

# FACTORS ASSOCIATED WITH EXPOSURE TO TOBACCO ADVERTISING OR PROMOTION

## AMONG MALE POPULATION AGED 15 YEARS OLD AND ABOVE IN MALAYSIA

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### Introduction

Tobacco advertisements and/or promotions are prohibited in Malaysia as stipulated in Part II & III of Control of Tobacco Product Regulations 2004 [CTPR], Food Act 1983 (Act 281) [FA]. However, any packaging or wrapping contains tobacco products on or inside it are not considered to be violating CTPR<sup>1</sup>. This exception was confirmed by WHO Framework Convention on Tobacco Control (FCTC), where in Malaysia all tobacco advertisements, promotions and sponsorships are comprehensively banned except for tobacco product displays at point of sales as well as nor it is covering cross-border advertising originating from Malaysia (for exportation purpose)<sup>2</sup>. Therefore, tobacco advertising or promotion still exists in this country. This study aims to determine the factors associated with the exposure to tobacco advertising or promotion among male population aged 15 years old and above in Malaysia.

### Material and Methods

We're using secondary data from National Health & Morbidity Survey (NHMS) 2019 conducted between July 14, 2019 until September 30, 2019 using face-to-face interview or self-administered questionnaires. The survey was cross-sectional nationwide population-based with two stages stratified random sampling methods.

"Exposure to tobacco advertising" was defined as either the respondents noticed any advertisement or sign promoting cigarettes in stores where cigarettes are sold within the past 30 days from the data collection.

"Exposure to one of the tobacco promotions" was defined as either the respondents noticed any tobacco promotions (free samples of cigarettes, cigarettes at sale prices, coupons for cigarettes, free gifts or special discount offers on other products when buying cigarettes, clothing or other items with a cigarette brand name or logo, or cigarette promotions in the mail) within the past 30 days from the data collection.

Data were analysed using complex sampling design and multiple logistic regressions.

### Discussion

- Among all types of exposures to tobacco advertising or promotion of male aged 15+ years in Malaysia, the exposure to any advertisement or signs promoting cigarettes in stores where cigarettes are sold ranked the highest (17.6%). This result was consistent with other survey conducted in Vietnam where the highest type of exposure to tobacco advertising and promotion was points of sale (8.6%).<sup>3</sup>
- Respondents within younger age group (15-34 years old) are two times more likely to be exposed to tobacco advertising or promotion compared to the eldest age group (65 years old and above). Younger age group is major target client for tobacco industry thus more attractive advertising or promotion improvised to tackle this group's sight especially in the store selling tobacco product.<sup>4-6</sup>
- This study found that respondent with higher educational background are more prone to the exposure to tobacco advertising or promotion as compared to those with lower educational background. This is similar to the findings in Vietnam<sup>3</sup> but contradict to the findings in Hong Kong<sup>5</sup> and United States<sup>6</sup>.
- Based on ethnicity, Malay and other Bumiputra were more likely to be exposed to tobacco advertising or promotion compared with Chinese ethnic in Malaysia.
- As strongly agreed by most of the studies, current smokers were more likely to be exposed with tobacco advertising or promotion.<sup>3-7</sup>
- Tobacco advertising or promotion contributes to the consumption of cigarettes as it increasing the desire to use the advertised tobacco products and discouraging smoking cessation especially among current smoker.<sup>3-7</sup>

### Conclusion & Recommendation

- Although prohibited by CTPR 2004 but with an exception, Malaysian male population aged 15 and above is still exposed with the tobacco advertisements or promotions.
- An immediate revision of the law is required so that strictly enforcement can be done to bring down this matter to zero exposure to the population.

### Results

Table 1 Sample characteristics (N=5,079)

Variable	n	%
<b>Age group</b>		
15-24	907	17.9
25-34	935	18.4
35-44	893	17.6
45-54	823	16.2
55-64	781	15.4
65 years and above	740	14.6
<b>Locality</b>		
Urban	3101	61.1
Rural	1978	38.9
<b>Education Level</b>		
No formal education	177	3.5
Primary education	1162	23.0
Secondary education	2629	52.1
Tertiary education	1076	21.3
<b>Ethnicity</b>		
Malay	3259	64.2
Chinese	644	12.7
Indian	319	6.3
Other Bumiputras	533	10.5
Others	324	6.4
<b>Working Status</b>		
Not working	1489	29.3
Working	3585	70.7
<b>Current Smoker</b>		
No	3042	60.2
Yes	2007	39.8
<b>Socio-economic Status</b>		
B40	3262	66.8
M40	1199	24.6
T20	422	8.6

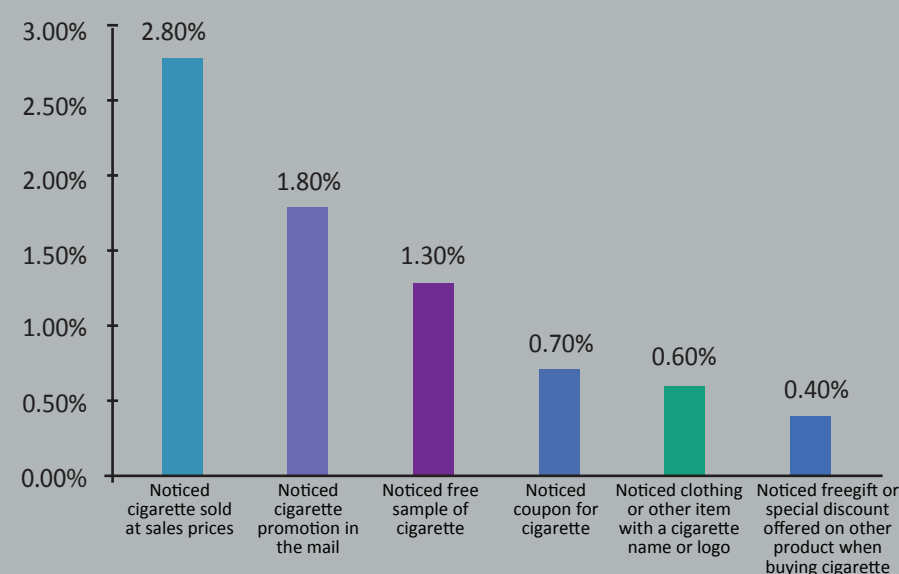


Figure 1 Percentages of respondents noticed to at least one type of tobacco promotion in the past 30 days

