



SEATCA
SOUTHEAST ASIA TOBACCO CONTROL ALLIANCE

**The Collaborative Funding Program for
Southeast Asia Tobacco Control Research**

SMOKING IN GIRLS AND YOUNG WOMEN IN MALAYSIA

**Foong Kin, Ph.D.
Tan Yen Lian, M.A.**

**Financial support from
The Rockefeller Foundation and
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EXECUTIVE SUMMARY

The study provides updated data on the extent and pattern of smoking, awareness smoking-related diseases, exposures to tobacco advertising, promotion and sponsorship, as well as attitude and beliefs towards smoking. The study also focused on assessing the respondents' awareness of and support for tobacco control policies such as tobacco advertising ban, implementation of graphic health warning and smoke-free policy. The first phase was a cross-sectional survey of lower and upper secondary school girls and young women studying at college/university aged between 13- 25 years. Three thousand sixty four young girls and women from urban Kuala Lumpur and the rural areas of Hulu Langat in Selangor participated in the study. A follow-up qualitative study using Focus Group Discussion was conducted with 26 groups of students.

About 20% of the girls and young women have ever smoked and 8% are currently smoking. The rate of smoking is higher among college and university students. There is no significant difference in smoking rates between the urban and rural areas. One in three female has a father who smoked, 2.3% of females' mother smoked. The great majority of girls and young women have a negative opinion and image of smoking. Smokers were more likely to have significantly more positive opinion and image of smoking compared to non-smokers. Awareness of smoking-related diseases was high. About two-thirds (60%) of females perceived that Malaysian society approves of smoking. Significantly larger percentage of current smokers believed that smoking is a norm and that it is socially acceptable for girls to smoke compared to non-smokers.

A sizeable proportion of girls and young women are exposed to tobacco advertising and promotion. Study results show that those who are exposed to tobacco advertising are more likely to smoke. Socio-cultural and personal factors predicted smoking. External socio-cultural factors have stronger influence on smoking uptake among girls and young women. These factors are peer smoking, mother smoking and exposure to tobacco advertising and promotion. Peer smoking is the strongest predictor of smoking. Females who have at least one close friend who smoked are 13 times more likely to take up the habit. Girls who have mothers who smoke are 4 times more prone to smoking. Exposure to tobacco advertising increases the likelihood of smoking by 3 times. Females who were offered free cigarettes in the last year and those who owned merchandise with a cigarette brand name were about 2 times more likely to smoke.

Personal factors such as attitudes towards smoking and perception of smoking norm predicted current smoking. Females who do not have a negative opinion of smoking are 4 times more likely to smoke. Those with a positive image of smoking were 2 times more prone to take up smoking. Girls and young women who perceived that it is socially acceptable for females to smoke were 2 times more likely to smoke. These findings are consistent with those from other studies.

Almost all (95%) of the females have been exposed to anti-smoking messages. Most females were aware of tobacco control policies in Malaysia such as tobacco advertising ban, implementation of graphic health warning, smoke-free policy and ban on sale to

minors.

Most girls and young women are aware of policies such as health warning on cigarette packs, smoke-free policies, ban on tobacco advertising, ban on sale to minors and ban on smoking among minors. Eight in ten females agreed that cigarette packs should have more health information compared to now and they supported the implementation of pictorial health warning. Most respondents also support a ban on tobacco advertisements inside shops and stores as well as display of cigarettes inside shops and stores.

Overall support for smoking bans in selected public places was high. Over 80% supported total ban in indoor and air-conditioned places such as restaurants, hospitals and educational institutions. However, support for ban in workplaces and non air-conditioned indoor and outdoor public places and places of worship was low. Total smoking ban in bars, pubs and discos was supported by a minority. The majority thinks that there should be partial bans in such entertainment outlets.

Most female respondents felt that the government is ineffective in implementing smoking bans. This is attributed to several factors: lack of enforcement, public awareness of policy is inadequate, lack of concern of non-smokers about the concern of passive smoking, and the high social acceptability of smoking. There were suggestions to improve the implementation of smoking ban including increasing enforcement and awareness of current smoke-free policy. Public education on the harms of secondhand smoke should be intensified.

Most females think that the youth smoking prevention programmes of the industry is ineffective in preventing smoking among young people. However, most expressed some support for the corporate social responsibility activities of tobacco industry. Most females have a negative attitude towards the tobacco industry and perceived that the industry entices young females to smoke.

The above findings have several implications for tobacco control. To reduce youth smoking and smoking among girls and young women Malaysia should prioritise implementation of tobacco control measures in line with recommendations of the WHO Framework Convention on Tobacco Control (FCTC). As a first step to successfully attain tobacco control goals, the government should pass the draft Tobacco Control Act immediately. The tobacco control law should comply with the FCTC recommendations. The government should also increase the tax on tobacco products to 75% of retail price as recommended by the World Bank to make them unaffordable to youth. It is also recommended that the government introduce a 2% dedicated tax on tobacco products to support health promotion activities and increase anti-smoking campaigns to reduce smoking among young people. We urge that the government implement the ban on kiddie packs (less than 20 sticks) immediately.

To counter the tobacco industry strategies to promote its products to the youth and to deter it from using retailer outlets as venue to advertise and promote its products, the government should ban the display of cigarette packs at all retail outlets. In addition, the government should also ban the use of promotional items such as lighter and ashtray that

comes with a tobacco product. To protect the Malaysian populace from the harms of exposure to secondhand smoke, the government should legislate and implement 100% smoke-free environments. Priority should be given to instituting a total smoking ban in all private workplaces and entertainment outlets such as pubs, nightclubs, discos, karaoke lounges, casinos, non-air-conditioned eating outlets. To further support this policy the government should not permit having smoking rooms even with ventilators because they are found to be ineffective. In line with this is the need to ban smoking sections in all indoor venues. The government's announcement that graphic health warnings on cigarette packs will be implemented beginning 2009 is a welcome move. As a complementary measure, the government should also ban the use of sleeve or any material that may conceal or obscure the graphic health warning on a cigarette pack. The government should also ban the use of descriptors since they mislead smokers to think that some tobacco products are less harmful and that the use of these products is an alternative to quit smoking. Anti-smoking media campaigns should be expanded through all possible means, such as the mass media (TV, radio, newspapers)

BACKGROUND

Smoking prevalence among young women is increasing rapidly globally whereas for men it is in a decline. Although current overall prevalence is about 4 times higher among men than women globally (48% vs 12%), this situation is quickly changing. Recent studies show that young girls are smoking in most countries nearly as much as young boys, and in some, their prevalence is even higher.¹

Between 1950 and 2000, about 10 million women died from tobacco use and the figure is expected to double in the next 30 years. According to Mackay and Amos², “the epidemic (of tobacco use) among women will not reach its peak until well into the 21st century. This will have enormous consequences not only for women’s health and economic wellbeing but also for that of their families”.

Increase in smoking among young women has been reported in ASEAN (Association of Southeast Asian Nations) countries. In Thailand, smoking prevalence among female youth (15-24 years old) has increased in recent years. The upward trend was first seen in a 1997 study which showed that almost 5% of female high school and vocational students were smokers, which was twice that of the national smoking rate for women. This increase may be related to the increased prominence of foreign brands, because nearly 70% of these young women preferred Marlboro.¹

Smoking among young adolescents in ASEAN countries is also an important concern. Findings from the Global Youth Tobacco Survey (GYTS) revealed the substantial difference in smoking prevalence among girls aged 13 to 15 years among countries in ASEAN. Malaysia, the Philippines and Singapore ranked the highest with a prevalence of 11.2% and 8.8%, 8.8%, respectively. Thailand and Myanmar reported a smoking prevalence of about 5%. Among the lowest reported prevalence were those in Indonesia (2.3%), Vietnam (1.9%) and Cambodia and Lao PDR at less than 1% prevalence.³

1.1 Situation in Malaysia

The national prevalence of smoking among adults 18 years and above obtained from the Third National Health and Morbidity Survey conducted in 2006 was 21.5%, male smoking rate was many fold higher (46.4%) than that of female (1.6%). Current smoking rate was higher in rural areas and the highest rates were recorded among respondents who were in their twenties and early thirties.⁴

The Malaysian GYTS conducted in 2003 found that one in 3 students have ever smoked cigarettes, while a significantly higher rate was found in males (53.6%) than females

¹ British Columbia Centre of Excellence for Women’s Health. *Turning a New Leaf*. Canada. 2006.

² Mackay, J and Amos, A. Women and Tobacco. *Respirology*, 8:123-130, 2003

³ SEATCA. The ASEAN Tobacco Control Report Card. Bangkok. 2007

⁴ Zariah Mohd Zain, et al. Adult Smoking in Malaysia in The Third National Health and Morbidity Survey III- Smoking, Ministry of Health, Malaysia. 2007. (unpublished report)

(11.4%).⁵ However, 25.3% of students currently use any tobacco products, with 19.9% currently smoking cigarettes and 7.9% using some other tobacco products. This was significantly higher for male students compared to female students. Cigarette consumption was 35.5% among males and 4.3% among females. Most (37.2%) of the current female smokers reported smoking at home and 33.6% purchased their cigarettes from the stores.

The Third National Health and Morbidity Survey found that ever smokers among 13 to 17 year olds was 14.7% with a higher rate in the rural (18.4%) compared to the urban (12.3%) area. Adolescent ever smokers were significantly higher amongst males (26.2%) than in females (3.0%). As many as 8.7% of Malaysian youths were current smokers, with more in the rural area (11.5%) than in the urban area (6.9%) and mainly among boys (16.6%) rather than girls (0.7%). Smoking rates increased with age, from 1.1% among 13 year-olds to 6.9% in 17 year-olds. Amongst current and frequent smokers the mean initiation age was 13.6 years, and it was similar between urban and rural respondents. Boys started smoking earlier (13.6 years old) compared to girls (14.1 years for current and 14.4 years for frequent smokers).⁶

An earlier study in 2005 on tobacco use among female college and university students in Kuala Lumpur, Malaysia found that 21.3% of these students have ever smoked and 4.3% were currently smoking.⁷ Most of these smokers were light smokers, smoking less than 10 cigarettes daily. Most smoked in the company of friends and outside the home. Two in three smokers have attempted to quit smoking. This study also found that most college and university students have high knowledge about smoking effects. Smokers were more likely to have a positive image of smoking such as smoking can cause weight loss, and that it is acceptable for women to smoke.

1.2 Tobacco Control in Malaysia

Prior to the Control of Tobacco Product Regulations (CTPR) 1993 made under the Food Act 1983 by the Health Ministry, there was no specific legislation for tobacco control. Subsequently, the CTPR '93 was amended in 1995 and again in 1997. As tobacco control measures improved the provisions in CTPR '97 included a limited ban on tobacco advertisement, sponsorship, prohibition to distribute free sample of tobacco product, prohibition on sale to minor, prohibition on placement of vending machine, the designation of smoke-free areas and requirement for health warnings by the government.

The CTPR 2004, which is quite comprehensive, was gazetted on 23 September 2004..^{8,9}

⁵ Manimaran Krishan. Global Youth Tobacco Survey (GYTS) Malaysia. Ministry of Health. 2003

⁶ Mohamad Haniki Nik Mohamed, et al. Smoking Adolescence in The Third National Health and Morbidity Survey III-Smoking, Ministry of Health, Malaysia. 2007. (unpublished report)

⁷ Khor YL. Factors Associated With Tobacco Use Among Female College and University Students in Kuala Lumpur, Malaysia. National Poison Centre, Universiti Sains Malaysia, Penang, 2005.

⁸ His Majesty's Government Gazette P.U. (A) 383. Food Act 1983. *Control of Tobacco Product Regulations 1993*, 18 November 1993

⁹ His Majesty's Government Gazette P.U. (A) 324. Food Act 1983. *Control of Tobacco Product*

The legislation banned tobacco product advertisement from Formula 1 Grand Prix and any motor vehicle racing events held at Sepang International Circuit after 31 December 2005 and football matches after 31 December 2004.

On 23 September 2003 Malaysia signed the World Health Organisation (WHO) – Framework Convention on Tobacco Control (FCTC) and ratified the convention on 16 September 2005. The CTPR 2004 was therefore gazetted midway between the signing and the ratification of the WHO document. When Malaysia ratified the document, she was among the 87 WHO member countries to do so.

There were marked improvements in the CTPR 2004 which is part of the Food Act 1983 and among the notable ones is the expansion of the list of places where smoking is banned in 1997. Smoking bans are extended to toilets, any area used for assembly other than private places or residential, petrol stations, any place used for religious purposes, and internet and internet café. Hence, the list of places where smoking is banned is quite comprehensive except the exclusion of pub, discotheque, night club or casino “at any time when such place is open to the public”.

For air-conditioned eating places, the proprietor is able to designate an area of not more than one-third of the total floor space for smoking and it has to have a partition and an “approved” mechanical ventilation system. The legislation is weak in this area because it did not elaborate what the partition is and what is defined as an “approved” mechanical ventilation system. In most restaurants that permit smoking, a rope barricade is used as the partition between the smoking and non-smoking sections.

Despite the fact that the CTPR 2004 being rather comprehensive, it is still possible to find luxury products bearing cigarette brand names such as Dunhill and Camel. Although the FCTC and CTPR 2004 ban indirect advertisement, it was found that, at least the British American Tobacco Malaysia (BATM), sold their stake in the luxury product company but owned it indirectly through overseas stakeholding. The luxury product store even changed its name to Dunhill instead of Alfred Dunhill.

Since the start of the FCTC initiatives, there are fewer cross-border violations particularly those involving sports because of a ban on industry sponsorship. Apparently cross-border advertisements worked for most countries.

The legislation also bar people from displaying or affixing, or permitting any tobacco product advertisement; however, it does not define a cigarette pack as an advertising medium and hence cigarette packs have been used to promote new products or new pack designs. Giving out “gifts” with tobacco products are banned and the industry has managed to circumvent the law by packing items together with tobacco products with the items charged at a token price. Hence these non-tobacco items can no longer be defined as “gifts”.

Recently, the government passed the amended CPTR 2004. The amendments include the introduction of graphic health warning on cigarette packs, a ban on descriptors such as “mild” and “light”, a ban on items that come with purchase of cigarettes and also the use of words that indicate cigarette promotion.

Points-of-sale are still selling single sticks although it has been banned by the CTPR 2004. It is done by selling under-the-counter because such sale is highly lucrative. In the urban areas, for example, a single stick of Dunhill is sold for RM1 which if sold in packs of 20s, cost RM0.41 each. Therefore, the retailers who sell single sticks make a profit of RM11.80 above the normal profit they get from selling whole packs at RM8.20.

