

Smoking in Malaysia: Early Initiation and Ways to Overcome

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ABSTRACT

Smoking is a public health problem worldwide and in Malaysia. According to time series data in Malaysia, smoking is initiated at a younger age and the prevalence of smoking in Malaysia among adults and adolescents have not been reduced much over the years. Smoking has a detrimental health effect to smokers as well as those passively smoking. Smoking at younger age is linked to increased dependence of nicotine and many other high-risk behaviours. The objective of this review was to describe the factors which contribute to the smoking initiation at younger age, issues regarding smoking bans and ways to overcome the early smoking initiation in Malaysia. The review was based on expert opinion on the important topics and articles retrieved from Google Scholar. The factors which contribute to smoking initiation at younger age are tobacco factors, school factors, family factors and social factors. Challenges to smoking bans in Malaysia includes poor enforcement and innovation of tobacco products in Malaysia. A comprehensive approach including the MPOWER strategy, which is recommended by the Framework Convention of Tobacco Control (FCTC) should be carried out to address this problem towards achieving Tobacco Endgame.

Keywords

Smoking, Tobacco, FCTC, MPOWER, Malaysia

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Received: 26 November 2020; Accepted: 16 June 2021

Doi: <https://doi.org/10.31436/imjm.v20i3>

INTRODUCTION

One of the most preventable cause of death is diseases caused by tobacco usage. According to World Health Organization (WHO), around 8 million people die yearly due to tobacco usage.¹ More than 7 millions of those deaths are due to direct tobacco usage while 1.2 million die due to exposure to second-hand smoke. In Malaysia, more than 10,000 people die yearly from smoking-related diseases.²

Generally, about one in every five adults worldwide smoke tobacco.³ According to the National Health and Morbidity surveys of 2011, 2015 and 2019, the prevalence of adult smokers in Malaysia is high and stagnant over the years, reported to 23.1%, 22.8%, and 21.3%, respectively. A national survey conducted by Global Adult Tobacco Survey (GATS) in 2011 has reported similar high prevalence of tobacco smokers among Malaysian adults (23.1%).⁴ The prevalence of smoking among adolescents also remains static over the years and Global Youth Tobacco Survey found that the prevalence of smokers among adolescents aged 13 to 15 was 20.2% in 2003 and a slight reduction to 18.2% in

2009. Besides that, the time series data in Malaysia shows that the mean age of smoking initiation has been reducing over the years,⁵⁻⁷ which meant individuals begin smoking at younger ages.

Smoking causes many detrimental health effects. For adolescents, early cigarette smoking can lead to increased risk of addiction, and affects the brain development and predisposes to high risk behavior.⁸ Smoking at an earlier age also cause individuals to be dependant to nicotine faster and leads to continuation of smoking habit during adulthood and difficulty in quitting, therefore increases the risk of chronic illness later in life.^{8, 9} Recognizing the burden and impact of smoking, WHO has implemented the Framework Convention of Tobacco Control (FCTC).¹⁰ Malaysia was a member of this convention since September 2003 and has ratified this convention on 16 September 2005. In the SimSmoke simulation model, to achieve the WHO target of 15% prevalence rate of smokers in 2025 and less than 5% in 2045, there are a few strategies that needs to be carried out.¹¹ The strategies include

Malaysian government should raise tobacco tax, implement comprehensive smoking bans, ban all advertising/promotions, and run extensive campaigns in mass media.

Since the prevalence of individuals who smoke at younger age is not reducing, it is essential to explore the factors contributing to smoking initiation.⁴ Moreover, smoking ban is essential to reduce the detrimental health effects of tobacco smoking among second-hand smokers and to denormalise the smoking habit.^{12, 13} Hence, the objective of this review was to describe the factors which contribute to smoking initiation at younger age, obstacles regarding smoking bans and ways to overcome these issues in Malaysia.

METHODS AND MATERIALS

In the first phase, keywords for factors of smoking initiation at younger age was identified. A preliminary search was conducted to determine appropriate keywords. Next, Google Scholar was searched to identify studies published from the year 2002 to 2020 using keywords of “factors”, “smoking”, “initiation”, and “adolescent”. The inclusion criteria were English language articles published from 2002 to 2020, published reports, availability of full text articles and studies conducted in the adolescent age group. The exclusion criteria in this search were case study, qualitative article, study protocol, and animal study. A total of 500 articles was retrieved.

