

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

Egypt

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).



Smoking prevalence

Egypt is a middle-income country with a population of about 80 million in 2010 (2), of which about 36% is employed in agriculture (3). The Global Adult Tobacco Survey (GATS), conducted in 2009 using a large nationally representative sample (ages 15 and above), found that 37.7% of men and 0.5% of women smoked, of which 95% were daily smokers (4). Manufactured cigarettes were the most popular type of product smoked by men (31.7%) followed by shisha (waterpipe) (6.2%), while 0.2% of women smoked manufactured cigarettes and 0.3% smoked shisha. About 14% of smokers only smoked shisha. About 5.0% of men and 0.3% of women used smokeless tobacco, but most also smoked cigarettes.

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, Egypt had smoke-free legislation covering health care facilities, educational facilities and universities, government facilities and public transport; however, there was none covering indoor offices, restaurants, cafés, pubs and bars. There were no changes in smoke-free laws between 2007 and 2012. Egypt was considered to have weak (first level) workplace laws, and 50% in other public places. The overall compliance score was 3 out of 10.

Offer help to quit tobacco use

In 2012, there was a toll-free quit line with a live person to discuss smoking cessation in Egypt. Nicotine replacement therapy was legally sold and can be purchased in a pharmacy without a prescription; however, it was not cost-covered and was not on Egypt's essential drug list. Bupropion and varenicline were not legally sold. Smoking cessation support was available in some health clinics or other primary care facilities and in some hospitals. It was not available in offices of a health professional, the community or in other places. National health insurance partially covered the cost of support in health clinics or other primary care facilities and hospitals, but information was not available for other places. Except for the addition of a quit line between 2010 and 2012, there were no change in the provision of cessation treatment between 2007 and 2012. According to GATS 2009, only one fifth (21.6%) of smokers had visited a health care provider in the past 12 months. Of those, 74.1% were asked by the provider if they smoked and 90.5% were advised to quit, although only 7.8% actually quit. Among smokers who had made a quit attempt in the past 12 months, 2.0% used pharmacotherapy, 4.0% used counselling or advice and 93.9% used none of these methods. Brief intervention is set at 60%.

Warn about the dangers of tobacco

In 2012, Egypt had a law mandating that health warnings appear on tobacco packages, and they must cover 50% of the package, be graphic and rotating. These warnings were implemented in 2008. Health warnings were at the highest level in 2012, There was at least one national anti-tobacco mass media campaign in 2011–2012. It was an evidence-based planning campaign that was part of a comprehensive tobacco control programme; it was pre-tested with the target audience and research about the target audience was conducted. The campaign was aired on television and/or radio, used media planning to secure air-time and/or placement, and media/public relations were used to promote the campaign. For 2011, there was a national agency/technical unit for tobacco control and three full-time equivalent staff. Government expenditure on tobacco control was US\$ 30 000. Egypt is considered to have a low level tobacco control campaign.

Enforce bans on tobacco advertising, promotion and sponsorship

In 2012, Egypt 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. The compliance score of direct advertising bans was 7 out of 10. 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 a tobacco product, appearance of tobacco brands in television and/or films (product placement) and appearance of tobacco products in television and/or films; however, there was no ban on sponsored events. The compliance score of indirect advertising bans was 5 out of 10. There were no changes in statutes between 2007 and 2012. Egypt is considered 50% of a full ban (level 4) and 50% of a direct advertising ban (level 2), with an overall compliance score of 6 out of 10.

Raise taxes on tobacco

WHO's comparable estimate for the price of a pack of 20 cigarettes of the most sold brand was 2.75 Egyptian pounds for 2008 and 6.00 Egyptian pounds for 2012, an increase from US\$ 1.36 to US\$ 2.09 based on international exchange rates. WHO's comparable estimate for taxes as a percentage of retail price was 59.3% for 2008 and 72.5% for 2012. Value added taxes were 0%.

Key findings

Without proper implementation of MPOWER tobacco control policies, smoking prevalence rates will remain relatively stable or increase from 38% for men and 2% for women, and smoking-attributable deaths are likely to continue to rise. There are 10.4 million smokers in Egypt, around half of which (5.15 million men and 68 000 women) will die from smoking-related diseases.

- Increasing cigarette excise taxes from 72.5% to 75% of the retail price will reduce smoking prevalence by 2% in 5 years, increasing to 5% in 40 years, and avert about 199 000 premature deaths.
- Some smoke-free laws are in place with weak enforcement. Comprehensive smoke-free laws with strong enforcement are predicted to reduce smoking prevalence by 8.9% in 5 years, increasing to 11.1% in 40 years, and avert more than 581 000 (573 000 male and 8000 female) premature deaths.
- A well-publicized and comprehensive cessation policy can reduce smoking prevalence by 2.5% within 5 years, increasing to 6.3% in 40 years, and prevent more than 329 000 premature deaths.
- Strong health warnings are already in effect.
- A high-level mass media campaign is projected to reduce smoking prevalence by 5.5% in 5 years, increasing to 6.6% within 40 years, and avert almost 345 000 premature deaths.
- A comprehensive marketing ban with enforcement is projected to reduce smoking prevalence by 3.6% in 5 years, increasing to 4.7% within 40 years, and avert more than 244 000 deaths.

Implementing the stronger set of policies suggested above, in line with the WHO FCTC, could reduce smoking prevalence by 21% in 5 years, increasing to 25% in 20 years and 29% in 40 years. Almost 1.5 million deaths could be averted. The *Abridged SimSmoke* model incorporates synergies in implementing multiple policies. Increasing cigarette excise taxes to 75%, enforcing smoke-free laws, comprehensive marketing restrictions, a comprehensive cessation programme and a mass media campaign would reduce smoking prevalence by 25% by 2025. Additional tax increases will be needed to reach the global target of a 30% reduction, but enforcement against smuggling may be required.

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.
- Much of the smoking population uses shisha. It is important to also raise the price of this product through taxes.
- 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 Egypt, due to higher background health risks and 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.

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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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).