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Perspective

Tobacco dependence treatment in Australia – an untapped opportunity for reducing the smoking burden

Sarah L White[a,c], Nikki McCaffrey[a,b] and Michelle M Scollo[a]

[a] Quit Victoria, Cancer Council Victoria, Melbourne, Australia
[b] Deakin Health Economics, Institute for Health Transformation, Faculty of Health, Deakin University, Melbourne, VIC, Australia
[c] Corresponding author: sarah.white@cancervic.org.au

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Key points

- Most Australian smokers want to quit but few use proven methods of tobacco dependence treatment (TDT)
- Despite an international commitment to promote cessation and provide TDT, Australia has no national strategy to ensure it does so
- Appropriately funding mass communication and education and embedding TDT – including systemic delivery of brief advice and standardised quit helplines – across the health system would further reduce Australia's smoking burden and reduce tobacco-related inequities

Abstract

Although the prevalence of smoking has fallen across Australia, population groups with complex psychosocial needs still have higher than average smoking rates. Although most people who smoke want to quit, relatively few report being offered advice and assistance to quit and even fewer use effective smoking cessation supports. Implementing systemic tobacco dependence treatment, as required under Australia's international obligations to the World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC), could further reduce the smoking prevalence, particularly among those experiencing smoking-related health inequalities. Australia's approach to tobacco dependence treatment is characterised herein using Article 14 of the FCTC as a framework.

Introduction

Australia has a remarkable track record in tobacco control. The prevalence of regular smoking (daily or weekly) among adult Australians decreased from 35% in 1980 to 12.4% in 2019.[1] However, priority population groups – such as First Nations Australians, lesbian, gay, bisexual, queer, trans and intersex (LGBQTI) individuals and people living with socioeconomic disadvantage or mental illness – have higher smoking rates than average. Regular surveys show decreasing prevalence among these groups[2,3], with the exception of LGBTQI people (no regular surveys) and people living with psychotic illness.[4]

The legislative, policy and fiscal environment in Australia is strongly discouraging of smoking. More than 70% of Australia's 2.9 million remaining current smokers have a definite plan to quit and routine surveys suggest that about half of them try to do so every year.[5] Most people attempt to quit many times before they succeed and the rate of success is low.[6] Quitting in priority populations is lower still.[2,6]

There is a glaring gap in Australia's population-level measures to reduce smoking: a systemic approach that actively promotes and supports evidence-based cessation at an individual level. Implementation of such an approach could mitigate current attempts by tobacco companies and other commercial

interests to position their products as cessation treatments and promote themselves as smoking cessation experts. Most importantly, systemic cessation support would likely increase quitting among people with complex psychosocial needs, and thus decrease health, financial and social inequities caused by smoking.

Treating tobacco dependence

Although most people who have quit smoking have done so unassisted[7], offering safe and effective tobacco dependence treatment (TDT) to those without capacity or desire to use will-power alone is right and fair.

The health system is the most obvious setting in which to embed the best practice model of care for smoking cessation: providing brief advice to promote cessation and facilitating the use of evidence-based treatments. Evidence-based treatments – multisession behavioural intervention combined with pharmacotherapy (if clinically appropriate) – have been shown to increase the odds of successful quitting by almost 260% (odds ratio 2.58 across all pharmacotherapies [95% confidence interval 1.48, 4.52]).[8] Even providing brief advice alone reduces smoking prevalence when delivered at a population level.[8]

Despite the availability of effective treatments and half of all smokers attempting to quit each year, our unpublished analysis of data from the 2016 National Drug Strategy Household Survey[9] indicated that barely one-third (34.6%) of Australians who attempted to quit in the 12 months before the 2016 survey reported using either behavioural support (quitline, internet, mobile app) (13.1%) or pharmacotherapy (28%), and only 9% of those attempting to quit used both. The low rates of use are likely due to a combination of lack of acceptability, lack of knowledge and health professional advice, and perceived and real accessibility barriers.

As a signatory to the World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC), Australia is obligated to promote cessation and implement effective measures to help tobacco users quit through TDT, as described in Article 14.[10] FCTC Article 14 implementation guidelines[11] suggest: development of a national treatment strategy and treatment guidelines; a treatment budget; free national quitlines; mass communication and education to encourage cessation and promote the use of cessation support; and involvement of "all relevant sectors of a country's healthcare system in providing brief advice". In countries in which it is affordable, specialised treatment services that meet agreed standards of care are also recommended.

How does Australia measure up on tobacco dependence treatment?

So how would one characterise Australia's TDT using the framework of FCTC Article 14 implementation?

National treatment strategy

Australia has no national strategy for TDT. As a result, treatment is fragmented and resourcing is woefully inadequate given the scale of mortality and morbidity. The social costs of smoking in Australia in 2015–16 were estimated at nearly $137 billion.[12]

Surveys of multidisciplinary teams in cardiothoracic care[13] and medical and radiation oncology[14] – specialties in which TDT is critical for secondary prevention – commonly report a lack of knowledge, training and time to provide TDT. A national treatment strategy could ensure TDT is prioritised by health services and provide the required training and resources.

