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Effects of meeting MPOWER requirements on smoking rates and smoking-attributable deaths

Bahrain

This factsheet presents estimates of the effect of implementing MPOWER policies consistent with the WHO Framework Convention on Tobacco Control (WHO FCTC). The estimates are based on the *Abridged SimSmoke* model *(1)*.

World Health Organization
Regional Office for the Eastern Mediterranean

Smoking prevalence

Bahrain is a high-income country with a population of more than 1 million in 2011 *(2)*, of which 88.7% live in urban areas *(3)*. Based on the STEPwise survey conducted nationwide in 2007, the current tobacco smoking rate including shisha (waterpipe) (ages 20–64) is 33.4% for men and 7.0% for women, compared to cigarette smoking rates of 27% for men and 1.2% for women *(4)*. Based on data from other countries in the Region, *Abridged SimSmoke* set the smoking rate for those aged 65 and above to half the rate of ages 55–64, and the rate for those aged 15–24 to half the rate of ages 25–34.

Tobacco control policies

Protect people from tobacco smoke

Based on the 2013 WHO report on the global tobacco epidemic *(5)*, which includes data from 2012, Bahrain had no smoke-free legislation covering health care facilities, educational facilities and universities, government facilities, indoor offices, restaurants, pubs and bars, public transport or other public places. Smoke-free laws remained unchanged between 2007 and 2012. Smoke-free policies were at the lowest level in 2012.

Offer help to quit tobacco use

In 2012, there was no toll-free quit line with a live person to discuss cessation in Bahrain (although there was in 2007). Nicotine replacement therapy could be purchased in a pharmacy without a prescription; however, it was not cost-covered (although it was in 2007). Bupropion and varenicline were legally sold. Smoking cessation support was available in most health clinics or other primary care facilities, some hospitals, some offices of a health professional and in some other places, but not in the community. This availability increased for other places between 2007 and 2012, but national health insurance only covers the cost of support in health clinics/other primary care facilities and in some other places. Cessation programmes were at the second highest level in 2012.

Warn about the dangers of tobacco

In 2012, Bahrain had a law mandating that health warnings appear on tobacco packages, which did not exist in 2007. Warnings must cover 50% of the package and be rotating and graphic. Bahrain had national anti-tobacco mass media campaigns in 2011–2012. In 2012, there was a national agency/technical unit for tobacco control, but no data were available on the number of full-time equivalent staff. Government expenditure on tobacco control was not reported. Health warnings and mass media campaigns were both at the second highest level in 2012.

Enforce bans on tobacco advertising, promotion and sponsorship

In 2012, Bahrain had bans on direct tobacco advertising on national/international television and radio, local/international magazines and newspapers, billboards and outdoors, point-of-sale and the internet. None of these types of advertising were banned in 2007, except on national television and radio. For indirect advertising, there were bans on the free distribution of tobacco products, promotional discounts, non-tobacco goods and services identified with tobacco brand names, brand name of non-tobacco products used for tobacco products, appearance of tobacco brands and products in television and films (product placement and non-product placement) and sponsored events. None of these types of advertising were banned in 2007, except sponsored events. The compliance score of both direct and indirect advertising bans was 9 out of 10, an improvement from 2007. Advertising bans were at the highest level in 2012.

Raise taxes on tobacco

WHO's comparable estimate for the price of a pack of 20 cigarettes of the most sold brand was 0.60 Bahraini dinars for 2008 and 1.00 Bahraini dinars for 2012; in terms of international dollars (purchasing power parity) the price increased from US$ 1.98 to US$ 3.08. WHO's comparable estimate for taxes as a percentage of retail price was 33.0% for 2008 and 20.0% for 2012. All taxes were import duties.

Key findings

The *Abridged SimSmoke* model for Bahrain estimates nearly 352 000 smokers (318 000 men and 34 000 women) in 2010, and projects nearly 176 000 premature deaths of smokers (159 000 men and 17 000 women) alive in that year. Without proper implementation of MPOWER tobacco control policies, smoking prevalence rates will remain relatively stable and smoking-attributable deaths are likely to continue to rise.

- Increasing cigarette excise taxes to 75% of the retail price would prevent much youth smoking and reduce smoking prevalence by 15.7% within 5 years, increasing to 31.4% in 40 years, and ultimately avert more than 55 000 premature deaths.
- Stronger enforcement of comprehensive smoke-free laws is predicted to reduce smoking prevalence by 10% in 5 years, increasing to 12% in 40 years, and avert nearly 22 000 premature deaths.
- A well-publicized and comprehensive cessation policy can reduce smoking prevalence by 2.5% within 5 years, increasing to 6% in 40 years, and prevent nearly 11 000 premature deaths.
- Strong health warnings can reduce smoking prevalence by 6% within 5 years, increasing to 12% in 40 years, and prevent more than 14 500 premature deaths.
- A high-level mass media campaign is projected to reduce smoking prevalence by 3.5% in 5 years, increasing to 4% within 40 years, and avert nearly 7000 premature deaths.
- A comprehensive marketing ban with enforcement is projected to reduce smoking prevalence by 0.3% in 5 years, remaining constant at 0.3% within 40 years, and avert nearly 600 deaths.

Implementing the stronger set of policies suggested above, in line with the WHO FCTC, could reduce smoking prevalence by 33% within 5 years, increasing to 41.7% within 20 years and 52.5% within 40 years. The *Abridged SimSmoke* model incorporates synergies in implementing multiple policies. A large tax increase accompanied by a comprehensive cessation programme and a mass media campaign would reduce smoking prevalence by at least 40% by 2025, thus meeting the global target.

Limitations

Abridged SimSmoke has been developed based on an extensively validated simulation model, providing support for the estimates given above. However, the model has certain limitations.

- It does not consider tobacco products other than cigarettes, such as smokeless tobacco, e-cigarettes and shisha (waterpipe). If tax increases and other policies are only directed at cigarettes, smokers may substitute to other tobacco products, which would offset some of the health gains from reduced smoking. If policies are also targeted toward the use of non-cigarette products, then substitution to these products may be reduced.

- Mortality risks for smoking are based on studies for the United States of America.
- It does not include deaths from second-hand smoke exposure. In addition, there are costs associated with morbidity and productivity loss due to premature death.
- It has been developed to use data from the biennial WHO global tobacco epidemic reports. The tobacco control policy data are restricted to a specific set of policies and definitions. The model does not consider policies directed at cost-minimizing behaviour, enforcement against smuggling, product regulation and youth access.

References

1. Levy DT, Fouad H, Levy J, Dragomir AD, El Awa F. Application of the *Abridged SimSmoke* model to four Eastern Mediterranean countries. Tob Control. 2016;25(4):413–21. doi:10.1136/tobaccocontrol-2015-052334 (http://tobaccocontrol.bmj.com/content/25/4/413, accessed 24 April 2018).
2. World population prospects: the 2015 revision. New York: Department of Economic and Social Affairs, Population Division; 2015.
3. World Factbook 2015. Washington DC: Central Intelligence Agency; 2015 (https://www.cia.gov/library/publications/the-world-factbook/, accessed 3 September 2015).
4. National noncommunicable diseases risk factors survey 2007. Manama: Ministry of Health; 2009 (http://www.who.int/ncds/surveillance/steps/2007_STEPS_Survey_Bahrain.pdf, accessed 24 April 2018).
5. WHO report on the global tobacco epidemic, 2013: enforcing bans on tobacco advertising, promotion and sponsorship. Geneva: World Health Organization; 2013 (http://apps.who.int/iris/bitstream/10665/85380/1/9789241505871_eng.pdf?ua=1, accessed 3 September 2015).