PREVENTION 1ST

Elevating preventive health policies to tackle chronic disease:
Australia's greatest health challenge

Submission to the Inquiry into best practice in chronic disease prevention and management in primary healthcare (Standing Committee on Health)

August 2015




Public Health Association AUSTRALIA

fare Foundation for Alcohol Research & Education

About Prevention 1st

Prevention 1st is a new campaign by the Foundation for Alcohol Research and Education (FARE) and the Public Health Association of Australia (PHAA), calling on all Australian governments and political parties to commit to a strong preventive health agenda to tackle Australia's greatest health challenge.

Prevention 1st will pursue every opportunity to express the need for action on public policy that the evidence shows will stop and prevent the rising burden of chronic disease.

About the Foundation for Alcohol Research and Education

FARE is an independent, not-for-profit organisation working to stop the harm caused by alcohol. Alcohol harm in Australia is significant. More than 5,500 lives are lost every year and more than 157,000 people are hospitalised making alcohol one of our nation's greatest preventative health challenges.

For over a decade, FARE has been working with communities, governments, health professionals and police across the country to stop alcohol harms by supporting world-leading research, raising public awareness and advocating for changes to alcohol policy.

FARE is guided by the World Health Organization's *Global Strategy to Reduce the Harmful Use of Alcohol*[1] for stopping alcohol harms through population-based strategies, problem directed policies, and direct interventions.

If you would like to contribute to FARE's important work, call us on (02) 6122 8600 or email info@fare.org.au.

About the Public Health Association of Australia

PHAA is recognised as the principal non-government organisation for public health in Australia and works to promote the health and wellbeing of all Australians. PHAA seeks better population health outcomes based on prevention, the social determinants of health and equity principles.

PHAA is a national organisation comprising around 1900 individual members and representing over 40 professional groups concerned with the promotion of health at a population level.

PHAA has been a key proponent of a preventive approach for better population health outcomes championing such policies and providing strong support for the Australian Government and for the Preventative Health Taskforce and National Health and Medical Research Council (NHMRC) in their efforts to develop and strengthen research and actions in this area across Australia.

To find out more information about PHAA's important work visit www.phaa.net.au or contact us on (02) 6285 2373 or email phaa@phaa.net.au.

[1] World Health Organization (2010). *Global strategy to reduce the harmful use of alcohol.* Geneva: World Health Organization.

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Overview

The Foundation for Alcohol Research and Education (FARE) and the Public Health Association of Australia (PHAA) welcome the opportunity to provide a submission to the Standing Committee on Health's (the Committee) *Inquiry into best practice in chronic disease prevention and management in primary health care.*

Chronic diseases have been described as Australia's greatest health challenge, being responsible for 83 per cent of premature deaths and 85 per cent of the total burden of disease.[1] Chronic diseases significantly reduce quality of life, not just for the affected individual but also for their family and friends who may be bearing practical and emotional burdens. More broadly, chronic diseases impose significant costs to Australia, through health system expenditure and reduced workforce participation and productivity. The chronic disease burden is likely to grow as Australia's population ages, placing even greater strain over the already struggling health system.

The majority of chronic diseases can be traced back to four modifiable behavioural risk factors: tobacco and alcohol use, physical inactivity and poor nutrition. This has been recognised by the World Health Organization (WHO) who have developed a set of global targets to achieve a 25 per cent reduction in the burden of chronic disease by the year 2025. Australia is a signatory to this plan, and with the 2025 deadline looming, it is imperative that decisive action be taken to ensure that these targets are met.

Prevention is the key to stemming the ever increasing tide of chronic diseases and reaching these global targets. Thanks to vigorous prevention efforts, Australia has seen dramatic declines in the incidences of tobacco-related diseases and drink driving. Sustained and increased efforts in these areas, as well as equivalent attention to other risk factors for chronic diseases, are likely to yield significant benefits to individuals and the community, resulting in lowered incidences for chronic diseases and improved societal standards about what constitutes healthy and 'normal' behaviour. Prevention is also cost-effective. Research has found that even a small package of four interventions could result in 650,000 fewer years lived with a disability for the Australian population and would generate $6 billion of net savings to the health system.[2]

The Committee has set eight terms of reference in relation to the inquiry and reporting on best practice in chronic disease prevention and management in primary healthcare. These are as follows:

1. *Examples of best practice in chronic disease prevention and management, both in Australia and internationally.*
2. *Opportunities for the Medicare payment system to reward and encourage best practice and quality improvement in chronic disease prevention and management.*
3. *Opportunities for the Primary Health Networks to coordinate and support chronic disease prevention and management in primary health care.*
4. *The role of private health insurers in chronic disease prevention and management.*
5. *The role of State and Territory Governments in chronic disease prevention and management.*
6. *Innovative models which incentivise access, quality and efficiency in chronic disease prevention and management.*
7. *Best practice of Multidisciplinary teams chronic disease management in primary health care and Hospitals.*

8. *Models of chronic disease prevention and management in primary health care which improve outcomes for high end frequent users of medical and health services.*

The focus of this submission is to review the current state of preventive health, and to provide recommendations to improve prevention in Australia. The recommendations in this submission extend beyond the primary healthcare context and address the physical, social and cultural factors that influence unhealthy behaviours that lead to chronic disease.

