knowledge towards anti-smoking campaign**

Variables	Fre- quen- cy (n)	Level of knowledge on anti-smoking campaign			X <sup>2</sup> Statistics (df)	*P Values
		Low	Moderate	High		
Gender					6.143 (1)	0.013*
Male	91	0	5	86		
Female	109	0	0	109		
Education level					2.358 (6)	0.884
Primary school	6	0	0	6		
SRP/PMR	10	0	0	10		
SPM	37	0	2	35		
STPM	4	0	0	4		
Matriculation	2	0	0	2		
Diploma	20	0	0	20		
Bachelor Degree	121	0	3	118		
Master	0	0	0	0		
Phd	0	0	0	0		
Monthly income					0.968 (1)	0.325
< RM1000	156	0	3	153		
RM1001- RM5000	44	0	2	42		
RM5001 & above	0	0	0	0		

### Association between socio-demographic data (gender, income, education level) and level of attitude towards anti-smoking campaign

Refer to Table III, it found that there are no significant association between attitude and gender, attitude and education background and attitude and monthly income.

**Table III: Association between Socio-Demographic data and levels of attitude towards anti-smoking campaign**

Variables	Frequency (n)	Level of attitude on anti-smoking campaign			X <sup>2</sup> Statistics (df)	*P values
		Poor	Moderate	Good		
Gender					1.345 (1)	0.246
Male	91	0	90	1		
Female	109	0	105	4		
Education level					3.348 (6)	0.764
Primary school	6	0	6	0		
SRP/PMR	10	0	10	0		
SPM	37	0	37	0		
STPM	4	0	4	0		
Matriculation	2	0	2	0		
Diploma	20	0	20	0		
Bachelor Degree	121	0	116	5		
Master	0	0	0	0		
Phd	0	0	0	0		
Monthly income					0.012 (1)	0.913
< RM1000	156	0	152	4		
RM1001- RM5000	44	0	43	1		
RM5001 & above	0	0	0	0		

### Association between socio-demographic data ( gender, income, education level) and level of practice towards anti-smoking campaign

Regarding the associated factors that affect the level of practice, the study data (refer Table IV) show significant association with gender (p=0.00), education background (p=0.00) and monthly income (p=0.026).

**Table IV: Association between Socio-Demographic data and levels of practice towards anti-smoking campaign**

Variables	Frequency (n)	Level of practice on anti-smoking campaign			X <sup>2</sup> Statistics (df)	*P values
		Poor	Moderate	Good		
Gender					25.147 (1)	0.000*
Male	91	0	72	19		
Female	109					
Education level					25.107 (6)	0.000*
Primary school	6	0	6	0		
SRP/PMR	10	0	7	3		
SPM	37	0	28	9		
STPM	4	0	4	0		
Matriculation	2	0	2	0		
Diploma	20	0	16	4		
Bachelor Degree	121	0	118	3		
Master	0	0	0	0		
Phd	0	0	0	0		
Monthly income					4.945 (1)	0.026*
< RM1000	156	0	145	11		
RM1001- RM5000	44	0	36	8		
RM5001 & above	0	0	0	0		

### Correlation between level of knowledge with level of attitude

Referring to Table V, it depicts that there was no significant correlation between level of knowledge and level of attitude.

**Table V: Correlation between levels of knowledge with level of attitude**

Variables	Category	Level of attitude on anti-smoking campaign			X <sup>2</sup>	*P values
		Poor	Moderate	Good		
Level of knowledge	Low	0	0	0	0.131	0.717
	Moderate	0	5	0		
	High	0	190	5		

### Correlation between level of knowledge with level of practice

Table VI shows that there was significant correlation between level of knowledge and level of practice (p=0.00). There were 181 respondents with high knowledge have fair level of practice towards anti-smoking campaign. While 14 of them had high knowledge with good practice.

**Table VI: Correlation between levels of knowledge with level of practice**

Variables	Category	Level of practice on anti-smoking campaign			X <sup>2</sup>	*P values
		Poor	Moderate	Good		
Level of knowledge	Low	0	0	0	48.853	0.000*
	Moderate	0	0	5		
	High	0	181	14		

### Correlation between level of attitude with level of practice

Referring to Table VII, it is clearly illustrates that the level of attitude was not significantly correlate with the level of practice.

**Table VII: Correlation between levels of attitude with level of practice**

Variables	Category	Level of practice on anti-smoking campaign			X <sup>2</sup>	*P values
		Poor	Moderate	Good		
Level of attitude	Low	0	0	0	0.538	0.463
	Moderate	0	176	19		
	High	0	5	0		

## DISCUSSION

### Association between socio-demographic data (gender, income, education level) and level of knowledge towards anti-smoking campaign

The results of this study showed that there was a significant association between gender and level of knowledge (p=0.013). Females have better knowledge on anti-smoking campaign as 100% of them obtained a high score on level of knowledge while only 94.5% male respondents had high level of knowledge and the rest had moderate level of knowledge towards anti-smoking campaign. Females had better knowledge as they were alert and focused towards information

regarding anti-smoking messages showed through various channel such as TV ads and printed materials. The study conducted by M. Obtel et al. (10) also showed significant association between gender and also level of knowledge towards anti-smoking campaign. They found that females had a better knowledge compared to males as females were more aware of the diseases related to smoking. Other than that, this study also showed that there was no significant association between the education level of respondents and level of knowledge towards anti-smoking campaign. Similar to a study by S. M. Yasin, (13), they found that there were no differences between level of education and level of knowledge. This condition might resulted from anti-smoking messages that were easily understand by the community regardless of their education status. Besides, this study also found that there was no significant association between monthly income and level of knowledge. Similar with S. M. Yasin, (13), they found no association between income and level of knowledge. According to them, a community tends to get non-formal information related to anti-smoking campaign regardless of the income status. Even though people may receive a low monthly income, they still can get information related to an anti-smoking campaign through various free channels such billboards and pamphlets.