In the second phase, title and abstract screenings were done. Screening was done based on the relevancy of the titles to the inclusion and exclusion criteria and the objectives of this study. A total of 470 articles were excluded after title and abstract screening leaving 30 articles to be assessed for eligibility.

In the third phase, the full articles were checked thoroughly if they fulfil the inclusion criteria and the objective of this research. Researchers then discussed on which articles to be included until final consensus was achieved. A total of 11 articles was included in this review. The themes for the factors of smoking initiation were then developed based on the articles obtained. Four main themes were emerged: tobacco

factors, school factors, family factors and social factors. Data extraction from the articles was based on this theme. The reporting of the themes of this study is conducted in a narrative method due to the descriptive nature of this review. The review of smoking bans and ways to overcome were based on expert views and subsequently relevant articles was retrieved.

Smoking Ban in Malaysia

The Control of Tobacco Product Regulation under the Food Act 1983 was implemented in 2004. It was aimed to regulate smoke-free environment and other related issues, such as tobacco advertising, promotion, sponsorship, tobacco packaging and labelling.¹⁴ In Malaysia, smoking is prohibited in areas which are specified in the Control of Tobacco Product Regulation 2004, which includes entertainment facilities (except pub, disco, night club and casino), hospital/clinics, lift, public toilets, eateries (or air-conditioned shops), public transport/stops of public transport, any building as stated by Minister, airport, government premises, enclosed areas in building used for gathering (except own premises/house), learning institutions, school buses, petrol station, stadium/sports complex/fitness centre/gymnasium, service counter, religious places, library, rest and recover area (RnR) and internet café. Various states have also implemented “Smoke Free Cities” because of their support to Smoke Free Legislation (SFL) programme. Table 1 shows some of the SFL program in various states across Malaysia as reported by Najihah et al. (2016).¹⁵

The latest smoking ban was implemented in Malaysia in eateries started on 1st January 2019.¹⁶ Smoking ban in eateries will help smokers to detach from association of smoking with eating and protect others from the exposure of environmental tobacco smoke (ETS).¹² There is a positive result on implementation of banning of smoking in eateries. For instance, a study in Guatemala have shown that ban of smoking in eateries decreased the nicotine concentration significantly and increased support towards smoking bans.¹³

However, SFL in Malaysia are considered partly as some closed public areas still allow smoking.¹⁷ Many people do not adhere to this smoking ban and are still seen to

Table 1: The timeline of tobacco control policies in Malaysia

| State in Malaysia (specific areas) | Year of Implementation | Name of SFL Program | Penalty for non-compliance |
|---|------------------------|---|--|
| Malacca (Malacca World Heritage City, Melaka Raya, Malacca International Trade Centre (MITC), Alor Gajah and Jasin) | June 2011 | Melaka Smoke-Free Zone | Those caught smoking will be fined up to RM 10,000 or face two years of imprisonment |
| Penang (Botanical Garden, Youth Park, Air Itam dam, Mengkuang dam, Teluk Bahang dam and Ampang Jajar Municipal Park, Georgetown) | October 2012 | Penang Bebas Asap Rokok (PeNBAR) | RM2000 will be fined for those caught smoking and RM500 for discarding cigarette butts carelessly |
| Johor (Town Park Two and Three, parks in Taman Seri Austin, Gunung Ledang National Park, Endau Rompin National Park, Endau Rompin Tambahan National Park, Pulau Kukup National Park and Tanjong Piai National Park) | June 2014 | Smoke Free Zone | Those caught smoking will be fined a range of RM250 to RM 10,000 or jailed not more than two years |
| Terengganu (The recreational park of Batu Burok and its surrounding area of approximately 1 km ² radius) | June 2014 | Terengganu Bebas Asap Rokok (TBAR) | Not mentioned |
| Kelantan (Administrative area of Kota Bharu Municipality, Islamic City involving two zones which are Dataran Ilmu and location from the Kota Bharu Bus Station until Tambatan Diraja) | April 2014 | Inisiatif Kelantan Bebas Asap Rokok (IKBAR) | Not mentioned |

smoke extensively in smoke free areas. In many venues across Malaysia, non-compliance was seen which predisposes people to SHS.¹⁵ Highest non-compliance was seen across restaurants. There are many health adverse effects reported on the exposure to SHS. SHS exposure in children was reported to have significance with increased visits for urgent treatment, symptoms of wheeze and worsen pulmonary function test.¹⁸