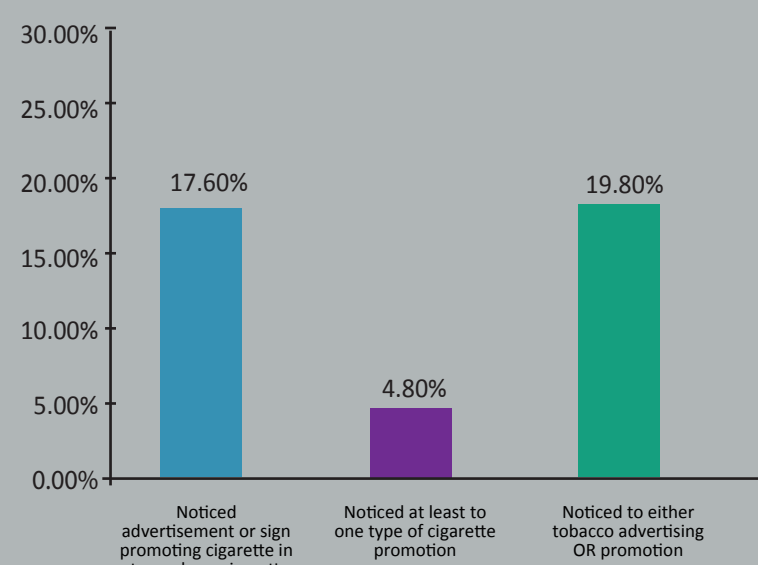


Figure 2 Prevalence of exposure to tobacco product advertising, or at least to one type of promotion OR to either one among respondents in the past 30 days

Table 2 Associations between the exposure of tobacco product advertising or promotion with socio-demographic variables and current smoking status among male population aged 15 years old and above in Malaysia.

Variable	Crude OR (95% CI)	p-value	Adjusted OR (95% CI)	p-value <sup>a</sup>
<b>Age group</b>				
15-24	2.92 (2.20-3.87)	<0.001*	2.20 (1.60-3.02)	<0.001*
25-34	3.23 (2.44-4.28)	<0.001*	2.03 (1.45-2.84)	<0.001*
35-44	2.43 (1.82-3.25)	<0.001*	1.55 (1.10-2.19)	0.011*
45-54	2.11 (1.56-2.83)	<0.001*	1.40 (1.10-1.98)	0.052
55-64	2.37 (1.77-3.19)	<0.001*	1.78 (1.29-2.47)	<0.001*
65 & above	1		1	
<b>Locality</b>				
Urban	1.05 (0.91-1.21)	0.491	1.07 (0.92-1.24)	0.395
Rural	1		1	
<b>Education level</b>				
No formal education	0.42 (0.23-0.76)	0.004*	0.47 (0.25-0.86)	0.015*
Primary education	1		1	
Secondary education	1.51 (1.26-1.81)	<0.001*	1.12 (0.91-1.37)	0.290
Tertiary education	1.79 (1.45-2.21)	<0.001*	1.42 (1.12-1.80)	0.004*
<b>Ethnicity</b>				
Malay	1.93 (1.52-2.46)	<0.001*	1.49 (1.15-1.93)	0.002*
Chinese	1		1	
Indian	1.56 (1.08-2.23)	0.016*	1.41 (0.97-2.04)	0.075
Other Bumiputra	1.99 (1.47-2.70)	<0.001*	1.65 (1.20-2.27)	0.002*
Others	0.98 (0.66-1.46)	0.918	0.77 (0.50-1.18)	0.229
<b>Working status</b>				
Not working	1		1	
Working	1.48 (1.27-1.74)	<0.001*	1.21 (0.99-1.47)	0.061
<b>Current smoking status</b>				
Not smoking	1		1	
Smoking	1.86 (1.63-2.14)	<0.001*	1.75 (1.51-2.02)	
<b>Socio-economic status</b>				
B40	0.79 (0.62-1.00)	0.047*	0.87 (0.67-1.12)	0.285
M40	0.89 (0.68-1.15)	0.368	0.88 (0.67-1.15)	0.350
T20	1		1	

Notes: \* – significant at  $\alpha=0.05$ ; \* – Backward LR Multiple Logistic regression was applied. Multicollinearity and interaction were checked and not found. Hosmer Lameshow test p-value = 0.665. Classification Table (overall correctly classified percentage = 78.8%) and ROC curve (area under ROC curve= 64.1%) were accepted to check model fitness.



Figure 3 Example of tobacco product displays which is legal due to the exception given in Regulation 4(3) of the CTPR 2004.



Figure 4 One of the advertisement confiscated by Inspectorate & Legislative Unit from District Health Office for the purpose of prosecution. This advertisement was found attached behind the cashier machine in front of the view of customers inside one of the retail shop that sell cigarette.

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