What can Aotearoa New Zealand learn from the Australian Sunsmart Story? A qualitative study

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Abstract

Objective: To explore the views of stakeholders in Australia concerning skin cancer primary prevention and identify successful strategies used that may be translatable to other jurisdictions.

Methods: In-depth stakeholder interviews with experts engaged in skin cancer prevention advocacy and action in Australia.

Results: A number of important facilitators were identified including: the use of good scientific evidence (including economic), strong leadership, legislation and strategic documents, engaging the media particularly with the use of personal stories and garnering public support. A number of barriers were also identified including: a lack of funding (particularly nationally), variation by state, apathy and the long latency of skin cancer.

Conclusions: Advocates identified a number of key strategies that were used to gain momentum in achieving Australia's comprehensive Sunsmart program. These included: strong leadership, legislation including that banning solaria and workplace health and safety legislation, a critical mass of key advocates from a range of disciplines including clinicians and patients, and the advantageous use of media to drive change.

Implications for public health: Australia demonstrates what can be achieved when skin cancer prevention is taken seriously. The challenge for other nations is to apply the lessons learnt in Australia to our own jurisdictions.

Key words: Australia, New Zealand, skin cancer prevention, advocacy, qualitative

With Australia, Aotearoa New Zealand (NZ) has the highest rates of cutaneous malignant melanoma globally.[1] Both are in the southern hemisphere, however, as Australia is closer to the equator it has higher maximum ultraviolet (UVR) levels,[2] with the ultraviolet index in northern states exceeding three (when sun protection is recommended) year round. A number of reasons have been postulated for the equivalent rate of skin cancer between Australia and NZ, despite lower UVR levels in NZ. First, the ethnic mix, and hence skin-type profile between the two countries, is different as Australia has a greater immigrant population from southern Europe.[2] Second, temperatures are often warmer in Australia than NZ, which may encourage better sun protection behaviour there, whereas the cooler temperatures in NZ may encourage sun-seeking behaviour.[2] Third, NZ has invested considerably less than Australia in public education campaigns, which may have differentially affected the sun protection behaviours of the respective populations, according to a letter responding to an official information request (Debra Jensen, General Manager, Communications, Digital and Marketing, New Zealand Government Te Hiringa Hauora – Health Promotion Agency dated September 2021).

For more than 30 years Australian agencies have had a comprehensive skin cancer primary prevention focus with SunSmart policies in workplaces, schools and recreational settings as well as widespread media coverage promoting SunSmart behaviour and legislation banning commercial solaria. Australians are now reaping the benefits of this commitment, with a downward trend in skin cancer rates among younger age-groups that have benefited from SunSmart policies since childhood.[3] Unfortunately, NZ lags behind Australia in virtually every dimension of skin cancer prevention including Government investment and supportive legislation (Table 1). A key political difference is that health is a state jurisdiction in the Australian federation and thus there is difference in response from the six states and two self-governing territories. In contrast, NZ has a unitary political system with health policy making led by the national Ministry of Health or Crown entities. Currently, Skin Cancer Prevention is led by the Crown entity Te Hiringa Hauora.

The progress made in the primary prevention of skin cancer has clearly been superior in Australia compared with elsewhere in the world.[4] The objective of this study was to explore the views of key stakeholders in Australia to skin cancer prevention advocacy and action and identify strategies used in Australia that may be translatable to NZ and other jurisdictions.

Methods

This study utilised key informant/stakeholder methodology[26] to conduct in-depth qualitative interviews with Australians with expertise on sun safety regarding their

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Table 1: A comparison of the state of play for primary prevention of skin cancer in Australia and NZ.

