

Strategies to discourage smoking among young people in PNG

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Abstract

This paper reviews literature on tobacco smoking among adolescents in Papua New Guinea and prevention efforts in the Asia Pacific Region. It investigates smoking prevention and cessation programs targeting young people Papua New Guinea. Although a national policy on tobacco control in PNG was introduced in 2004, the WHO Framework Convention for Tobacco Control Secretariat found that, five years later, implementation was sporadic, uncoordinated and underfunded. The paper argues for multi-strategy approaches and recognizes that stand-alone programs that try to reduce tobacco use in the short term will not achieve satisfactory results. A call is made for the co-ordination of prevention and smoking cessation activities in the country and an effective framework for the implementation of the WHO Framework Convention for Tobacco Control (FCTC), particularly targeting youths.

Keywords: Smoking, tobacco, Papua New Guinea, adolescents, Framework Convention for Tobacco Control (FCTC)

Introduction

The World Health Organisation reports that the use of tobacco is a leading preventable cause of death in the world with more than five million people worldwide dying from tobacco use annually (WHO, 2009a). Smoking of tobacco has reached epidemic proportions globally, with more than one billion smokers worldwide. Smoking is a major contributor to global chronic disease and disability (Rahman and Zaman, 2008).

Tobacco smoking affects many ages and socioeconomic groups (McEwen et al, 2008; WHO, 2010). However, the burden of tobacco use is greatest in low and middle-income countries. It is predicted that, if very little is done to curb tobacco use and current trends continue, tobacco use will kill more than eight million people worldwide each year by the year 2030, with 80% of these premature deaths in low-and middle-income countries (Anderson Johnson et al., 2006; Devlin et al., 2003; WHO 2009a;).

In monetary terms, tobacco places a huge strain on individuals and countries as WHO estimated that the use of tobacco around the world resulted in an annual global net loss of over US\$ 200 billion, a third of which was accumulated in developing countries (WHO, 2010). Tobacco smoking continues to be a significant risk factor and predictor for lung and mouth cancer (Chiu et al., 2005; Ruano-Ravina et al., 2003) while it is also strongly associated with coronary heart disease among young and middle aged populations (Rahman &

Zaman, 2008) with up to one in every ten cardiovascular deaths in the year 2000 attributed to tobacco smoking (Bullen, 2008).

In young people, the initiation of smoking increases with age and is predominant among males (Anderson-Johnson et al., 2006) with most starting during adolescence (Webb et al., 2007). Numerous studies show that smoking uptake among adolescents can start as early as nine years of age at the primary school level, through experimentation, peer pressure, parental smoking and media influence (Milton et al., 2004; Sargent and DiFranza, 2003). There has been growing evidence that show over 30% of children smoked their first whole cigarette before ten years of age in countries such as Ghana, Grenada, Guyana, India, Jamaica, Palau, Poland, Northern Mariana Islands and St Lucia (Mackay & Eriksen, 2002).

While the lines between childhood, adolescence and adulthood may differ by culture and region, and definitions vary on what an adolescent is, this paper follows the WHO definition where an adolescent is 'a person between 10-19 years of age' (WHO 2011).

Methodology

A literature review was undertaken to identify issues concerning smoking among young people in the Asia Pacific region with a focus on Papua New Guinea. This research investigated adolescent smoking prevention and cessation programs in the Asia Pacific region. Electronic databases such as ProQuest, Jstor, Informit, ScienceDirect and Google Scholar were searched to find relevant literature related to smoking prevalence, tobacco control legislation and its implementation in the Asia Pacific Region and Papua New Guinea.