FARE and PHAA have identified several preventive strategies to aid in Australia's efforts to meet the WHO targets. Infrastructural improvements, such as funding and public accountability mechanisms, are needed to support dedicated preventive efforts along with interventions that target the physical and social structures that encourage unhealthy behaviours. This includes addressing the social determinants of health and increasing efforts to educate the community about healthy behaviours. Finally, these need to be complemented by interventions that reduce the availability, affordability and promotion of unhealthy products in order to reduce and prevent unhealthy behaviours.

Recommendations

1. That the Committee recognises chronic disease as Australia's greatest health challenge.
2. That the Committee recommends that the Commonwealth Government establish firm targets that contribute towards achieving the World Health Organization's overall target of reducing premature death by 25 per cent by 2025.
3. That the Committee acknowledges that prevention must be a priority in strategies to reduce the burden of chronic disease.
4. That the Committee recommends the Commonwealth Government adopt the following policy objectives to reduce the burden of disease:
    i. A focus on prevention to stem the tide of chronic diseases in Australia.
    ii. Addressing the four major risk factors of chronic diseases: alcohol, tobacco, diet and physical activity.
    iii. Using an evidence-based approach to minimise the ever increasing cost to our health system.
    iv. Addressing the health inequality and disparity so everyone has the chance to live a healthy life.
5. That the Committee recommends the Commonwealth Government outline their commitment to achieve the World Health Organization's targets which Australia has adopted to prevent chronic diseases and to publically report against the progress in reaching these targets. In doing this, the government must recognise that there is currently no plan in place to achieve these targets, and recognise the urgency in achieving this in ten years.
6. That the Committee recommends the Commonwealth Government implement a tax system developed to minimise economic externalities, encourage healthier choices, and maximise benefits to the community.
7. That the Committee recommends the Commonwealth Government increase the access to information at the point of consumption through adequate labelling on alcohol, food and tobacco.

8. That the Committee recommends the Commonwealth Government regulate of the promotion and marketing for products that are associated with increased risk of chronic diseases.

9. That the Committee recommends the Commonwealth Government provide individuals and communities the opportunity to live in a safe environment that supports healthy decisions through regulating the availability of products that are associated with increased risk of chronic diseases.

10. That the Committee recommends the Commonwealth Government provide a greater provision of information to increase awareness and education on the importance of prevention, particularly in regard to the four common risk factors.

11. That the Committee recommends the Commonwealth Government increase the expenditure on preventive health to ensure that resources are appropriately allocated to address the burden of chronic diseases.

Chronic disease in Australia

The burden of chronic disease

The Australian Institute of Health and Welfare (AIHW) define chronic diseases as Australia's biggest health challenge, being responsible for 83 per cent of premature deaths (deaths among people aged less than 75 years)[3] and 85 per cent of the total burden of disease.[4]

Chronic diseases, also known as non-communicable diseases (NCDs), describe health conditions that are of long duration, slow progression and not transmitted from person to person. The four main types of chronic diseases are cardiovascular diseases, cancers, diabetes and chronic respiratory diseases.[5] Many people living with chronic disease are living with more than one.

The impacts of chronic disease can extend beyond the individual to their families, friends and carers.[6,7] In 2012 there were approximately 2.7 million Australians providing informal care to an older person, or someone with a long-term health condition or disability. This includes 770,000 Australians who identified as the primary carer.[8]

At a broader societal level, chronic diseases compromise Australia's economic prosperity through health system costs and reduced workforce participation and productivity.[9] Estimates based on allocated healthcare expenditure indicate that the four most expensive disease groups are chronic diseases: cardiovascular, oral health, mental disorders, and musculoskeletal. In total, these diseases incur direct healthcare costs of $27 billion.[10] This equates to 36 per cent of all allocated health expenditure. The below table outlines the cost for the four most expensive disease groups in 2008-09.

Table 1. Australia's most expensive disease groups based on healthcare expenditure in 2008–09[11]

Most costly disease groups in 2008–09	Cost (A$ billion)	Proportion of total allocated health expenditure (%)
Cardiovascular diseases	7.74	10.4
Oral health	7.18	9.7
Mental disorders	6.38	8.6
Musculoskeletal	5.67	7.6

This cost to the healthcare system is significantly underestimated. Not all healthcare expenditure is allocated by disease, particularly those that are managed in the primary healthcare setting.[12] These costs also do not take into consideration the costs outside of the healthcare sector. The associated costs of chronic disease would increase significantly if these costs were included, such as residential care.

Workforce participation rates reduce with each additional chronic disease an individual suffers from, with rates of 52 per cent for people with one chronic disease, 38 per cent for two chronic diseases and 14 per cent for three or more. Carers of people with chronic disease are also likely to have lower workforce participation and productivity.[13]

As Australia's population ages, the burden of chronic disease will grow, exerting even greater pressure on our already overstretched health system. A report by the AIHW found that between 2003 and 2033 the total health and residential aged care expenditure is predicted to increase by 189 per cent, with a number of chronic diseases (notably Type 2 diabetes with a 520 per cent projected increase in expenditure) contributing to this.[14]

