

Combating tobacco use in Saudi Arabia: a review of recent initiatives

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Abstract

Background: The tobacco use epidemic is one of the major global public health challenges and causes > 7 million deaths each year, including ~70 000 Saudis who die from smoking-related diseases.

Aims: To present recent government initiatives in Saudi Arabia that have been designed to combat tobacco use in the country.

Methods: This was a review based on secondary data sources such as published reports, articles in newspapers, and research studies published in various journals.

Results: We present initiatives taken from June 2017 to April 2019 by the Saudi government to combat tobacco use, including value-added tax on tobacco, antismoking campaigns, antismoking clinics, mobile apps and other initiatives.

Conclusion: The study suggests that the government should evaluate the impact of these initiatives on tobacco control in Saudi Arabia.

Keywords: anti-smoking campaign, anti-smoking clinics, mobile app, Saudi Arabia, tobacco

Citation: Itumalla R; Aldhmadi B. Combating tobacco use in Saudi Arabia: a review of recent initiatives. *East Mediterr Health J.* 2020;26(7):858–863. <https://doi.org/10.26719/emhj.20.019>

Received: 28/02/19; accepted: 26/11/19

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Introduction

The government of Saudi Arabia is determined to enhance the quality of preventive and therapeutic health care services as a part of its Vision 2030. The public sector is focusing on promoting preventive care and on reducing infectious diseases in the country (1). The tobacco use epidemic, one of the world's major public health challenges, is resulting in more than 7 million deaths per year according to the World Health Organization (WHO). Out of this total, more than 6 million deaths are the result of direct tobacco use, while some 890 000 deaths are the result of non-smokers being exposed to second-hand smoke (2). The prevalence of tobacco use and the dangers posed to those users, as well as 'second-hand smokers', is one of the major public health concerns in Saudi Arabia. The control of tobacco use is imperative since the numbers of smokers and deaths from smoking in the country are rising rapidly (3), with a reported 70 000 Saudis dying annually from smoking-related diseases (4).

Saudi Arabia has been striving to control the use of tobacco. In the Gulf Cooperation Council (GCC), tobacco control activities started in January 1979, when Saudi Arabia presented an initial scientific proposal at the 6th GCC Health Ministers' Council Conference on combating smoking in the Region. The WHO Framework Convention on Tobacco Control (FCTC) has subsequently been signed by the majority of the GCC member states, including Kuwait, Qatar, Saudi Arabia and United Arab Emirates, with every single member state endorsing it (5). Thus, the government of Saudi Arabia has become a signatory of the WHO FCTC launched in May 2003, as well as initiating its own anti-smoking campaign for the first time in the same year.

All GCC member states possess a national level agency to control tobacco use. In 2008, WHO presented the MPOWER measures (Monitor tobacco use and prevention policies, Protect people from tobacco smoke, Offer help to quit tobacco use, Warn about dangers of tobacco, Enforce bans on tobacco advertising, promotion and sponsorship, Raise taxes on tobacco) to GCC member states in fulfilment of their WHO FCTC commitments. The MPOWER measures provide useful support in the process of implementing tobacco control initiatives in Saudi Arabia (5). The Saudi government has banned any marketing efforts by tobacco companies and also launched a 6-month anti-smoking drive in May 2010 (6).

The country's national anti-smoking committee is working towards stricter tobacco control in Saudi Arabia, and passed an anti-smoking law in 2015 to combat tobacco use (7). As a result, anti-tobacco regulations were implemented during 2016 (8) and smoking is now prohibited in a variety of areas and public spaces, such as mosques; ministries, government-owned factories, public authorities and their branches; educational, health, sports, cultural and social institutions; the work place, such as companies and organizations; public transport; facilities for the production and processing of food and beverages; sites for the production, transportation and distribution of petroleum, including fuel stations; and warehouses, elevators and lavatories. However, if specific areas and places are dedicated to allow smoking, then such facilities must be set apart and access denied to persons under 18 years of age (7).

