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Government paralysis? Stable tobacco prices mean preventable deaths and disease persist, along with health inequalities in New Zealand

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Abstract

Tobacco affordability, prices and tobacco tax rates have considerable effects on smoking uptake, consumption, and quitting. We examined the trends in New Zealand per capita tobacco consumption and real cigarette prices from 1975–2008.

Since 1984, there has been a close inverse relationship between real price and per capita tobacco consumption. Thus price increases drive consumption falls. However, in the periods of 1992–1997 and 2002–2008, both price and consumption were largely stable.

The stability since 2002 means other tobacco control interventions have been undercut by increased tobacco affordability (due to increased average real incomes). Furthermore, the lack of tobacco tax increases (to be used to fund better tobacco control) is against majority surveyed New Zealand public opinion, and may be contrary to even smokers' views. The great majority of smokers, who want to quit, could be assisted by more extensive programmes funded by the extra revenue from tobacco tax increases. These could include more prime-time mass media campaigns and greater Quitline capacity. Tobacco tax increases are a highly evidence-based policy that could help reduce harm to the health of New Zealanders and reduce health inequalities.

Tobacco affordability in New Zealand

The affordability of tobacco products is a major determinant of smoking prevalence in New Zealand, ¹⁻³ as it is elsewhere in the world. ^{4,5} Tobacco affordability reflects a combination of tobacco product prices and levels of consumer disposable incomes. ⁶ Affordability is particularly important for children and youth—the cheaper the price of tobacco, the more likely children and youth are likely to start smoking. ^{7,8} It is also important for those on low incomes, with tobacco price increases reducing both smoking prevalence and tobacco consumption far more for those on low incomes compared to those on medium and high incomes. ^{9,10}

In New Zealand, tobacco product prices are largely determined by the level of tobacco taxation (about 70% of the price is tobacco tax or GST). However, tobacco companies and retailers can also affect the price. For example, in July 2009, British American Tobacco and Imperial Tobacco reduced the prices for several of their brands in New Zealand. Public health and other organisations in New Zealand and elsewhere have argued that tobacco taxes should be increased, in order to reduce smoking prevalence and tobacco consumption. 13,14

The Framework Convention on Tobacco Control Treaty, which New Zealand has ratified, states that countries:

...should take account of its national health objectives concerning tobacco control and adopt or maintain, as appropriate, measures which may include: (a) implementing tax policies and, where appropriate, price policies, on tobacco products so as to contribute to the health objectives aimed at reducing tobacco consumption.¹⁵

Trends in tobacco consumption and real cigarette prices

To inform discussions around appropriate tobacco tax levels, we examined the rates of per capita (15 years plus) tobacco consumption and the real cigarette prices, from 1975 to 2008. For detail on the data sources for real tobacco prices and consumption, see pp.25-6 of our 2007 report, and Table A.2 of the report Volume 2. In this work 'consumption' is measured by the manufactured cigarettes and loose tobacco released by tobacco companies from bond. For cigarette consumption, one gram of loose tobacco is counted as one cigarette. There can be some year to year trend variations, if there are fluctuations in tobacco product releases close to the start or end of a data year.

Figure 1 shows the change in the real price (adjusted for inflation) of cigarettes against per capita consumption of manufactured and roll-your-own (RYO) cigarettes. The results indicate two key points. The first is that from 1975 to 1984, while the real price was very stable, there was a considerable decline in per capita consumption, from 3168 to 2724 cigarettes a year. This decline occurred before most established evidence-based tobacco control interventions were implemented in New Zealand, and suggests that during that period other factors, such as increasing information about health risks in the mass media, were sufficiently compelling for some groups to prompt quitting and reductions in the amount smoked.

The second key point is the reciprocity of price and consumption since 1984. When the real price rose, consumption fell markedly. For example, between 1988 and 2001 the real price of cigarettes more than doubled, and per capita consumption approximately halved. However, when the price was stable, per capita consumption was also fairly stable; see for example the periods between 1992–1997 and 2002–2008.

The real price of tobacco products in New Zealand has changed little since the last tobacco tax rise (beyond inflation), in 2000. Furthermore, because of rising average real incomes, the affordability of tobacco products has effectively been increasing over this time period, despite the annual inflation adjustment in the tobacco tax rate. ^{11pp.45-46}

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Figure 1. Real cigarette prices and per capita tobacco consumption, 1975–2008*

*'Consumption' is from 'tobacco released from bond' data, and includes both RYO and factory made cigarettes. Scale is the same for both series. Real cigarette prices are expressed relative to all groups consumer price index (June 1999 = 1000).

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Measuring the effects of tobacco control

Besides tobacco consumption, a more widely used measure of smoking at the population level is adult smoking prevalence. Some survey (self-reported) data indicate that daily smoking rates fell 5% in absolute terms between 2003 and 2007. However, this may be misleading, and may reflect that as smoking becomes less normalised, smokers are increasingly giving socially desirable responses to survey questions and stating that they are non-smokers. This can result in an increasing underestimate of true smoking prevalence over time. The lack of decline in per capita consumption during this period supports this explanation.