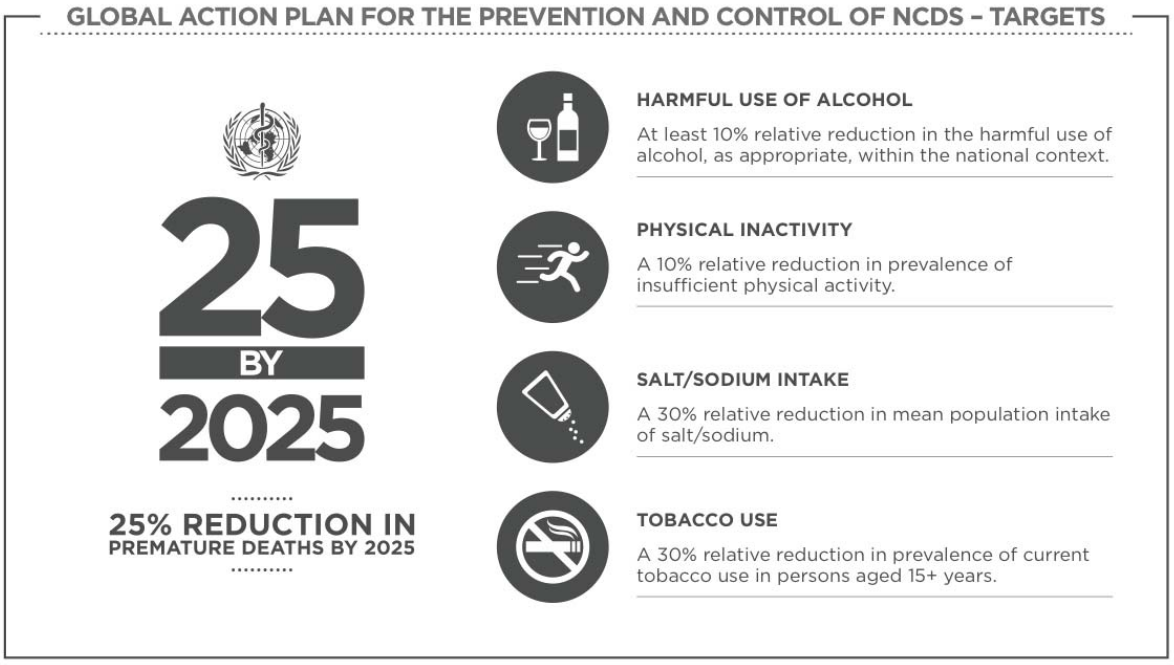
Australia's commitment

The World Health Organization (WHO) has recognised the enormity of this health threat and as a result has developed a set of targets and indicators to reduce the burden of chronic disease. The WHO targets are outlined in *the Global Action Plan for the prevention and control of non-communicable diseases 2013-2020* (Global Action Plan). The overarching objective of the Global Action Plan is a 25 per cent reduction in premature mortality from NCDs by the year 2025, with 2010 as the baseline year. The Global Action Plan comprises nine voluntary targets with 25 indicators, representing a mixture of prevention and management interventions.

Countries signing up to these targets, including Australia, have been encouraged to set their own specific targets for specified risk factors. In order to give full effect to Australia's commitment to the Global Action Plan, Australian governments need to agree to and establish firm and definite targets to complement the WHO targets and indicators.

In the absence of Australia setting its own targets to reach the global goal of a 25 per cent reduction in premature mortality by 2025, the figure outlines the four targets set by the WHO relating to the four major risk factors of chronic disease: tobacco and alcohol use, physical inactivity, and diet.

Figure 1. World Health Organization's global targets to achieve a 25 per cent reduction in premature mortality from NCDs by the year 2025



Recommendations

1. That the Committee recognises chronic disease as Australia's greatest health challenge.
2. That the Committee recommends the Commonwealth Government establish firm targets that contribute towards achieving the World Health Organization's overall target of reducing premature death by 25 per cent by 2025.

Putting prevention first

The WHO describes prevention as:

> *"Approaches and activities aimed at reducing the likelihood that a disease or disorder will affect an individual, interrupting or slowing the progress of the disorder or reducing disability."*[15]

Primary prevention is designed to minimise the probability of a disease or disorder developing. Secondary prevention is concerned with intervention at the early stages of a disease or disorder, in order to impede its progress. Tertiary prevention focuses on treating the disease or disorder in order to stop the damage that has already occurred and prevent its recurrence.[16]

The focus of this submission is on primary prevention, henceforth referred to as prevention.

Prevention is effective to reduce the burden of disease

Prevention is important not only to stem the tide of chronic disease but also as a vehicle to change long-term social and cultural norms that can transmit to future generations. Over the years Australia has positioned itself as a leader in preventive health and has a strong track record in implementing policies that have proven to be effective in reducing disease and harm.