Poor enforcement and innovation of tobacco product are the main challenges experienced in the implementation of smoking ban.¹⁹ To enhance the positive effects of SFL, the enforcement must be continuous and the environmental health officers should perform monitoring regularly. A local research has shown that the enforcement of SFL by the environmental health officers depends on working experience of officers and whether they receive any acknowledgement.²⁰ Usage of e-cigarettes is also a new challenge for smoking bans.¹⁹ In Malaysia, there is no restriction of the usage on e-cigarettes in smoking free areas which weakens the SFL. Majority of respondents perceived e-cigarettes to be a healthier option than conventional cigarettes.²¹ However, this is not generally true as there are many chemicals in e-cigarettes which can cause adverse health effect.²²

Smoking Initiation among Adolescents

There are a few factors that contribute to younger age of smoking initiation, which includes tobacco factors, school factors, family factors and social factors.²³⁻³³ For tobacco factors, easy availability of contraband cigarettes (cheap cigarettes) links to younger age of smoking initiation. According to the Nielsen Company (US) L. Illicit Cigarettes Study (ICS) in Malaysia (2019), 62.3% of the cigarettes in 2019 were cheap contraband cigarettes which were smuggled into the country.³⁴ Students were more likely to afford cheaper cigarettes. This study also showed that Malaysia was one of the top five countries with the highest illicit tobacco usage. Illegal cigarettes are not labelled with the normal health warnings that is seen on legal cigarettes and are easier to purchase.

In addition, majority of young smokers obtain their cigarettes from over-the-counter sources (commercial sources) easily from supermarkets, grocery stores and roadside stalls primarily due to lack of enforcement.²³ About 53.2% of underaged adolescents, aged below 18, who purchased cigarettes in stores were not refused because of their age.³⁵ Sellers rarely ask for any identification and sell cigarettes to underaged although

they are aware of the law. Some even sell loose cigarettes to students.

There are variety of school factors which can contribute to smoking initiation at younger age. Students of younger age were subjected to immense pressure and stress in school. Those unable to cope with the increasing competition and have resultant low grades tended to use smoking as a coping mechanism to reduce stress. In relation to stress, a systematic review in Asian countries have shown that the risk of smoking initiation increases when the adolescents have poor school performance.²⁴ This finding was supported by another study, which reported a significant higher rates of smoking initiation among those who were unstable low achievers compared to persistent high achievers and average achievers.²⁵ Some studies have also reported peer factor as a significant factor for initiation of smoking.^{26, 27} During the adolescence period, there is an increase peer intimacy and peer pressure and adolescents may view tobacco experimentation as normative.²⁶

There are a variety of family factors that can contribute to earlier age of smoking initiation. Parents function as role model and students whose parents smoke, perceive smoking as grown-up and mature. According to a meta-analysis,²⁹ the odds of smoking among children increased significantly if one of their parents smoke compared to children whose parent did not smoke and higher odds were reported if both parents smoke. In addition, some children may have immaturity in thinking, impulsivity and poor decision-making skills which creates a window of vulnerability for tobacco use.²⁹ Stricter family monitoring significantly reduces the risk of initiation of smoking.³³

Social factors also play an important role in smoking initiation at an early age. Adolescents with longer exposure to television were more likely to start smoking.²⁷ Specifically, adolescents who watched five or more hours of television per day were 6 times more likely to initiate smoking compared to those who watched <2 hours.³⁰ High exposure to cigarette advertisements on television is a significant predictor of adolescent smoking initiation.³¹ Other factors which is linked earlier age of smoking initiation include personality traits such as psychological reactance,

sensation seeking and delinquency.^{27,32} Those with higher sensation seeking scores, psychosocial reactance (rebelliousness) scores and delinquent scores are at higher risk of initiation of smoking.^{26, 27, 32} Generally, these traits are more common among adolescents.

