

Tobacco control and health

The deaths, disease and disability caused by tobacco not only cause great suffering to victims and their families, but also cause major losses to the economy. This is because the life of a smoker is shortened by 10 years on average, resulting in the premature loss of economically active citizens. (Jha et al. 2013)

Introduction

Tobacco is the second leading cause of death and disability in the world after high blood pressure (Global Burden of Disease Study 2012), accounting for 6.3% of the total burden. The World Health Organization (WHO) estimates that in 2012 tobacco killed 6 million people worldwide, of whom 600 000 were non-smokers killed by inhaling environmental tobacco smoke (WHO 2011).

In the USA the rate of death from any cause among current smokers is about three times that among those who have never smoked (hazard ratio for women 3.0, 99% confidence interval [CI], 2.7 to 3.3; hazard ratio for men 2.8, 99% CI, 2.4 to 3.1). The probability of surviving from 25 through to 79 years of age is about twice as great in those who have never smoked compared to current smokers (70% versus 38% among women and 61% versus 26% among men) (Jha et al. 2013).

Tobacco is also a leading cause of death in South Africa, and is estimated to have caused 7% of annual deaths during the period 1999 to 2007 (Sitas et al. 2013).

In addition to the deaths it causes, tobacco is a major risk factor for disease and disability such as heart attacks, heart failure, strokes, chronic obstructive airways disease and lung cancer. It is estimated that in the year 2000 in South Africa tobacco was the fourth leading

cause of death and disability (accounting for 4% of disability-adjusted life years lost) after unsafe sex (HIV and AIDS), interpersonal violence and alcohol (MRC Burden of Disease Research Unit 2008).

The deaths, disease and disability caused by tobacco not only cause great suffering to victims and their families, but also cause major losses to the economy. This is because the life of a smoker is shortened by 10 years on average, resulting in the premature loss of economically active citizens (Jha et al. 2013).

Adults who had quit smoking at 25 to 34, 35 to 44, or 45 to 54 years of age gained about 10, 9, and 6 years of life, respectively, as compared with those who continued to smoke (Jha et al. 2013). In addition, losses to the economy accrue from days off work taken by smokers due to sickness and the cost of treating sufferers of tobacco-related disease.

This policy brief provides research evidence of the progress and challenges in combating tobacco use in South Africa, and sets out key policy recommendations for strengthening tobacco control. Among the recommendations are the need for research into behaviour change communication targeted at women and girls to reduce and/or eliminate smoking. Further, the brief recommends tighter controls for reducing the availability of contraband cigarettes and a total ban on

Importantly, the decline in smoking prevalence seems to correlate with successive rounds of anti-tobacco legislation (Figure 1) and with the hike in excise duties on cigarettes since 1994, as seen in the All Media and Products Survey (AMPS).

smoking in public areas, including a ban on smoking in vehicular transportation carrying children under the age of 12 years. Going further, the brief calls for the establishment of a health promotion foundation funded via surcharges on the tobacco industry to promote positive health in South Africa.

Background and context of the research

Research and monitoring are key elements of a comprehensive tobacco control policy in order to quantify the scale of the problem, to monitor the impact of tobacco control programmes, and to detect changes in tobacco use and tobacco-related disease for appropriate modifications in tobacco control interventions.

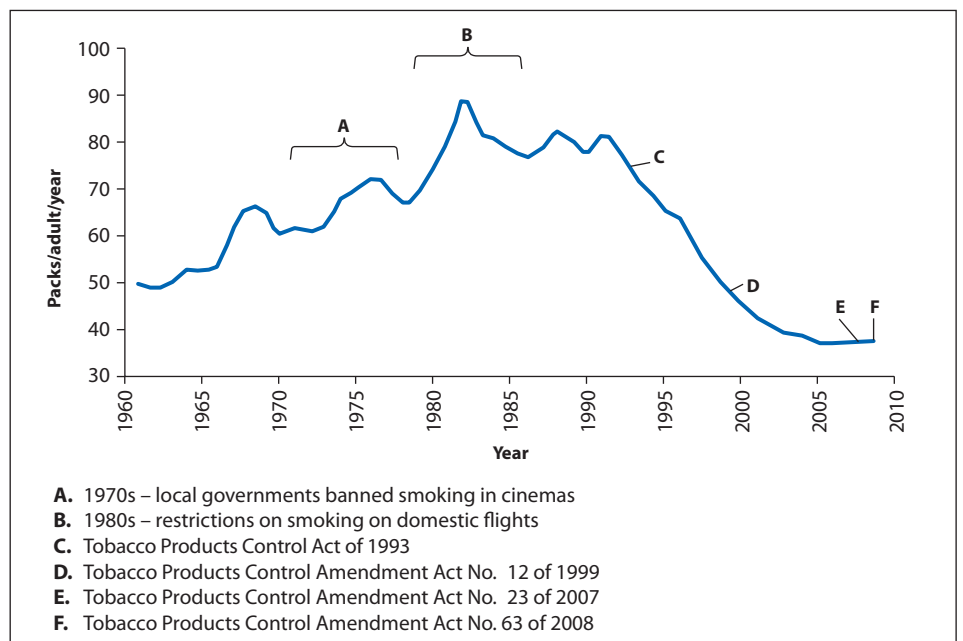
Key research findings and policy implications