Examples of this is the positive and sustained changes in both smoking and drink driving rates in Australia. Starting from as early as 1971 to now, tobacco control has incorporated a suite of strategies such as sustained public education, graphic warning labels and plain packaging laws.[17] In that time there has been an associated decrease in smoking, from 35 per cent of adults in 1980 to 20 per cent in 2010,[18] and male deaths from lung cancer and obstructive lung disease have dropped from peak 1970s and 1980s levels.[19] Similarly, drink driving has been the target of concentrated efforts since the late 1970s and early 1980, with the introduction and enforcement of Random Breath Testing, public education campaigns and more recently, ignition interlock devices for extreme or repeat offenders. Numerous evaluations around Australia have found significant decreases in fatal motor vehicle crashes, particularly during high alcohol hours.[20]

Preventive health is cost-effective policy

The assessing cost-effectiveness in prevention (ACE-Prevention) study provided a large body of evidence to warrant immediate funding and implementation of cost-effective prevention measures that would have instant effects on the health system. The study evaluated 123 preventive interventions and 27 treatment interventions.[21]

It found that a large impact on disability-adjusted life year (DALYs) could be attained by implementing a small number of cost-effective interventions. For example, some population-based preventive measures that were found to be cost-effective include tax increases on tobacco (30 per cent), alcohol (30 per cent) and unhealthy foods (10 per cent), as well as mandatory salt limits on processed foods.[22]

Together, these four interventions would result in 650,000 fewer years lived with a disability for the Australian population and generate $6 billion of net savings to the health system.[23]

The table overleaf shows the most cost-effective interventions arising from the ACE-Prevention analysis.

Table 2. ACE-Prevention analysis of the most cost-effective interventions which would have instant effects on the Australian healthcare system

Intervention	DALYs prevented	Intervention costs (A$ billion)	Cost offsets (A$ billion)	Net costs (A$ billion)	Cost/DALY
Taxation					
Tobacco tax 30& increase	270,000	0.02	-0.7	-0.68	Savings
Alcohol tax 30& increase	100,000	0.02	-0.5	-0.48	Savings
Alcohol volumetric tax 10% above current excise on spirits	110,000	0.02	-0.7	-0.68	Savings
Unhealthy foods tax 10%	170,000	0.02	-3.5	-3.48	Savings
Regulation					
Mandatory salt limits on processed food	110,000	0.07	-1.5	-1.43	Savings
Preventive treatments					
Three blood-pressure lowering drugs to replace current practice of preventive drug treatments	20,000	-1.9	-0.3	-2.2	Savings
Polypill to replace current practice	60,000	-7.0#	-0.8	-7.8	Savings
Laparoscopic gastric banding (body mass index > 35)	140,000	3.7#	-2.9	0.8	$5,700/DALY
Health promotion					
Intensive SunSmart	120,000	2.0	-0.3	1.7	$14,000/DALY

The current practice of blood-pressure and cholesterol lowering treatments is inefficient and hence the intervention costs are negative (there will be cost savings if replaced by more efficient treatment).

Source: Based on Table 0.1 in: Vos et al. (2010). *Assessing cost-effectiveness in prevention (ACE-Prevention) final report*. University of Queensland, Brisbane and Deakin University, Melbourne.

Recommendation

3. That the Committee acknowledges that prevention must be a priority in strategies to reduce the burden of chronic disease.

Policy response

Prevention must be a key focus of governments in order to reduce the burden of chronic disease. Ensuring that preventive health is at the forefront the healthcare agenda will ensure that Australia is once again seen as a leader in this space.

Policy objectives to reduce the burden on chronic disease

In order to reduce the burden of disease and to create a health system that provides individuals and communities the opportunity to live in a society that supports positive and healthy choices, the following principles have been developed.

i. A focus on prevention to stem the tide of chronic disease in Australia.

Chronic disease prevention must no longer be perceived as the sole responsibility of individuals making healthy 'lifestyle' choices. Characteristics of a person's physical and social environment influence their behaviour early and persistently throughout the life span.

The fundamental aim of any health system should be to prevent disease and reduce illness, so that people remain as healthy as possible for as long as possible. This can be achieved by implementing prevention policies that will reduce the burden of chronic disease.

ii. Addressing the four major risk factors of chronic disease: alcohol, tobacco, diet and physical activity.

Chronic diseases are closely associated with modifiable risk factors such as tobacco and alcohol use, physical inactivity and diet. These behaviours increase the risk of developing biomedical risk factors including overweight and obesity, and high cholesterol levels, which subsequently can lead to chronic disease.[24] Action to address each of these risk factors is needed to reverse the increasing burden chronic disease.

Of these four risk factors, only smoking has decreased markedly in the population, with the other three risk factors stable or increasing.[25] Strategies to reduce smoking have enjoyed visible success in Australia. As a result, smoking has not only reduced in the population, it is also less socially sanctioned, with an increasing number of public spaces being declared smoking-free zones.[26]

It is important to not only sustain and continually improve efforts in tobacco control, but to dedicate an equivalent amount of attention to the other risk factors.

iii. Using an evidence-based approach to minimise the ever increasing cost to our health system.

Prevention is not only good policy, it is good economics. The burden placed on the health system from chronic diseases is preventable or capable of reduction through effective, evidence-based changes to policy.

There is no shortage of evidence that shows that prevention works and is cost-effective. Relying on the evidence to introduce policies which we know work will position Australia as a leader in preventive health.

iv. Addressing the health inequality and disparity so everyone has the chance to live a healthy life.

Chronic disease is unevenly distributed, with higher rates of chronic disease and risk factors among disadvantaged populations. Prevention is for everyone, therefore a focus is required to ensure that

preventive interventions have reach and effectiveness in populations groups that have poorer health outcomes.