Suggestion to Overcome Early Initiation of Smoking

To overcome the issues of smoking such as, smoking initiation at younger age and issues regarding smoking bans, recommendations should be made based on the MPOWER strategy. MPOWER was introduced by WHO in 2008 which was in line with WHO Framework Convention on Tobacco Control (WHO FCTC). About 65% of the world's population are now protected by at least one MPOWER strategy.¹⁰ There are six strategies of MPOWER, which include monitoring tobacco use and prevention policies, protecting people from tobacco smoke, offering help to quit tobacco use, warning about the dangers of tobacco, enforcing bans on tobacco advertising, promotion and sponsorship, and raising taxes on tobacco. In Malaysia, the National Strategic Plan for Tobacco Control Program (NSPTC) (2015-2020) was implemented to carry out this strategy.³⁶

Monitoring tobacco use through implementing an effective surveillance system is important. Currently, the Ministry of Health, Malaysia is adapting the research of Mini Global Adult Tobacco Survey (GATS) nationally. It has been conducted since 2011 by the Institute of Public Health in collaboration with the Ministry of Health to generate smoking data, which can be used to compare between countries.³⁷ The National Health and Morbidity Survey is also conducted four yearly to monitor usage of tobacco among adults aged 15 years and above.³⁸ National E-Cigarette Study (NECS) on the other hand has been carried out specifically to determine the prevalence of e-cigarette usage among adults.³⁹ To monitor the tobacco use among adolescents, Global Youth Tobacco Survey (GYTS), Global School Health Survey (GSHS), and The Tobacco and E-Cigarette Survey among Malaysian Adolescents (TECMA) are being carried out.²³ All these government initiatives are in addition to local studies conducted by universities throughout the country. Proper monitoring enables the extent of the smoking problem to be identified and helps the targeted policies to be implemented.⁴⁰

Next strategy under MPOWER policy is to protect people from tobacco smoke. This strategy is mainly employed to protect non-smokers from the effect of second-hand smoke. In Malaysia, there are 21 areas which are gazetted as smoke free.⁴¹ The most recent program, known as 'Smoke-Free Homes', has been introduced by the government under the Community Empowerment Programs (KOSPEN).⁴¹ Smoke free cities also have been introduced in certain states.³⁶ Under blue ribbon policy, individuals or organizations who put effort to ensure smoke free environment will receive recognitions.¹⁹ Stricter enforcement should be carried out in these areas to ensure the effectiveness of this program. More cities also should be gazetted as smoke free areas. Speak Out: Express Your Right, Protect Your Lung campaign also has been launched in 2019 to empower the non-smokers for their rights for smoke-free environment.

Offering help to quit tobacco use for smokers in Malaysia, the government has undertaken a number of strategies. There are many quit smoking clinics in hospitals and clinics in Malaysia.⁴¹ These clinics have been implemented since 2000 and provide services such as health promotion, screening, counselling, and pharmacotherapy. These clinics assist smokers to quit smoking, inspire those who want to quit and prevent relapse among recent quitters. To intensify the quit smoking services, mQuit services was launched in November 2015. These services are based on a collaboration between public and private partnership, to ensure these services are widely accessible throughout the public and private sectors.⁴² These services include tailored quit service plan, resources, and advice on quit smoking, follow-up sessions by dedicated healthcare professionals and nicotine replacement therapy.⁴³ These services are further intensified with a Quitline system (telephone-based service) and smokers can register through www.jomquit.moh.gov.my. In schools, "Kesihatan Oral Tanpa Asap Rokok Programme" (KOTAK) have been implemented.⁴⁴ KOTAK program performs dental check-up yearly and those found smoking will be assisted to quit via a behavioural approach. Other measures that should be carried to achieve this strategy include, strengthen the quitline system, increase counselling via dental team and increase quit smoking services outside of health facility.³⁶

Warning about the dangers of tobacco is another measure under the MPOWER strategy. In Malaysia, there are six authorised health warnings mandated to be displayed on cigarette packs since January 2014.⁴⁵ The textual and graphic warning should occupy 50% of the front of the pack and 60% of back of pack. The language of the text of the warning is in Malay on the front panel and English on the back panel. However, these warnings are only mandated on the cigarette pack and does not apply to other tobacco products. Besides that, there are variety of health promotion activities which are carried out under this measure. "Tak nak" campaign was implemented since 2004 which are aimed to prevent the initiation of smoking among non-smokers and motivate smokers to quit smoking.⁴⁶ This campaign conveys anti-smoking messages through mass media including television, radio, and social media poster billboards, government premises, newspaper, magazine, and targets younger audiences.⁴⁴ ⁴⁶ "Kempen Nafas Baru Bermula Ramadan" was organised to assist Muslim smokers specifically to quit smoking during the fasting month.¹⁹ Moreover, the community empowerment program (KOSPEN) uses trained volunteers in the community to convey anti-smoking messages.⁴⁷ In schools, specific programmes, such as IMFree tobacco programmes have been implemented to convey anti-tobacco messages to school going adolescents.