Current prevalence of adolescent tobacco smoking

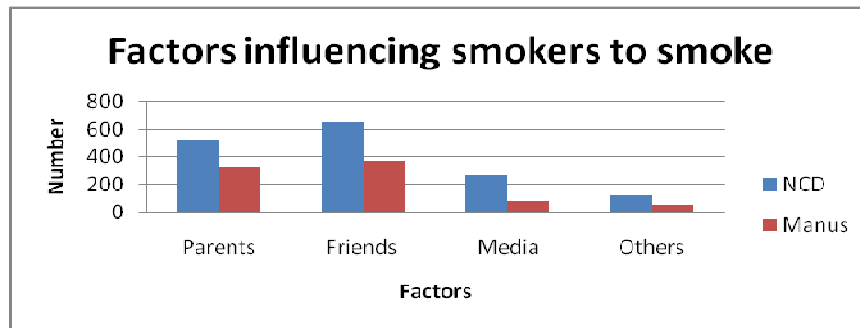
There is limited literature on the prevalence of tobacco smoking in PNG (PNGMOH, 2004). It is also difficult to predict total consumption of tobacco in PNG due to 'a lack of a strong regulatory mechanism' (WHO, 2010) for concerned organisations to keep track of tobacco consumption patterns. This has led to inadequate national epidemiological surveillance, monitoring and evaluation, funding and even political will at the national level to implement the Tobacco Products (Health Control) Act 1987 (Allen & Clarke, 2007; Hiawalyer, 2002; Thomas et al., 2007; WHO, 2010).

Although there has been little done to find the prevalence of tobacco smoking among the 10-19 year old age group in Papua New Guinea, WHO statistics show 43.8% of young people in PNG aged 13 to 15 years were reported to 'currently smoke tobacco products' (WHO, 2009b). In that same age group, the current cigarette use prevalence among boys, which was 52.1%, is considered to be the highest in the Western Pacific Region (CDCP, 2008). The World Health Organisation's Global Youth Tobacco Survey in 2007 showed that 73.9% of young people aged 13-15 years old in PNG were exposed to smoking

in their homes while 86.4% of them were exposed to smoking outside their homes (WHO, 2009b), while the WHO Step Wise survey carried out in 2008 showed that two-thirds of the adult population, aged 15-64 years old, in Papua New Guinea consumed tobacco in one form or another (FCTC Convention Secretariat, 2010).

Significant research carried out by Gilbert Hiawalyer, from the National Health Department, on 3000 young people aged 8-20 years in Manus and Central provinces showed that children as young as eight years of age had begun smoking. He also found that out of 2000 adolescents surveyed in the National Capital District (NCD), only 10% of the males and 37% of the females were non-smokers and, proportionally, there was an average of two male smokers to every female smoker (Hiawalyer, 2002). In Manus province, Hiawalyer found that, of the 1000 boys and girls he interviewed, 5% of the males and 40% of the females were non-smokers. From a total of 2245 smokers, he found that the number of smokers increased with age. He explained that, as students moved higher in the school grade levels, the number of smokers also began to increase. His study also found that these young smokers were influenced by their friends, parents and the media (Graph 1).

Figure 1 Factors influencing young smokers to smoke



Another study, carried out by final year students of Divine Word University on 200 children in five primary schools in the Madang Urban District, found that 18% of the students regarded themselves as smokers while 10% of them smoked three to four times daily (Ongogo, Gabuogi & Varip, 2010). The DWU researchers also found that 63% of the smokers were 13-15 years of age, 30% were 16-18 years of age, while 7% of these were 10-12 years of age (Ongogo, Gabuogi, and Varip 2010).

Adolescent tobacco uptake factors

The Global Youth Tobacco Survey (CDCP, 2007) indicates that the environment is a significant factor in young people’s uptake of tobacco products and adolescents in PNG are no exception (Hiawalyer, 2002). The environment may include family and social support networks which can influence adolescents’ smoking uptake (Mermelstein, 2003). For example,

Onguglo, Gabuogi and Varip (2010) found that, although 49.5% of the 200 students in Madang's five primary schools indicated in a questionnaire that they knew that smoking caused lung cancer, 53% of students who smoked said they did so because of peer pressure.

The home where a family lives can also influence smoking habits (Betson et al., 1995; Krisjansson et al., 2010). The Global Youth Tobacco Survey conducted in PNG in 2007 showed that 73.9% of young people aged 13-15 years old are exposed to smoking at home (WHO, 2009b) and Hiawalyer found that adolescents in the NCD (34%) and Manus (39%) smoked because their parents did so at home (Hiawalyer, 2002).

The low cost of tobacco products in Papua New Guinea is also a factor for adolescent uptake of tobacco smoking (PNGMOH, 2004). An example of this would be the smoking of the 'roll your own' tobacco that is being sold on almost every street corner. This is because it is the cheapest of all tobacco products in this country as it is home grown and sold locally (WHO, 2010). It costs 10toea (5 Australian cents) for one stick, is not taxed and carries no health warning (WHO, 2010).