According to the WHO:

> *"The social determinants of health (SDH) are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies and political systems."*[27]

The social determinants of health are highly influential in the development of chronic disease, and much of early public health initiatives prioritised the importance of living conditions. However, rapid improvements in the medication and treatment of diseases, together with politically driven shifts towards assigning the responsibility of health to the individual, have downgraded the importance of interventions addressing the social determinants of health.[28] Therefore, it is important to reinstate the emphasis on the social determinants of health and understand how these influence behaviours that place individuals at risk of developing chronic diseases.

Social and economic conditions can impact on individuals' risk of developing health conditions as well as the actions taken to prevent or treat the conditions. There is a linear relationship between health and socioeconomic status, also known as the social gradient of health. This means that greater disadvantage equates to poorer health outcomes. These health disparities are largely avoidable.[29]

In Australia, health inequities are most evident between Aboriginal and Torres Strait Islander peoples and other Australians. The life expectancy for Aboriginal and Torres Strait Islander peoples is ten (females) to 12 years (males) below that of other Australians. For 35 to 74 year olds, approximately 80 per cent of this mortality gap is attributable to chronic diseases, with ischaemic heart disease, diabetes mellitus and diseases of the liver (mostly alcoholic liver disease) being the largest contributors. The harmful use of alcohol, tobacco smoking, and overweight and obesity, which are more prevalent for Aboriginal and Torres Strait Islander Australians compared to other Australians, are likely responsible for a large proportion of chronic disease development.[30]

The poorer health outcomes for disadvantaged groups is due to a complex interaction between environmental factors, socioeconomic factors and health behaviours.[31] For example, the research shows that people experiencing social and economic disadvantage are more likely to smoke tobacco. The reasons for this include financial pressure and stress, mental illness, living in environments where smoking is the norm, lower health literacy, difficulties or perceived difficulties in physically or financially accessing quitting services, and seeing cigarettes as being one of the few pleasures in their lives, as an escape from stress or boredom.[32] Many of these factors may also be applicable to the other risk behaviours for chronic diseases.

Therefore, it is essential to consider the social determinants of health when implementing policies designed to reduce the incidence of unhealthy behaviours. Reforms in these areas need to be multi-sectoral, involving governments and non-government organisations, and across settings that include workplaces, schools, health services, sporting clubs and community groups.

Policies to put prevention first

1. A commitment to achieve the World Health Organization's targets which Australia has adopted to prevent chronic diseases and to publically report against the progress in reaching these targets

The lack of centralised focus, dedicated funding and public accountability for the prevention of chronic diseases is hampering Australia's capacity to meet the WHO's chronic disease targets by the year 2025. With only ten years remaining to honour this commitment, decisive action needs to be taken immediately.

With the cessation of the National Partnership Agreement on Preventive Health (NPAPH), there is no longer a specific pathway through which Australian governments can "jointly agree on actions, including targets and indicators, to prevent chronic disease".

To ensure greater success in preventing chronic diseases, it is essential that the nine targets identified by WHO are appropriately reflected in Australian preventive efforts. Currently, Australia's focus is uneven, with alcohol receiving relatively little attention compared to the other risk factors for chronic diseases. This is despite the fact that in 2010, alcohol contributed to 5,554 deaths and 157,132 hospitalisations, to 17.8 per cent of cancer cases in males, and 11.7 per cent of cancer cases in females.[33]

Public reporting is also important in order to increase accountability for preventive actions. The treatment sectors enjoy considerable recognition in relation to the public reporting of health targets (such as emergency department waiting times). In contrast, the public reporting of preventive health progress is limited, meaning that there is less accountability for these targets. The abolition of the two reporting mechanisms, the NPAPH and the Council of Australian Governments (COAG) Reform Council, means that there is no longer an ongoing commitment tied to tracking the progress of chronic disease prevention. The NPAPH required governments to report progress against targets, but there was no imperative to make these reports public. Similarly, the COAG Reform Council, who was responsible for overseeing the progress of a number of national agreements and national partnership agreements, did not publish any reports measuring the progress of strategies under the NPAPH.[34]

A commitment from the Commonwealth Government to achieve the targets set by the WHO is needed to ensure that the burden of disease is reversed. This commitment should include detailed plans and strategies for each of the four risk factors and allows governments to publically report against the progress in reaching these targets.

2. Implement a tax system developed to minimise economic externalities, encourage healthier choices, and maximise benefits to the community.

It is well-known that price is a key driver of consumer behaviour.[35] Pigovian or corrective taxes, such as alcohol taxation, have been used to change behaviours and prevent harms and to reduce the social costs of these harms on the community. For example, the price of tobacco products has an inverse relationship with the rate of smoking in a population.[36] Alcohol taxation has also been found to be effective in reducing alcohol consumption and consequent harms among targeted groups (such as harmful drinkers and young people) and is cost beneficial.

There is strong evidence to demonstrate that the lower the price of alcohol, the higher the levels of consumption.[37] In 2009, a meta-analysis was conducted of 112 peer reviewed studies on the effects

of alcohol price and taxation levels on alcohol consumption and found that there was "overwhelming evidence of the effects of alcohol pricing on drinking".[38] Young people and heavy drinkers are particularly sensitive to alcohol price, with the heaviest drinkers more likely to seek out cheaper drinks than moderate drinkers.[39] Evidence clearly demonstrates that alcohol taxation reform is the most cost-effective measure to reduce alcohol harms.