Despite the shortcomings, the government has made some serious efforts to implement the CTPR 2004 and comply with the requirements of the FCTC by conducting anti-tobacco promotion with the *Tak Nak* (“Say No”) mass media campaign. The *Tak Nak* is held at state and national levels through various mass media channels such as television, newspaper, magazine, radio, cinema, billboards, school advertising panels, giant posters and community boards. A national evaluation conducted in 2005 showed that more than 95% of adolescent and adult smokers and non-smokers were exposed to the campaign messages¹⁰.

The Malaysian Health Ministry (MOH) has also set up Quit Clinics – 294 clinics as of November 2007 – in the country to help smokers to quit their smoking habit. MOH and the National Poison Centre have also established tobacco “Infoline” and “Quitline” to provide further access to cessation assistance for smokers.

Since 1990, tobacco and tobacco product taxation has increased steadily and progressively and as in 2005, cigarettes were taxed by stick rather than by weight. Since July 2007, there was an increase of 25% of excise tax on each pack of cigarette. Such taxation over the years has pushed the prices of cigarettes up. The current tax rate is 54% of the retail price.

Strong lobbying by multinational tobacco companies often poses difficult challenges to tobacco control in the country. There is strong reason to believe that the influence of the tobacco industry has led to the deferment in implementation of the ban on small cigarette packs of less than 14 till year 2010. Tobacco industry continues to market and promote its products using the cigarette pack and at point-of-purchase. These evidences lead one to question the political will of the Malaysian government to enhance and sustain tobacco control.

The FCTC is a powerful tool for public health that complements existing efforts of tobacco control in the country. It has provided impetus for rapid advancement for tobacco control in Malaysia. Currently the MOH is in the process of enacting the Control of

¹⁰ Foong K, et al. *Report Evaluation of the National Anti-Smoking Campaign in Malaysia. Tak Nak Media Campaign 2004*. Clearinghouse and Research Network for Tobacco Control, National Poison Centre of Malaysia; May 2005

Tobacco Product Act that will be consistent with all the requirements of the FCTC.

1.3 Rationale of Study

Recent studies on smoking on women in selected ASEAN countries have identified smoking prevalence among young women (mainly college/university students) and the social, psychological and environmental factors associated with smoking.¹¹ The current study proposes to examine the smoking behaviour of girls and young women, their awareness of and support for tobacco control policies as well as their exposure to and perception of tobacco advertising, promotion, sponsorship and the tobacco industry's youth smoking prevention programmes and corporate social responsibility activities. Findings from this study would contribute to the development of tobacco control policies that are gender-sensitive.

1.4 Specific Objectives of Study

1. To determine the extent of smoking and smoking behaviour of these respondents.
2. To examine the girls' and young women's awareness of smoke-free places, ban on advertising, promotion and sponsorship and health warnings on cigarette packs.
3. To determine exposure to tobacco advertising, promotion and sponsorship among the respondents
4. To examine respondents' support for tobacco control policies
5. To examine respondents' perception of tobacco industry's youth smoking prevention programme and corporate social responsibility activities.

¹¹ SEATCA. Tobacco Use in Southeast Asia: Key Evidences for Policy Development. Bangkok, 2007.

RESEARCH DESIGN AND METHODS

Cross-sectional surveys of lower and upper secondary school girls and female college/university students were conducted. A combined quantitative and qualitative method was used to investigate the above objectives. The first phase of the study involved cross-sectional sample surveys of female secondary and college students. Data were collected using a self-administered structured questionnaire. This was followed by a more in-depth examination of key findings obtained from the surveys using focus group discussion method. The objective was to elicit a better understanding and insight when interpreting survey results.

Respondents from the urban areas were sampled from the urban capital city of Kuala Lumpur in the Federal Territory. Rural schools in the District of Kajang, Selangor were randomly selected for the study.

2.1 Sampling Design and Sample Size for Cross-sectional Surveys

The study selected girls in urban and rural secondary schools as well as urban female college students. Young teenage girls aged 13-15 years of age and older female adolescents 16-19 years old were sampled for the study. Young female adults aged 20-25 years old were mainly sampled among college or university students.

a. Sampling for School-based Survey.

The selection of the school sample was carried out in the following manner:

- i. Since the study focuses on students in the following age categories: 13-15, 16-19, and 20-25 year olds, the study selected students from secondary schools in Kuala Lumpur and Kajang District in Selangor. Students in lower secondary (Form 1-3) level correspond to the age of 13-15 and those in the upper secondary matches that of the 16-19 age group.
- ii. The sampling frame was created from the data base of schools compiled by the Department of Schools, Ministry of Education, Malaysia. A list of schools from the urban capital city of Kuala Lumpur as well as from the rural Kajang district in Selangor state were drawn up.
- iii. The sample was drawn using a 2 stage cluster sampling design. The first sampling stage include simple random selections from total number of secondary schools in both Kuala Lumpur and Kajang. Six urban schools from Kuala Lumpur and 6 rural schools from the rural areas in Hulu Langat district in Selangor were selected.
- iv. For the second stage, in each selected secondary school, classes were selected for each grade. The number of classes selected varies between the schools because of the difference in number of classes and grades. All female students in the selected classes participated in the survey.

b. Sampling of Female College/university/vocational Students

Colleges and universities provided a relatively convenient avenue for recruiting young women between the ages of 20-25 years for this study. Since the whole Federal Territory

is gazetted as urban, there were no colleges or universities that are located in rural areas. Female students from 4 public and 5 private institutions who agreed to participate in the study were included in the study. The respondents were from a mix of sciences, arts and health-related disciplines. A total of 1,003 female college/university students were sampled for the study, 494 from public institutions and 509 from private institutions.

Sample Distribution

The study sampled a total of 3,064 female secondary and college/university students in the category of 13-15, 16-19 and the 20-25 year olds. Tables I and II below present the breakdown of respondents by location and age group and level of education, respectively.

Table I: Distribution of sample by age group and location

| Location | 13-15 years old | 16-19 years old | 20-25 years old | Total |
|----------|-----------------|-----------------|-----------------|-------|
| Urban | 549 | 790 | 824 | 2,163 |
| Rural | 498 | 403 | - | 901 |
| Total | 1,047 | 1,193 | 824 | 3,064 |

Table II: Distribution of sample by level of education and location

| Location | Lower Secondary | Upper Secondary | College/University | Total |
|----------|-----------------|-----------------|--------------------|-------|
| Urban | 546 | 614 | 1,003 | 2,163 |
| Rural | 497 | 404 | - | 901 |
| Total | 1,043 | 1,018 | 1,003 | 3,064 |

2.2 Qualitative Study Using Focus Group Discussion (FGD) Method

A total of 26 focus group discussions were conducted as specified below:

| Location | Lower Secondary | Upper Secondary | College/University |
|----------|-----------------|-----------------|--------------------|
| Urban | 4 | 4 | 10 |
| Rural | 4 | 4 | |
| Total | 8 | 8 | 10 |

Two schools in the urban and 2 in the rural areas were selected for carrying out the FGDs. Each FGD comprised of 6 female students.

2.3 Survey Questions

The survey included measures of:

- a. Awareness of and support for tobacco control policies and regulations such as smoking restrictions, ban on advertising, promotion and sponsorship, as well as warning labels on cigarette pack.
- b. Exposures to tobacco advertising and promotion and anti-smoking activity.
- c. Beliefs about the tobacco industry and perception of tobacco industry youth smoking prevention programme and corporate social responsibility activities.
- d. Smoking status and smoking history, including daily consumption, brand used, and age of onset.
- e. Demographic characteristics (grade, age, gender, etc.)

The questionnaire is attached in the appendix.

2.4 Measures

Smoking Behaviour

Smoking status was assessed by asking “Have you ever smoked a cigarette, even just a few puffs?” and “How many cigarettes have you smoked in your life?” Respondents who had smoked at least one cigarette were asked: “Think about the last 30 days. How often did you smoke?” The following criteria were used to define smoking status: *Never Smokers* (have never smoked a cigarette); *Ever smokers* (have tried cigarettes, even just a few puffs) and *Current smokers* (smoked in the past 30 days).

Age of initiation was measured by asking, “How old were you when you first smoked a whole cigarette?” Cigarette consumption among current smokers was assessed by asking, “During the past week, on the days you smoked, how many cigarettes did you smoke each day?” Current smokers were also asked the reasons for smoking, how often they smoke with friends and in the presence of their parents, their preferred brand, where they usually get their cigarettes, where they usually smoke, and expenditure on cigarettes in the last month.

In addition, current smokers were also asked to report the date of their last quit attempt, their intention to quit, and whether various things have made them think about quitting.

The survey included one measure of susceptibility: “If you are not smoking now, do you think you will smoke a cigarette in the near future?” Perception of the ease of quitting was assessed by asking, “Once someone has started smoking regularly, do you think it would be easy or hard for them to quit?”

Exposure to Advertising and Promotion

Exposure to cigarette advertising was assessed by asking respondents whether they have noticed cigarettes or tobacco products advertised in any of the following places: on

posters, in magazines, at shops or stores, in discos/karaoke clubs, in lounges, etc., and on or around street vendors; and how often they have seen advertisements for cigarettes at sports events, fairs, concerts, or community events. Exposure to cigarette promotion was evaluated by two items: “In the last year, has anyone offered you a free sample of cigarettes, other than friends or family?”

Exposure to Anti-smoking Media Campaigns

Exposure to anti-smoking media campaigns was measured by asking respondents, “In the last six months, have you noticed advertising or information that talks about the dangers of smoking, or encourages quitting, in any of the following places: television, radio, posters, billboards, newspapers or magazines, cinema, shops/stores, or on cigarette packs?” Respondents were also asked if they saw any advertisements from tobacco companies on the dangers of smoking.

Opinion on Tobacco Control Measures

Respondents were asked their opinion on health warnings on cigarette packs, ban on tobacco advertising, promotion and sponsorship, ban on smoking scenes in movies and TV programmes, ban on display of cigarette packs at point-of-purchase, tobacco industry and their corporate social responsibility activities of tobacco industry and implementation of tobacco control measures such as smoke-free areas.

Opinion on Smoke-free Areas

Respondents were asked their opinion whether smoking should be allowed at various public places (hospital, workplace, air-conditioned and non air-conditioned restaurants, public transport, place of worship, college).

Knowledge and Perception of Risks of Smoking

Knowledge and perception of the risks caused by smoking were assessed by asking if smoking causes various diseases, whether light or mild cigarettes are less harmful than regular cigarettes, whether cigarette smoking is harmful to smokers’ health, and whether cigarette smoke is dangerous to nonsmokers.

Beliefs and Attitudes Toward Smoking

Attitudes toward male and female smoking were measured using a 6 item scale and rated on a 4-point Likert scale ranging from “strongly agree” to “strongly disagree”. Beliefs about smoking were assessed using an 8 item scale ranging from “strongly agree” to “strongly disagree”. Respondents were also asked about their overall opinion of smoking. Peer smoking was measured by asking respondents to indicate how many of their 5 closest friends smoke.

Socio-demographic Characteristics include sex, age, nationality, ethnicity, year of study, field of specialization, mother's level of education, father's level of education, place of residence of parents, older brother smoking, older sister smoking, father smoking and mother smoking.

2.5 Data Analysis

2.5.1 Survey data collected were processed and analysed using SPSS. Cross-sectional comparisons of each category of respondent and between urban and rural area were carried out. Quantitative data obtained from the survey of female respondents were analysed using descriptive statistics. The relationships between awareness, beliefs and smoking status were examined using bivariate analyses. A multivariate analysis using logistic regression was used to determine factors that significantly predicted current smoking status.

2.5.2 Qualitative data collected from focus group discussions were transcribed and analysed according to emerging themes. Data were reported in the form of narratives.

2.6 Ethical Concerns

Approvals to conduct the study in the selected secondary schools were obtained from the Ministry of Education and the Federal Territory and Selangor State Department of Education. Respondents were informed about the research objectives, methods, the involvement of the respondents and the length of time of involvement, and plan on the use of the research results including how these will be disseminated. Verbal consent were obtained from the respondents. Respondents were assured about the confidentiality of the information they provided and that the presentation of the results of the research will always be done in the collective form.

2.7 Dissemination Plan

Results of the study will be published in a peer-reviewed journal. Findings of the study will be forwarded to policy-makers, governmental and non-governmental bodies who are involved in tobacco control efforts. A fact sheet and policy brief summarising salient research findings and recommendations will be prepared for presentation to policy makers

RESULTS

3.1 Characteristics of Respondents

Over half (56.2%) of all the respondents were Malays whilst another 31.1% were Chinese with 10.3% Indians and 2.5% were from other races (Table 1). A majority of the respondents were from the urban areas. All college and university students were from the urban areas. Half to about two thirds of the lower and upper secondary students were from the urban areas, respectively.

Table 1: Demographic characteristics of respondents (% distribution of respondents)

| Characteristic | Lower Secondary (n=1043) | Upper Secondary (n=1018) | College/ University (n=1003) | All Levels (n=3064) | p-value |
|--------------------------|-----------------------------|-----------------------------|------------------------------------|------------------------|---------|
| Race | | | | | |
| Malay | 59.9 | 65.6 | 42.4 | 56.2 | *** |
| Chinese | 25.6 | 20.2 | 48.3 | 31.1 | |
| Indian | 12.6 | 13.1 | 4.9 | 10.3 | |
| Other | 1.9 | 1.2 | 4.4 | 2.5 | |
| Location | | | | | |
| Urban | 52.3 | 60.3 | 100.0 | 70.6 | *** |
| Rural | 47.7 | 39.7 | | 29.4 | |
| Smoking in family | | | | | |
| Older brother smoked | 15.4 | 25.5 | 26.1 | 22.3 | *** |
| Older sister smoked | 3.3 | 3.2 | 4.3 | 3.6 | NS |
| Father smoked | 34.8 | 37.7 | 32.7 | 35.1 | *** |
| Father quit smoking | 10.7 | 10.5 | 6.7 | 9.3 | |
| Mother smoked | 1.8 | 3.0 | 1.9 | 2.3 | NS |
| Mother quit smoking | 0.7 | 1.0 | 0.7 | 0.8 | |

Note: *** p-value <0.001

Father or sibling smoking is quite common. Slightly over one third (35.1%) of all respondents reported that their fathers smoke while only 2.3% said that their mothers smoke. The secondary students reported higher rates of father smoking than the college/university students. Over 20% of all respondents had older brothers who smoked and the rate was higher among the older schoolgirls. About 4% had older sisters who smoked and this was similar across all age groups.