#### **Association between socio-demographic data (gender, income, education level) and level of attitude towards anti-smoking campaign**

This study found that there was no significant association between gender and level of attitude ( $p=0.246$ ). The results from this study showed that attitude towards anti-smoking campaign between male and female was the same. The results of this study were also slightly different from a study by Leung DYP et al (7), where it was found that there was a significant association between gender and level of attitude towards smoking cessation. According to the study, females had a better attitude towards anti-smoking campaign compared to males. The study also concluded that good attitude resulted from a successful anti-smoking campaign.

This study also revealed that there was no significant association between education level and level of attitude towards anti-smoking campaign ( $p=0.764$ ). People who were highly educated and those with low education had a fair attitude regardless of their education background. However, According to S. M. Yasin, (13), a person with high level of education could lead to a good attitude towards anti-smoking messages. This was because of the early education that he/she got from formal or non-formal education and successful anti-smoking campaigns.

Besides, there was also no significant association between monthly income and level of attitude ( $p=0.913$ ). Similar with Lim.KH et al (8) where their study also found no association between income and attitude as people with low income felt that smoking

was burdensome financially and thus decided not to smoke and to cultivate a good attitude towards the anti-smoking campaign. This was similar to the Kuantan population who had a fair attitude regardless of their income status.

#### **Association between socio-demographic data (gender, income, education level) and level of practice towards anti-smoking campaign**

In this study, there significant association between gender and level of practice towards anti-smoking campaign ( $p=0.000$ ). Male had better practice towards anti-smoking campaign compared to females as many of the respondents were ex-smokers and they decided to quit smoking after knowing the bad effects of smoking especially on their health. They also encouraged friends to stop smoking as well. However, according to M. Obtel et al. (10), there was no association between gender and practice towards anti-smoking campaign among nurses. Both genders showed the same effort to promote the pernicious effects of tobacco on the community.

However, there was a significant association between education level and level of practice towards anti-smoking campaign ( $p=0.000$ ). People with a higher education seemed to have a higher confidence level in promoting the anti-smoking campaign with others and discussing the messages with others compared to people with a lower education level. Monthly income also showed a significant association with level of practice ( $p=0.026$ ). 81.8% out of 44 respondents with a monthly income range of RM1001- RM5000 had a fair level of practice while the rest had good level of practice. S. M. Yasin, (13) in their study stressed that people with good practice towards anti-smoking messages would avoid smoking areas and would not smoking at public areas.

#### **Correlation between level of knowledge with level of attitude**

This study found that there was no significant correlation between level of knowledge and level of attitude ( $p=0.717$ ). Certain respondents with adequate information on the bad effects of smoking did not agreed with the methods used to deliver anti-smoking messages. A few of them also did not agree that reducing the price of cigarettes should be implemented to counter smoking prevalence. In addition, in the research done by S. M. Yasin, (13), although people were aware that smoking was dangerous, they still believed that they could maintaing their good health.

#### **Correlation between level of knowledge with level of practice**

From this study it was found that there was a significant correlation between level of knowledge and level of practice ( $p=0.000$ ). From the result, 92.8% respondents with good knowledge had fair practice towards anti-smoking. This result proves that an individual with good knowledge will put to practice his/her knowledge

as well as adopt fair practice towards anti-smoking campaign. Such an individual tends to promote anti-smoking campaign to others and is more open-minded to receive anti-smoking messages.

### **Correlation between level of attitude with level of practice**

From this study, it was revealed that there was no correlation between level of attitude and level of practice ( $p=0.463$ ). The results showed that although the respondents had fair attitude, only 9.7% of them still had good practice. This proves that good attitude does not guarantee good practice.

### **CONCLUSION**

The results of this study showed a significant association between gender and level of knowledge. All female respondents had a good level of knowledge. This study also showed that there was no significant association between education level and level of knowledge. Monthly income also showed no association with level of knowledge. Overall, the respondents possessed high level of knowledge towards anti-smoking campaign. This study also found that there was no significant association between socio-demographic data which are gender, education level and income with the level of attitude. We can conclude that regardless of socio-demographic data, the respondents only got a moderate level of attitude.

Next, all socio-demographic data which are gender, education level and income showed a significant association with level of practice. Besides, this study also found that there was a correlation between level of knowledge and level of practice but found no correlation between level of attitude with level of knowledge and level of practice. It revealed that respondents with high level of knowledge and moderate level of knowledge only had moderate level of attitude. Respondents with moderate level of attitude also had good level of practice towards anti-smoking campaign.

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