Consideration needs to be given to how taxes are applied to products that are associated with the four common risk factors, such as alcohol as a mechanism to the reduce and prevent chronic disease.

3. An informed community with access to information at the point of consumption through adequate labelling on alcohol, food and tobacco.

Consumers are entitled to be informed of the content of the products they consume so that they can make informed choices. Consumer information includes ingredients and nutritional information, as well as warnings about the harms associated with use of the product.

A rigorous labelling regime, complemented by a robust social marketing campaign, is central to the success of tobacco control. A similar labelling scheme should be applied to other products associated with the behavioural risk factors, such as alcohol, poor nutrition and physical inactivity.

Using labelling on alcohol products as an example, an evaluation by FARE, primarily incorporating lessons learnt from tobacco control, found that an effective labelling regime should contain the following elements:

- be mandatory, and applied to all relevant products and their associated promotional materials
- be developed by experts and regulated by government, with regular reporting against progress
- be visible and legible
- comprise both text and a pictorial symbol
- use strong, clear and direct language
- use rotating messages that cover a broad range of health harms, both social and physical, associated with use of the product
- be accompanied by a recommendation for action. For example, messages on alcohol products should contain information such as a helpline on how to seek help if someone is concerned about their drinking.[40] [41]

Health information labels for alcohol do exist. In December 2011, the Legislative and Governance Forum on Food Regulation (FoFR) declared that the alcohol industry had two years to implement voluntary pregnancy health information labels on alcohol products, before regulating this change. This voluntary period has been extended to 2016.

Alcohol industry organisation, DrinkWise commenced their voluntary scheme in July 2011. Unfortunately, evaluations of this voluntary scheme have found that the messages are weak, with low visibility and limited coverage of alcohol products.[42] International evidence has also shown that without government regulation, industry-led public health initiatives are likely to be contaminated with vested interests, resulting in weak messages that downplay the serious risks associated with harmful products.[43]

Health information for food also exists on a voluntary basis. The Health Star Rating system for packaged food was introduced in July 2014 and is being implemented across Australia by the food industry over the next five years, with a progress report after two years. The rating conveys the overall nutritional profile of packaged foods on the front of the product, with 'healthier' products assigned a higher number of stars. The scheme was developed by Australian governments in conjunction with industry, public health and consumer groups.[44] While it is too early to determine the success of this scheme, it is important that an evaluation is undertaken.

Labelling provides a key method of promoting informed choice at both the point of sale and consumption, and should be an essential feature of any product that carries a risk of harm with consumption. To ensure its success, product labelling should be government-regulated rather than industry-regulated, and developed by public health experts using the evidence-base of what works.

4. Independent regulation of the promotion and marketing for products that are associated with increased risk of chronic disease.

Advertising plays a significant role, not only in promoting the consumption of certain products by individuals, but also embedding the consumption of such products as a normal part of everyday life. Advertising imposes significant influences on consumer behaviour, especially for young people who are forming habits that may persist to adulthood.

With traditional forms of advertising now mostly closed to the tobacco industry, their marketing opportunities are limited. This has contributed to the decline in smoking rates in Australia.[45]

Unfortunately, other unhealthy products such as junk food and alcohol continue to be aggressively promoted in Australia, with comparatively few neutralising messages that encourage healthy eating or alcohol abstention or reduction.[46] Disturbingly, the majority of junk food promotion is aimed at children,[47] and although alcohol is prohibited for purchase by people under the age of 18, the evidence strongly demonstrates that young people are regularly exposed to alcohol marketing.[48]

A recent study examined 1,113 Australian adolescents aged between 12 and 17 years in relation to their exposure to alcohol advertising in television, magazines, billboards and posters, bars and clubs, bottle shops, on the internet and in promotional materials. The study found that nearly all (94.2 per cent) of the young people surveyed had seen alcohol advertising on television.[49] This is concerning because the volume of alcohol advertising young people are exposed to has been demonstrated to impact on their future alcohol consumption behaviour. A review of 12 longitudinal studies of over 38,000 young people has shown that the higher the volume of advertising they are exposed to, the lower the age that they start drinking and the higher their consumption levels if they are already drinking.[50] Young people bear a disproportionate level of harm from alcohol-related accidents and injury,[51] and drinking earlier and in greater quantities is likely to have negative long-term impacts, particularly on the development of chronic diseases such as liver cirrhosis. Indeed, liver cirrhosis is affecting Australians at increasingly younger ages. There has been a particularly noticeable rise in young women who are being hospitalised for liver cirrhosis, and medical professionals attribute this to "steady and dangerous drinking starting in teenage years".[52]

The current regulation of food and alcohol advertising in Australia involves a number of quasi and self-regulatory codes that attempt to regulate the 'content' or the 'placement' of advertising. This results in systems that are convoluted and ineffective in that there are few, if any, penalties or sanctions for those who break the various provisions in the codes.[53] Certainly in the case of alcohol advertising, there are no repercussions if alcohol producers and distributors decide not to participate in the schemes at all.

Self-regulation by industry also infuses the process with vested interests. For instance, in the United Kingdom (UK), it was found that alcohol producers and advertisers often used market data on 15 and 16 year olds (below the legal purchase age for alcohol) to aid the development of promotional materials,[54] suggesting a 'grooming' process whereby brand loyalty could be established at a young age.