Another example of cheap tobacco products would be the practice of selling loose cigarettes. Pictured below are factory made cigarette packs each with 20 cigarettes in a pack. Each cigarette in the pack is being sold individually. In the blue cup are tobacco leaves rolled with newspaper and they are being sold for 10 toea each.

Photograph 1: Roadside selling of tobacco products in PNG



Photograph by Kingston Namun

Factory made cigarettes in packs of 20 that cost K11.40 (AU\$5.00) are sold individually at roadside markets for 70 toea (30 Australian cents). This practice of buying single or loose cigarettes is more affordable for young people than paying for a whole pack of 20.

Government policy and legislation to curb tobacco smoking

In 1987, the government passed the Tobacco Products (Health Control) Act. This Government Act legislated for a ban on all forms of tobacco advertising (including sporting sponsorship); prevention of sales of tobacco products to people under 18 years of age; restriction of smoking in confined public places such as hospitals, schools, public transport and restaurants; a ban on all duty-free sales and imports of cigarettes; requirements that health warnings and tar and nicotine contents be printed on all cigarette packets; empowerment of the Minister of Health to fix an upper limit for cigarette constituents (e.g. tar and nicotine); and a requirement that all cigarettes be sold in packets (outlawing the sale of loose cigarettes) (Marshall 1991).

As a sign of political commitment to the WHO Framework Convention for Tobacco Control, the PNG National Executive Council adopted the National Policy on Tobacco Control in September 2004 as a component of the 2000-2010 National Health Plan (WHO, 2010). According to the policy document (PNG Ministry of Health, 2004), the ultimate objective of the policy was to:

- Prevent initiation of tobacco use
- Eliminate exposure to second-hand smoking
- Promote cessation of tobacco use
- Identify and eliminate disparities related to tobacco use and its effects among different populations.

The former Minister for Health, Mr Melchior Pep, introduced the National Policy on Tobacco Control in September 2004 (PNGMOH, 2004), yet, the FCTC Convention Secretariat, in its needs assessment of the tobacco situation in PNG, maintained that in 2010, five years after the policy was adopted, very few of its contents have been implemented (FCTC Convention Secretariat 2010). Prevention and cessation approaches in Papua New Guinea have often been sporadic, uncoordinated and underfunded throughout the nation (PNGMOH, 2004). At present, overseeing the implementation of tobacco control programs has been scattered throughout the Health Department. The table below, provided by the WHO, shows some of the areas under tobacco control that PNG has achieved and others that still need to be achieved.

Table 1: National tobacco control provisions for PNG

INFRASTRUCTURE FOR TOBACCO CONTROL																													
National Tobacco Control Provisions																													
Tobacco Bans and Restrictions	Not				Tobacco Requirements and Regulations	Not																							
	Banned	Restricted	Regulated	Unknown		Required	Regulated	Regulated	Unknown																				
Advertising in certain media		X			Advertising health warnings/messages	X																							
Advertising to certain audiences				X	Age verification for sales				X																				
Advertising in certain locations				X	Manufacturing licensure				X																				
Advertisement content or design		X			Package health warning/message	X																							
Sponsorship or promotion for certain audiences			X		Label design on packaging		X																						
Sponsorship advertising of events				X	Ingredient/constituent information on package label	X																							
Brand stretching				X	Amount of tar		X																						
Sales to minors	X				Amount of nicotine		X																						
Sales by minors				X	Amount of other ingredients/constituents		X																						
Place of sales				X	Product constituents as confidential information				X																				
Vending machines	X				Product constituents as public information				X																				
Free products				X	Constituent disclosure by brand				X																				
Single cigarette sales				X	Constituent disclosure in the aggregate				X																				
Misleading information on packaging				X	<table border="1"> <thead> <tr> <th>Other Provisions</th> <th>Yes</th> <th>No</th> <th>Unknown</th> </tr> </thead> <tbody> <tr> <td>National tobacco control committee</td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>Tobacco control education/promotion</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>Anti-smuggling provisions</td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>Litigation enabling provisions</td> <td></td> <td></td> <td>X</td> </tr> </tbody> </table>					Other Provisions	Yes	No	Unknown	National tobacco control committee			X	Tobacco control education/promotion	X			Anti-smuggling provisions			X	Litigation enabling provisions			X
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Smoking in government buildings (incl. worksites)	X																												
Smoking in private worksites				X																									
Smoking in educational facilities		X																											
Smoking in health care facilities			X																										
Smoking on buses		X																											
Smoking on trains		X																											
Smoking in taxis		X																											
Smoking on ferries		X																											
Smoking on domestic air flights	X																												
Smoking on international air flights				X																									
Smoking in restaurants				X																									
Smoking in nightclubs and bars				X																									
Smoking in other public places		X																											