Australia	NZ	Commentary
Legislation/regulation		
Workplace legislation Under Australian workplace health and safety legislation, employers must take steps to protect workers from harmful levels of exposure to UVR. Employees, where work substantially contributed to the development of skin cancer, can claim compensation from their employer through litigation.	Workplace legislation Under workplace health and safety legislation, employers must take steps to protect workers from harmful levels of exposure to UVR. Litigation is not an option, however the Injury Prevention, Rehabilitation and Compensation Amendment Act (2008) specifically mentions radiation as a potential chronic workplace exposure. In 2020/21 the ACC paid out A$1.7 million in claims related to sunburn or UVR exposure (Written communication, Sasha Wood, Manager Official Information Act Services Government Engagement & Support, 24 August 2021).	Both countries' legislation contains a general rather than specific sun-safety legislative mandate for workplace and educational settings, placing the onus of responsibility on employers to provide a health and safe environment including hazard management. Unlike Australia where breaches in legislation can result in litigation by the employee, NZ has a no fault accident compensation scheme although this has not been well utilised in the skin cancer prevention area to date. In both countries there are educational guidelines that schools are expected to follow but they are not mandatory in primary or secondary schools in either country. In Australia for early childhood centres to receive funding, it is explicitly stated that they must provide sun protection and shade in their facilities.
Educational legislation Under educational guidelines, schools have a duty of care to protect children while at school. All licensed early childhood services are required to operate under the Education and Care Services National Law Act (2010) and Education and Care Services National Regulations. Sun protection and shade is specifically covered in the regulatory regulations (Email from J Osborne, SunSmart Schools and Early Childhood Program , Cancer Council Victoria, 12 Nov 2021).	**Educational legislation** Under educational guidelines, schools and early childhood centres have a duty of care to protect children while at school/early childhood centres.	
Ban of commercial solariums Legislation bans commercial solariums – breaches can result in substantive fines (for example, in Queensland a commercial operator can be fined up to A$500,000 per sunbed).[5]	**Restriction of solarium users** Commercial solarium use restricted to individuals aged 18 years and over – there have been repeated breaches and/or prosecution.[6,7] Biannual monitoring of sunbed operators by 12 regional public health units.	Total ban (Australia), restricted use (NZ).
Sunscreen regulated Primary sunscreens – regulated as therapeutic goods - this controls the manufacturing, testing and labelling of primary sunscreen products.	**Sunscreen classified as a cosmetic** Sunscreen regulations are currently under review in the: i. Sunscreen (product safety standard) Bill. ii. Therapeutic Products Bill.	Sunscreen regulated (Australia), not regulated (NZ).
Standards for protective products *Mandatory* Sunscreen AS/NZS 2604:2021. Sunglasses AS/NZS 1067.1 and 1067.2:2016. Sun protective hats/clothing AS/NZS 4399:2017. Shade fabric AS 4174:2018.	**Standards for protective products** *Mandatory* Sun protective hats/clothing AS/NZS 4399:2017. *Voluntary* Sunscreen AS/NZS 2604:2021. Solarium for cosmetic purposes AS/NZS 2635:2008. Sunglasses AS/NZS 1067.1 and 1067.2:2016. *No Standard* Shade fabric.	Four mandatory standards (Aus), one mandatory standard (NZ).
Strategic documents		
National strategic documents National Preventive Health Strategy.[8] National Cancer Prevention Policy – Cancer Council Australia.[9] There are also state level strategy documents.	**National strategic documents** Pūrongo Ārai Mate Pukupukku - Cancer Prevention Report.[10] NZ Cancer Action Plan 2019-2029 - Te Mahere mō te Mate Pukupuku o Aotearoa 2019-2029.[11] NZ Skin Cancer Primary Prevention and Early Detection Strategy 2017-2022.[12]	Both countries have national strategic documents that cover skin cancer prevention.
Resources		
Commonwealth government investment National 6 week campaign funded from 19th January 2022 - A$10 Million (≈39 cents per person population).[13] Small investments by the Commonwealth Government in 2009 but no television coverage. No national campaign between 2009 and 2020. Other states, notably Victoria, Western Australia and New South Wales have state funded campaigns for most years since. 2006-2007 national mass media campaign paid for at the Commonwealth level on skin cancer awareness A$6 Million (≈30 cents per person population).[14] State dependant, various Cancer Councils implement comprehensive Sunsmart programmes in schools (including SunSmart schools), workplaces and communities.	**Government investment** 2020 – the budget for SunSmart for Te Hiringa Hauora/Health Promotion Agency was A$465,000 (≈9 cents per person population) (Letter from Debra Jensen, GM, Communications, Digital and Marketing, New Zealand Government Te Hiringa Hauora – Health Promotion Agency, September 2021). 2005/6 the budget for SunSmart for the Health Sponsorship Council was A$1.1 Million (≈26 cents per person population).[15] 2010/11 the last substantive nation-wide mass media campaign by the Health Sponsorship Council ("Never let your child get sunburnt").[16] Since then campaigns have been restricted to social media or print media campaigns. Cancer Society of NZ implements the National SunSmart Schools Accreditation Programme.	Substantially less investment in NZ.
State funded capital grants for sun protection Queensland and Victoria have state-based funding grant rounds for community groups and/or schools to apply to for sun protection (predominantly for shade). For example, in Victoria there is a pool of funding totalling $10m triennially for community groups. In Victoria all 2,149 schools are entitled to a shade grant of up to A$25,000 to purchase shade sails.[17]	**State funded capital grants for sun protection** N/A. No state government.	No capital grants available for shade funding in NZ.