A national treatment strategy, supported by a coordinating centre as recommended in Article 14, could address challenges such as: multiple models of brief advice; inconsistent training for health professionals; the absence of minimum standards for training or practice for the provision of multisession behavioural interventions; and the lack of standard systems for referral to behavioural intervention services and requirements for monitoring or evaluating their outcomes, among others.

National treatment guidelines

In regular reports on the progress of FCTC implementation, Australia self-rates as high on the treatment of tobacco dependence in primary care, noting the existence of quitlines and smoking cessation guidelines for general practitioners.

The Royal Australian College of General Practitioners (RACGP) smoking cessation guidelines have advocated a five-step (5As) model of brief advice for nearly two decades.[15] However, guidelines alone are insufficient to drive clinical best practice. Data from Victoria suggest that only about 11% of smokers and recent quitters recall their GP suggesting they call Quitline. Eight percent report receiving a prescription for a smoking cessation medicine and 6% for nicotine replacement therapy (NRT). Only 5.7% of smokers and recent quitters report receiving advice to call the quitline and a pharmacotherapy prescription.[16]

National budget for treatment

The Australian Government subsidises pharmacotherapies that are listed on the Pharmaceutical Benefits Scheme (PBS). Gum, patches, lozenge and inhalator NRT products, demonstrated to increase smoking cessation success rates by at least 50%[17],

are subsidised as monotherapies. Smoking cessation medications, bupropion and varenicline, are also available on the PBS. In all, six different smoking cessation pharmacotherapies are subsidised, providing multiple options for low-income smokers.

Although spending for such pharmacotherapies through the PBS is considerable, expenditure on treatment is nevertheless suboptimal. Combining two forms of NRT is not subsidised on the PBS, despite being up to four times more effective for quit attempts than using single products alone.[18] A mechanism that ensured subsidised pharmacotherapies were used alongside behavioural interventions, such as quitlines, would maximise investment and increase quitting success.[19]

Telephone quitlines

Telephone quitlines, referenced specifically in the FCTC Article 14 guidelines, are the principal method of providing behavioural interventions in Australia. Quitlines increase quit attempt success rates by up to 25% more than pharmacotherapy alone.[19] Quitlines provide effective, accessible and affordable cessation support to geographically dispersed populations. Quitlines can be modified to meet the needs of specific groups and employed as part of coordinated care with health professionals.[20]

Quitlines are highly cost-effective. A recent evaluation of the Victorian Quitline demonstrated the quitline is cost-saving, even with relatively low numbers of users, with an incremental cost-effectiveness ratio (ICER) of $AUD14 335 per life year gained.[21] To put this in context, research suggests the Australian Government subsidises medications on the PBS that have an ICER threshold less than $AUD55 000 per life year gained (as at 2015).[22]

Quitlines are currently funded by individual states and territories. Consequently, there is considerable variation in the services offered. For example, multisession interventions tailored to people with mental illness are not available to Quitline users in most states and territories, and patient referral and feedback pathways for health professionals are not always clear.

A combination of digital technologies might one day supersede quitlines as a population-level service. Quitlines and/or face-to-face clinics of the future might constitute the specialised services as noted in the Article 14 guidelines. Quality standards and evaluation will be required irrespective of the mode of delivery of behavioural intervention.

Mass communication and education

In Australia, investment in one area of Article 14 implementation has been steadily declining. Mass media–led public education campaigns motivate quit attempts and increase help-seeking behaviour[23] but national funding for these was dramatically reduced over the six years to 2017-18, and investment by state governments also declined substantially between 2012 and 2017.[24]

Specific communication about TDT – for health professionals and for people who smoke – appears inadequate. Our (unpublished) qualitative research shows smokers, including those with mental illness or identify as LGBQTI, don't know how a Quitline increases quitting success.[25] The proportion of smokers knowing they can access PBS-subsidised smoking cessation pharmacotherapies declined in Victoria from just under 50% in 2015 to fewer than one quarter in 2018.[16]

Consistent delivery of brief advice

National treatment guidelines mandating the use of brief advice will be required for TDT to be delivered across the health system. Previously, the RACGP's guidelines advocated only the 5As brief advice model, which is comprehensive but impracticable for "all relevant sectors of a country's healthcare system".[15] This model was unsuitable for systemic implementation by health (and other) professionals unable to prescribe pharmacotherapies, untrained (or lacking confidence) in motivational interviewing, operating under time constraints (i.e. a fixed appointment) or without privacy (e.g. a pharmacy or ward setting).

