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

Islamic Republic of Iran

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

The Islamic Republic of Iran is a middle-income country with a population of more than 75 million in 2011 *(2)*, of which 69.1% live in urban areas *(3)*. Based on the STEPwise survey conducted nationwide in 2009, the current tobacco smoking rate (ages 15–64) is 24.6% for men and 3.3% for women, compared to cigarette smoking rates of 22.1% for men and 1.3% 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.

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, the Islamic Republic of Iran had smoke-free legislation covering health care facilities, educational facilities including universities, government facilities, indoor offices, restaurants, public transport and all other public places. Smoke-free laws remained unchanged between 2007 and 2012. The compliance score was 9 out of 10, an increase from previous years. Smoke-free policies were at the highest level in 2012.

Offer help to quit tobacco use

In 2012, there was a toll-free quit line with a live person to discuss smoking cessation in the Islamic Republic of Iran. Nicotine replacement therapy could be purchased in a pharmacy without a prescription and was fully cost-covered. Bupropion was legally sold, but varenicline was not. Smoking cessation support was available in some health clinics or other primary care facilities, offices of a health professional and the community, but not in hospitals or elsewhere. Availability of cessation support increased in the office of a health professional between 2007 and 2012, but national health insurance only covered the cost in health clinics or other primary care facilities. Cessation programmes were at the highest level in 2012.

Warn about the dangers of tobacco

In 2012, the Islamic Republic of Iran had a law mandating that health warnings appear on tobacco packages, and they must cover 50% of the package and be rotating and graphic. This was a change from 2007, when the law did not mandate that warnings be placed on the principal display area or be rotating. Health warnings were at the highest level in 2012. Islamic Republic of Iran did not have a national anti-tobacco mass media campaign in 2011–2012. For 2012, there was a national agency/technical unit for tobacco control and 20 full-time equivalent staff. Government expenditure on tobacco control was approximately US$ 500 000. Islamic Republic of Iran is considered to have a low level tobacco control campaign.

Enforce bans on tobacco advertising, promotion and sponsorship

In 2012, the Islamic Republic of Iran 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. 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. The compliance score of both direct and indirect advertising bans was 10 out of 10. 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 4739.00 Iranian rials for 2008 and 12 000.00 Iranian rials for 2012; in terms of international dollars (purchasing power parity) the price increased from US$ 1.19 to US$ 1.90. WHO's comparable estimate for taxes as a percentage of retail price was 17% for 2008 and 17% for 2012, with some increases in specific excise taxes since 2008. Of the 17% taxes, 11% was value added tax leaving 6% in excise taxes.

Key findings

The *Abridged SimSmoke* model for the Islamic Republic of Iran estimates over 6.8 million smokers (nearly 6.5 million men and about 400 000 women) in 2010, and projects nearly 3.5 million premature deaths of smokers (nearly 3.3 million men and 200 000 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 27.3% within 5 years, increasing to 54.7% in 40 years, and ultimately avert almost 1.9 million premature deaths.
- Stronger enforcement of comprehensive smoke-free laws is predicted to reduce smoking prevalence by 2.5% in 5 years, increasing to 3% in 40 years, and avert more than 102 000 (96 000 male and 6000 female) premature deaths.
- A well-publicized and comprehensive cessation policy can reduce smoking prevalence by 1.5% within 5 years, increasing to 3.5% in 40 years, and prevent more than 117 000 premature deaths.
- Health warnings are already at the strongest level.
- A high-level mass media campaign is projected to reduce smoking prevalence by 5.5% in 5 years, increasing to 6.5% within 40 years, and to avert nearly 226 000 premature deaths.
- A comprehensive marketing ban is already in place.

Implementing the stronger set of policies suggested above, in line with the WHO FCTC, could reduce smoking prevalence by 33.9% within 5 years, increasing to 47.5% within 20 years and 60.3% within 40 years. More than 2 million premature deaths could be averted. The *Abridged SimSmoke* model incorporates synergies in implementing multiple policies. A large tax increase accompanied by strong enforcement of marketing restrictions, a comprehensive cessation programme and a mass media campaign would reduce smoking prevalence by at least 48% 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. 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.

- 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.

- Mortality risks for smoking are based on studies for the United States of America. As a middle-income country, the effects of reductions in tobacco use on smoking-attributable deaths may be lower than projected for Islamic Republic of Iran, due to higher background health risks lower levels of smoking intensity and duration.

- 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 policies.

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).

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3. World Factbook 2015. Washington DC: Central Intelligence Agency; 2015. (https://www.cia.gov/library/publications/the-world-factbook/, accessed 3 September 2015).

4. Iran STEPS survey 2009. Geneva: World Health Organization; 2009 (http://www.who.int/ncds/surveillance/steps/iran/en/, 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).