

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

Pakistan

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

Pakistan is a low-income country, with an estimated population (ages 15 and above) of 59.5 million males and 62.1 million females in 2015 (2). About 45% were employed in agriculture and 6% were unemployed in 2015 (3). Based on the Global Adult Tobacco Survey (GATS) conducted nationwide in 2014, the overall rate for current tobacco use in any form was 19.1% (31.8% of men and 5.8% of women), of which 22.2% of men and 2.1% of women smoked tobacco (cigarettes or bidis), giving an overall current smoking rate of 12.4% (4).

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, Pakistan had smoke-free legislation covering health care facilities, educational facilities and universities, government facilities, indoor offices, restaurants, cafés and public transport, but not covering other public places. Smoke-free laws were strengthened between 2007 and 2010 (prior to then, smoking was allowed in ventilated areas). For 2012, the compliance score was 5 out of 10, an increase from previous years. However, GATS 2014 found that 70% of workers were exposed to smoke in the workplace. Accordingly, *Abridged SimSmoke* ranks compliance at 3 out of 10.

Offer help to quit tobacco use

Based on 2012 data, there was no toll-free quit line with a live person to discuss cessation in Pakistan. Nicotine replacement therapy could be purchased in a pharmacy without a prescription, but it was not cost-covered. Bupropion and varenicline were not legally sold. Smoking cessation support was available in some health clinics or other primary care facilities, hospitals, offices of a health professional and in the community, but not elsewhere. Availability increased slightly between 2008 and 2010, but national health insurance did not cover the cost of support.

Warn about the dangers of tobacco

In 2012, Pakistan had a law mandating that health warnings appear on tobacco packages. The warning must cover 40% of principal display area, and be rotating and graphic. Pakistan was classified at level 3 out of 4 for health warnings. Pakistan did not have any national anti-tobacco mass media campaigns in 2011–2012. There was a national agency/technical unit for tobacco control and 16 full-time equivalent staff in 2011. Government expenditure on tobacco control was US\$ 90 552 (5 500 000 Pakistani rupees). GATS 2014 indicated that only around 40% of the population had heard anti-tobacco media in the last year. This is considered a low level tobacco control campaign.

Enforce bans on tobacco advertising, promotion and sponsorship

Based on 2012 data, Pakistan had no bans on direct tobacco advertising on national television and radio, local magazines and newspapers, billboards and outdoors, and point of sale. However, there were bans on indirect advertising through the free distribution of tobacco products and promotional discounts, appearance of tobacco brands and products in television and films, brand name of non-tobacco products used for tobacco products, and sponsored events. These policies are considered a partial marketing ban at level 1.5 of 4. GATS 2014 indicated that about 30% of the population (40% of smokers) saw a tobacco advertisement in the last month. The compliance score was 3 out of 10.

Pakistan

Raise taxes on tobacco

WHO's comparable estimate for the price of a pack of 20 cigarettes of the most sold brand is 18.40 Pakistani rupees for 2008 and 33.00 Pakistani rupees for 2012; in terms of international dollars (purchasing power parity) the price increased from US\$ 0.76 to US\$ 0.81. WHO's comparable estimate for taxes as a percentage of retail price is 52.5% for 2008 and 60.0% for 2012, with some increases in specific excise taxes since 2008. Of the 60.0% taxes, 13.8% is value added tax, leaving 46.2% in excise taxes.

Key findings and messages

Based on current smoking rates of 22.2% among men and 2.1% among women, smoking-attributable deaths are predicted to be more than 7.55 million (6.9 million men and 600 000 women) of the 15 million smokers alive today, and the numbers are likely to continue to rise each year in the absence of stronger policies.

- Increasing cigarette excise taxes from a current level of 46% to 75% of the retail price would prevent much youth smoking and reduce smoking prevalence by 20.2% within 5 years, increasing to 40.3% in 40 years, and ultimately avert more than 3.5 million premature deaths.
- Comprehensive smoke-free laws are in place, but stronger enforcement is predicted to reduce smoking prevalence by 6% in 5 years, increasing to 7.4% in 40 years, and avert over 560 000 premature deaths.
- A well-publicized and comprehensive cessation policy can reduce smoking prevalence by 2.5% within 5 years, increasing to 5% in 40 years, and avert 300 000 premature deaths.
- Strong health warnings can reduce smoking prevalence by 6% within 5 years, increasing to 12% in 40 years, and avert almost 900 000 premature deaths.
- A high-level mass media campaign is projected to reduce smoking prevalence by 5.5% in 5 years, increasing to almost 7% in 40 years, and avert over 500 000 premature deaths.
- A comprehensive marketing ban with enforcement is projected to reduce smoking prevalence by 9% in 5 years, increasing to 11% within 40 years, and avert more than 850 000 deaths.

Implementing the stronger set of policies suggested above, in line with the WHO FCTC, could reduce smoking prevalence by 38% within 5 years, increasing to 49% within 20 years and 60% within 40 years. More than 4.5 million deaths could be averted. A large tax increase accompanied by comprehensive marketing restrictions, a comprehensive cessation programme, strong health warnings, and a mass media campaign would reduce smoking prevalence about 49% 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). GATS 2014 indicates that 11.4% of men and 3.7% of women use smokeless tobacco. 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 smokes bidis. It is important to also raise the price of these products through taxes.
- Smoking prevalence data for Pakistan are from 2014. However, as a low-income country, smoking rates may increase as incomes rise, especially among women.
- 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 low-income country, the effects of reductions in tobacco use on smoking-attributable deaths may be lower than projected for Pakistan, 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).
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. Global Adult Tobacco Survey: Pakistan 2014. Geneva: World Health Organization; 2015 (<http://www.who.int/tobacco/surveillance/survey/gats/pakfactsheet.pdf>, accessed 25 April 2018).
5. WHO report on the global tobacco epidemic, 2015: raising taxes on tobacco. Geneva: World Health Organization; 2015 (http://apps.who.int/iris/bitstream/10665/178574/1/9789240694606_eng.pdf?ua, accessed 3 September 2015).