Table 1 cont.: A comparison of the state of play for primary prevention of skin cancer in Australia and NZ.

Australia	NZ	Commentary
Taxation of protective products No sales tax on sunscreen >SPF15.[18] **Tax deductible[18]** Sun protection products for outdoor workers are tax deductible. Cost of sunscreen – Woolworths home brand sunscreen 1 litre A$8.50 (85 cents per 100ml) (1/11/2021).	**Taxation of protective products** Sunscreen attracts Goods and Services Tax (GST) of 15%. **Tax deductible (According to a letter from Hon David Parker, Minister for Revenue, NZ Government,16 July 2021)** Sun protection products for outdoor employers are tax deductible, this is not the case for employees. Cost of sunscreen – Woolworths home brand sunscreen 1 litre A$16.70 (A$1.67 per 100ml) (1/11/2021).	Sunscreen is double the price in NZ for equivalent products, it attracts GST and is tax deductible but only for employers. In Australia, sunscreen does not attract GST and it is tax deductible for outdoor workers.
Research (national and state (Australia only))		
Monitoring of/trends of population level sun protection attitudes, knowledge and behaviour. National Sun Protection Survey – conducted triennially from 2003 to 2016/17 (surveys were conducted in Victoria from 1987).[19] The Sun Observational Study - monitors sun protection trends (in Melbourne).[20]	National monitoring of/trends of population level sun protection attitudes, knowledge and behaviour Sun Behaviour Survey – The first national survey was in 1994 (then named Five Cities Survey) which became the Triennial Sun Protection Survey 1997- 2016.[21] Health and lifestyle survey (2018) included questions on sunburn, sun protective behaviours and skin checks.[22]	National population monitoring of sun protection practices discontinued in both countries, however Australia is investigating alternate methods for monitoring such as direct observation.
Economic burden analysis Cost of treatment for skin cancer in Australia in 2021 is estimated at A$824 million.[23]	**Economic burden analysis** Cost of treatment for skin cancer in NZ in 2021 is estimated at NZ$181 million.[23] Cost for sunburn/UVR related claims to the ACC over the past five years are approximately A$6.3 Million (Letter: S Wood, Manager Official Information Act Services Government Engagement & Support, 24 Aug 2021).	Economic analyses have been conducted in both countries.
Sunsmart brand		
SunSmart® Brand established in 1988.	**SunSmart®** Being "sunsmart" was appearing in Cancer Society documents from the late 1990s. Establishment of the SunSmart brand was approximately 2005/6.	Sunsmart branded in both countries.
Programmes		
SunSmart Schools Programme Launched in 1998 – currently 66% of schools accredited.[19]	**SunSmart Schools Accreditation Programme** Launched in 2005 – currently there are less than 30% of primary schools accredited (Email from S Nahu, Cancer Society of New Zealand 17 August 2021).	Sunsmart schools programme in both countries, greater uptake in Australia.
Policies		
Sun protection policies Early childhood centres – 95%.[24] Primary schools – 80%.[25] Secondary schools – unknown. Workplaces – unknown. Local councils – unknown. National Sporting Organisations – unknown.	**Sun protection policies** Early childhood centres - unknown. Primary schools – 94%.[5] Secondary schools – 37%.[5] Workplaces – unknown. Local councils - 6%.[5] National Sporting Organisations - 3%.[34]	Knowledge on the availability of sun protection policies in different settings variable.