The National Preventative Health Taskforce recommended the introduction of regulations to prevent unhealthy food television advertising aimed at children between 6am and 9pm.[10] However, rather than introducing further regulation, the Commonwealth Government has committed to monitoring the food industry self-regulatory codes that have been implemented, including one developed by the fast food industry."[55,56]

It is of paramount importance that the marketing of products that promote unhealthy behaviours is regulated with the health and wellbeing of Australians in mind. The key to this is to move away from self-regulation by the food, alcohol and advertising industries, and move towards independent regulation that is free from vested interests.

To be effective, food and alcohol advertising must be independently regulated and this should cover full monitoring and enforcement powers. There must be clear and consistent penalties for breaches of regulatory codes. As part of this regulation, it is necessary to update elements of the codes to reflect the evidence-base of what constitutes harmful advertising practices. For example, setting lower limits to how many junk food advertisements can be shown during children's programs, and closing the loophole that allows alcohol advertising to be shown during live sports broadcasts on the weekend.

5. A setting that provides individuals and communities the opportunity to live in a safe environment that supports healthy decisions.

Addressing the physical environment and how this affects susceptibility to chronic diseases

The choices that individuals make are also affected to some degree by their physical environment. This is well evidenced in alcohol where there has been unprecedented growth in the physical availability of alcohol in Australia over the last 15 years,[57] resulting in an increase in health and social harms. For example, in Victoria the number of liquor licenses increased by 120 per cent between 1996 and 2010.[58] Trading hours for alcohol sales, and in particular late night trading, have also increased dramatically in recent decades.[59] In some states and territories, such as the Australian Capital Territory, alcohol can be sold in supermarkets, alongside groceries and other everyday items.

A Victorian study found that there was an association between alcohol-caused chronic disease and higher outlet density, particularly with takeaway alcohol. Although not explicitly explored in the study, the findings indicated that disadvantaged groups may be disproportionately affected.

There are fewer studies that have directly measured the impact of trading hours on the development of alcohol-related chronic diseases, however, as with outlet density, higher trading hours is associated with higher alcohol consumption which is a risk factor for chronic conditions such as liver cirrhosis.[60]

In relation to junk food, a recent UK study found that the availability of takeaway food outlets in home, work and commuting environments was associated with slightly higher takeaway consumption, higher body mass index and an increased risk for obesity.[61]

The intersection of availability with the level of social and economic advantage is important to understand. The increased access and availability of unhealthy products intensifies their allure for

people experiencing social and economic disadvantage. For example, a joint New South Wales (NSW) Health and University of New South Wales study conducted in metropolitan Sydney found that the most disadvantaged areas had a higher density of takeaway food outlets and supermarkets, shorter distances to travel to these, and less parkland.[62] Similarly for alcohol, a recent study found that for rural and regional Victoria there were six times as many packaged liquor outlets and four times as many pubs and clubs per person in disadvantaged areas.[63] People in these communities face additional barriers in challenging the proliferation of alcohol outlets in their area. Objecting to liquor licences requires an investment of time, resources and research capacity, likely rendering this task particularly difficult for people experiencing disadvantage.[64]

Decreasing the physical availability of unhealthy choices has been demonstrated to have positive effects on behaviour. For example, in response to growing concerns about alcohol-fuelled violence in their community, the City of Newcastle in NSW introduced a 3am close time and 1am lockout (later amended to 3.30am and 1.30am) for all on-licensed premises in Newcastle in 2008. An evaluation found that the restrictions resulted in a 37 per cent reduction in night-time alcohol-related assaults[65] and no geographic displacement to the nearest late night district of Hamilton.[66] These positive effects were sustained over time. An evaluation undertaken five years later found a sustained reduction in alcohol-related assaults, with an average of a 21 per cent decrease in assaults per hour.[67]

Providing an environment for individuals and communities that support healthy lifestyle behaviours should be a priority of governments, particularly by addressing the density of both alcohol and takeaway food outlets.

The need for community engagement to foster healthy behaviours

Community engagement is the key to successful uptake of intervention initiatives as it helps to not only empower the community to be receptive to lifestyle modifications, it also enables them to initiate actions that are tailored to the needs and characteristics of their community.[68]

This is particularly important for marginalised groups such as Aboriginal and Torres Strait Islander communities. For example, Alcohol Management Plans (AMPs) are strategies that are used to target alcohol supply and consumption in Aboriginal and Torres Strait Islander communities. Measures include preventive interventions such as restricting the sale of certain types of alcohol that are associated with problematic drinking, restricting the opening hours of local licensed venues and declaring 'dry' areas.[69] Based on the small body of evidence available, AMPs result in better and more enduring outcomes from the community if they involve high community engagement[70] and are culturally appropriate.[71] The Menzies School of Health Research conducted an evaluation of the Alice Springs AMP, finding that the lack of communication about the AMP had led to a degree of hostility and opposition from the community towards the plan. The community felt that the AMP was a government imposed initiative rather than a community-led one.[72]

In assessing the readiness of a community to adopt healthier behaviours and to determine the best way to target interventions, it is necessary to understand community attitudes and behaviours. At a national level, attitudes and behaviours around drug and alcohol use are routinely collected through the AIHW's National Drug Strategy Household Survey. However, equivalent data on nutrition, physical activity, biomedical factors and social determinants of health are collected inconsistently and generally infrequently.[73]

An important factor of high community engagement is that it will help foster the development of healthier social norms. This is particularly valuable for communities facing social and economic disadvantage because the uptake and continuation of unhealthy behaviours is partly attributable to

the social norms that govern these communities.[74] It is therefore essential that communities are provided the adequate support in developing strategies to deal with the burden of disease.