Source: The 12th World Conference on Tobacco or Health: Tobacco Control Country Profiles (WHO 2003a)

Health warnings

Health warnings on tobacco products have always been an issue ever since the Tobacco (Health Control) Act was introduced in 1987. The Ministry of Health has been vocal in introducing health warnings on tobacco products, prompting its call in the National Tobacco Policy that the labeling of tobacco products could influence smoking and the use of words such as 'light', 'ultra light', 'low tar' or similar terms used by tobacco manufacturers on tobacco products provided a false impression that these products are safer than the 'regular' ones (PNGMOH 2004).

The National Tobacco Policy of 2004 on warning, labeling and packaging;

- Requires insert cards with additional health information
- Prohibits any sale of a tobacco product that does not have a health warning
- Bans false, misleading and deceptive language on the cigarette packs
- Requires rotating warnings with pictures with a minimum size of 50% on the two larger sides of the cigarette packet.

Currently, health warnings on tobacco products manufactured by the PNG British American Tobacco company have written warnings in English and Pidgin on cigarette packets, such as: *Government Health Warning: Smoking is*

dangerous to health; Smoking kills; Smoking causes lung cancer; Your smoking can harm others. These appear on the back and front of the packet. The sizes of the warnings cover 33% of the front and 25% of the back and they are printed black on white in a black frame (FCTC Convention Secretariat 2010). Pictured below There are Government Health warnings cigarette packets that are sold in PNG. At the front of the pack, in English, it says 'Smoking kills' while at the back of the packet, it says the same thing but in Pidgin 'Simuk i save kilim man na meri' (smoking can kill males and females)

Photo 2: Current English and Pidgin health warnings on cigarette packs



Photograph by Kingston Namun

However, the use of pictorial health warnings has not been implemented yet. PNG needs to urgently put pictorial health messages on tobacco products because there is evidence that pictorial messages are more effective than word messages. Studies done in Greece and United States show that the use of graphics are effective in reducing smoking rates (Vardavas et al., 2009; O'Hegarty et al., 2006).

Smoke-free environment

Though the Tobacco Control Act has banned smoking indoors or in enclosed areas in the country it was not until 1991 that the Health Minister declared a ban on the use of tobacco products in the following places: aircraft, both on domestic and international flights; educational facilities, except staff areas; government buildings; health care facilities; and public transportation.

According to the Minister's declaration, the smoking of tobacco in these public places carried a fine of K1000 (AU\$300) or imprisonment for a term not exceeding 12 months (FCTC Convention Secretariat, 2010). However anecdotal evidence shows that enforcement of the 1991 Declaration and the 1987 Act has been lacking and confusion reigns on who should perform this task (Freeman, 2001; Hiawalyer, 2002).

Photograph 3 shows a sign in a NCD shopping centre warning people not to smoke. The sign is written in the three official languages of PNG: English, Pidgin and Motu.

Photo 3: No Smoking sign in English, Pidgin and Motu at a shopping centre



Picture by Bernard Saliau

Photograph 4 shows a sign displayed at the hospital in Madang. The use of Pidgin as well as English caters for people who cannot read English. 'Tambu tru long smok insait long hausik' (truly forbidden to smoke inside the house sick [hospital]) and 'Smoking is strictly prohibited in hospitals'.

Photograph 4 No smoking sign in Pidgin and English at a hospital



Picture by Kingston Namun

Taxation

Papua New Guineans are part of 94% of the world's population who live in a country where tobacco tax per cigarette pack is less than 75% of the total price (WHO, 2009b). It is estimated that around 26% of the retail price of cigarettes consists of excise duty (WHO, 2009c) and with other taxes, such as the Goods and Services Tax, the annual tax revenue from tobacco products in Papua New Guinea is estimated to be around K277 million (AU\$105 million) that goes to the Government (FCTC Convention Secretariat, 2010). The Excise Tariff Act 2007 requires that the duty rate of tobacco products be adjusted at six monthly intervals (on May 31 and November 30) each year together with the movement

of the Consumer Price Index (CPI). However, when the CPI increases, there is little increase in tobacco duty tax, thus indicating that, although tobacco taxes are raised regularly, they are well below the actual rate of inflation (FCTC Convention Secretariat, 2010).