Based on Article 13 by WHO, a comprehensive ban on advertising, promotion and sponsorship would decrease the usage of tobacco products.⁴⁸ All forms of direct and indirect tobacco advertising, promotion and sponsorship should be banned. In Malaysia, all tobacco related advertisement was banned since 1982.³⁵ Indirect promotion via gift, free samples, selling price and packaging of tobacco products is controlled by the Control of Tobacco Product Regulation 2004. Enforcement is carried out by the Ministry of Health under this measure and those non-compliance should be fined or brought to court. Besides that, the sales of single sticks has been banned in Malaysia since 2004.³⁵ Single sticks cigarettes are one of the key drivers to lure adolescents to initiate smoking since they do not have to buy the entire cigarette pack. Despite banning all forms of advertising and promotion at point of sale (POS) in Malaysia, pack display has not been banned. Tobacco companies will take advantage of existing

loopholes and use it to their gain. Hence, a comprehensive ban in Malaysia should include ban on pack display at POS, enforce a clear-written guideline to prevent indirect advertisement at POS, to develop and enforce new regulations to prevent direct and indirect advertising via tobacco pack and to develop Code of Conduct to control receiving sponsorship by tobacco companies.^{35, 36}

Besides, to reduce advertisement and promotion on cigarette pack, some countries have implemented plain packaging. The first country which implemented plain packaging was Australia in 1 December 2012.⁴⁸ Article 11 WHO Framework of Convention of Tobacco Control has stated a clear definition of plain packaging as “Measures to restrict or prohibit the use of logos, colours, brand images or promotional information on packaging other than brand names and product names displayed in a standard colour and font style.”⁴⁸ In other words, plain packaging removes all marketing elements, including brand, colours and logos.⁴⁹ Malaysia is still in progress for implementation of plain packaging. Plain packaging is said to be effective to reduce smoking among smokers and prevent initiation of smoking among non-smokers.⁵⁰

For the next measure under the MPOWER strategy, raising taxes on tobacco has been proposed. According to the NSPTC 2015-2020, it has been suggested that taxation on tobacco products should be given excise duty up to 75% of its retail price.³⁶ This is to discourage the public to buy any of tobacco products. In 2015, the overall price of per stick has increased (from RM 0.28 to RM 0.40) with the introduction of Goods and Services Tax (GST) and tobacco excise duty by 42.8%.⁴⁴

Other strategies which can be carried out are strengthening current tobacco activities, strengthening legislation and enforcement and increasing of multi-sectoral collaboration. In the NSPTC 2015-2020, involvement of multiple ministries and related agencies were clearly outlined as part of strategies to strengthen the national tobacco control activities.³⁶ By having an established organization at higher level, acts and policies can be tabled at parliament and implemented by public health authorities. Further commitment was shown when the legislation was included in *Rancangan Malaysia*

Ke-Sebelas (11th Malaysia Plan). The main legislation in Malaysia is the Control of Tobacco Product Regulation and its latest amendment in 2018.¹⁴ This regulation covers various crucial aspects, such as gazette of smoke free environments, ban of tobacco advertising, ban of tobacco promotion, ban of tobacco sponsorship, control of sales of tobacco product (prohibition of cigarette to be sold in an unopened packet, ban of sale of tobacco product to a minor) and requirement of warning on tobacco packaging.

CONCLUSION

The review revealed that the factors which predispose smoking initiation at a younger age in Malaysia include tobacco factors, school factors, family factors and social factors. Hence, a comprehensive approach should be taken to overcome this issue and to meet the WHO targets for Tobacco Endgame. MPOWER can be used as a comprehensive strategy. It is important that we all commit to ensuring everyone is fully protected from the harms of the tobacco epidemic. This is to ensure a tobacco free nation by 2045. Unfortunately, the tobacco epidemic is far from over. There have been and will continue to be obstacles and unexpected pitfalls to overcome the issues of smoking.

Conflict of Interest

The authors declare that they have no financial and non-financial conflict of interest

ACKNOWLEDGEMENT

We would like to acknowledge National University of Malaysia for grant FF- 2020-057.

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