3.2 Extent of Smoking and Smoking Behaviour

Table 2: Report on smoking (% of respondents)

| Smoking Behaviour | Lower Secondary (n=1043) | Upper Secondary (n=1018) | College/ University (n=1003) | All Levels (n=3064) | p-value |
|---|--------------------------|--------------------------|------------------------------|---------------------|---------|
| Ever smoked | 12.7 | 20.6 | 23.2 | 18.8 | *** |
| Smoked last 30 days | 5.4 | 9.1 | 7.9 | 7.4 | ** |
| Cigarettes smoked in lifetime | | | | | |
| 1-10 | 89.1 | 75.1 | 61.2 | 72.7 | *** |
| 11-100 | 8.5 | 19.5 | 18.9 | 16.8 | |
| >100 | 2.3 | 5.4 | 19.8 | 10.5 | |
| Age first tried cigarette | | | | | |
| 13 and below | 73.3 | 47.4 | 28.9 | 45.8 | *** |
| 14-17 | 24.4 | 51.7 | 40.5 | 40.9 | |
| 18 and above | 2.3 | 1.0 | 30.6 | 13.3 | |
| Vulnerability to smoking | | | | | |
| Smoke if friend offer cigarette (% Yes) | 6.1 | 9.1 | 10.8 | 8.6 | ** |
| Intention to smoke next year (% Yes) | 4.1 | 5.9 | 9.8 | 6.6 | *** |

About 19% of total female respondents have ever smoked cigarettes, with ever smoking significantly higher among those in the upper secondary (20.6%) and tertiary institutions (23.2%) (Table 2). However, 7.4% were current smokers (smoking in the last 30 days). Significantly higher smoking rates were reported among upper secondary (9.1%) and college/university (7.9%) students compared to 5.4% of lower secondary students. Most of these students have smoked 100 or less cigarettes in their lifetime. College/university students smoked substantially more.

Age of initiation varied across the 3 groups. Lower secondary students started smoking at a much younger age compared to their older counterparts. Three in 4 lower secondary students began smoking before the age of fourteen. College/university students were more likely to initiate smoking at an older age.

A small minority of never smokers in all 3 categories of respondents mentioned that they would smoke if a friend offers them a cigarette. A larger percentage of upper secondary and college/university students were more vulnerable to smoking as indicated by a larger percentage of these students stating that they would smoke if offered a cigarette. When asked if they have intention to smoke next year, 4.1% to 9.8% of respondents from the 3

groups of respondents expressed their intention to smoke.

Table 3 below compares respondents from the urban and rural areas. Among lower secondary students, a larger percentage of students from the rural areas (15.3%) ever tried smoking compared to 10.3% of students from the urban areas. There was no significant difference between areas among upper secondary students. On the other hand, the rate of current smoking was significantly higher among urban (11.1%) upper secondary students compared to rural students (6.2%). Urban upper secondary students were more likely to have smoked more cigarettes in their lifetime compared to rural upper secondary students. Upper secondary students in the urban area who have never smoked were more likely to smoke if offered a cigarette compared to rural students. Rural lower secondary students were more likely to initiate smoking at a younger age compared to urban students.

Table 3: Report on smoking by location (% of respondents)

| Smoking Behaviour | Lower Secondary (n=1043) | | | Upper Secondary (n=1018) | | |
|--|-----------------------------|-------|---------|-----------------------------|-------|---------|
| | Urban | Rural | p-value | Urban | Rural | p-value |
| Ever smoked | 10.3 | 15.3 | 0.015 | 21.7 | 19.1 | 0.316 |
| Smoked last 30 days | 4.6 | 6.2 | 0.147 | 11.1 | 6.2 | 0.005 |
| Cigarettes smoked in lifetime | | | | | | |
| 1-10 | 92.7 | 86.5 | 0.521 | 69.5 | 85.1 | 0.011 |
| 11-100 | 5.5 | 10.8 | | 22.1 | 14.9 | |
| >100 | 1.8 | 2.7 | | 8.4 | 0.0 | |
| Age first tried cigarette | | | | | | |
| 13 and below | 60.7 | 82.7 | 0.011 | 43.2 | 54.5 | 0.182 |
| 14-17 | 37.5 | 14.7 | | 55.3 | 45.5 | |
| 18 and above | 1.8 | 2.7 | | 1.5 | 0.0 | |
| Smoke if friend offers cigarette (% Yes) | 6.2 | 6.0 | 0.898 | 10.6 | 6.7 | 0.035 |
| Intention to smoke next year (% Yes) | 4.2 | 4.0 | 0.874 | 6.8 | 4.5 | 0.114 |

3.2.1 Pattern of Smoking Among Current Smokers

The patterns of smoking of the 3 categories of current smokers are presented in Table 4. College/university smokers smoked significantly more in the last seven days (38.1% smoked more than 5 sticks) compared to the other younger smokers from secondary

schools ($p < 0.001$). Most smokers smoked to release tension or stress. “To relax” was the next frequently reported reason for smoking. Some smoked because of “group norm” or to “do what the guys can do”. Smoking with friends was common particularly among smokers from college/university. Smokers rarely smoked with their parents.

Table 4: Pattern of smoking of current smokers

| Pattern of Smoking | Lower Secondary (n=56) | Upper Secondary (n=93) | College/ University (n=79) | All Levels (n=228) | p-value |
|----------------------------------|------------------------|------------------------|----------------------------|--------------------|---------|
| Cigarettes smoked in last 7 days | | | | | |
| None at all | 22.6 | 31.2 | 16.7 | 23.9 | 0.000 |
| Less than 1 stick | 50.9 | 34.4 | 23.8 | 34.3 | |
| 2 to 5 sticks | 22.6 | 23.7 | 21.4 | 22.6 | |
| More than 5 sticks | 3.8 | 10.8 | 38.1 | 19.1 | |
| Main reasons for smoking | | | | | |
| To release tension/ stress | 64.8 | 60.2 | 42.5 | 55.0 | 0.01 |
| To do what the guys can do | 13.0 | 2.3 | 5.0 | 5.9 | |
| To be accepted by group | 1.9 | 1.1 | 0.0 | 0.9 | |
| To relax | 16.7 | 29.5 | 37.5 | 29.3 | |
| Group norm | 3.8 | 6.8 | 15.0 | 9.0 | |
| Smoking with friends | | | | | |
| Never | 22.2 | 35.3 | 10.0 | 19.1 | 0.000 |
| Sometimes | 66.7 | 62.6 | 46.3 | 57.8 | |
| Often | 11.1 | 12.1 | 43.8 | 23.1 | |
| Smoking with parents | | | | | |
| Never | 92.6 | 95.7 | 92.5 | 93.8 | NS |
| Sometimes | 7.4 | 4.3 | 5.0 | 5.3 | |
| Often | 0.0 | 0.0 | 2.5 | 0.9 | |
| Cigarettes usually smoked | | | | | |
| Manufactured cigarettes | 65.4 | 68.5 | 77.5 | 71.0 | 0.002 |
| No usual brand | 21.2 | 30.3 | 21.3 | 24.9 | |
| Hand rolled cigarettes | 13.5 | 1.1 | 1.3 | 4.1 | |
| Taste of imported cigarettes | | | | | |
| Taste better | 16.7 | 26.4 | 45.6 | 30.8 | 0.000 |
| Taste the same | 25.9 | 31.9 | 12.7 | 23.7 | |
| Taste worse | 0.0 | 2.2 | 6.3 | 3.1 | |
| Don't know | 57.4 | 39.6 | 35.4 | 42.4 | |
| Usually get cigarettes | | | | | |
| Buy them | 28.8 | 56.5 | 68.4 | 54.3 | 0.10 |
| Someone buys them | 13.5 | 7.6 | 3.8 | 7.6 | |
| From friends | 42.3 | 26.1 | 22.8 | 28.7 | |
| From home | 9.6 | 6.5 | 2.5 | 5.8 | |
| Other way | 5.8 | 3.3 | 2.5 | 3.6 | |

| Pattern of Smoking | Lower Secondary (n=56) | Upper Secondary (n=93) | College/ University (n=79) | All Levels (n=228) | p-value |
|-------------------------------------|------------------------|------------------------|----------------------------|--------------------|---------|
| Usually smoke | | | | | NS |
| At home | 23.1 | 24.1 | 21.8 | 23.0 | |
| At school | 1.9 | 0.0 | 5.1 | 2.3 | |
| At work | 3.8 | 0.0 | 5.1 | 2.8 | |
| At friend's house | 17.3 | 8.0 | 2.6 | 8.3 | |
| At social events | 9.6 | 14.9 | 18.0 | 14.7 | |
| In public places | 30.8 | 40.2 | 41.0 | 38.2 | |
| Others | 13.5 | 12.6 | 6.4 | 10.6 | |
| Easy or difficult to get cigarettes | | | | | 0.000 |
| Difficult | 25.9 | 32.6 | 7.5 | 22.1 | |
| Easy | 42.6 | 45.7 | 85.0 | 58.8 | |
| Not sure | 31.5 | 21.7 | 7.5 | 19.0 | |
| Intention to quit smoking | | | | | 0.000 |
| In next 30 days | 52.8 | 59.8 | 25.6 | 45.9 | |
| Sometime in next 6 months | 9.4 | 6.9 | 17.9 | 11.5 | |
| Beyond next 6 months | 32.1 | 28.7 | 26.9 | 28.9 | |
| Do not plan to quit at all | 5.7 | 4.6 | 29.5 | 13.8 | |

The main reasons reported by participants of the FGDs were similar to the results of the survey presented above. Individual, family and social environmental factors were usually stated as the reasons why girls and young women smoke. Some individual factors that influence smoking highlighted by the secondary students include “*as a means to reduce stress and tension*”, “*seeking attention from parents*”, “*rebellious*” and “*to look cool and mature*”. More important were social factors, and these were expressed by several students:

“*Peer influence especially from close friends and boy friend*” (secondary student)

“*Everyone around me seems to be smoking, and my friend told me to just take a puff....I just took one puff and I got addicted to it*” (a smoker in upper secondary school)

“*influence from pub activities, like clubbing, lots of clubs in KL, go clubbing and smoke*” (Universiti Malaya student)

Some said it was more acceptable for girls to smoke these days, as expressed by a university students:

“*more young girls are smoking, it is acceptable to openly smoke. Last time they cannot do this. Now there is equality, so it is okay for girls to smoke, they don't keep it a secret, these kind of things encourage them to smoke*” (University of Malaya student)

Media was also said to entice girls to smoke: “*Influenced from media, movies or TV shows (follow the stars that smoke)*”

Widespread availability and easy access to cigarettes was another factor inducing youth

to smoke. This was expressed by a college student: “cigarettes can easily be obtained, even by school students, if they cannot afford to buy a pack, they can still buy single sticks. Control of smoking is not strong”

Most smokers usually smoked manufactured cigarettes and have a favourite brand. Opinion on the taste of imported Western cigarettes differed among the respondents. A significantly larger percentage of smokers in college/university said that such cigarettes taste better. Most of the younger smokers said they “don’t know”. Responses to the question on “How do you usually get your cigarettes?”, differed between the groups of smokers. Obtaining cigarettes from friends was the most common source among the youngest smokers, i.e. in lower secondary students. Purchasing cigarettes on their own were common among the older smokers. Though they were minors, a sizeable percentage of the youngest smokers reported purchasing their own cigarettes, an evident violation. Most smokers either smoked in public places or in the home. Smoking at social events or in a friend’s home was also mentioned. Most smokers said that it was easy to obtain cigarettes, especially among the oldest category of smokers.

An overwhelming majority of smokers expressed their intention to quit smoking. A significantly larger percentage of younger smokers had intention to cease smoking in the next month. A larger (29.5%) proportion of the oldest smokers had no plans to quit compared to about 5% of the younger smokers.

3.3 Overall Opinion of Smoking

Nine in 10 female respondents perceived smoking as bad or very bad (Table 5). Nonetheless, there was small minority especially among the youngest (2.6%) teenage students who believed that smoking is good or very good.

Table 5: Overall opinion of smoking by level of education

| Opinion of Smoking | Lower Secondary (n=1043) | Upper Secondary (n=1018) | College/ University (n=1003) | All Levels (n=3064) | p-value |
|----------------------|--------------------------|--------------------------|------------------------------|---------------------|---------|
| Bad/very bad | 88.3 | 91.1 | 89.0 | 89.5 | ** |
| Neither good nor bad | 9.1 | 7.2 | 10.2 | 8.8 | |
| Good/very good | 2.6 | 1.7 | 0.8 | 1.7 | |

Almost all participants in the FGDs perceive smoking as a very bad habit, that harms the user as well as those around them.

The attitude towards smoking among smokers and non-smokers were compared and results presented in Table 5. Overall smokers were more likely to have a positive attitude towards smoking. A similar association was found among secondary students and those in college/university. A significantly larger percentage of smokers held a neutral opinion about smoking (neither good nor bad) and that smoking was good or very good.

Table 6: Overall opinion of smoking by level of education and smoking status

| Opinion of Smoking | Secondary students | | | College/University Students | | |
|----------------------|---------------------|----------------|---------|-----------------------------|---------------|---------|
| | Non-Smoker (n=1912) | Smoker (n=149) | p-value | Non-Smoker (n=924) | Smoker (n=79) | p-value |
| Bad/very bad | 91.6 | 65.5 | 0.000 | 92.4 | 49.4 | 0.000 |
| Neither good nor bad | 6.7 | 27.7 | | 7.1 | 46.8 | |
| Good/very good | 1.8 | 6.8 | | 0.5 | 3.8 | |

3.4 Attitude towards Smoking

Respondents were asked if they agree, strongly agree, disagree or strongly disagree with various statements on smoking. These statements could be broadly categorized into those related to “positive images of smoking”, “negative images of smoking” and “perception of smoking norm”. The results are presented in Table 7.

Overall, a minority of students in all 3 educational levels held positive images of smoking. Nonetheless, there were significant differences between the groups. A slightly larger percentage of college/university students (22.8%) believed that smoking helps to control body weight compared to a smaller percentage among the younger respondents. A larger percentage of the latter groups on the other hand, believed that people who smoke have more friends. The younger respondents were also more likely to believe that smoking made people look cool or fit and more mature.

Two in three respondents from all groups held negative perception of smoking, i.e., smoking is disgusting and that smokers have a harder time performing in sports. Overall, one in three respondents perceived that most girls/women their age smoke. A larger percentage of upper secondary students held similar opinion.

All participants in the FGDs perceived smoking as a bad habit, waste of money and harmful to health and pollutes the environment. Most could identify the harms of tobacco smoke such as causing lung cancer, heart disease, and that secondhand smoke affects the health of people around the smokers.