experience of advocacy and action for skin cancer prevention. A literature search identified people who had authored at least five topic-related academic papers, with at least one since 2015. Subsequent snowball sampling during the interview was also used to ensure a range of participants.[27]

Of the 39 stakeholders invited, 16 agreed to be interviewed, five declined, nine reported that they had no involvement in advocacy and action and a further nine did not respond. Participants were from five states and included nine academics, four health promotion practitioners, two public servants and one clinician.

Interviews were conducted online by an experienced skin cancer control researcher (BM), between February and May 2021. An semi-structured interview schedule (Supplementary File 1) was used to guide the interviews. All three authors are experienced researchers in the primary prevention of cancer from a public health perspective. Each interview was recorded with consent and transcribed verbatim and checked for accuracy. Using a semi-structured interview guide, stakeholders' views were sought on skin cancer prevention advocacy and action and strategies that may be translatable to other jurisdictions.

Transcriptions were analysed by using content analysis and cross-checked.[28] In the first phase of analysis, the interview transcripts were read through to identify broad themes and then line by line inductive coding was undertaken by BM. During the second phase of the analysis the themes were refined with the raw data checked for consistency (BM and RG). Key themes were discussed and agreed on by the three authors.

Ethical approval was obtained from the University of Otago Human Ethics Committee (number D20/273).

Results

Key results are presented below with quotes from stakeholders (SH#) to illustrate core themes.

Leadership

Many participants spoke of the importance of Australia's global leadership on skin cancer control over many decades.

It is a success story of public health in Australia. So we can frame it as a uniquely Australian issue that we have had global leadership in.(SH1)

One participant explained how that success had supported skin cancer prevention funding.

When governments have tried to squeeze our dollars at a state level, they've inevitably failed to do so. An analogy I use is that no one wants to kill Bambi … so the idea of killing off what is essentially a fabulous public health success story … does have an element of protection around it.(SH2)

Despite this success, a number of participants did express concern at the current apparent lack of prioritisation of skin cancer prevention, particularly at a national level.

You sort of look from outside and say, Australia's pretty successful in skin cancer, we'd probably disagree with you. In that while we have made quite a lot of significant gains over a long period of time, in the current environment, skin cancer is not on the top … skin cancer primary prevention doesn't get [prioritised] *either at a … national government or a state government level.* (SH13)

There was agreement among most participants that efforts are fragmented, mostly occurring at a State rather than Commonwealth (Federal) level. There was concern this can lead to inequity depending on resources and expertise available.

Delivery of skin cancer prevention campaigns have been left to the states to deliver … that means that there's a complete lack … of equity. (SH2)

The crucial role played by a few people who have persevered was applauded by several participants.

There have been some key people over the years who have been very committed … who've stuck around long enough to see things change, and learn from it and keep pushing. (SH5)

Legislation

Legislation is key for creating environments that support UVR protection behaviour. It also signals the importance of the issue to the community.