There are also some potential problems with the use of annual consumption measures. For example, these could be distorted by higher or lower releases at the beginning or end of the measurement year, or prior to implementation of interventions like tax and duty changes; or due to changes in stock ordering and invoicing procedures. However, these are unlikely to result in systematic bias over long periods of time, and so should not distort observed trends. Hence, for multi-year periods, per capita consumption, measured through cigarettes and tobacco released to the market, may be a more robust measure of overall levels of smoking in the New Zealand population.

The consequences of stable tobacco prices

The stability of capita tobacco consumption (and possibly adult smoking prevalence) since 2002 suggests that tobacco control activities in New Zealand have been undercut by increased tobacco affordability, due to the failure to increase real

cigarette prices. It further suggests that all the *other* tobacco control interventions introduced during this period in New Zealand besides tax (e.g., graphic health warnings, extension of the smokefree indoor workplaces legislation, mass media campaigns, and enhanced smoking cessation assistance) have been needed just to keep per capita tobacco consumption stable. The tobacco control spending and efforts appear to be running hard just to maintain the status quo.

Do smokers and non-smoking New Zealanders want tobacco taxes to stay unchanged in real terms? There is public (combined smoker and non-smoker) support for a tobacco tax increase, provided the extra revenue raised is used to help smokers. For example, in a 2008 national survey of over 1600 people, 64% agreed with the statement 'Tax on cigarettes and tobacco should be increased and all the extra money used to help smokers wanting to quit.' The data about smokers' views is more mixed. In the same survey, only 30% of current smokers agreed with this statement (46% of those who had made two or more quit attempts). However, in another national survey of over 1300 smokers and recent quitters in 2007–8, almost 60% supported an increase in tobacco tax, if all the extra revenue 'was used to promote healthy lifestyles, including helping smokers wanting to quit.'

The need for government action on tobacco affordability

The possibility of raising alcohol taxation levels has currently been raised by the Law Commission. ²⁰ The government could take this opportunity to also review tobacco taxation, and to put in place an effective health-driven tobacco price strategy that extends beyond episodic and ad-hoc revenue raising decisions.

Besides the overall tobacco tax rates, there is the urgent need to consider the relative cheapness of RYO tobacco, because smoking thinner RYO cigarettes is cheaper and provides an alternative to quitting.²¹ Over 80% of New Zealand RYO smokers give lower cost as a reason for their RYO preference, with this being the most common reason given.²² RYO cigarettes are also more likely to be used by young smokers, due to the lower cost,²³ with 69% of smokers aged 15-19 smoking RYO.²⁴ In 2008, 12% of New Zealand year 10 students were regular smokers (and 31% of Māori girls).²⁵ Of these regular smoking students, 57% (68% of Māori) usually smoked RYO.²⁶

New Zealand smokers regret starting smoking and want to quit, ^{27,28} with over 60% attempting to quit over a five year period. ²⁴ They need far more help. For instance, the Quitline and its associated media work, (the most prominent cessation intervention by government) results in less than 10% of smokers contacting the Quitline annually. ²⁹

Less than 5% of tobacco tax revenue in New Zealand is used for preventing the tobacco problem. There are strong practical arguments for a much greater proportion of the revenue being used for prevention.³⁰ Extra tobacco tax revenue could help pay for more prime-time mass media campaigns and greater Quitline capacity.³¹ Furthermore, there are strong ethical grounds for *all* tobacco tax revenue to be used to help smokers quit.³²

Decisions about tobacco tax rates should be informed by the evidence that tobacco smoking is highly addictive. ^{33,34} The addiction causes a huge burden of avoidable disease, disability, premature death, ^{23,35} and economic costs. ³⁶ Tobacco use is a major contributor to health inequalities in New Zealand, with Māori and those on low

incomes particularly affected. 37-39 In terms of life lost, the harm to populations on low incomes from tobacco tax rises, due to increased economic hardship among continuing smokers, is far less than the gains from quitting and reducing smoking.⁴⁰ Households where smokers quit as a result of a tax increase experience considerable financial gains (in 2007 calculated as about \$2200 per year on average). 11 Real increases in tobacco product prices are a highly effective public health measure to reduce smoking uptake and consumption, and to increase smoking cessation.^{4,7}

The revenue raised by tobacco tax increases represents an opportunity to fund support for smokers to quit, and other interventions to reduce smoking. Successive governments have refused to institute a long term tobacco tax plan, with regular above inflation tax increases. 11 This represents a failure to implement evidence-based policy, which has resulted in repeated missed opportunities to reduce smoking and save lives. This failure also means that tax-payers are not getting full value-for-money from government expenditure on tobacco control.

These failures have contributed to the continuing high death toll from the tobacco epidemic, the persistence of youth smoking, and result in a continuing tobacco epidemic which kills over 4000 New Zealanders every year, ²³ and causes and exacerbates health inequalities.³⁷

Competing interests: Although we do not consider it a competing interest, for the sake of full transparency we note that all of the authors have undertaken work for health sector agencies working in tobacco control.

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