Table 7: Opinion on smoking by level of education (% of respondents agreeing with following statements)

| Statement | Lower Secondary (n=1043) | Upper Secondary (n=1018) | College/University (n=1003) | All Levels (n=3064) | p-value |
|--------------------------------------|--------------------------|--------------------------|-----------------------------|---------------------|---------|
| Positive image of smoking | | | | | |
| Smoking helps to control body weight | 14.2 | 17.7 | 22.8 | 18.2 | 0.000 |
| Smoking is a sign of being modern | 7.4 | 7.5 | 7.0 | 7.3 | NS |
| Smoking made people look cool or fit | 11.7 | 11.3 | 8.6 | 10.5 | * |

| Statement | Lower Secondary (n=1043) | Upper Secondary (n=1018) | College/ University (n=1003) | All Levels (n=3064) | p-value |
|---|--------------------------|--------------------------|------------------------------|---------------------|---------|
| Smoking makes young people look more mature | 13.9 | 13.9 | 9.2 | 12.3 | 0.001 |
| People who smoke have more friends | 22.4 | 25.6 | 11.4 | 19.8 | 0.000 |
| Negative image of smoking | | | | | |
| Smoking is disgusting | 64.6 | 64.8 | 66.5 | 65.3 | NS |
| Smokers have a harder time in sports | 66.7 | 64.8 | 59.4 | 63.7 | 0.000 |
| Perception of smoking norm | | | | | |
| Most of the girls/women my age smoke | 27.6 | 41.7 | 36.0 | 35.0 | 0.000 |
| It is acceptable for young men (aged 15 to 25) to smoke | 24.9 | 22.3 | 20.3 | 22.5 | 0.04 |
| It is acceptable for young women (aged 15 to 25) to smoke | 8.2 | 10.2 | 11.0 | 9.8 | NS |
| Malaysian society disapproves of smoking | 43.0 | 43.3 | 30.8 | 39.1 | 0.000 |

Most feel that smoking among females is not acceptable in Malaysian society, as stated by a participant- *“in our culture perception of a lady smoking is like she is wild.. not a good image, it is considered rude for ladies to smoke. Smoking is like pushing fumes inside your body, it eats the soul and makes you addicted which is not healthy or good”* (a Universiti Malaya student)

Another Universiti Malaya student added *“It is disgusting for men and women to smoke, they stink, it is nauseating, the house smells, it is a waste of money and uncomfortable for others”*.

“smoking is a waste of money, the poor can spend their money on other things” (UTAR student)

“Smoking is only good for tobacco companies”(a Universiti Malaya student)

“Smoking affects an expectant mother and the unborn child” (ASTIN College student)

“I think it is irresponsible because smoking is not only bad for your own health, it also harms other people’s health. Also, it is bad for the next generation if you are the mother” (an Upper secondary student)

Table 8 shows a comparison of smokers’ and non-smokers’ perceptions of smoking. Smokers were more likely to have a positive image of smoking. Over 40% of smokers believed that smoking helps to control body weight, makes young people look more mature, and that people who smoke have more friends compared to significantly smaller percentage of non-smokers who held similar perceptions of smoking. Two in three non-

smokers said that smoking is disgusting while just slightly over a third of smokers had this negative image of smoking.

Table 8: Opinion on smoking by smoking status (% of respondents agreeing with following statements)

| Statement | Non-Smoker N= 2836 (% Agree) | Smoker N= 228 (% Agree) | p-value |
|---|------------------------------------|-------------------------------|---------|
| Positive image of smoking | | | |
| Smoking helps to control body weight | 15.7 | 48.5 | 0.000 |
| Smoking is a sign of being modern | 5.9 | 24.6 | 0.000 |
| Smoking made people look cool or fit | 8.5 | 36.0 | 0.000 |
| Smoking makes young people look more mature | 10.0 | 40.8 | 0.000 |
| People who smoke have more friends | 18.2 | 41.0 | 0.000 |
| Negative image of smoking | | | |
| Smoking is disgusting | 67.7 | 35.5 | 0.000 |
| Smokers have a harder time in sports | 63.8 | 61.7 | 0.282 |
| Perception of smoking norm | | | |
| Most of the girls/women my age smoke | 32.4 | 68.1 | 0.000 |
| It is acceptable for young men (aged 15 to 25) to smoke | 19.1 | 65.4 | 0.000 |
| It is acceptable for young women (aged 15 to 25) to smoke | 6.8 | 46.9 | 0.000 |
| Malaysian society disapproves of smoking | 51.6 | 35.6 | 0.000 |

3.5 Exposure to Tobacco Advertising, Promotion and Sponsorship

Three in four respondents said that they have not noticed things that were designed to encourage smoking or which made them think about smoking in the last 30 days (Table 9). A small percentage (19.6%) have noticed things that encouraged smoking “once in a while”, while a very small proportion of respondents reported that they had often noticed things that encourage them to smoke.

Table 9: Exposure to tobacco advertising

| | Lower Secondary (n=1043) | Upper Secondary (n=1018) | College/ University (n=1003) | All Levels (n=3064) | p-value |
|--|--------------------------|--------------------------|------------------------------|---------------------|---------|
| Noticed things that encouraged smoking in last 30 days | | | | | |
| Never | 79.8 | 76.3 | 68.9 | 75.1 | 0.000 |
| Once in a while | 16.5 | 19.1 | 23.2 | 19.6 | |
| Often | 3.6 | 4.6 | 7.9 | 5.4 | |
| | Lower Secondary (n=1043) | Upper Secondary (n=1018) | College/ University (n=1003) | All Levels (n=3064) | p-value |
| Exposure to cigarette ads at sports events, fairs, concerts, or community events | | | | | |
| Never | 30.0 | 24.1 | 33.9 | 29.3 | 0.000 |
| Sometimes | 33.5 | 44.3 | 43.8 | 40.5 | |
| A lot | 3.6 | 4.7 | 6.7 | 5.0 | |
| Hardly attend such events | 32.9 | 26.9 | 15.6 | 25.2 | |
| Offered a free sample of cigarettes (% Yes) | 4.6 | 6.5 | 6.7 | 5.9 | NS |
| Noticed competitions/prizes associated with cigarettes (% Yes) | 5.2 | 7.8 | 11.1 | 8.0 | 0.000 |
| Watching actors smoke on TV, videos or movies | | | | | |
| Never | 7.4 | 2.5 | 3.5 | 4.5 | 0.000 |
| Sometimes | 58.1 | 54.8 | 37.3 | 50.2 | |
| A lot | 30.6 | 40.6 | 57.8 | 42.8 | |
| Hardly watch TV, videos or movies | 3.9 | 2.2 | 1.4 | 2.5 | |
| Favourite actors smoke | | | | | |
| None | 18.6 | 13.3 | 7.8 | 13.3 | 0.000 |
| Some | 40.5 | 44.6 | 45.9 | 43.6 | |
| Most or all | 5.3 | 13.6 | 21.9 | 13.5 | |
| Don't have any favourite actors | 9.4 | 8.7 | 8.8 | 9.0 | |
| Don't know | 26.1 | 19.8 | 15.7 | 20.6 | |
| Owned merchandise with cigarette brand name (% Yes) | 6.4 | 8.6 | 9.9 | 8.3 | 0.04 |
| Likely to use something with cigarette brand name (% Yes) | 10.7 | 14.2 | 23.1 | 15.9 | 0.000 |

When asked if they were exposed to any kind of tobacco advertising, most FGDs participants responded “no”. Most have not seen any forms of direct advertisements except for a few who recalled seeing posters or functional objects with cigarette brand name in the rural areas. Some students said that they still observed some forms of advertising in villages, in particular: *“in my village, I still see mirrors given by tobacco company hung in two restaurants even though the law forbids it.* (ASTIN student).

Less than half (40.5%) of the respondents have been exposed to cigarette advertisements at sports events, fairs, concerts or community events sometimes while another 5% said that they had often seen such advertisements. The rest have never seen such advertisements or had hardly attended such events. Larger percentages of upper secondary and college/university students were exposed compared to the younger students.

When asked if they have ever been offered a free sample of cigarettes, a small percentage said that they had been offered. Another small percentage had also noticed competitions/prizes associated with cigarettes with a higher percentage recorded among the college/university students. An overwhelming majority (93%) of all respondents reported having watched actors smoke on television, videos and the movies. A larger percentage of upper secondary students were exposed to actors smoking compared to the youngest and oldest group.

A sizeable number of FGDs participants mentioned that they see beautiful displays of cigarette packs in retail shops and convenient stores and could recognize that they are forms of advertising. Below are some of their descriptions:

“Cigarette packs are attractively displayed in front of the counter”. (student from Connaught school)

“When I was buying some stuff with my mum, I was looking at the cigarettes, they smelled of strawberry,.....cherry and another one was blackberry and I wonder why all these cigarettes have all these flavours and I asked the lady and she said oh it’s for the girls...to make them interested so that they can choose whichever flavour they like”. (student from Connaught school)

“There is a new brand promotion advertisement”

“Yes....they purposefully put the bright colours so that the girls get attracted”.

“Mostly girls get attracted by something colourful like pink”

“They are very attractive, the colours, the pictures on cigarette packs”

“Even children are attracted.. they think the displayed cigarette packages are candies” (ASTIN student).

When asked if cigarette companies target young women, some participants replied “yes”. Some said that “*New cigarette brand and new flavours were introduced to attract girls to smoke*” and “*to encourage the women to smoke*”

A few participants have observed **cigarette companies selling cigarettes through promoters**: “*we do see people going around promoting cigarettes*”

“*After 11pm, they take out their handbag and there are a lot of stuff in the bag, and they carry huge bags....some girls wear very sexyly to attract the guys....they just sit there and people will come, because they know the person who sells the cigarettes*”. (student from Connaught school).

3.6 Receptiveness to Advertising

About 10% of total respondents owned merchandise with a cigarette brand name. A significantly larger percentage is seen among the oldest respondents compared to the younger groups. When asked if they would use something with a cigarette brand name, about 16% of all total respondents said that they were likely to do so. About 11% of the youngest students said that they were likely to do so and the percentage increased significantly with age, with the largest percentage (23.1%) among college/university students.

A comparison was also made on the exposure and receptiveness to cigarette advertising and promotion between smokers and non-smokers (Table 10). Generally, a significantly larger percentages of smokers mentioned that they had noticed things that encouraged smoking in the last 30 days and that they were exposed to cigarette advertising at sports events, fairs, concerts or community events. The percentage of smokers that were offered free samples of cigarettes were 6 fold (25.8%) that of non-smokers (4.3%). Significantly more smokers (13.5%) noticed competitions/prizes associated with cigarettes compared to 7.5% of non-smokers. Smokers were also more likely to own and to use merchandise with a cigarette brand name.

Table 10: Exposure to tobacco advertising by smoking status

| | Non Smoker N= 2836 | Smoker N= 228 | p-value |
|--|-----------------------|------------------|---------|
| Noticed things that encouraged smoking in last 30 days | | | |
| Never | 78.5 | 32.3 | *** |
| Once in a while | 17.2 | 49.8 | |
| Often | 4.3 | 17.9 | |
| Exposure to cigarette ads at sports events, fairs, concerts, or community events | | | |
| Never | 29.3 | 29.7 | 0.009 |
| Sometimes | 40.1 | 44.1 | |
| A lot | 4.7 | 8.3 | |
| Hardly attend such events | 25.8 | 17.9 | |
| Offered a free sample of cigarettes (% Yes) | 4.3 | 25.8 | 0.000 |
| Noticed competitions/prizes associated with cigarettes (% Yes) | 7.5 | 13.5 | 0.002 |
| Owned merchandise with cigarette brand name (% Yes) | 7.0 | 24.6 | 0.000 |
| Likely to use something with cigarette brand name (% Yes) | 14.4 | 34.9 | 0.000 |
| Watching actors smoke on TV, videos or movies | | | |
| Never | 4.6 | 2.6 | 0.301 |
| Sometimes | 50.4 | 47.2 | |
| A lot | 42.5 | 47.6 | |
| Hardly watch TV, videos or movies | 2.5 | 2.6 | |
| Favourite actors smoke | | | |
| None | 13.9 | 5.7 | 0.000 |
| Some | 43.4 | 45.4 | |
| Most or all | 12.8 | 22.7 | |
| Don't have any favourite actors | 8.8 | 10.9 | |
| Don't know | 21.1 | 15.3 | |
| Support banning on smoking scenes in movies and television programmes | | | |
| Not at all | 17.1 | 30.7 | 0.000 |
| A little/somewhat | 25.1 | 41.2 | |
| A lot | 57.8 | 28.1 | |

3.7 Multivariate Analysis of Factors Related to Smoking

3.7.1 Material and Methods

Bivariate analyses were computed to determine the relationship between female smoking and environmental (exposure to cigarette advertising, receptiveness to advertising, parent smoking, offered free cigarette) and personal (attitudes and beliefs about smoking) factors. Thirteen variables were found to be significantly associated with current smoking status. The list of predictor variables and coding are shown in Table 11. A binary logistic regression analysis was carried out to determine which variables significantly predicted smoking among the college students. All variables were entered into the logistic regression model. The logistic regression coefficients were used to estimate odds ratios for each of the independent variables in the model.

Table 11: Coding of predictor variables

| Predictor variable | Coding (dichotomy) |
|---|--|
| Personal factors | |
| 1. Knowledge of smoking-related diseases | High = 0; Low and moderate = 1 |
| 2. Overall opinion on smoking | Bad = 0; Good or neutral = 1 |
| 3. Perception about image of smoking | Negative image = 0; Positive image = 1 |
| 4. Acceptable for young men to smoke | Disagree = 0; Agree = 1 |
| 5. Acceptable for young women to smoke | Disagree = 0; Agree = 1 |
| 6. Malaysian society disapproves of smoking | Disagree = 0; Agree = 1 |
| 7. Most girls my age smoke | Disagree = 0; Agree = 1 |
| 8. Age | 13-15 = 0; 16-25 = 1 |
| Socio-cultural factors | |
| 8. Mother smoking | No = 0; Yes = 1 |
| 9. Number of closest friends who smoke | 0 friends = 0; 1-5 friends = 1 |
| 10. Noticed things that encourage smoking | No = 0; Yes = 1 |
| 11. Exposure to cigarette ads at sports and cultural events | No = 0; Yes = 1 |
| 12. Offered free cigarette samples | No = 0; Yes = 1 |
| 13. Owned merchandise with cigarette brand name | No = 0; Yes = 1 |

3.7.2 Predictors of Current Smoking Among Females

Of the 3,064 female students, we had full information on 2,937, which were available for analysis using stepwise logistic regression. Of these, 220 were current smokers.

Table 12 presents the predictors of smoking from the logistic regression model. Five of the eight personal factors and five of the six socio-cultural factors significantly predicted smoking. Female students with the overall opinion that smoking is bad or neither bad nor good were 3.65 times more likely to smoke. Individuals were 1.72 times more likely to smoke if they have a positive image of smoking. The odds of smoking were greater for females who agreed that it is acceptable for young men (OR=2.09) and women (OR=2.35) to smoke. Knowledge of smoking-related diseases, perception about the norm of smoking did not significantly predict smoking.