In 2017, Saudi Arabia joined other WHO Member States in the campaign to increase public awareness about the dangers of tobacco use (3), and its Ministry

of Health allocated a sizable budget to fund the various tobacco control programmes in the country. In this context, the main objective of this current study is to present the recent initiatives by Saudi Arabia in its fight against tobacco use from 2017 to 2019.

Methods

The design of the study was a review based on secondary data sources, which included published reports, articles in newspapers and research studies published in various journals. The relevant literature regarding tobacco control in Saudi Arabia was searched from three scientific databases: PubMed, Scopus and Google Scholar from January to April 2019. Key phrases such as ‘tobacco use in Saudi Arabia’, ‘smoking in Saudi Arabia’ and ‘tobacco control in Saudi Arabia’ were used. The main inclusion criterion for selection was that the article had to discuss tobacco control programmes in Saudi Arabia. Articles that were not available in English with free full text were excluded from the study. Table 2 provides the selected list of studies on tobacco use in Saudi Arabia.

Results

The prevalence of tobacco use in Saudi Arabia is detailed in the WHO report on the global tobacco epidemic 2017 (Table 1). The data on young people were taken from the Global Youth Tobacco Survey 2010, and adult data from the Saudi Health Information Survey 2014. The total prevalence of tobacco use was 14.9% among young people, and 12.2% among adults. Moreover, the prevalence of cigarette smoking was found to be 8.9% among young people, whereas the prevalence of smokeless tobacco use was 3.4%, but only 0.9% among adults in Saudi Arabia (9).

The findings of the Saudi Health Information Survey 2014 revealed that 17.2% of Saudis were exposed to second-hand smoke at home and 14.8% were exposed in the work place. The survey also found that 14.6% of smokers were aged 35–44 years. Moreover, the survey identified that the prevalence of smoking increased among those aged 25–64 years, rising from 12.2% in 2005 to 15.3% in 2013 (10). Recent statistics from the Ministry of Health also revealed that the total number of smokers in the country had reached 5.5 million, i.e., 23% of the population (11).

Initiatives

Saudi Arabia has undertaken several initiatives to reduce tobacco use among its population since 2017. These include sales taxes and fines, anti-smoking campaigns, es-

tablishing smoking cessation clinics, introducing related mobile applications, among other initiatives.

Sales tax and fines

A recent policy initiative has been the implementation of a sales tax (excise duty) on tobacco, introduced 11 June 2017, and saw 100% excise duty imposed on tobacco products in the country (12). As a result, the number of people seeking help from smoking cessation clinics increased by 213% (13), rising to 302% during 2018 (14). The government was also stringent with any commercial organizations violating the new anti-tobacco policies, with fines of up to 5000 Saudi riyals (US\$ 1330) imposed (15). The implementation of the 100% excise duty on tobacco products also resulted in a significant decrease in tobacco imports to Saudi Arabia, dropping by 43.1% during 2017–2018, to 1.78 billion Saudi riyals (US\$ 474 710 960). According to the Saudi Customs Authority, the country imported tobacco products worth 500 million Saudi riyals (US\$ 133 345 775) during the first quarter of 2019 (16).

Anti-smoking awareness campaigns

During the Islamic religious month of Ramadan in 2017, the Ministry of Health launched an anti-smoking drive that coincided with World No Tobacco Day (31 May), under the theme called “Help us – We will help you” (3). The awareness campaigns served to inform smokers on how to quit tobacco use and the help available, namely smoking cessation clinics opened across the country; training for service providers; and provision of free anti-smoking medication to citizens (17).