South Africa has had great success in tobacco control largely due to the comprehensive health promotion approach to tobacco control adopted by the South African government

since 1994. For instance, tobacco-using behaviour has been changed through health education in schools and in the media, banning the sale of cigarettes to minors and hiking excise duties to 52% of the total price of a pack of cigarettes. Moreover, environments have been improved through legislation prohibiting smoking in public places, and ending the advertising of cigarettes and sponsorship of sporting and cultural events by tobacco companies. Importantly, the decline in smoking prevalence seems to correlate with successive rounds of anti-tobacco legislation (Figure 1) and with the hike in excise duties on cigarettes since 1994, as seen in the All Media and Products Survey (AMPS). These surveys have shown sustained reductions in South African cigarette consumption among adults. Cigarette pack consumption per smoker per year decreased by 53% from 1991 to 2004 (see figure 1 as well as Van Walbeek 2003 and Reddy et al. 2013).

Success in tobacco control has also extended to children. Successive Global Youth Tobacco Surveys (GYTS) in 1999, 2002, 2008 and 2011 have shown that smoking prevalence in schoolchildren

Figure 1: Changes in smoking consumption in South African adults from 1960 to 2010



Source: Van Walbeek 2003; Reddy et al. 2013

fell from 23.0% in 1999 to 16.9% in 2011, a 26.5% proportionate reduction over a 12-year period (Reddy et al. 2013).

Government tobacco control programmes have also resulted in a profound sociocultural shift in attitudes towards smoking in both adults and children, and in smokers as well as non-smokers (Reddy et al. 2013). Furthermore, for an addictive substance such as tobacco that is freely available in society, the target is to reduce smoking prevalence to below 10%.

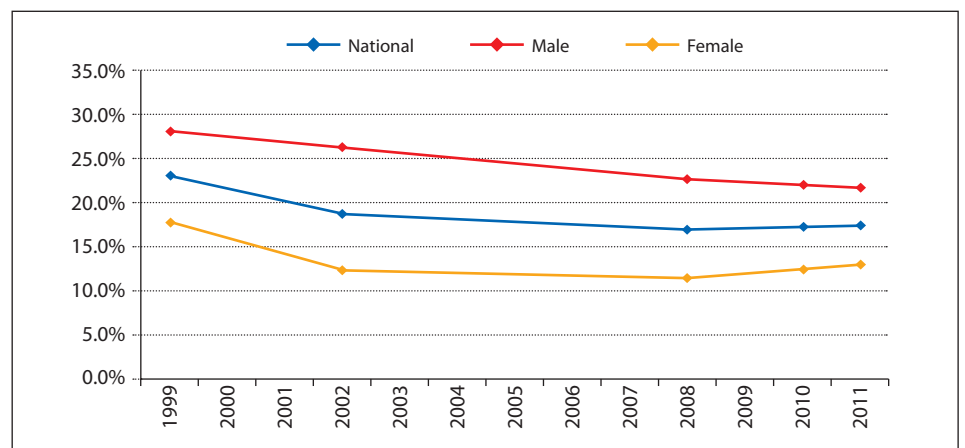
In summary, among adolescents, the research studies show that after initial declines in tobacco use among schoolchildren from 1999 to 2008, smoking rates increased among girls from 2009 to 2011 (Figure 2). This is in line with international trends for girls and young women (Reddy et al. 2013). Research also shows that among black African schoolchildren (whose smoking rates are considerably lower than for white, coloured and Indian children) smoking rates have not significantly declined over the past 12 years (Reddy et al. 2013). A decline of 8% in adult smoking prevalence from 32% in 1992 to 24% in 2005 has been achieved (Martin 1992; Reddy et al. 1996; Van Walbeek 2005), with a further decline to 15.3% in 2012 (Ng et al. 2014), representing a decline of over 50% in 20 years (Figure 3).

Impact of tobacco on the South African economy

It is possible to crudely estimate the economic impact of tobacco control in South Africa. The 15.3% of the population over 15 years old who volunteered that they currently smoked (Health Systems Trust 2013) represent approximately 5.9 million people as 71% of the population are older than 15 years (Stats SA 2012). If the prevalence of smoking had remained at the 32% level of 20 years ago, there would be approximately 6 million additional smokers today.