Among the significant socio-cultural predictors, having one or more of 5 closest friends who smoke is a strong predictor of smoking (OR= 12.54). Individuals with mothers who smoked and those who noticed things that made them think about smoking were 3.66 times and 2.84 times more likely to smoke, respectively. Females who were offered free cigarettes in the last year and those who owned a merchandise with a cigarette brand name were 2.2 times and 1.66 times more likely to smoke, respectively. The Nagelkerke R^2 is 0.501 indicating that 50% of the variation in predicting current smoking is explained by the predictors of this logistic regression model.

Table 12: Predictors of current smoking among females

| Variable | Odds Ratio | 95% Confidence Interval (CI) | | p-value |
|---|------------|------------------------------|--------|---------|
| | | | | |
| Personal factors | | | | |
| 1. Knowledge smoking-related diseases (High ¹) Low/moderate | 1.415 | .946 | 2.117 | 0.091 |
| 2. Overall opinion on smoking (Bad ¹) Good/neutral | 3.650 | 2.451 | 5.436 | 0.000 |
| 3. Perception about image of smoking (Negative ¹) Positive | 1.716 | 1.178 | 2.501 | 0.005 |
| 4. Acceptable for young men to smoke (Not-acceptable ¹) Acceptable | 2.088 | 1.355 | 3.215 | 0.003 |
| 5. Acceptable for young women to smoke (Not-acceptable ¹) Acceptable | 2.352 | 1.499 | 3.692 | 0.000 |
| 6. Most girls my age smoke (Disagree ¹) Agree | 1.358 | .932 | 1.977 | 0.111 |
| 8. Age (13-15 years old ¹) 16 -25 | 1.558 | 1.002 | 2.420 | 0.049 |
| Socio-cultural factors | | | | |
| 9. Mother smoking (No ¹) Yes | 3.656 | 1.907 | 7.012 | 0.000 |
| 10. Number of closest friends who smoke (None ¹) 1-5 | 12.541 | 7.117 | 22.099 | 0.000 |
| 11. Noticed things that encourage smoking (Never ¹) Once in a while/often | 2.843 | 1.977 | 4.089 | 0.000 |
| 12. Exposure to cigarette ads at sports and community events (Never ¹) Sometimes/a lot | .822 | .575 | 1.176 | 0.283 |
| 13. Offered free cigarette samples (No ¹) Yes | 2.197 | 1.379 | 3.501 | 0.001 |
| 14. Owned merchandise with cigarette brand name (No ¹) Yes | 1.663 | 1.055 | 2.620 | 0.028 |

¹ Reference category

3.8 Exposure to Anti-smoking Messages

Over 90% of respondents have been exposed to anti-smoking messages in the last six months either sometimes or a lot (Table 13). Upper secondary students reported significantly higher exposures compared to the other 2 groups of respondents. There were

multi-sources of anti-smoking messages. The predominant sources were television, poster, billboards and print media. Over 70% of respondents were exposed to anti-smoking messages from the latter sources. Radio and cigarette packs were some of the other sources.

Table 13: Exposure to anti-smoking media messages in last six months

| | Lower Secondary (n=1043) | Upper Secondary (n=1018) | College/ University (n=1003) | All Levels (n=3064) | p-value |
|------------------------------------|--------------------------|--------------------------|------------------------------|---------------------|---------|
| Exposure to anti-smoking messages | | | | | |
| Never | 5.5 | 3.3 | 6.0 | 4.9 | 0.000 |
| Sometimes | 62.0 | 51.9 | 60.4 | 58.1 | |
| A lot | 32.6 | 44.8 | 33.6 | 37.0 | |
| Source of anti-smoking advertising | | | | | |
| On television | 93.9 | 93.9 | 79.6 | 89.2 | 0.000 |
| On radio | 52.7 | 64.5 | 53.8 | 57.0 | 0.000 |
| On poster | 90.4 | 93.2 | 85.9 | 89.9 | 0.000 |
| On billboards | 87.4 | 94.0 | 84.1 | 88.5 | 0.000 |
| In newspapers or magazines | 75.2 | 81.8 | 70.2 | 75.8 | 0.000 |
| At cinema before or after film | 21.8 | 28.1 | 33.8 | 27.9 | 0.000 |
| In discos/karaoke lounges | 6.0 | 12.4 | 11.0 | 9.8 | 0.000 |
| On cigarette packs | 29.9 | 46.0 | 55.2 | 43.6 | 0.000 |
| Others | 13.5 | 24.0 | 20.3 | 18.4 | 0.000 |

All FGDs participants of various age groups said that they have been exposed to anti-smoking messages and could recall the “*Tak Nak*” (Say No) media campaign that is implemented by the government since 2004. They could cite most of the media used and some of the messages that appeared on billboards, in newspapers, posters, etc. However, when participants were asked their feedback on the “*Tak Nak*” campaign, most students felt that the campaign is not effective for non-smokers in particular. Some of their views are presented below:

“more people are still smoking, especially now when more girls are smoking; in the past girls are shy to smoke, but now more are explicitly smoking, it’s a trend now” (ASTIN student)

“Tak nak campaign is effective only among the young who have not started to smoke, but for those who are already smoking, the campaign has no effect on these people” (ASTIN student)

When asked which media is effective, a UM student responded *“TV is the one. Posters on ‘Tak Nak’ don’t say anything”*.

“This campaign keep asking people not to smoke but at the same time must tell how, is there a way to stop” (Universiti Malaya student)

When FGD participants were asked if the government should intensify media campaigns, most believe not as they think campaigns are a waste of money. For those who agreed to increase such campaigns, they suggested changing and making it more interesting. One student suggested: *“people nowadays like rap - come up with songs everybody can remember then it will be effective”* (Universiti Malaya student)

“I think the internet is one popular channel to promote” (Universiti Malaya student)

“I think the main point is to create the image that smoking is ugly, this will be effective because people now feel it is handsome to smoke” (Universiti Malaya student)

“Campaign works for me, every smoker knows it is bad but it does not work on them” (UTAR student)

“Effective for non-smokers, can work for girls” (UTAR student)

“Friends’ influence is stronger than what you see in ads” (UTAR student)

“Campaign is a waste of money, it does not bring any benefit” (ASTIN student)

3.9 Awareness of “light” and “mild” Cigarettes

Most (60.5%) respondents have never heard of “light” or “mild” cigarettes. Awareness was highest among college/university students (59.7%) compared to the younger students. Most respondents were not aware if “light” or “mild” cigarettes were easier or harder to smoke, or if such cigarettes were less harmful (Table 14)

Table 14: Awareness of “light” and “mild” cigarettes

| | Lower Secondary (n=1043) | Upper Secondary (n=1018) | College/ University (n=1003) | All Levels (n=3064) | p-value |
|--|-----------------------------|-----------------------------|------------------------------------|------------------------|---------|
| Ever heard of “light” or “mild” cigarettes | | | | | |
| Yes | 21.3 | 38.2 | 59.7 | 39.5 | 0.000 |
| No | 78.7 | 61.8 | 40.3 | 60.5 | |
| Are “light” or “mild” cigarettes easier or harder to smoke? | | | | | |
| Easier | 5.9 | 10.5 | 27.4 | 14.5 | 0.000 |
| Harder | 3.1 | 4.5 | 3.5 | 3.7 | |
| No Difference | 6.3 | 11.0 | 11.1 | 9.4 | |
| Don’t know/haven’t heard of “light” or “mild” cigarettes | 84.7 | 74.0 | 58.0 | 72.4 | |
| | Lower Secondary (n=1043) | Upper Secondary (n=1018) | College/ University (n=1003) | All Levels (n=3064) | p-value |
| Believed that “light” or “mild” cigarette are less harmful than regular cigarettes | | | | | |
| No, they are not | 15.1 | 24.8 | 33.5 | 24.3 | 0.000 |
| Yes, they are less harmful | 4.0 | 5.3 | 10.7 | 6.6 | |
| Don’t know/haven’t heard of “light” or “mild” cigarettes | 81.0 | 69.9 | 55.8 | 69.1 | |

3.10 Knowledge of Diseases Caused by Smoking

Table 15: Awareness of diseases caused by smoking (% of respondents who believe)

| Smoking causes the following disease | Lower Secondary (n=1043) | Upper Secondary (n=1018) | College/ University (n=1003) | All Levels (n=3064) | p-value |
|--|--------------------------|--------------------------|------------------------------|---------------------|---------|
| Lung cancer in smokers | 96.3 | 98.0 | 98.8 | 97.7 | 0.001 |
| Lung cancer in non-smokers from secondhand smoke | 85.9 | 91.8 | 96.8 | 91.4 | 0.000 |
| Stained teeth in smokers | 96.2 | 98.6 | 98.9 | 97.9 | 0.000 |
| Premature ageing | 75.1 | 84.5 | 86.6 | 82.0 | 0.000 |
| Stroke in smokers | 89.5 | 92.6 | 88.8 | 90.3 | 0.04 |
| Impotence in male smokers | 77.9 | 84.4 | 83.0 | 81.8 | 0.000 |
| Pregnancy-related complications in women smokers | 86.3 | 95.1 | 96.0 | 92.4 | 0.000 |

Knowledge on diseases caused by smoking was very high among all the respondents. Over 90% of the respondents were aware of most of the diseases caused by smoking (Table 15). A comparison across all 3 groups of respondents indicated that the youngest respondents had comparatively lower knowledge of some diseases such as lung cancer in non-smokers from secondhand smoke, premature aging, impotence in male smokers and pregnancy-related complications in women. Smokers in general were less aware of diseases caused by smoking compared to non-smokers (Table 16).

Table 16: Awareness of diseases caused by smoking by smoking status (% of respondents who believe)

| Smoking causes the following disease | Non Smoker (n= 2836) | Smoker (n= 228) | p-value |
|--|----------------------|-----------------|---------|
| Lunch cancer in smokers | 98.0 | 94.7 | 0.004 |
| Lung cancer in non-smokers from secondhand smoke | 91.9 | 85.7 | 0.002 |
| Stained teeth in smokers | 98.0 | 96.9 | 0.198 |
| Premature ageing | 82.5 | 75.3 | 0.007 |
| Stroke in smokers | 90.9 | 83.1 | 0.000 |
| Impotence in male smokers | 82.1 | 77.7 | 0.061 |
| Pregnancy related complications in women smokers | 92.5 | 91.6 | 0.341 |

3.11 Awareness of Tobacco Control Policies

3.11.1 Awareness of Health Warnings on Cigarette Packs

Slightly over half (58%) of the respondents were aware of health warnings on cigarette packs (Table 17) while awareness was significantly higher among college/university students. Among those who were aware, slightly more than half of them have noticed these warnings in the last month. When asked if the health warnings made them think about smoking, just over half replied “a lot”, 36.2% responded “a little” and a minority replied “not at all”.

Table 17: Exposure to health warnings on cigarette packs

| | Lower Secondary (n=1043) | Upper Secondary (n=1018) | College/ University (n=1003) | All Levels (n=3064) | p-value |
|---|--------------------------|--------------------------|------------------------------|---------------------|---------|
| Awareness of health warning | | | | | |
| Yes | 43.9 | 59.5 | 72.0 | 58.3 | 0.000 |
| No | 11.9 | 10.0 | 7.1 | 9.7 | |
| Don't know | 44.2 | 30.5 | 20.9 | 32.0 | |
| Noticed health warnings in last month | | | | | 0.000 |
| Never | 54.1 | 42.8 | 41.8 | 46.3 | |
| Once in a while | 35.3 | 41.6 | 37.4 | 38.1 | |
| Often | 10.6 | 15.6 | 20.8 | 15.6 | |
| Extent health warnings made you think about health risks of smoking | | | | | NS |
| Not at all | 12.0 | 8.9 | 10.7 | 10.4 | |
| A little | 40.1 | 33.9 | 35.6 | 36.2 | |
| A lot | 47.9 | 57.1 | 53.7 | 53.4 | |

Findings on awareness of health warnings from FGDs were similar to that of the survey. College and university students had greater awareness compared to school girls. When asked if the current warning “Smoking is dangerous to your health” is effective in discouraging youth from smoking, most students thought that it is in effective in discouraging smoking among the young. The reasons given include “*too small, no effect*”; “*No, they don't even read them, they just open it without reading those warnings*”.

3.12 Opinion on Tobacco Control Policies

a. Support for Pictorial Health Warnings

About 78% of total respondents were of the opinion that cigarette packs should have more health information compared to now (Table 18). A similar opinion was held by all age groups. Less than a third of respondents believed that pictorial health warning is

effective in reducing smoking among young people. The rest felt that pictorial health warning is neither effective nor ineffective in reducing smoking among young people. Slightly more than a third felt that pictorial health warning is ineffective to deter youth smoking. A significantly larger percentage of college/university students thought that pictorial health warning is ineffective to prevent youth smoking. However, when asked if the government should implement pictorial health warnings on cigarette packs in Malaysia, a great majority (79.2%) of respondents answered “yes”. All 3 groups of respondents were supportive of this tobacco control measure.

Table 18: Opinion on pictorial health warnings

| Health Warnings on Cigarette Packages | Lower Secondary (n=1043) | Upper Secondary (n=1018) | College/ University (n=1003) | All Levels (n=3064) | p-value |
|---|--------------------------|--------------------------|------------------------------|---------------------|---------|
| Think that cigarette packages should have... | | | | | |
| Less health information compared to now | 12.1 | 11.0 | 3.8 | 9.0 | 0.000 |
| About the same as now | 13.5 | 10.0 | 11.8 | 11.8 | |
| More health information compared to now | 74.4 | 79.0 | 78.5 | 77.3 | |
| Can't say | - | - | 6.0 | 2.0 | |
| Believed that pictorial health warnings is effective in reducing smoking among young people | | | | | |
| Effective | 26.3 | 30.5 | 27.2 | 28.0 | 0.000 |
| Neither effective nor ineffective | 44.3 | 34.8 | 29.0 | 36.1 | |
| Ineffective | 29.4 | 34.6 | 43.8 | 35.9 | |
| Should government implement pictorial health warnings on cigarette packs in Malaysia | | | | | |
| Yes | 77.7 | 81.1 | 78.7 | 79.2 | 0.04 |
| No | 5.5 | 4.5 | 7.3 | 5.7 | |
| Unsure | 16.8 | 14.3 | 14.1 | 15.1 | |

All participants in the FGDs were shown pictures of graphic health warnings on cigarette packs from Thailand and asked if they think such pictures should be printed on cigarette packs in Malaysia. The support for graphic health warnings was unanimous. The reasons given by the university students include:

“it’s good because it has a visual effect”

“smokers will be reminded every time they smoke”

“it would be more effective especially for the young”

School girls also think that “*It is more effective to have scary pictures on cigarette packs*” and that “*maybe young girls will be scared more than the boys*”.

b. Support for Tobacco Advertising Ban

An overwhelming majority (86.1%) of total respondents expressed support for a complete ban on tobacco advertisements inside shops and stores, with 60.9% expressing a lot of support (Table 19). There was also strong support for a complete ban on displays of cigarettes inside shops and stores. The older respondents had expressed greater support of these bans compared to the youngest group. Slightly more than half of the respondents believed that a ban on sale to minors is effective in reducing smoking among young people in Malaysia. The rest of the respondents were neutral in their opinion or believed that a ban on sale to minors is ineffective in reducing smoking among the youth. The opinions of smokers and non-smokers were compared. Non-smokers were more supportive of a ban on tobacco advertising inside shops and stores and a ban on display of cigarettes compared to smokers (Table 20).