It [legislation] *does have political resonance much greater than the benefit of reducing the number of people exposed. It just sends a really important message to the general community that these things* [tanning beds] *are dangerous … but it also signals that we have to be very careful about UVR.* (SH2)

In the occupational sector, legislation has been used to drive change directly within industry and local government, predominantly through liability concern.

By putting sun protection firmly in your Occupational Health and Safety policies … protect yourself against that litigation risk, but you're also able to make a statement that you've been proactive about your duty of care. (SH3)

… if people have a right to sue, much as we hate all that legal stuff, but it actually it can change. You can drive good behaviour. If people are personally responsible, and so employers you know, anyone who works for Telstra or on the railways or anything, they have hats, sunscreen, long sleeves, mining companies, all of that. You know, some people might say it's a nanny state, but actually, the employers would say, if you don't have it, mate you can't work, see you later. (SH8)

Strategic documents

The importance of having skin cancer prevention covered in national and state strategic documents was highlighted by a number of participants. A civil servant highlighted this when they spoke about how their work plan in skin cancer control is determined in their state.

[Name] *cancer plan is a requirement under the* [name] *Act, so the minister has to table a cancer plan once every four years. And that cancer plan spans the whole pathway from prevention, to treatment to survivorship, for cancer patients and also research.* (SH12)

Given the importance of strategic documents, it was concerning to some participants that skin cancer prevention had not been mentioned in one key strategy document with advocates rallying to have this rectified.

We got word that sun protection was not going to be included in the [name]. *And so we really started to rally the troops and talk to everyone that we could, all the contacts that we had in government, regardless of where they worked, really start to put some pressure on people and say, listen, if you don't put sun protection in this, you're gonna look stupid.* (SH3)

One stakeholder explained that in their particular state, the health department strategic document actually put an empirical figure (5% of total skin cancer budget) on prevention which proved extremely useful in advocacy and action at a local government level.

[Now] *we've now got something that we can bang on the table at a local council, local government meeting, saying, listen, it's in the public health plan, you've got to be looking after this stuff.* (SH3)

Resources

Adequate funding for skin cancer prevention requires the initial investment and then ongoing costs to maintain momentum. Obtaining this funding was referred to by one participant as a battle, with others describing piecemeal funding and competing health issues.

Skin cancer has always been the poor cousin of the other major health issues - tobacco, obesity prevention, even alcohol prevention are all very well-funded. Sun protection, not so much. We get just enough to dribble along so we can put a campaign together ... other public health issues tend to get a dump of money from the government, skin cancer has had to cobble money together from many different sources. (SH3)

We know [what] *makes a difference is investment in public education. And that obviously comes at a significant cost. If you're going to do that, well, in the Australian context, you at a national level, you need to spend $10-$12million a year as an absolute bare minimum.* (SH2)

Some stakeholders talked about the success of flagship programs, in particular the Slip, Slop, Slap public education campaign and SunSmart program in primary schools.

There's been a couple of big flagship programs that helped really embed the idea around enhancing prevention in people's brains. And so I think, yeah, some really high profile sort of programs probably helps set the scene. (SH6)

The shade grant scheme in Victoria and Queensland is a relatively new program but one in which substantial state funding is being provided for local communities.

The government likes investing in shade grants, because it spreads the money out in the community, engages local MPs. (SH2)

… It's kind of nice to have a concrete community grant, that you can snip a ribbon on or say that here is what we have achieved. (SH5)

Research

The importance of scientific evidence being available, or produced rapidly if the political opportunities arise, was noted by many participants. Good trend data was highlighted by several participants as being essential for monitoring change over time.

Tracking the data is really important and having evidence, you know, and being able to turn to the figures and be able to say, this is the state of play … if you've got data, it's really hard for politicians and other people to wriggle out of it. (SH8)

Most participants viewed well-designed economic analyses as a critical tool for successful advocacy and action such as a cost benefit analysis of the SunSmart programme.

The economic one is powerful, both in terms of the overall cost and burden to the health system … we know what the return on investment is, in terms of prevention, it's pretty hard to argue why this shouldn't be an important investment for what is our national cancer. (SH2)

However, a number of participants did provide a cautionary tale of economic analysis as necessary but not sufficient.