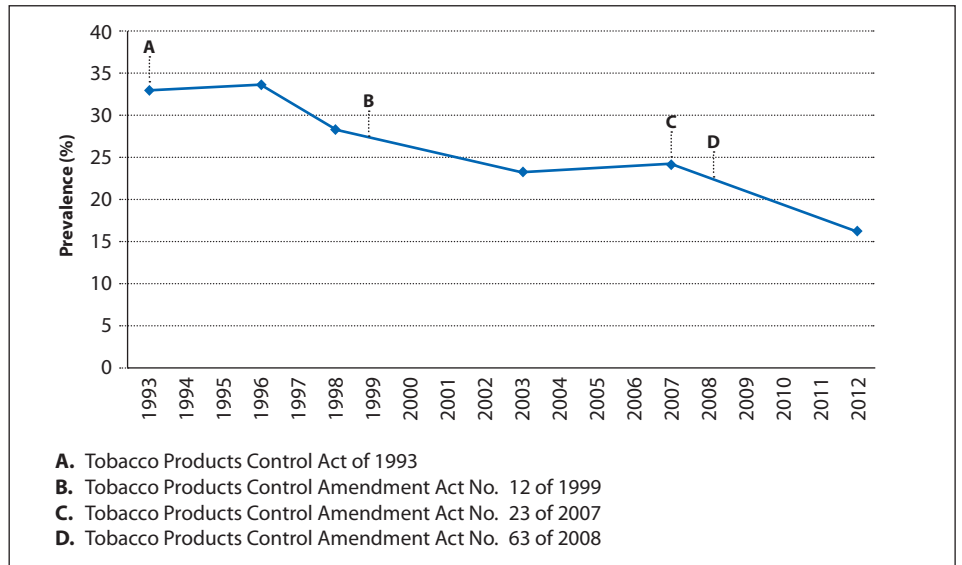
Smoking reduces the life expectancy of a smoker by, on average, 10 years, and therefore the 6 million people who have been saved from smoking represent 60 million life years saved during their future lifetime, or 1 million life years saved per annum, since life expectancy at birth is 60 years (Jamison 2006; Jha et al. 2013). Gross domestic product (GDP) per capita in South Africa is R67 308 per annum; therefore 1 million life years saved per annum has an economic value of R67.38 billion per annum, or 3.4% of GDP, assuming that each of the life years saved is economically active; or 1.7% of GDP if only 50% of the life years saved are economically active.

Figure 2: Changes in smoking prevalence in South African grades 8–10 learners from 1999 to 2011



Source: Reddy et al. 2013

Figure 3: Decline in tobacco smoking over 20 years in South Africa



Source: Compiled by the authors from Martin et al. 1992; Ng et al. 2014; Reddy et al. 1996 and Van Walbeek 2005

... for every day lost to tobacco-related death there are 20 lost to tobacco-related illness.

This economic benefit of the reduction in mortality delivered by tobacco control far outweighs the economic value added by the tobacco industry. If the economic costs of morbidity are added to this figure, then the economic benefit of tobacco control increases dramatically, as for every day lost to tobacco-related death there are 20 lost to tobacco-related illness. The economic benefit would therefore more than double to R134.76 billion per annum.

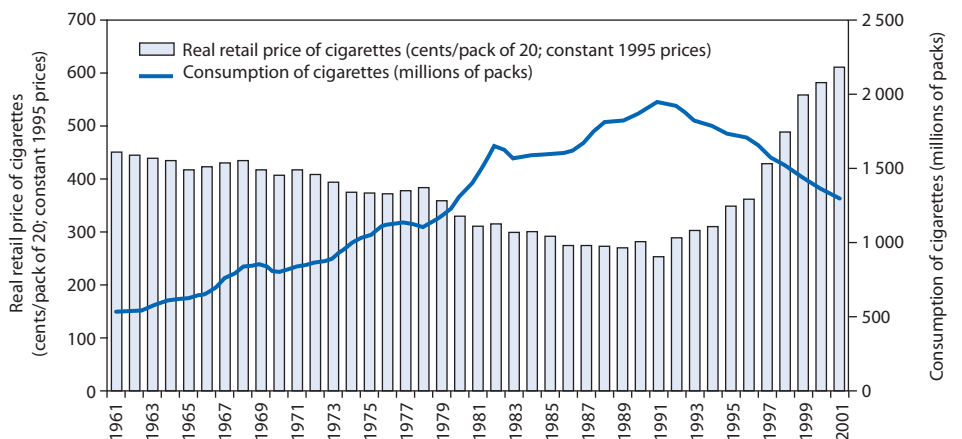
This figure does not include the billions gained by the exchequer from excise duties.