Most FGDs participants supported banning all kinds of tobacco advertising “*to avoid teenagers from being influenced by the cigarette advertisements.*”

Table 19: Opinion on tobacco advertising ban

| | Lower Secondary (n=1043) | Upper Secondary (n=1018) | College/ University (n=1003) | All Levels (n=3064) | Lower Secondary (n=1043) |
|--|-----------------------------|-----------------------------|------------------------------------|------------------------|-----------------------------|
| Support a complete ban on tobacco advertisements inside shops and stores | | | | | |
| Not at all | 18.5 | 13.6 | 9.6 | 13.9 | 0.000 |
| A little/somewhat | 24.1 | 22.0 | 29.5 | 25.2 | |
| A lot | 57.4 | 64.4 | 60.9 | 60.9 | |
| Support a complete ban on displays of cigarettes inside shops and stores | | | | | |
| Not at all | 19.5 | 14.2 | 12.7 | 15.5 | 0.000 |
| A little/somewhat | 22.8 | 20.6 | 27.2 | 23.5 | |
| A lot | 57.7 | 65.2 | 60.1 | 60.9 | |

| | Lower Secondary (n=1043) | Upper Secondary (n=1018) | College/ University (n=1003) | All Levels (n=3064) | Lower Secondary (n=1043) |
|--|-----------------------------|-----------------------------|------------------------------------|------------------------|-----------------------------|
| Believe that a ban on sale to minors is effective in reducing smoking among young people in Malaysia | | | | | |
| Effective | 52.9 | 55.3 | 52.7 | 53.6 | 0.000 |
| Neither effective nor ineffective | 28.6 | 21.7 | 22.4 | 24.3 | |
| Ineffective | 18.6 | 23.0 | 24.9 | 22.1 | |

Table 20: Opinion on tobacco advertising ban by smoking status

| | Non Smoker N=2836 | Smoker N= 228 | p-value |
|--|----------------------|------------------|---------|
| Support a complete ban on tobacco advertisements inside shops and stores | | | |
| Not at all | 13.2 | 23.3 | 0.000 |
| A little/somewhat | 23.2 | 49.3 | |
| A lot | 63.6 | 27.3 | |
| | Non Smoker N=2836 | Smoker N= 228 | p-value |
| Support a complete ban on displays of cigarettes inside shops and stores | | | |
| Not at all | 14.7 | 26.8 | 0.000 |
| A little/somewhat | 21.8 | 45.2 | |
| A lot | 63.6 | 28.1 | |
| Believe that ban on sale to minors is effective in reducing smoking among young people in Malaysia | | | |
| Effective | 54.8 | 39.0 | 0.000 |
| Neither effective nor ineffective | 23.7 | 31.6 | |
| Ineffective | 21.5 | 29.4 | |

c. Support for Smoking Ban

The degree of support for total smoking ban varies depending on the type of place. Support for total smoking ban was very high for hospitals, indoor places of worship, and in educational facilities where over 80% agreed that these places should be smoke-free (Table 21). Support for smoke-free air-conditioned restaurants and other air-conditioned places as well as public transport was high where slightly over 70% agreed that a total smoking ban should be imposed in such places. Banning smoking in workplaces, non-air-

conditioned restaurants, public eating places and outdoor places of worship received much lesser support compared to the other places mentioned above. A majority of respondents did not support a full smoking ban in entertainment outlets such as bars and pubs. There were some significant differences in support for smoke-free places between the 3 groups of respondents.

Table 21: Support for complete ban on smoking in various public places (% of respondents)

| Public Place | Lower Secondary (n=1043) | Upper Secondary (n=1018) | College/ University (n=1003) | All Levels (n=3064) | p-value |
|--|--------------------------|--------------------------|------------------------------|---------------------|---------|
| Hospitals | 86.1 | 87.8 | 89.7 | 87.8 | 0.04 |
| Workplaces | 51.7 | 47.3 | 47.7 | 48.9 | 0.04 |
| Air-conditioned restaurants and other air-conditioned places | 71.7 | 72.5 | 77.1 | 73.7 | 0.000 |
| Non air-conditioned restaurants and public eating areas | 42.0 | 38.1 | 39.5 | 39.9 | 0.000 |
| Public transport | 66.9 | 70.2 | 81.1 | 72.6 | 0.000 |
| Indoor areas at your place of worship | 83.8 | 89.0 | 87.9 | 86.9 | 0.001 |
| Outdoor areas at your place of worship | 45.0 | 42.7 | 44.4 | 44.0 | 0.000 |
| Bars/pubs/discos | 26.8 | 23.2 | 23.0 | 24.4 | 0.000 |
| Universities/colleges/school | 84.6 | 86.8 | 77.3 | 82.9 | 0.000 |

Most FGDs participants fully support a ban on smoking in public places. The reasons given were:

“to protect our health, environment and other people around us....dangerous to health”

“Yes, especially in the public areas that most people visit, secondhand exposure to cigarette smoke is more dangerous”

“Less chance for smokers to smoke because they have to force themselves not to smoke”.

“Because everyone in Malaysia are aware that secondhand smoke are more prone to illness”

3.13 Opinion on Implementation and Enforcement of Tobacco Control Policies

a. Tobacco Advertising, Promotion and Sponsorship

Respondents were asked the extent to which the government has been effective in enforcing a ban on tobacco advertising, promotion and sponsorship in Malaysia. Forty percent of the respondents felt that enforcement of the ban on tobacco advertising, promotion and sponsorship was not effective and almost a similar proportion of respondents had a neutral opinion (Table 22). More college/university students felt that the government was ineffective in enforcing on ban on tobacco advertising, promotion and sponsorship compared to the younger respondents. Over 80% of the respondents stated that the tobacco industry should pay a heavy penalty if they violate the ban. A majority also agreed to withdraw the license to operate of violators. Most also agreed that relevant government agencies should be held responsible. There were significant differences in opinion between the 3 age groups. Non-smokers in general were more favorable of imposing greater penalties (Table 23)

Table 22: Opinion on government effort in enforcing ban on tobacco advertising, promotion and sponsorship

| | Lower Secondary (n=1043) | Upper Secondary (n=1018) | College/ University (n=1003) | All Levels (n=3064) | p-value |
|--|--------------------------|--------------------------|------------------------------|----------------------|---------|
| How effective has the government been in enforcing ban on tobacco advertising Very effective/ effective Neither effective nor ineffective Ineffective/ very ineffective | 18.8 49.1 32.1 | 19.5 38.4 32.1 | 16.0 38.8 47.3 | 18.1 41.5 40.4 | 0.000 |
| Heavy penalty placed on tobacco industry (% Yes) | 85.8 | 88.8 | 77.8 | 84.2 | 0.000 |
| Withdraw license to operate (% Yes) | 86.6 | 91.4 | 80.9 | 86.3 | 0.000 |
| Relevant government agencies should be held responsible (% Yes) | 83.0 | 87.2 | 86.2 | 85.5 | 0.04 |

Table 23: Opinion on government effort in enforcing ban on tobacco advertising, promotion and sponsorship by smoking status

| | Non Smoker (n= 2836) | Smoker (n= 228) | p-value |
|---|-------------------------|--------------------|---------|
| How effective has the government been in enforcing ban on tobacco advertising | | | |
| Very effective/ effective | 18.2 | 16.7 | 0.200 |
| Neither effective nor ineffective | 41.1 | 47.1 | |
| Ineffective/ very ineffective | 40.7 | 36.1 | |
| Heavy penalty placed on tobacco industry (% Yes) | 85.3 | 70.0 | 0.000 |
| Withdraw license to operate (% Yes) | 87.6 | 70.5 | 0.000 |
| Relevant government agencies should be held responsible (% Yes) | 86.1 | 76.7 | 0.000 |

b. Implementation and Enforcement of Smoking Ban

When asked “How effective has the government in enforcing smoking bans in public places?” about 40% of the respondents were of the opinion that the government has not been effective in enforcing smoking bans in public places (Table 24). An equal proportion was neutral in their response. A small proportion felt that there was effective enforcement. A significantly larger percentage of college/university students said that there was no effective enforcement of smoking bans compared to the younger groups.

Table 24: Opinion on effectiveness of enforcement of smoking bans in public places

| | Lower Secondary (n=1043) | Upper Secondary (n=1018) | College/ University (n=1003) | All Levels (n=3064) | p-value |
|---|-----------------------------|-----------------------------|------------------------------------|------------------------|---------|
| Enforcement of smoking bans | | | | | |
| Effective | 23.3 | 24.2 | 14.2 | 20.6 | 0.000 |
| Neither effective nor ineffective | 48.3 | 35.5 | 35.8 | 39.9 | |
| Ineffective | 28.4 | 40.3 | 50.0 | 39.4 | |
| Factors preventing implementation of smoking ban in public places | | | | | |
| Lack of enforcement | 80.2 | 86.8 | 92.8 | 86.5 | 0.000 |
| Public awareness is | 87.5 | 92.0 | 90.5 | 90.0 | 0.001 |

| | | | | | |
|--|------|------|------|------|-------|
| inadequate | | | | | |
| Lack of concern of non-smokers about passive smoking | 69.4 | 74.1 | 78.8 | 74.1 | 0.000 |
| High social acceptability of smoking | 75.2 | 84.0 | 82.1 | 80.4 | 0.000 |
| Others | 15.9 | 32.4 | 22.6 | 22.4 | 0.000 |
| Ways to improve implementation of smoking ban | | | | | |
| Increase enforcement | 91.8 | 95.1 | 94.8 | 93.9 | 0.001 |
| Increase public awareness of smoking bans | 92.3 | 94.4 | 94.0 | 93.5 | NS |
| Educate public about the harms of passive smoking | 91.2 | 93.1 | 93.0 | 92.4 | NS |
| Others | 24.5 | 40.2 | 34.5 | 31.6 | 0.000 |

According to the respondents, the main factors that prevented the implementation were lack of enforcement, inadequate public awareness of smoking ban and the high social acceptability of smoking. Lack of concern about passive smoking among non-smokers was another important factor. College/university students gave greater emphasis on the above reasons compared to the younger groups. Over 90% of the respondents agreed that there should be increased enforcement, public awareness and education about the harms of passive smoking.

When asked about enforcement and implementation of policies such as prohibiting sales to minors and ban on smoking in public places, all the university students who participated in the FGDs said that these laws have not been enforced effectively.

Similarly with the ban on smoking in public places most participants said that this regulation has not been enforced well and that people are non-compliant to the law. The schoolgirls voiced their opinions:

“why not people who control take action, fine, and not just mention “Tak Nak” (“Say No”), businessman who sell don’t care about government. Need action from government”.

“No, because there is no enforcement to fine the violators”

“....there is sign that says ‘No Smoking’ in the restaurant but I still see them smoking except for in air-con areas”

“Some of them just smoke underneath the ‘No Smoking’ sign”

“Should take action against youth if they are smoking in the designated no-smoking areas”

The college and university students had similar feedback. Their comments consist of the following:

“How could the police enforce no-smoking ban when they themselves still smoke in these public places” (ASTIN student)

“In public places they should not be smoking in all areas and not only in non-smoking areas” (ASTIN student)

“Everyone must play a role in making the campaign a success, we cannot depend on the government alone” (ASTIN student)

3.14 Perception of Tobacco Industry

More than a third of the respondents were not aware of the tobacco industry’s Youth Smoking Prevention (YSP) Programme. Among those who were aware most did not think that it is effective in reducing smoking among young people. A significantly larger percentage of college/university students believed that the YSP program was ineffective (Table 25).

When respondents were asked whether they supported the activities of the tobacco industry such as providing scholarship to students, aid to flood victims, etc. over 70% of them said that they supported these activities of the industry. A significantly larger percentage of college/university students supported these activities of the industry.

Table 25: Perception of tobacco industry’s youth smoking prevention programme and corporate social responsibility activities

| Tobacco Industry Activities | Lower Secondary (n=1043) | Upper Secondary (n=1018) | College/ University (n=1003) | All Levels (n=3064) | p-value |
|---|--------------------------|--------------------------|------------------------------|---------------------|---------|
| Believed that YSP program is effective in reducing smoking among young people | | | | | |
| Effective | 24.9 | 27.0 | 20.1 | 23.9 | 0.000 |
| Neither effective nor ineffective | 51.6 | 47.3 | 43.9 | 47.5 | |
| Ineffective | 23.5 | 25.7 | 36.0 | 28.6 | |
| Support corporate social responsibility activities of tobacco industry | | | | | |
| Not at all | 29.3 | 26.9 | 17.5 | 24.6 | 0.000 |
| A little/somewhat | 49.8 | 53.5 | 53.2 | 52.1 | |
| A lot | 20.9 | 19.6 | 29.3 | 23.2 | |

Respondents were asked their opinion about the contribution of tobacco industry to the Malaysian economy. A sizeable proportion (40%) said they had no idea, while 37.1% said that the industry contributes a little or somewhat to the country's economy and 11.6% said they contribute "a lot" (Table 26). A larger percentage of the younger groups had no idea on this issue compared to college/university students. More than half of total respondents mentioned that they do not like the tobacco industry, while another 41.1% neither like nor dislike tobacco industry. Less than 5% of the respondents said that they like the industry. There were some differences in opinion between the 3 respondent groups.

About half of respondents from each group agreed that cigarette companies lie about the dangers of smoking (Table 26). Two in three respondents believed that cigarette companies try to get youth to smoke. A significantly larger percentage of upper secondary and college/university students believed that cigarette companies entice youth to smoke. Two-thirds of total respondents agreed with the statement "I would like to see cigarette companies go out of business", especially among the younger groups. Only a minority of respondents (19.7%) agreed that tobacco companies do good things for the community. Overall smokers have a more positive attitude towards cigarette companies compared to non-smokers (Table 26).

