

Commentary on ‘Core public health functions for New Zealand’

Nick Wilson

The special article on ‘Core public health functions for New Zealand’ by Williams and colleagues in this issue of the *Journal* is a very valuable contribution to public health thinking in this country. The inter-relationships between goals, outcomes sought, core functions and key principles are all well outlined. The valuable illustrative examples in their Table 2 indicate the depth of experience and thinking by the authors.

It seems likely that there would be widespread acceptance by health workers for the content of this article, and indeed by the public as well. Even so, in an ideal democratic society attitudes of the public to the principles could be subjected to further evaluation of acceptability eg, with surveys or citizen juries.¹

Some areas for possible further work

The authors had space restrictions to elaborate on particular issues, but future work could be done on areas where there might be differing perspectives within the New Zealand health sector and society. For example:

- The stated goal includes New Zealander’s living “longer” lives—but is this really what most people want? Perhaps a majority might prefer the health sector to focus more attention on the quality component of life with greater effort directed at major causes of disability. Indeed, there are various potential complex advantages and disadvantages of having an increasingly older population (as discussed elsewhere by New Zealand authors^{2,3}). The ranked list of causes of disability for New Zealand was documented in a recent

Lancet article: back pain (largest burden); major depressive disorder; neck pain; anxiety; “other musculoskeletal disorders”; asthma; chronic obstructive pulmonary disease (COPD); hearing loss; diabetes and migraine (tenth in burden).⁴ Of course, preventing some of these conditions (eg, COPD and diabetes) will both reduce disability and result in longer lives, as will progress with tobacco and alcohol control. But the scope for extending life expectancy might soon start to face diminishing marginal returns.

- Does public health action around “reducing health disparities” include addressing lower male life expectancy? Indeed, some causes of the gap are readily achievable—such as preventing cardiovascular disease in men.⁵
- Should “evidence” for public health practice include both evidence of intervention “effectiveness”, but also “cost-effectiveness” to ensure the best value for money? The authors thoughtfully discuss cost-effectiveness in the Background section, but this does not end up in any of the principles.
- Should there be a principle of the health system striving to be more environmentally sustainable with ongoing reductions in its carbon footprint? Such approaches have been adopted by the National Health Service in the UK and in various other jurisdictions.^{6,7} Indeed, the *Lancet* has recently described tackling climate change as the greatest opportunity for advancing global health.⁸
- Should there also be a principle of the health system striving to maximise

co-benefits for all sectors of society? This might mean, for example, that alcohol control gets special attention given that there are major health benefits but also very wide societal benefits (relating to reduced crime, violence and lost productivity).

The critical importance of prevention in public health

The authors appropriately detail “preventive interventions” as one of the five core public health functions. But this category may deserve even more emphasis since it generally stands out in terms of value-for-money and the size of the health gain achievable. For example, preventive interventions to reduce alcohol-related harm are likely to be cost-saving to society.^{9,10} Modelling work for the New Zealand setting also indicates that a range of interventions to prevent high dietary salt intake will also be net cost-saving to the health system.¹¹ Likewise for raising tobacco taxes to prevent tobacco-related disease, again with net cost-savings even though people will incur extra health costs by living longer.¹²

Some preventive interventions will even raise extra tax revenue for the New Zealand Government—which can then be used to improve health in other areas, or to fund other public sectors, such as improving education. Examples are traditional taxes on alcohol and tobacco,¹³ but potentially new taxes such as those on junk food and sugar-sweetened beverages (as per New Zealand modelling work^{14,15}), and also a salt tax.¹¹ Indeed, the World Health Organization has recently stated that increasing tobacco tax is the most cost-effective way to reduce tobacco use and prevent youth uptake of smoking.¹⁶ Nevertheless, some preventive interventions might not be worthwhile as per our work on the cost-effectiveness of HPV vaccination for boys in New Zealand at current vaccine prices¹⁷ (in contrast to improving HPV vaccination for girls¹⁸).

Another notable feature of some of these preventive measures that change the

environment is that they can also reduce disparities. For example, greater health gain for Māori is suggested by modelling work on raising tobacco taxes,¹² for multiple interventions to reduce dietary salt intake,¹¹ and in the domain of food taxes/subsidies.¹⁵

The particular importance of law as a public health intervention

Williams et al appropriately mention public health laws and regulations in their article, yet this is another area that may deserve a special emphasis. This is because there is now a strong scientific basis for the use of the law as a public health instrument, as shown by one review which identified 65 systematic reviews of studies on the effectiveness of 52 public health laws.¹⁹ Most of these laws were found to be effective in achieving their health objectives, and they encompassed: injury prevention; housing; tobacco; vaccination; violence; and food safety. In addition, a review of the “ten great public health achievements” in the US last century (up to the year 1999) found that all ten were supported by laws at each level of government.²⁰ Laws that benefit public health are relatively low-cost to pass (estimated at \$3.7 million for New Zealand²¹) and can have high levels of effectiveness for multiple decades. For example, the smokefree law banning smoking in pubs and restaurants in New Zealand has been very effective²² and only a few court cases were required in its wake.²³ New laws are probably needed in New Zealand to raise taxes on hazardous products (as detailed above), but also to improve food labelling, to control marketing of alcohol and junk food, and to accelerate the tobacco endgame (eg, via retail outlet reduction²⁴). But some existing laws might also cause net public health harm and may need to be reviewed. For example, are the country’s cycle helmet laws fully fit for purpose if these are potentially making it harder to establish cycle sharing schemes in cities? Such schemes are good for public health and are increasingly common internationally (at over 700 cities globally).

Summary

This special article by Williams et al is clearly a valuable contribution to public health thinking in this country. Yet future

work could expand on some of the details and give more emphasis to those core functions which have more potential importance than others.

Author information:

Nick Wilson, Department of Public Health, University of Otago, Wellington

Corresponding author:

Nick Wilson, Department of Public Health, University of Otago, Wellington, PO Box 7343, Wellington South, New Zealand.

nick.wilson@otago.ac.nz

URL:

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