The World Health Organisation has recognized that increasing the price of tobacco products through significant tax increases has become the single most effective way to decrease tobacco use and encourage users to quit smoking (WHO, 2009a). There is extensive research to support the view that increasing tobacco tax promotes a decrease in tobacco uptake and prevalence in adolescents around the world (Liang and Chaloupka, 2002; Zhang et al., 2006).

The WHO Framework Convention for Tobacco Control (FCTC)

Since FCTC's declaration in 2003, a total of 168 countries representing 91.58% of the world's population, have signed on to increase political commitment by their respective governments to carry out the objectives outlined in this treaty (WHO, 2009). Papua New Guinea has been a signatory to the WHO FCTC since 2004 and ratified its commitment in 2006 and must use the FCTC as a framework to curb tobacco use among adolescents (FCTC Convention Secretariat 2010). The Framework underlines tobacco control strategies based on supply and demand of tobacco. The *Core Demand* reduction strategies include price and tax measures to reduce the *demand* for tobacco; and the regulation of the contents of tobacco products; packaging and labeling requirements of tobacco products. The *Core Supply* reduction provisions relate to Sales to and by minors; illicit trade in tobacco products.

The FCTC must be embraced by PNG as a national guideline for tobacco control and must be seen as a national priority. To do this, these provisions must be channeled into a comprehensive strategy that begins with its inclusion in the next National Health Plan (2011-2020) so that tobacco control strategies and activities will be actively funded and strategically implemented. With the introduction of WHO's FCTC, the PNG Government must now work towards achieving some of the treaty articles and learn lessons from other countries in the Asia Pacific Region.

Smoking prevention programs in the Asia Pacific

Of the 168 countries who have signed or ratified their commitment to the WHO FCTC, 38 are located in the Asia Pacific Region (WHO 2009b). Throughout countries located in the Asia Pacific Region, numerous tobacco smoking prevention programs have been established with varying levels of success. The researcher looked at smoking prevention and cessation programs in some of these countries:

Tobacco smoking prevention and cessation strategies of countries in the Asia Pacific Region

Thailand

- Increased price of tobacco by 400% in 8 steps over a number of years.
- Pictorial warnings on cigarette packs
- US\$35 million is collected under the 2% tobacco and alcohol surcharge. This money is channelled into the Thailand Health Promotion Foundation

Philippines

- In 2003, the *Youth Smoking Cessation Program* declared smoke-free campuses, improved the training for students and teachers, and increased penalties for smoking.
- The *Tobacco Regulatory Act of 2003* was approved and sought to increase public education measures, ban all tobacco advertisement, strengthen warning labels on tobacco products, and prohibit sales to minors.
- All of these smoke-free programs have received extensive national and local media coverage.

Republic of Korea

- Government tobacco control agency responsible for tobacco control and it spends just over US\$28 million for tobacco control programs.
- Anti smoking campaigns critical in reducing the number of people who smoked from around 80% in early 2000 to 40% as recently as 2007.
- Strategies included antismoking music for young people, banning smoking at public places such as over 8,000 bus-stops in Seoul and 8 public parks.
- Smoking is now banned in health care facilities, buses, trains and domestic airflights and sales to minors.
- Government operates a national Quitline to help people for advice and counselling.

Indonesia

- Passed a Tobacco Control Act in 1992 and the government employs 12 full time staff in a National Tobacco Unit to implement tobacco control program with a budget of US\$30,000.
- Increases in tax rates did not have a large influence on public health because the tobacco tax system was uneven for different tobacco products and the system also allowed tobacco firms to evade paying higher taxes.

Fiji

- Began cigarette tax higher than 75% of cigarette retail price in 2008.
- Nabila Health Project.
- Winners Don't Smoke program.
- Truth about Tobacco program.

Cook Islands

- Tobacco Control Working Group in place.
- Smoke Free Challenge program.

Tonga

- A ranking of 10 out of 10 on the WHO FCTC overall compliance with direct ban on advertising.
- Churches are powerful allies in public health campaigns to reduce smoking prevalence.