Policy recommendations

1. Young women and girls

Redouble efforts in targeting girls and young women to reduce smoking prevalence. This will require focused

Figure 4: Cigarette consumption and real prices in South Africa, 1961 to 2001



Source: Van Walbeek 2003

behavioural research on how to tailor health education messages and other interventions to assist these groups to avoid tobacco addiction or to quit smoking.

2. Social media

Develop novel methods using social media and information and communication technology (ICT) (mobile telephony) to reach vulnerable or already smoking groups to show that smoking is 'not cool'.

3. Smoking, entertainment and the media

Curtail smoking by actors/actresses (particularly popular young people) in films and on TV to remove the 'glamorous' image that such peers might give to the use of tobacco.

4. Cigarette smuggling and illicit trade

Introduce tighter controls to reduce contraband cigarettes entering the country by using sophisticated stamps and tracking procedures for cartons of cigarettes. Such cigarettes avoid the 52% excise duty, robbing the fiscus of revenue (also providing cheap cigarettes for young people).

5. Excise duty and price elasticity of demand for cigarettes

Raise excise duties on cigarettes to reach at least 75% of the total cost of a pack of cigarettes within the next 10 years. This is important because evidence shows that in low- and middle-income countries (LMIC) and in South Africa, communities display marked 'price elasticity of demand' (Figure 4). This means that poorer communities respond more than rich communities to a rise in the cost of cigarettes by reducing their daily consumption of tobacco.

6. Health warning labels and plain packaging

Introduce plain packaging for cigarettes similar to what was done in Australia. Health warning labels can change the attitudes of smokers to smoking.

7. Total prohibition of smoking in public places

Introduce a total ban on smoking in public places. Additionally, enforce the law prohibiting smoking in a vehicle when children under the age of 12 are passengers. These measures would also protect workers in restaurants and bars who are exposed to cigarette smoke in designated smoking sections of these establishments. A total ban on smoking in public places will also reduce the rate of admissions with acute cardiac events at hospitals (Sargent et al. 2004).

8. Electronic cigarettes

Enforce strict control of electronic cigarettes. Though users of these devices avoid the long-term impacts of smoking such as lung cancer and chronic bronchitis, they could suffer heart diseases caused by the nicotine that the device delivers to the bloodstream. Such individuals also become addicted to nicotine, and the device may serve as a 'gateway drug' to cigarette smoking and not as an aid to stop smoking as portrayed by the industry.

9. Pan-African collaboration in tobacco control

African countries should collaborate and support each other in tobacco control through the African Union, the African academies of science and other mechanisms. In addition they should collaborate with the WHO

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in tobacco control, and employ the 'MPOWER' strategy (WHO 2008) for tobacco control:

- Monitor:** Monitor tobacco use and prevention policies.
- Protect:** Protect people from tobacco smoke.
- Offer:** Offer help to quit tobacco use.
- Warn:** Warn about the effects of tobacco.
- Enforce:** Enforce bans on tobacco advertising, promotion and sponsorship.
- Raise:** Raise taxes on tobacco.

10. BRICS countries

Collaborate with other BRICS countries in tobacco control programmes, including crop substitution to reduce the cultivation of tobacco in BRICS countries. This should be done in terms of implementing the WHO's Framework Convention on Tobacco Control (FCTC) (WHO 2013), through which 177 signatory member countries of the WHO coordinate their efforts in tobacco control. South Africa has signed and ratified the FCTC.

11. Establishing a health promotion foundation in South Africa

Health promotion foundations (HPFs) have been established in various parts of the world to coordinate health promotion and health prevention. Australia, Thailand, Austria, Switzerland and Singapore are some countries that have successfully implemented HPFs. Notably, Thailand's foundation was set up at the same time as its national health insurance (NHI) was launched. The aim was to reduce the burden of disease and contain costs to the NHI. This has resulted in enormous savings in disease treatment, and has mobilised resources, developed capacity, and provided funding for research and for the monitoring

and evaluation of health promotion programmes. The Thailand Foundation realised cost reduction to their NHI. South Africa is well placed to establish a similar foundation as it launches the NHI. This can mitigate costs to the NHI, and enhance longevity and the quality of life of all South Africans. It is proposed that a surcharge levied on the tobacco and alcohol industries be introduced to generate funds for a South African HPF.

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STUDY AUTHORS

Priscilla Reddy, PhD; Deputy Executive Director, Population Health, Health Systems and Innovation (PHHSI), Human Sciences Research Council

Ronel Sewpaul, Senior Statistician, Centre for Science, Technology and Innovation Indicators (CeSTII), Human Sciences Research Council

Enquiries to: Dr Priscilla Reddy
email: preddy@hsrb.ac.za