Table 26: Attitude towards the tobacco industry

| Attitude | Lower Secondary (n=1043) | Upper Secondary (n=1018) | College/ University (n=1003) | All Levels (n=3064) | p-value |
|---|--------------------------|--------------------------|------------------------------|---------------------|---------|
| Opinion about the contribution of tobacco industry to Malaysian economy | | | | | |
| Nothing | 14.6 | 12.5 | 4.2 | 10.5 | 0.000 |
| Very little/somewhat | 28.1 | 35.1 | 48.6 | 37.1 | |
| A lot | 4.0 | 8.8 | 22.5 | 11.6 | |
| No idea | 53.3 | 43.7 | 24.8 | 40.8 | |
| Like cigarette company | | | | | |
| Like them a lot/somewhat | 3.1 | 3.0 | 4.7 | 3.6 | 0.000 |
| Neither like or dislike | 42.0 | 35.6 | 45.7 | 41.1 | |
| Don't like them somewhat/at all | 54.9 | 61.4 | 49.6 | 55.3 | |
| Cigarette companies lie about the danger of smoking (% agreeing) | 48.5 | 51.9 | 50.9 | 50.4 | NS |
| Cigarette companies try to get people my age to smoke (% agreeing) | 55.3 | 68.2 | 63.9 | 62.4 | 0.000 |

| | | | | | |
|---|------|------|------|------|-------|
| I would like to see cigarette companies go out of business (% agreeing) | 69.1 | 70.0 | 56.0 | 65.1 | 0.000 |
| Tobacco companies do good things for the community (% agreeing) | 17.7 | 17.5 | 23.9 | 19.7 | 0.000 |

Table 27: Attitude towards the tobacco industry by current smoking status

| Statement | Non Smoker (n= 2836) | Smoker (n= 228) | p-value |
|--|----------------------|-----------------|---------|
| Cigarette companies lie about the danger of smoking | 51.6 | 35.6 | 0.000 |
| Cigarette companies try to get people my age to smoke | 62.8 | 57.3 | 0.059 |
| I would like to see cigarette companies go out of business | 66.2 | 51.3 | 0.000 |
| Tobacco companies do good things for the community | 18.5 | 34.5 | 0.000 |

When asked about the Corporate Social Responsibility (CSR) activities of the industry, some university participants believed that *“it’s a corporate strategy to prevent people from seeing the truth”*. On further discussion on the issue of tobacco control and economic interest of the country, some participants were convinced that the government should:

“Over time reduce dependency on tobacco revenue”

“Have to remove root cause, no point in education, campaigning, etc

DISCUSSION

One in five girls and young women between the ages of 13 to 25 years tried cigarette smoking. About 8% smoked in the last 30 days. Another 7% of never smokers intend to smoke in the next year. Smoking rate is higher among the older girls. There is no significant difference in smoking rates between urban and rural areas. Although smoking rate is relatively low, about 40% of these females are exposed to secondhand smoke in their home.

Among those who have ever smoked, a majority smoked 10 or less cigarettes in their lifetime. One in ten girls has smoked over 100 cigarettes in their lifetime. Nine in ten girls were minors when they first tried smoking, with half below 15 years of age. Most females smoked manufactured cigarettes, smoking 5 or less cigarettes in the last seven days and they smoked to relieve tension and to relax. Female smokers reported having good access to cigarettes. A majority of smokers intend to quit smoking.

A great majority of girls and young women have a negative opinion and image of smoking. Smokers were more likely to have a favorable opinion of smoking as well as a positive opinion and image of smoking compared to non-smokers. Awareness of smoking-related diseases was high.

There is substantial evidence that exposure to direct and indirect tobacco advertising, together with other marketing tactics used by the tobacco industry, leads to an increase in experimentation by young people who would potentially become regular users of tobacco products. Studies show that pervasive tobacco promotion creates the perception that more people smoke than is actually the case. The tobacco industry promotes cigarettes to young women using false images of sophistication, slimness, vitality, emancipation and sexual allure.¹²

There is evidence from the study that some girls and young women have a positive image of smoking such as smoking helps to control body weight, that it is a sign of being modern, cool and mature and that it helps them to socialize. Slightly more than a third of the girls believed that it is socially acceptable for them to smoke. About 40% of respondents perceived that Malaysian society approves of smoking. Significantly larger percentage of current smokers believed that smoking is a norm and that it is socially acceptable for girls to smoke compared to non-smokers. Girls and young women in this study who believe that smoking helps to control body weight and is a sign of modern, cool and maturity, were more likely to smoke^{13,14}

Although cigarette advertising and promotion has been banned in Malaysia, one in four females reported that they have noticed tobacco advertising in the last month. About half

¹² WHO, Gender and Tobacco Control: A Policy Brief, 2007.

¹³ Camp, D.E., Klesges, R.C. and Relyea, G. The relationship between body weight concerns and adolescent smoking. *Health Psychology*, 12(1): 24-32, 1993.

¹⁴ Page, R.M., et al. Co-occurrence of substance use and loneliness as a risk factor for adolescent hopelessness. *Journal of School Health*, 63(2):104-8, 1993.

of the females have seen tobacco advertising at cultural, sports and community events. A small proportion of females were offered free samples of cigarettes and owned a merchandise with a cigarette brand name. Over 90% of females have been exposed to anti-smoking messages. Television, billboards, posters and print media are the major sources of such messages.

The study provided evidence that several personal and socio-cultural factors contributed to current smoking. Personal factors that predicted female smoking include having a positive opinion of smoking, a positive image of smoking, and perception that it is socially acceptable for girls to smoke. Socio-cultural factors that increased the likelihood of smoking among the girls and young women are peer smoking, mother smoking and exposure to tobacco advertising and promotion. These findings are consistent with earlier studies^{15,16,17}

Most girls and young women were aware of policies such as health warning on cigarette packs, smoke-free policies, ban on tobacco advertising, ban on sale to minors and ban on smoking among minors. Eight in ten females agreed that cigarette packs should have more health information compared to now and they supported the implementation of pictorial health warning. Most respondents also supported a ban on tobacco advertisements inside shops and stores as well as display of cigarettes inside shops and stores.

Overall support for smoking bans in selected public places was high. Over 80% supported total ban in indoor and air-conditioned places such as restaurants, hospitals and educational institutions. However, support for bans in workplaces and non air-conditioned indoor and outdoor public places including places of worship was low. Total smoking ban in bars, pubs and discos was supported by a minority. These findings suggest the need to enhance education on the harms of secondhand smoke. There is also evidence that young people including young females pick up the smoking habit while socializing with friends in entertainment facilities such as pubs and bars. Thus, banning smoking in public places will prevent the development of social practices of smoking while out at clubs, discos, restaurants, or in other popular gathering places of youth. It is vital that young people learn to socialize without the “crutch” of cigarettes, and the development and implementation of strong policies banning smoking in workplaces (which would include most recreational areas) and public places will be effective in doing so.

Most female respondents felt that the government is ineffective in implementing smoking bans. This is attributed to several factors: lack of enforcement, public awareness of policy

¹⁵ Evans, R.I., et al. Deterring the onset of smoking in children: Knowledge of immediate physiological effects and coping with peer pressure, media pressure and parent modelling. *Journal of Applied Social Psychology*, 8:126-135, 1978.

¹⁶ Gottlieb, N.H. The effects of peer and parental smoking and age on the smoking careers of college women. A sex-related phenomenon. *Social Science and Medicine*, 16:595-600, 1982

¹⁷ Aghi, M et al. Initiation and maintenance of tobacco use. In Samet, J.M. and Yoon SY (eds) *Women and tobacco epidemic: Challenges for the 21st Century*. Geneva: World Health Organization, 2001.

is inadequate, lack of concern among non-smokers about passive smoking, and the high social acceptability of smoking. There were suggestions to improve the implementation of smoking bans that include increasing enforcement and awareness of current smoke-free policy. Public education on harms of secondhand smoke should also be intensified.

Concerning the ban on sale to minors and smoking among minors, most girls and young women perceived that these laws have not been enforced effectively. As such, they recommended that efforts be stepped up to effectively enforce these policies.

Most females think that the YSP programmes of the industry are ineffective in preventing smoking among young people. While most expressed some support for the corporate social responsibility activities of tobacco industry, many however have a negative attitude towards the tobacco industry.

POLICY RECOMMENDATIONS

Strong government action in individual countries has the greatest potential to stem the tobacco epidemic. Comprehensive tobacco policies are a key component in preventing and decreasing tobacco use among women as well as protect never smokers from being exposed to secondhand smoke. Comprehensive tobacco policies such as price controls and taxation of tobacco products, packaging regulations, advertising bans, limiting depictions of smoking in mass media, smoking location restrictions, and sales legislation, are among other strategies that have been effective at the population level.

Malaysia should prioritise implementation of tobacco control measures in line with recommendations of the WHO Framework Convention on Tobacco Control (FCTC). As the first step to successfully attain tobacco control goals, the government should pass the drafted Tobacco Control Act immediately. The tobacco control law should urgently comply with the FCTC recommendations. Other measures recommended include:

1. The tax on all tobacco products should be increased to 75% of retail price as recommended by the World Bank to make them unaffordable to youth. It is also recommended that the government introduce a 2% dedicated tax on tobacco products to support health promotion and increase anti-smoking campaigns to reduce smoking among young people.
2. To counter the tobacco industry's strategies to promote its products to the youth and other segments of the population and to deter it from using point-of-sale as a venue to advertise and promote its products, the government should ban the display of cigarette packs at all retail outlets. In addition, the government should also ban the use of promotional items such as lighter and ashtray that comes with a tobacco product. We urge that the government implement the ban on kiddie packs immediately and not defer its ban any longer.
3. To protect the Malaysian populace from the harms of exposure to secondhand smoke, the government should legislate and implement 100% smoke-free environments. Priority should be given to instituting a total smoking ban in all private workplaces and entertainment outlets such as pubs, nightclubs, discos, karaoke lounges, casinos and non-air-conditioned eating outlets. To further support this policy the government should not permit having smoking rooms even with ventilators because they are found to be ineffective. In line with this is the need to ban the adoption of smoking zones in all indoor venues.
4. The government should implement graphic health warnings on cigarette packs immediately as a means to educate the public at no cost to the government. The graphic health warnings should occupy a minimum of 50% of the top front and back panels of the pack, must be printed in colour and rotated every two years to avoid smokers' overexposure to the same graphic warnings. As a complementary measure, the government should also ban the use of sleeve or any material that may conceal or obscure the graphic health warning on a cigarette pack. The government should also ban the use

of descriptors since they mislead smokers to think that some tobacco products are less harmful and that use of these products is an alternative to quit smoking.

5. Anti-smoking media campaigns should be expanded through all possible means, such as mass media (TV, radio, newspapers) and inter-personal communication.

APPENDIX (QUESTIONNAIRE)

Case ID:

School ID:

SMOKING IN GIRLS AND WOMEN SURVEY

INSTRUCTIONS

These questions are about awareness and attitudes of young people like yourself to anti-smoking activities, smoking tobacco products and any smoking experiences you might have had.

Please read each question carefully and answer honestly.

The answers you give will be kept completely secret and confidential.

To help us keep your information confidential, please do not put your name on any of the pages.

For each question, indicate your answer by circling your response.

For example: (1) No 2 Yes

DATE: ____/____/____

Checked by: _____

(Name of Field Supervisor)

SECTION A: SMOKING BEHAVIOUR

1 Have you ever smoked a cigarette, even just a few puffs?

1 Yes

2 No

2 How many cigarettes have you smoked in your life? (Choose only one)

1 None

2 1-10

3 11-100

4 More than 100

3 How old were you when you first tried a cigarette?

1 I have never smoked cigarettes

2 Below 10 years old

3 10 or 11 years old

4 12 or 13 years old

5 14 or 15 years old

6 16 or 17 years old

7 18 or 19 years old

8 20 years old and above

4 During the past 30 days [one month]. How many days did you smoke cigarette?
(Choose only one)

1 Not at all → **[SKIP TO SECTION B (Q.15) on PAGE 4]**

2 1 or 2 days

3 Some days

4 Almost every day

5 Every day



Go to NEXT QUESTION

5 During the past week, on the days you smoked, how many cigarettes did you smoke each day?

- 1 None at all
- 2 Less than 1 cigarette (only puffs)
- 3 1 cigarette
- 4 2 to 5 cigarettes
- 5 6 to 10 cigarettes
- 6 11 to 20 cigarettes
- 7 More than 20 cigarettes

6 Which of the following best describe the reasons for smoking?

- 1 To release tension/ stress
- 2 To do what the guys can do
- 3 To be accepted by group
- 4 To relax
- 5 Group norm

7 **How often do you smoke with your friends?**

- 1 Never
- 2 Sometimes
- 3 Often

8 How often do you smoke with your parents?

- 1 Never
- 2 Sometimes
- 3 Often

9 What brand of cigarettes do you usually smoke? **(Select only one response)**

- 1 Write name of brand (e.g., Marlboro Light) _____
- 2 I have no usual brand
- 3 I usually smoke hand rolled cigarettes

10 In your opinion, do imported Western cigarettes taste better or worse than local brands?

- 1 Taste better
- 2 Taste the same
- 3 Taste worse
- 4 I don't know

11 How do you usually get your cigarettes? **(Select only one response)**

- 1 I do not smoke
- 2 I buy them
- 3 Someone buys them for me
- 4 I get them from friends
- 5 I get them from home
- 6 I get them another way

12 Where do you usually smoke? **(Select only one response)**

- 1 I have never smoked cigarettes
- 2 At home
- 3 At school
- 4 At work
- 5 At friends' houses
- 6 At social events
- 7 In public places (e.g. parks, shopping centres, street corners)
- 8 Others (specify: _____)

13 How easy or difficult is it for you to get cigarettes when you want them?

- 1 Very difficult
- 2 A little difficult
- 3 A little easy
- 4 Very easy
- 5 I don't know/Not sure

14 Which of the following describe your thoughts about quitting smoking?

- 1 I plan to quit in the next 30 days [1month]
- 2 I plan to quit sometime in the next 6 months
- 3 I plan to quit, but not in the next 6 months
- 4 I do not plan to quit at all

SECTION B

TO BE ANSWERED BY EVERYBODY

15 If one of your best friends were to offer you a cigarette, would you smoke it?

- 1 **Definitely not**
- 2 **Probably not**
- 3 **Probably yes**
- 4 **Definitely yes**

16 At any time during the next year do you think you will smoke a cigarette?

- 1 Definitely not
- 2 Probably not
- 3 Probably yes
- 4 Definitely yes

17 During the past 6 months, how often have you noticed ANTI-SMOKING media messages (e.g., television, radio, billboards, posters, newspapers, magazines, movies)?