In 2019, the Ministry of Health started a campaign to monitor the spread of tobacco use among adult men and women in 12 800 households across the country, and undertaken by the Saudi government’s General Authority for Statistics under the supervision of the World Health Organization (WHO). This survey initiative, which is being conducted for the first time in Saudi Arabia, is a unified international measure to assess the prevalence of tobacco use among adult men and women and the development of strategies to reduce tobacco consumption (18). However, the smoking prevention programs in the country need to reinforce non-smoking attitudes, address how to resist pressure to smoke, and how to develop high self-efficacy towards non-smoking in various situations (19).

Anti-smoking clinics

Besides anti-smoking campaigns to increase the awareness among the population, the government has also fo-

Table 1 Prevalence of tobacco use in Saudi Arabia

Prevalence (%)	Youth tobacco use		Adult tobacco smoking	Youth smokeless use	Adult smokeless use
	Current tobacco use	Current cigarette smoking	Current	Current smokeless tobacco use	Current smokeless tobacco use
Total	14.9	8.9	12.2	3.4	0.9

Source: World Health Organization report on the global tobacco epidemic 2017, Country Profile: Saudi Arabia, p. 2.

Table 2 Selected list of studies on Smoking in Saudi Arabia

S.no.	Author (s) and year	Study
1	Almotairi, H. M. (2012)	Smoking in Saudi Arabia and its control measures
2	Al-Zalabani A, Kasim K. (2015)	Prevalence and predictors of adolescents' cigarette smoking in Madinah, Saudi Arabia: a school-based cross-sectional study
3	Mansour AY (2017)	Predictors of smoking among Saudi dental students in Jeddah.
4	Jradi H.(2017)	Awareness, practices, and barriers regarding smoking cessation treatment among physicians in Saudi Arabia
5	Algabbani AM, Almubark R, Althumiri N, Alqahtani A, BinDhim N (2018)	The Prevalence of Cigarette Smoking in Saudi Arabia in 2018
6	Alrabah, M., Gamaledin, I. & Allohidan, F (2018)	International Approaches to Tobacco-Use Cessation Programs and Policy for Adolescents and Young Adults in Saudi Arabia
7	Awan KH, Hussain QA, Khan S, Peeran SW, Hamam MK, Al Hadlaq E, Al Bagieh H.(2018)	Accomplishments and challenges in tobacco control endeavors- Report from the Gulf Cooperation Council countries.
8	Alotaibi SA, Alsuliman MA, Durgampudi PK. (2018)	Smoking Tobacco Prevalence Among College Students in the Kingdom of Saudi Arabia: Systematic Review and Meta-Analysis
9	Mohammed, M., Eggers, S. M., Alotaiby, F. F., de Vries, N., & de Vries, H. (2018)	Reasons and motivations for cigarette smoking and barriers against quitting among a sample of young people in Jeddah, Saudi Arabia

cused on providing treatment services to people affected by smoking. The Ministry of Health has established anti-smoking clinics in different regions of the country. The aim of these clinics is to provide therapeutic and awareness services for the target smokers and non-smokers, highlighting anti-smoking regulations, providing counseling and health education, as well as reducing the overall percentage of smoking and passive smoking (17).

It was reported in 2017 that there were 160 anti-smoking clinics that provided free awareness services, medical consultations and therapeutic services to smokers of both genders in order to help them to quit smoking. It was noteworthy that anti-smoking clinics in health care centers and hospitals in Riyadh have received more than 7,000 patients since the beginning of 2017 (3). The people seeking help from clinics increased by 213 percent from July to September 2017. According to the head of the ministry's smoking cessation clinics, the taxes were the most effective way to help people, especially youths, who wanted to quit smoking (13). But, some of the reasons for not quitting smoking, like: a) lack of willpower, b) the other smokers around a person and c) stress at home/work are posing challenges to the nation's fight against tobacco use (20).

