



# Impact of Smoke-Free Melaka City (SFMC) policy on future visit to places within smoke-free zones among adult smokers: Findings from Intercept Study of the SFMC Policy

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## BACKGROUND AND OBJECTIVES

### BACKGROUND:

Since Jun 15, 2011, the state of Melaka in Malaysia has implemented a 100% smoke-free (SF) city policy (indoor and outdoor). One of the concerns of implementing SF policy especially among business owners is the potential economic impact in terms of frequency of patrons/customers visiting to restaurants, cafés, clubs, and other recreational centers such as children playgrounds and the zoo.

### OBJECTIVE:

To examine the impact of SFMC policy on smokers' perception and their future visits to places within smoke-free zones after the implementation of the SF policy.

## METHODS AND ANALYSES

### SURVEY:

Data were collected in June 2012 using systematic intercept sampling. A total of 601 adults smokers within six smoke-free zones were recruited through a face-to-face interview. The six smoke-free zones were:

- 1) Jonker Walk,
- 2) Jalan Kota,
- 3) Melaka International Trade Centre (MITC),
- 4) Bandar Warisan Dunia,
- 5) Jasin City Centre and
- 6) Alor Gajah City Centre.

### MAIN PREDICTORS:

In this study smokers were asked about:

- 1) In the last 6 months, have you noticed smoke-free Melaka advertising or information that talks about the dangers of smoking, or encourages quitting in several places (television, radio, poster/signage, etc) ,
- 2) Overall, would you say that a ban on smoking indoors in all public places in Melaka would be a good thing or a bad thing, and
- 3) How do you anticipate this smoke-free policy impacting your future visit (to work, shop, dine and recreation) to places within those area.

### ANALYSES:

Descriptive analysis, univariate, and multiple logistic regressions were applied by using the complex sample's package in SPSS 18 to account for the survey design. Odd ratio and 95% Confident Interval were calculated for each of the predictor variables. In this analyses,  $P < 0.05$  was set as statistical significant. Socio-economic and demographic variables such as age, gender, race, residency status and level of education were used as covariates for multiple logistic regression analysis.

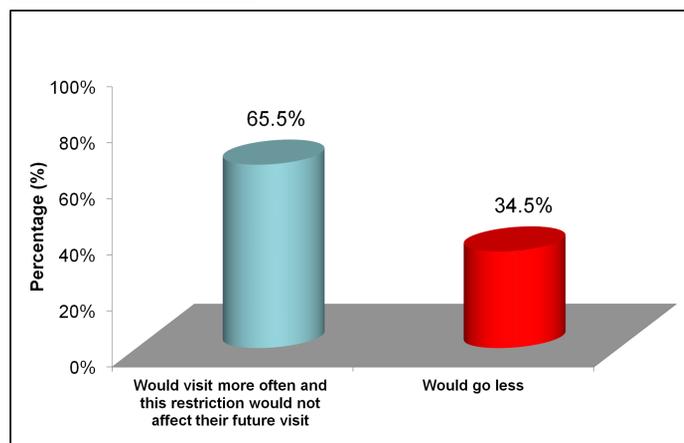


## RESULT AND DISCUSSION

**Table 1: Demographic Characteristics**

VARIABLES	PERCENTAGE (%)
<b>Gender (N=1039)</b>	
Male	76.7
Female	23.3
<b>Age group (N=1039)</b>	
18-24 years old	34.6
25-39 years old	36.3
40-54 years old	20.0
More than 55 years old	9.0
<b>Race (N=1038)</b>	
Malay	76.4
Chinese	17.2
Indian	4.2
Others	2.1
<b>Level of education (N=1037)</b>	
Primary	9.0
Secondary	57.5
Tertiary	33.5
<b>Residency status (N=1037)</b>	
Resident	68.1
Visitor	24.0
Temporary resident	7.9

**Figure 1: Impact of SFMC policy on future visits to venues in smoke-free zones**



**Table 2: Association between awareness of the SFMC advertisement or information that talks about dangers of smoking and encouraged quitting with perception that a ban on smoking indoors in all public places in Melaka**

Variables	Perception that a ban on smoking indoor in all public places in Melaka would be a good thing	
	Univariate p value OR(95% CI)	Multivariate p value OR(95% CI)
<b>Awareness of SFMC advertisement or information that talks about dangers of smoking and encouraged quitting</b>	N=1017 P<0.001 1.14 (1.06, 1.22)	N=1009 P<0.001 1.21 (1.11, 1.31)

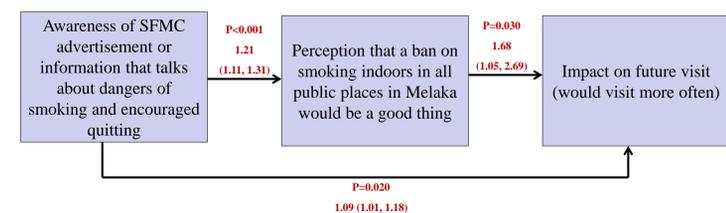
Note: Other variables in multiple regression analysis not reported above are gender, age, race, level of education, and residency status.

**Table 3: Association between awareness of the SFMC advertisement or information that talks about dangers of smoking and encouraged quitting with impact on future visit to venues in smoke-free zones**

Variables	Impact on future visits (would visit more often and this restriction would not affect their future visit)	
	Univariate p value OR(95% CI)	Multivariate p value OR(95% CI)
<b>Awareness of SFMC advertisement or information that talks about dangers of smoking and encouraged quitting</b>	N=571 P=0.280 1.04 (0.97, 1.12)	N=568 P=0.002 1.09 (1.01, 1.18)
<b>Perception that a ban on smoking indoors in all public places in Melaka would be a good thing</b>	P=0.130 1.39 (0.91, 2.12)	P=0.030 1.68 (1.05, 2.69)

Note: Other variables in multiple regression analysis not reported above are gender, age, race, level of education and residency status.

As shown in Figure 1, most smokers stated that they would visit more often and this restriction would not affect their future visits to those places which were gazetted by the state regulation as smoke-free zones. Multivariate analysis revealed that awareness of the SFMC advertisements and information was significantly associated with smokers' perception that indoor and outdoor smoking ban in all public places in Melaka was a good thing (Table 2). Awareness of these advertisements and information as well as perception that a ban on smoking indoor and outdoor in all public places in Melaka was a good thing were significantly associated with smokers who said they would visit more often places within the smoke-free zones in Melaka (Table 3).



## CONCLUSION

SFMC policy has shown the frequency of visits to places within Smoke-Free Zones by smokers were high especially among those smokers who are aware of the policy and have positive perception on indoor and outdoor smoking ban. Thus, refuting the claim that the Smoke-Free Policy would have a negative impact for businesses owners.

## ACKNOWLEDGMENT

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