I think it's important, but I don't think it's the only thing that I need … I think by itself, it's not quite enough necessarily to push it over the line. (SH6)

It's an argument that goes well with health departments, but not with treasuries … Treasury is interested in saving money and not spending it. (SH13)

Actors

Consistent messaging on sun protection messages by all advocates in the sector was considered important by many participants. Researchers at QIMR Berghofer Medical Research Institute have purposively established an annual meeting on current issues to bring together a diversity of stakeholders to discuss clear and consistent messaging out of the public eye.

Bring all the stakeholders together, and really review the state of the evidence, and then sort of unify all of our various similar but overlapping and not quite consistent advice that came from all those groups … to get our research house in order in order to go and advocate more strongly. (SH8)

Some participants spoke of the importance of using a variety of different types of advocates to advocate for skin cancer control.

Build a network of people who are quite clear that what they are wanting … decide who are going to be … news actors … it's a tag team thing, you know, that, because very often, journalists will call me … and say you don't happen to know a family where that tragedy has happened. And they want to tell the hard story, you know, from the science and the epidemiology, but they also want to tell a personal story. (SH11)

The importance of having clinicians included in advocacy and action was highlighted by a number of participants. Clinicians are able to report from personal experience of seeing patients with the disease but without the raw emotion of a patient advocate.

Having a high up clinical person ... who can, can talk from personal experience about seeing the sad end of, of where this is going, if you don't prevent it was really helpful. And didn't come across as … emotional. (SH5)

The National Skin Committee is an important organisation for advocacy and action on skin cancer prevention. It includes representatives from a number of organisations. Speaking of this committee one participant commented:

Distributing the risk across 10 organisations, it's not just falling on one, you're speaking with one voice, it's a very considered perspective ... it always helps showing that you have a consistent ask, and there's no infighting or disagreement about what the answer should be. (SH1)

Finding champions for your cause within a political context was also considered crucial and having, or developing, a relationship with them as a critical component of advocacy and action. Often the champion will have had a personal connection with a particular cancer.

There are some politicians that get it and can be champions and advocates and you've got to identify who they are, you've got to know who they are and get them onside. (SH14)

The importance of personal stories and patient advocates in the media was highlighted by most participants.

I think they're actually more powerful than any evidence [because politicians don't necessarily] *listen to the science and the evidence … they're looking for the popular, you know, voice.* (SH9)

This was used very successfully during advocacy and action efforts, which resulted in the solarium ban. In Australia two compelling, articulate patient advocates, Clare Oliver and Jay Allen were champions in the media with both attributing their own melanoma to solarium use and advocating for a ban. Clare was a trained journalist who recognised the media potential of her own story and actively worked with the media advocating a solarium ban.

This was a person [Clare Oliver] *who had an authentic lived experience … that's a terribly important thing in advocacy … unlike a person like myself, you know ivory tower University … I'm forced to answer in the third person for somebody … and it just doesn't have the same legs as a person who's sitting there saying, look, you know, I could die from this.* (SH5)

Our current [name] *politician's favourite thing to do is to stand up at a press conference with someone who has that particular type of cancer … and talk about listing a new medicine or funding something that will address the cancer for the person standing next to them … for prevention, it's very hard to do.* (SH13)

Public opinion is extremely important to politicians. Some participants spoke of the benefit of using a positive approach to sell an argument with politicians.

It's a kind of low hanging fruit, frankly, that metaphor is an important one, politically ministers of health are often there on the telly and in the newspapers, because something's going wrong … look, this is something that you can do, that people … [are] *going to applaud you for doing.* (SH11)

Some participants highlighted the lack of industry opposition commonly seen in other areas of cancer control such as the alcohol, tobacco and food industries. Apart from the 'ban solaria campaign', which garnered widespread public support, skin cancer prevention is largely not controversial.