China

- National agency - the Chinese Association on Tobacco Control (CATC) employs 27 full time staff with a budget of Yuan 20 million (AUD\$2.9m).
- Promote the establishment of national smoke-free hospitals, smoke-free schools, tobacco-free ads and tobacco-free films and TV shows.
- 12 million students from middle schools and elementary schools have been organized to sign up for 'being a smoke-free generation' activities; 41 movie stars have been encouraged to give initiatives on smoke-free films.
- Today, 12,094 primary and middle schools and Universities have been named as 'smoke-free schools' in the whole nation.
- 'Refuse First cigarette, be a No-Smoking New Generation' project.

New Zealand

- *Smokefree Environments Amendment Act 2003.*
- Late in 2004, a comprehensive smoke-free law came into effect which significantly addressed gaps and began to strengthen the existing law, expanding it to provide cover for all indoor workplaces, including hospitality venues (pubs, bars, restaurants and casinos), with no exemptions for marked smoking rooms.
- National Educational program called 'QUIT' also began in 2004.
- In 2009, New Zealand cigarette packs began to have pictorial health warnings on 30% front-of-pack and 90% of the cigarette packs.
- Today seven of the 14 pictorial health warnings are equally featured in each 12-month period and a yearly rotation cycle is in place to reduce wear-out (with a four-month transition period).

Australia

- Well organised anti-tobacco movement that has been reducing tobacco prevalence for more than 20 years now.
- NSW Central Coast Program.
- Smarter than Smoking (STS).
- More than half the cost of a cigarette is given to government tax.
- In 2010, a tax hike of an extra \$2.16 on the current price of a pack of 30 cigarettes and estimated that this change would cut tobacco consumption by 6 per cent.
- Even though there were various legislations in place already banning smoking in public places such as the *Airports Act 1996* and *Interstate Road Transport Act 1985*, state governments passed their own legislation to promote smoke free environments.

- School-based, multi-session, group cessation programs have been the most commonly used approach for interventions with adolescents throughout the country.
- Currently, health warnings covering 30% of the front and 90% of the back of loose tobacco and pipe tobacco pouches, with graphics appearing on both the front and back of the cigarette packs.
- There are 14 health warnings which have been developed so far comprising graphic images, warning messages, explanatory messages and the government divides a rotation system to increase consumer learning and awareness of the health effects of smoking with two sets of 7 health warnings alternating every 12 months.

Some of the countries in the Asia Pacific Region, such as Thailand, have stepped up their tobacco control campaigns since signing and ratifying their commitment to the WHO FCTC treaty. Thailand's work in the area of implementing increased taxes and pictorial health messages on cigarettes has been an encouraging sign for other countries in the region to do the same. Indonesia is the only country in the Asia Pacific Region that has not signed its commitment to the FCTC and, as such, tobacco use continues to cause huge problems for the country.

Other countries especially those in the Pacific, like PNG, currently have tobacco prevention and cessation programs that are short-term and often lack funding. This may be because it is difficult for Pacific Island countries to assess the extent of the public health problems caused by tobacco use (and to develop tobacco control programs) due to a lack of quality research and data on smoking rates, epidemiology, or cultural and economic impacts of smoking (Allen and Clarke 2007).

Australia is a shining light among countries in the region in terms of a comprehensive national approach to tobacco control. The fight against the devastating health effects of tobacco in Australia is fought on all fronts such as tobacco taxation, mass media campaigns, school prevention programs and legislative changes. The country currently implements programs that are funded by state and Commonwealth government and displays strong partnerships among different stakeholders. As seen from their efforts, Australia now has the lowest smoking rates in the Asia Pacific Region. If Papua New Guinea is to see a reduction in adolescent smoking rates, it needs to implement a comprehensive national approach against tobacco that is similar to Australia's.

Conclusion

This paper calls for provincial and national action against tobacco that is fully funded by the government, well researched, comprehensive has legislative support and operates within the WHO FCTC treaty requirements. This can be done and requires cooperation of all government departments, NGOs and civil society. As experienced by Australia, this much needed change in a tobacco

culture such as the one in PNG cannot happen overnight. It took Australia five decades to get to where it is now – one of the top five nations in the world in terms of comprehensive tobacco control and one where tobacco companies dread to ply their trade. It is hoped that a multi-level approach towards reducing tobacco use PNG set a benchmark for greater efforts in long terms tobacco control strategy.

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