There was an increase in the number of anti-smoking clinics and the people visiting these clinics in 2018. The Ministry of Health has activated its 262 anti-smoking clinics and it found that the anti-smoking campaign launched by Ministry at the beginning of last Ramadan (2017) increased the number of visitors to anti-smoking clinics by 321 percent (17). However, the establishment of anti-smoking clinics has been continued in various parts of the nation and in 2019 reached a total of 542 (18). These clinics are run by trained medical staff to help people who want to quit their smoking habit by providing counseling and follow-up services as well as the free medication initiatives already mentioned above (14). However, the smoking cessation counseling and therapy provided by physicians can play an important role in helping smokers to quit smoking (21). The working hours of these clinics are from 9 p.m. to 12 a.m. and total capacity of the patients treated are 20 patients/per clinic. In addition to these measures, the website of the Ministry of Health displays anti-smoking clinics' locations on Google Map as well as the Anti-Smoking Clinics Directory for the public domain. People should be able to easily find the location of clinics and also can download clinics' dictionary as and when required (22). According to the Ministry of Health, the anti-smoking clinics have helped 11,441 smokers to give up smoking during the first half of 2019 (23).

Mobile app to catch violators of anti-smoking regulations

mHealth, the use of mobile computing and communication technologies in health care and public health, is a rapidly expanding area of research and practice (24). Mobile technologies have the potential to bridge systemic gaps needed to improve access to, and use of, health services (25). The government of Saudi Arabia has taken the initiative to use the potential of mHealth in the battle against smoking. The Ministry of Health has launched a mobile application as a part of its anti-smoking drive in the Kingdom (17). This novel initiative is very helpful for reporting and monitoring the violations of anti-smoking regulations such as smoking in public places, selling tobacco to the children less than 18 years of age and advertising cigarette or shisha smoking on any local television channels. The mobile app is available for all and the violations can be informed to the concerned officials (15).

Other initiatives

Apart from the above initiatives, the Ministry of Health has been publishing various health educational materials. They include books and pamphlets explaining the dangers of smoking, as well as providing free medicines to smokers who want to quit the habit (18). The Ministry has also developed a range of awareness-raising materials via films and publishing in the mass media and social media platforms (17). The influence of friends and parents smoking plays an important role in the increased risk of smoking in the adolescents (26). Factors such as gender and family influence were identified as the main pro-smoking risk factors, while at the same time an im-

proved knowledge of health risks was found to be a protective factor (27). Hence, the pro-smoking risk factors need to be given a greater priority and could be included in anti-smoking education programs targeting youth and adults of the country.

Discussion

The Ministry of Health and the National Tobacco Control Committee have both been playing key roles in controlling the tobacco use with time to time policies and initiating novel programs. However, there is still a long way to go to achieve the desired results. The tobacco control initiatives of the government of Saudi Arabia are in line with the World Health Organization's MPOWER measures. As per the World Health Organization's 2017 report on the global tobacco epidemic, the total prevalence of tobacco use, as well as smokeless tobacco use, among youth were found to be greater than the adults in Saudi Arabia. Despite the robust efforts of tobacco control agencies in the Kingdom of Saudi Arabia to combat smoking, in a recent study (28), prevalence rates among youth were found to be around 12.1% with no indications of a decline. In a latest study, the meta-analysis results revealed that the pooled estimate of smoking prevalence among college students in the KSA was 17% (29). Moreover, another contemporary work on the prevalence of cigarette smoking in Saudi Arabia in 2018 found that the prevalence of cigarette smoking was 21.4% of the population (30). In the light of these findings, it can be argued that the prevalence of tobacco use is still high though the country has run several anti-smoking initiatives. This is an alarming situation facing the country's policy makers in which they need to reassess anti-smoking initiatives in order to take necessary actions to effectively control the tobacco use in the nation. The antismoking awareness programs can focus more on youth, without neglecting the adults.