6. A greater provision of information to increase awareness and education on the importance of prevention, particularly in regard to the four common risk factors.

Tobacco control has enjoyed sustained public education efforts for the last two decades. Diet and physical inactivity in Australia are currently subjects of a number of highly visible social marketing campaigns. NSW Health's *Make Healthy Normal* campaign focuses on normalising healthy choices (in terms of nutrition and exercise) in order to improve health. However, more still needs to be done to advance diet and physical inactivity to the levels seen in tobacco control.

Compared to the other three behavioural risk factors, alcohol has received relatively little attention. There has been no sustained social marketing campaigns focused on alcohol apart from those relating to drink driving. It is vital to educate Australians on the importance of reducing or ceasing their alcohol consumption in preventing chronic diseases. Australians are relatively unaware of the long-term effects of alcohol use. The majority of Australians are cognisant of the long-term effects of smoking. In contrast, few Australians recognise the links between alcohol and chronic health harms such as heart disease (56 per cent), stroke (47 per cent), mouth and throat cancer (29 per cent) and breast cancer (17 per cent).[75]

It is vital that there are sustained, evidence-based public education campaigns with equal priority on the top four behavioural risk factors. Drawing largely on tobacco control efforts, the evidence shows that public education campaigns must be multifaceted and use a range of media to promote its key messages including television, digital media and print. A clear target and message is also essential. The campaign rationale must clearly identify the target audience and the behaviour change sought. Understanding the target audience includes securing information about their knowledge, attitudes and current behaviours relevant to the public education campaign's objective.[76] The campaign should also be reinforced with more formal messaging in other settings. School-based educational programs are a vital tool to ensure that key health messages are being disseminated to young people who are beginning to form lifelong habits.

7. A commitment to increase the expenditure on preventive health to ensure that resources are appropriately allocated to address the burden of chronic disease.

The abolition of the NPAPH means that there is no longer dedicated funding for chronic disease prevention. Given that Australia's spending on preventive health is low, especially in relation to other Organisation for Economic Co-operation and Development (OECD) countries, there needs to be a commitment to increase the expenditure on preventive health to ensure that resources are appropriately allocated to address the burden of chronic disease.

The NPAPH had a key role in chronic disease prevention, providing just over $870 million in funding from 2009-10 to 2017-18. This included the introduction of prevention programs targeting schools, workplaces and in the community. The cessation of the NPAPH was justified in the 2014-15 Australian Government budget on the grounds that $368 million over the four years from 2014-15 to 2017-18 would be saved and reinvested into the Medical Research Future Fund, which has a broader focus than prevention.[77,78]

Dedicated spending on public health as a proportion of all recurrent health expenditure is low, with a recent AIHW publication revealing that public health (which includes immunisation programs,

screening, health promotion, drug use prevention, communicable disease control and public health research) comprised only 1.5 per cent of total recurrent health expenditure in 2012-2013[79] This is significantly less compared to other countries. In 2013, the OECD reported that New Zealand dedicated seven per cent of total health expenditure to public health, with Canada close behind at 5.9 per cent.[80]

A commitment from governments is needed that an increase in funding will be allocated to preventive health to ensure resources can be allocated to reduce and prevent the burden of disease.

Recommendations

4. That the Committee recommends the Commonwealth Government adopt the following policy objectives to reduce the burden of disease:
    i. A focus on prevention to stem the tide of chronic diseases in Australia.
    ii. Addressing the four major risk factors of chronic diseases: alcohol, tobacco, diet and physical activity.
    iii. Using an evidence-based approach to minimise the ever increasing cost to our health system.
    iv. Addressing the health inequality and disparity so everyone has the chance to live a healthy life.
5. That the Committee recommends the Commonwealth Government outline their commitment to achieve the World Health Organization's targets which Australia has adopted to prevent chronic diseases and to publically report against the progress in reaching these targets. In doing this, the government must recognise that there is currently no plan in place to achieve these targets, and recognise the urgency in achieving this in ten years.
6. That the Committee recommends the Commonwealth Government implement a tax system developed to minimise economic externalities, encourage healthier choices, and maximise benefits to the community.
7. That the Committee recommends the Commonwealth Government increase the access to information at the point of consumption through adequate labelling on alcohol, food and tobacco.
8. That the Committee recommends the Commonwealth Government regulate of the promotion and marketing for products that are associated with increased risk of chronic diseases.
9. That the Committee recommends the Commonwealth Government provide individuals and communities the opportunity to live in a safe environment that supports healthy decisions through regulating the availability of products that are associated with increased risk of chronic diseases.
10. That the Committee recommends the Commonwealth Government provide a greater provision of information to increase awareness and education on the importance of prevention, particularly in regard to the four common risk factors.
11. That the Committee recommends the Commonwealth Government increase the expenditure on preventive health to ensure that resources are appropriately allocated to address the burden of chronic diseases.

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