The use of roll-your-own cigarettes in South Africa

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South Africa ratified the WHO Framework Convention on Tobacco Control (FCTC) in 2005 and has since then amended its tobacco control laws in line with the provisions of the FCTC (1). The country has realised a decline in the proportion of tobacco use. Between 1993 and 2003, smoking prevalence decreased from 34% to 21.4% (2) through the implementation of its various anti-tobacco policies and legislation that have resulted in a ban of all tobacco advertisements, the enforcement of health warnings on cigarette packages, and an increase in excise taxes among a plethora of other interventions.

Between 1994 and 1999, the real excise cigarette taxes went up by 149% (3). The 2011/2012 excise tax on cigarette tobacco was R210.51 per kilogram, while the excise tax on the pipe tobacco used for roll-your-own cigarettes (RYO) was R119.16 per kilogram in packages weighing less than 5 kg (4). A predictable consequence of cigarette price increases is that some people will switch to cheaper substitutes, like RYO tobacco (the price is one-third of the cost of manufactured cigarettes) and this may negate the effect of taxation (5). In 2007, 20% of current smokers used RYO, and by 2010, 28.8% of smokers reported using RYO (6).

RYO versus manufactured cigarettes

About 8% or 45,000 of all annual deaths in South Africa are related to smoking (7). There are early signs that tobacco control efforts implemented in South Africa since the last two decades are beginning to show benefits with regards to decreasing rates of cancers and cardiovascular diseases. However, mortality resulting from tuberculosis (TB) and other infectious diseases, especially among certain population groups in South Africa, remains high. Importantly, about 20% of deaths from pulmonary TB in South Africa can be avoided if smoking was eliminated in this population (7).

Although RYOs are regarded as safer alternatives by smokers, smokers of RYO cigarettes are more likely to be exposed to higher levels of smoke constituents than smokers of manufactured cigarettes (8). This makes them more likely to be exposed to a wider range of carcinogens than manufactured cigarette smokers (9). The weight, diameter, packing density and the porosity of wrapping paper are controlled by the manufacturers of manufactured cigarettes unlike RYO cigarettes which are controlled by the user, thereby giving rise to wide differences in the final products (10). RYO smokers take more puffs, inhale more smoke per cigarette and for longer period, and are less likely to make quit attempts compared to those who smoke the more expensive manufactured cigarettes (11).

RYO cigarette use in South Africa

There is an increasing prevalence of RYO use among South Africans of lower socioeconomic status despite the fact that the manufactured cigarette smoking prevalence is going down (6). RYO cigarettes are less expensive than manufactured cigarettes and may be regarded as a form of compensation for manufactured cigarette price and tax increases (2). In South Africa, RYO cigarettes are commonly made from pipe tobacco which is available in different pack sizes with 5g pack being the smallest and equivalent to about five sticks of manufactured cigarettes. RYO is smoked rolled in newspapers without filters making them more dangerous (2) (Figure 1). Tax increases have been observed to be the most effective policy tool in reducing tobacco consumption especially among the poor (8). They prevent smoking initiation, increase the likelihood of cessation among current users and lead to substantial improvements in public health. (8). However, these increases have led to a rise in demand for RYO as a cheaper alternative which may negate the effect of taxation.



Figure 1: Pipe tobacco is wrapped in newspaper and used as roll-your-own cigarette

RYO users in South Africa are less likely to make quit attempts compared to those who smoke the more expensive manufactured cigarettes (5, 6). This is probably because RYO smokers are more addicted to smoking (11), take more puffs and inhale more smoke per cigarette for longer period (8).

Those with low self-efficacy to quit manufactured cigarette smoking are the ones using RYO in South Africa (6). Lower socio-economic status has been associated with having low self-efficacy to quit, having no intention to quit and higher levels of nicotine dependence (12). This suggests that among the lower socioeconomic group, tax and price increases do not necessarily promote smoking cessation but instead encourage switching to cheaper tobacco products like RYO. Self-efficacy, social variations in dependency and intention to quit indicate that population-level interventions such as tax and price increases may be less

effective for lower socio-economic strata and thus targeted interventions may be essential to reduce the disparity of cessation across socio-economic groups (12).

In South Africa, the share of RYO in total tobacco consumption increased from 2.5% in 1990 to 4.1% in 2000 with a pronounced increase among the poorest (5.1% in 1990 to 18.7% in 2000) (5). However, the use of RYO did not change among the richer households indicating that there was no major substitution (5). RYO use increased between 2007 and 2010 and this was mainly among rural residents and those with no education. The greater use of RYO cigarettes in the rural areas may in part reflect the fact that people living in rural areas are often poorer than their urban counterparts.

In conclusion, RYO tobacco taxes may need to be revised, but offering cessation assistance would be necessary to support tax policy implementation. There is need for more intensive treatment interventions to increase self-efficacy to quit among RYO cigarette smokers. In addition to revising the tax structure to reduce the incentive to switch to pipe tobacco or RYO cigarette tobacco, there is also a need to educate RYO cigarette users on the dangers of using any tobacco product whatsoever.

Note that the views expressed in this article are those of the author(s) and do not necessarily represent the views of PHASA.

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