The implementation of excise tax on tobacco products has been presenting positive results in the process of controlling tobacco use. In addition, it has become one of the reasons to quit smoking in the country. The anti-smoking clinics have been playing a crucial role in the fight against smoking in the country. The increase in the number of anti-smoking clinics, and the number of people using the services provided by these clinics, shows a positive sign towards the control of tobacco use in the country. The introduction of a mobile app is one of the novel initiatives by the Ministry of Health and it is time to utilize this app in the battle against tobacco use by increasing people's participation.

The study, however, is subject to couple of limitations. The reader should bear in mind that the study is based on secondary data. It considers only the recent initiatives of tobacco control in the country.

Conclusion

The present study has made an attempt to present the recent initiatives of the Saudi Arabian government to combat the use of tobacco. These initiatives include i) increased value-added tax on tobacco, ii) the launch of anti-smoking campaigns, iii) the establishment of anti-smoking clinics iv) introducing a mobile app and v) other initiatives. Although there are various initiatives undertaken by the Saudi Arabian government to reduce tobacco use, the study suggests that the government should evaluate the impact of these initiatives on tobacco control in the country.

Funding: None.

Competing interests: None declared.

Lutte contre le tabagisme en Arabie saoudite : examen des initiatives récentes

Résumé

Contexte : L'épidémie de tabagisme constitue l'un des défis majeurs de santé publique à l'échelle mondiale, avec plus de sept millions de décès par an, parmi lesquels environ 70 000 Saoudiens qui meurent chaque année de maladies liées au tabagisme.

Objectifs : Présenter les initiatives récentes du gouvernement saoudien en matière de lutte antitabac.

Méthodes : L'étude a passé en revue les sources de données secondaires, telles que les rapports publiés et les articles de journaux ainsi que les études de recherche parus dans différentes revues.

Résultats : Nous avons présenté les initiatives prises par le gouvernement saoudien entre juin 2017 et avril 2019 afin de lutter contre le tabagisme, notamment la mise en place d'une taxe sur la valeur ajoutée pour tabac, l'organisation de campagnes antitabac, l'ouverture de cliniques de sevrage tabagique et la création d'applications mobiles parmi d'autres initiatives.

Conclusion : L'étude propose que le gouvernement examine rigoureusement l'impact de ces initiatives sur la lutte antitabac dans le pays afin d'évaluer leur efficacité.

مكافحة تعاطي التبغ في المملكة العربية السعودية: استعراض للمبادرات الأخيرة

رامايا إتومالا، بدر الضمادي

الخلاصة

الخلفية: يعد تعاطي التبغ من أكبر التحديات أمام الصحة العامة العالمية، إذ يتسبب في وفاة ٧ ملايين شخص كل عام، من بينهم قرابة ٧٠ ألف مواطن سعودي ممن يلقون حتفهم بسبب أمراض تتعلق بالتدخين كل عام.

الأهداف: تهدف هذه الدراسة إلى عرض مبادرات حكومة المملكة العربية السعودية لمكافحة تعاطي التبغ داخل حدودها.

طرق البحث: استعرضت هذه الدراسة مصادر بيانات ثانوية، بما فيها تقارير منشورة، ومقالات صحفية، ودراسات بحثية منشورة في مجالات أكاديمية مختلفة. تم البحث في الأدبيات ذات الصلة المتعلقة بمكافحة التبغ في المملكة العربية السعودية من ثلاث قواعد بيانات علمية: PubMed و Scopus و Google Scholar من يناير إلى أبريل 2019.

النتائج: استعرضت الدراسة المبادرات التي اتخذتها حكومة المملكة العربية السعودية من يونيو/حزيران 2017 إلى أبريل/نيسان 2019 لمكافحة تعاطي التبغ، وتشمل فرض ضريبة المبيعات على التبغ، وحملات مكافحة التدخين، وعيادات مكافحة التدخين، وتطبيقات الهاتف من بين مبادرات أخرى. الاستنتاج: يُقترح أن تُجري الحكومة تقييماً سلبياً لأثر هذه المبادرات على مكافحة التبغ في البلد من أجل تقييم فاعليتها.

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