- 1 Never
- 2 Sometimes
- 3 A lot

18 In the last 6 months, have you noticed advertising or information that talks about the dangers of smoking, or encourages quitting in any of the following places? **(Please answer all the questions a-i below)**

| | Tick <input checked="" type="checkbox"/> in appropriate box | |
|---|---|--------------------------|
| | ¹ Yes | ² No |
| a. on television | <input type="checkbox"/> | <input type="checkbox"/> |
| b. on radio | <input type="checkbox"/> | <input type="checkbox"/> |
| c. on posters | <input type="checkbox"/> | <input type="checkbox"/> |
| d. on billboards | <input type="checkbox"/> | <input type="checkbox"/> |
| e. in newspapers or magazines | <input type="checkbox"/> | <input type="checkbox"/> |
| f. at cinema before or after film | <input type="checkbox"/> | <input type="checkbox"/> |
| g. in discos/karaoke lounges, etc | <input type="checkbox"/> | <input type="checkbox"/> |
| h. on cigarette packs | <input type="checkbox"/> | <input type="checkbox"/> |
| i. others (specify: _____) | <input type="checkbox"/> | <input type="checkbox"/> |

19 **As far as you know, are there any health warnings on cigarette packs?**

- 1 Yes
- 2 No
- 3 **Don't know**

20 **In the last month, how often, if at all, have you NOTICED health warnings on cigarette packages?**

- 1 Never
- 2 Once in a while
- 3 Often
- 4 Very often

21 **To what extent, if at all, have the health warnings made you think about the health risks of smoking?**

- 1 Not at all
- 2 A little
- 3 A lot
- 4 I haven't seen any warning labels

22 Do you think that cigarette packages should have.....

- 1 Less health information compared to now
- 2 About the same as now
- 3 More health information compared to now
- 4 Can't say

23 Do you think printing pictorial health warnings about harmful effects of smoking on cigarette packs is an effective way to reduce smoking among young people?

- 1 Very effective
- 2 Effective
- 3 Neither effective nor ineffective
- 4 Ineffective
- 5 Very ineffective

24 In your opinion, should the government implement pictorial health warnings on cigarette packs in Malaysia?

- 1 Yes
- 2 No
- 3 Unsure

25 In the last 30 days, how often have you noticed things that are designed to encourage smoking or which make you think about smoking? (Things like advertisements and pictures of smoking).

- 1 Never
- 2 Once in a while
- 3 Often
- 4 Very often

26 In the last 30 days, have you noticed CIGARETTES or TOBACCO PRODUCTS ADVERTISED in any of the following places: **(Please answer all the questions a-i below)**

| | Tick <input checked="" type="checkbox"/> in appropriate box | |
|---|---|--------------------------|
| | ¹ Yes | ² No |
| a. on television..... | <input type="checkbox"/> | <input type="checkbox"/> |
| b. on radio | <input type="checkbox"/> | <input type="checkbox"/> |
| c. on posters | <input type="checkbox"/> | <input type="checkbox"/> |
| d. on billboards | <input type="checkbox"/> | <input type="checkbox"/> |
| e. in newspapers or magazines | <input type="checkbox"/> | <input type="checkbox"/> |
| f. at shops or stores | <input type="checkbox"/> | <input type="checkbox"/> |
| g. in discos/karaoke lounges, etc | <input type="checkbox"/> | <input type="checkbox"/> |
| h. on or around street vendors | <input type="checkbox"/> | <input type="checkbox"/> |
| i) others (specify:_____) | <input type="checkbox"/> | <input type="checkbox"/> |

27 When you go to sports events, fairs, concerts, or community events, how often do you see advertisements for cigarettes?

- 1 Never
- 2 Sometimes
- 3 A lot
- 4 I hardly ever attend sports events, fairs, concerts, or community events

28 Do you support the banning of sponsorship of sports (such as Formula 1) and cultural activities by tobacco industry in Malaysia?

- 1 Not at all
- 2 A little/somewhat
- 3 A lot

29 In the last year, has anyone offered you a free sample of cigarettes, other than friends or family?

- 1 Yes
- 2 No

30 In the last year, have you noticed COMPETITIONS or PRIZES associated with cigarettes?

- 1 Yes
- 2 No

31 Do you have something like a hat or t-shirt, or any other clothing with a cigarette brand name or logo on it?

- 1 Yes
- 2 No

32 Would you ever use or wear something that has a cigarette name or logo on it, like a t-shirt or hat?

- 1 Definitely not
- 2 Probably not
- 3 Probably yes
- 4 Definitely yes
- 5 Don't know

33 When you watch TV, videos, or movies, how often do you see actors smoking?

- 1 Never
- 2 Sometimes
- 3 A lot
- 4 I hardly ever watch TV, videos, or movies

As far as you know, how many of your favourite actors smoke?

34

- 1 None
- 2 Some
- 3 Most or all
- 4 I don't have any favourite actors
- 5 I don't know

35 Do you support banning smoking scenes in movies and television programmes?

- 1 Not at all
- 2 A little/somewhat
- 3 A lot

36 In your opinion, how effective has the government been in enforcing ban on tobacco advertising, promotion and sponsorship in the country?

- 1 Very effective
- 2 Effective
- 3 Neither effective nor ineffective
- 4 Ineffective
- 5 Very ineffective

37 In your opinion, what should be done to tobacco companies that violate this ban on advertising, promotion and sponsorship? **(Please answer all the questions a-d below)**

| | Tick <input checked="" type="checkbox"/> in appropriate box | |
|--|---|--------------------------|
| | ¹ Yes | ² No |
| a. Heavy penalty placed on tobacco industry | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Withdraw license to operate | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Relevant government agencies should be held responsible | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Others (specify: _____)..... | <input type="checkbox"/> | <input type="checkbox"/> |

38 Do you support a complete **ban on tobacco advertisements** inside shops and stores?

- 1 Not at all
- 2 A little/somewhat
- 3 A lot

39 Do you support a complete **ban on displays** of cigarettes inside shops and stores?

- 1 Not at all
- 2 A little/somewhat
- 3 A lot

40 Do you believe banning tobacco sales to minors is an effective way to reduce smoking among young people in Malaysia?

- 1 Very effective
- 2 Effective
- 3 Neither effective nor ineffective
- 4 Ineffective
- 5 Very ineffective

41 Do you believe that the tobacco industry's Youth Smoking Prevention Program (YSP) is effective in reducing smoking among young people?

- 1 Very effective
- 2 Effective
- 3 Neither effective nor ineffective
- 4 Ineffective
- 5 Very ineffective
- 9 Never heard of Youth Smoking Prevention Program (YSP)

42 The tobacco industry provides scholarship to students, aid to flood victims, build bus stands and other forms of philanthropic actions. Do you support these actions of the tobacco industry?

- 1 Not at all
- 2 A little/somewhat
- 3 A lot

43 In your opinion, how much does the tobacco industry contribute to the Malaysian economy?

- 1 Contribute nothing
- 2 Contribute very little
- 3 Contribute somewhat
- 4 Contribute a lot
- 5 No idea

44 How much do you like cigarette company?

- 1 I like them a lot
- 2 I like them somewhat
- 3 Neither like nor dislike
- 4 I don't like them somewhat
- 5 I don't like them at all

SMOKING BAN

- 45 For each of the following public places, please tell me if you think smoking should be allowed in all indoor areas, in some indoor areas, or not allowed indoors at all. (Please answer all the questions a-i below)

| | Tick <input checked="" type="checkbox"/> in appropriate box | | |
|--|---|---|---|
| | ¹ Smoking allowed in all indoor areas | ² Smoking allowed in some indoor areas | ³ Smoking should not be allowed at all |
| a. Hospitals? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Workplaces? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Air-conditioned restaurants and other air-conditioned places? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Non-air-conditioned restaurants and public eating areas? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Public transport? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Indoor areas at your place of worship (where people pray)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Outdoor areas at your place of worship. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Bars/pubs/discos | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i. Universities/colleges/school | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

How effective has the government enforced smoking bans in public places?

46

- 1 Very effective
- 2 Effective
- 3 Neither effective nor ineffective
- 4 Ineffective
- 5 Very ineffective

47 In your opinion, which are the factors that have prevented the implementation of smoking ban in public places in Malaysia? **(Please answer all the questions a-e below)**

| | Tick <input checked="" type="checkbox"/> in appropriate box | |
|---|---|--------------------------|
| | ¹ Yes | ² No |
| a. Lack enforcement | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Public awareness is inadequate | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Lack of concern of non-smokers about passive smoking | <input type="checkbox"/> | <input type="checkbox"/> |
| d. High social acceptability of smoking | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Others (specify: _____)..... | <input type="checkbox"/> | <input type="checkbox"/> |

48 In your opinion, how can implementation of smoking ban in public places be improved? **(Please answer all the questions a-d below)**

| | Tick <input checked="" type="checkbox"/> in appropriate box | |
|--|---|--------------------------|
| | ¹ Yes | ² No |
| a. Increase enforcement | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Increase public awareness of smoking bans..... | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Educate public about the harms of passive smoking | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Others (specify: _____)..... | <input type="checkbox"/> | <input type="checkbox"/> |

Which of the following best describes smoking in your home?

- 49
- 1 Smoking is ALLOWED EVERYWHERE in your home
 - 2 Smoking is allowed in some places or at some times
 - 3 Smoking is NEVER allowed ANYWHERE in your home

50 During the past 7 days (one week), how often have people smoked INSIDE YOUR HOME, while you were there?

- 1 Never
- 2 Sometimes
- 3 Often

ATTITUDES AND BELIEFS

51 Some cigarettes are described as 'light' or 'mild', have you ever heard of light or mild cigarettes?

- 1 Yes
- 2 No

52 Compared to regular cigarettes, are 'light' or 'mild' cigarettes easier or harder to smoke for new smokers?

- 1 Easier
- 2 Harder
- 3 No difference
- 4 Don't know / I haven't heard of 'light or mild' cigarettes

53 Are 'light or mild' cigarettes **less** harmful than regular cigarettes?

- 1 No, they are not
- 2 Yes, they are less harmful
- 3 Don't know / I haven't heard of 'light or mild' cigarettes

54 Based on what you know or believe, does smoking cause the following:
(Please answer all the questions a-g below)

| | Tick <input checked="" type="checkbox"/> in appropriate box | |
|---|---|--------------------------|
| | ¹ Yes | ² No |
| a. Lung cancer in smokers | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Lung cancer in nonsmokers from secondhand smoke | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Stained teeth in smokers | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Premature ageing | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Stroke (blood clots in the brains) in smokers | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Impotence in male smokers | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Pregnancy related complications in women smokers | <input type="checkbox"/> | <input type="checkbox"/> |

55 Of the five closest friends that you spend time with on a regular basis, how many of them are smokers?

- 0
- 1
- 2
- 3
- 4
- 5

56 What is your overall opinion of smoking? (Choose only one)

- Very Bad
- Bad
- Neither good nor bad
- Good
- Very Good

57 Please indicate whether you agree or disagree with the following statements:

(Please answer all the questions a-q below)

| | Tick <input checked="" type="checkbox"/> in appropriate box | | | |
|--|---|--------------------------|--------------------------|--------------------------|
| | Strongly agree | Agree | Disagree | Strongly disagree |
| a) Smoking helps to control body weight. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Smoking is a sign of being modern. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Smoking made people look cool or fit. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Most of the women my age smoke. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) It is acceptable for <u>young men</u> (aged 15 to 25) to smoke. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f) It is acceptable for <u>young women</u> (aged 15 to 25) to smoke. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g) Smoking is disgusting. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| h) Smoking makes young people look more mature. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i) It is safe to smoke for a year or two. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| j) Smokers have a harder time in sports. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| k) People who smoke have more friends. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| l) Cigarette companies lie about the danger of smoking. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| m) Cigarette companies try to get people my age to smoke. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| | Tick <input type="checkbox"/> in appropriate box | | | |
|---|--|--------------------------|--------------------------|--------------------------|
| | Strongly agree | Agree | Disagree | Strongly disagree |
| n) I would like to see cigarette companies go out of business. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| o) Young women are used by tobacco industry to promote their product. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| p) Malaysian society disapproves of smoking. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| q) Tobacco companies do good things for the community. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

DEMOGRAPHICS

- 58 Do any of your OLDER BROTHERS smoke?
- 1 I don't have an older brother
- 2 Yes
- 3 No
- 4 I don't know if my brother smoke

- 59 Do ANY of your OLDER SISTERS smoke?
- 1 I don't have an older sister
- 2 Yes
- 3 No
- 4 I don't know if my sister smoke

- 60 Do ANY of your FATHER smoke?
- 1 Yes
- 2 No
- 3 I don't know if my father smoke
- 4 My father had passed away

61 Do ANY of your MOTHER smoke?

- 1 Yes
- 2 No
- 3 I don't know if my mother smoke
- 4 My mother had passed away

62 In what grade or year are you?

- 1 Form 1
- 2 Form 2
- 3 Form 3
- 4 Form 4
- 5 Form 5
- 6 Form 6 /pre-university/diploma
- 7 Bachelor degree- Year 1
- 8 Bachelor degree –Year 2
- 9 Bachelor degree –Year 3
- 10 Bachelor degree –Year 4
- 11 Master / PhD degree

63 What is your field of study?

- 1 No stream (for Form 1, 2 & 3)
- 2 Science stream (for Form 4, 5 & 6)
- 3 Art stream (for Form 4, 5 & 6)
- 4 Medical
- 5 Phamarcy
- 6 Art (History, Geography, Literature, Economic, Sociology, Psychology and others.

- 7 Applied Art (Communication, Management, Graphic designer and others.)
- 8 Engineering
- 9 Other (specify: _____)

64 What is your age?

- 1 13 -15 years old
- 2 16- 19 years old
- 3 20-25 years old

65 Race:

- 1 Malay
- 2 Chinese
- 3 Indian
- 4 Other (Specify)_____

66 To what religious faith do you belong?

- 1 Islam
- 2 Christianity
- 3 Hinduism
- 4 Buddhism
- 5 Others (specify: _____)
- 6 No religion

67 Where do you come from?

- 1 Town (specify: _____)
- 2 Village (rural) (specify: _____)

68 State of origin?

THANK YOU, YOU HAVE FINISHED

Thank you very much for your help.

Please check to see that you have answered all the questions that apply to you.

As a reminder, all of your answers will be kept strictly confidential.

If you have any questions, please ask the interviewer.



About SEATCA

The Southeast Asia Tobacco Control Alliance (SEATCA) works closely with key partners in ASEAN member countries to generate local evidence through research programs, to enhance local capacity through advocacy fellowship program, and to be catalyst in policy development through regional forums and in-country networking. By adopting a regional policy advocacy mission, it has supported member countries to ratify and implement the WHO Framework Convention on Tobacco Control (FCTC)

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