A three-step model of 'very brief advice', used in the UK, has now also been incorporated (as "Ask, Advise, Help") in the RACGP guidelines.[15] A three-step model is fast and simple, promoting cessation and ensuring people who want assistance are helped by active referral to a quitline and/or are provided a prescription for, or advice on, pharmacotherapy.

Tobacco dependence treatment (TDT) as a means of addressing tobacco-related disparities

Embedding smoking cessation across the health system could be an effective tool to reduce tobacco-related inequality, given that people living with complex psychosocial conditions are more likely to be frequent users of health services. A systematic review examined self-reported barriers to quitting among people with socio-economic disadvantage, mental illness and substance abuse, Aboriginal people, homeless people, people in prison and at-risk youth. The review identified three barriers common to each group, including lack of support from health and other service providers.[26]

Almost one-third of all smokers in 2016 had been diagnosed with a mental illness[5]; so what if all mental health professionals routinely promoted cessation, provided (free) pharmacotherapies and facilitated access to specialised behavioural intervention as routine care? Pharmacotherapies are effective among those with current and past depressive symptoms, schizophrenia and other serious mental illnesses.[27] Tailored quitline

counselling can monitor nicotine withdrawal, mood changes and common medication side effects in people with mental illness.[28]

Reviews of practice in Australian mental health settings provide ready examples of missed opportunities. A survey of NSW psychologists (n = 72) found that while more than 95% believed the health benefits of smoking cessation were substantial, only 7% always provided brief interventions and 64% never referred the client for behavioural intervention.[29] Similarly, an Australian study found 86% of community mental health consumers who smoked (n = 558) said they would have accepted advice to quit and 89% would have accepted referral for smoking cessation, but only 7% were referred to a quitline.[30]

The Talking About The Smokes study in 2015 found positive outcomes from smoking cessation advice provided to Aboriginal and Torres Strait Islander people. Most (75%) smokers and ex-smokers were advised by a health professional to quit, and those advised were twice as likely to make a quit attempt compared with those who weren't. However, only one in four (28%) were referred to a quitline.[31] Another study found that only 23% of Aboriginal and Torres Strait Islander people who smoked daily had used smoking cessation pharmacotherapy in the past year, compared with 42.1% of non-Indigenous people. That was despite similar proportions of Aboriginal and Torres Strait Islander and non-Indigenous daily smokers believing pharmacotherapies help smokers quit (70% versus 74.2%).[32] Systemic promotion of cessation plus advice on treatment, and removing barriers such as the cost of pharmacotherapies, would likely help increase quitting in this priority population.

Where to from here?

A national strategy for TDT would guide the development of national guidelines and implementation of best practice. A coordinating group or centre could then work to progress elements such as engaging with professional colleges and societies to drive health professional training or making changes to PBS subsidisation of smoking cessation pharmacotherapies.

A national strategy could set minimum quality, service, data collection and reporting standards for quitlines (and other behavioural intervention services) and monitor effectiveness. These standards would ensure all Australians, particularly those with complex psychosocial needs, are provided effective multisession counselling, and that services are culturally appropriate for Aboriginal and Torres Strait Islander people and LGBQTI people. Standards would also ensure health professionals across Australia can confidently provide brief advice to all patients – irrespective of medical, psychosocial or cultural needs – and appropriately refer to an accessible and effective multisession behavioural intervention, in addition to prescribing or providing the best possible low- to no-cost pharmacotherapy.

PBS approval of combination NRT must be considered to ensure best practice use is affordable for all Australians. Consideration should also be given to funding quitlines to provide free pharmacotherapy, at least to priority population groups. This would remove many barriers to access for those on low incomes and guarantee behavioural intervention accompanies pharmacotherapy use.

Increased investment in mass communication to motivate quitting, and promote and increase the use of TDT, must be a priority.

Finally, incentives to cement sustained best practice TDT in practice should be considered. These could be, for example, the introduction of a Medicare item number (or similar) for referral to quitline, a decision by the Council of Australian Governments to make funding of health services contingent on the implementation and reporting of TDT, or incorporation of TDT in quality and safety accreditation standards.

Conclusion

The lack of a systemic approach to TDT in Australia fails to leverage the considerable investment by both governments and non-government organisations in creating a policy, legislative and fiscal environment that discourages smoking. The fragmentation of efforts leads to inefficiencies, redundancies and wastage in the health system, high social costs, and preventable pain and suffering.

The Australian Government could, and should, implement Article 14 of the WHO FCTC and invest in TDT. Tobacco taxes raised approximately $AUD12.15 billion per annum in 2018–19[33], a small fraction of which would be more than sufficient to fund all aspects of Article 14 implementation. This would increase the number of successful quit attempts and, importantly, act specifically to reduce health inequality caused by tobacco use.

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SW and MS are employed, and NM is part-employed, by Cancer Council Victoria. Cancer Council Victoria administers the not-for-profit quitline in Victoria.

Author contributions

SW conceived the concept for, and wrote, the manuscript; MS and NM wrote the manuscript.

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