There's nobody who is going to jump up and down and say you shouldn't be preventing this. (SH1)

And so when we do surveys of "do you think the government should fund another slip, slop slap"? People are almost unanimously saying, well, yes, of course. (SH13)

Media

A number of stakeholders reported strategically engaging with the media on issues for skin cancer control. For example, recently, when the draft National Prevention Health Strategy[8] did not mention skin cancer, advocacy efforts included strategic engagement with the media using press releases and engagement with specific journalists to highlight the issue.

We got the Australasian College of Dermatologists, we got all the melanoma patient groups, we got even some of the government agencies…to do submissions. And there was direct ministerial office engagement. And what ultimately got it over the line actually was some very direct inquiries from the media. (SH2)

As outlined above, the compelling story of Clare Oliver was captured by the media and proved particularly effective in achieving the solarium ban.

… the journalist immediately saw this eloquent, attractive young woman who was 26 years of age who had, you know, terminal, metastatic melanoma that she attributed to use of solarium, and saw this as very newsworthy. (SH14)

Australian culture

A number of participants explained the important role that culture plays in how skin cancer is perceived, including with decision-makers. Apathy is commonplace and as skin cancer is so prevalent many perceive that it is inevitable.

Skin cancer has been so prevalent and everybody's Granny and Grandad has had a skin cancer, people almost think of it as being a normal part of the Australian lifecycle. (SH8)

I don't think that you can go out and expect people are going to march for … skin cancer [prevention]. (SH11)

This is compounded by the outdoor lifestyle and the number of Australians with light-coloured skin.

Characteristics of skin cancer

The long latency of the disease makes it challenging for advocacy and action particularly with the short political cycle.

Skin cancer is a long-term game … you don't see the benefits of prevention until two decades down the line … you've got to have courageous politicians who can get past the immediate. (SH8)

It is not something that someone can be the sitting member and get glory from it. (SH7)

The long latency requires sustained effort over decades.

It is a fairly naive proposition that you can run a health promotion campaign and get people to change their behaviour, and it's sustainable, and then you don't have to keep doing anything. Of course, Coca Cola doesn't think that … you wouldn't say that an ambulance service was something you'd run as a project and see if you needed it in three years. So, it'd be lovely if government started to see these programs or services that just need to be funded in the long term. (SH4)

A few participants commented on the high survivability of skin cancer being a challenge when competing for resources against other health issues.

Skin cancer is a high survival cancer, if you're in the cancer space, you know, there's lung, there's tobacco control, you know, there will be other more pressing issues. (SH1)

Failure with adolescents/More work needed for adolescents

Although not specifically elicited, many participants were concerned about the lack of sun protection in adolescent and secondary school cohorts. Adolescents were described as a challenging group to target in that students are generally considered old enough to make their own decisions. Participants also reported that secondary schools do not necessarily see sun protection as a major responsibility for them and that students are not very well protected by legislation.

Imagine a 40-year-old on a building site, they're probably better protected under our H & S [Health and Safety] *legislation, and their workplace doing that, than their child, a 14-year-old is in the playground … when we say we should be protecting workers from the H & S risk of, how can we possibly say that it's fine for children to keep going to school and not be protected?* (SH1)

Discussion

In this paper Australian stakeholders reflect on how Australia has achieved its status as a global leader in skin cancer prevention and provide lessons for NZ and other jurisdictions.

Stakeholders pointed to strong and consistent state government leadership and accompanying resources over decades as critical to Australia's successful, comprehensive skin cancer prevention programme. This has enabled effective action by the Cancer Council and others in multiple policy arenas and thus multiple settings in which people live. It appears that there was a level of policy consensus that skin cancer could, and should, be prevented and this resulted in policy in areas such as workplaces, schools and local government. While described by some as the 'poor cousin' to other public health issues, Australia has consistently invested in skin cancer prevention. However, stakeholders did express concern that this resourcing is currently stagnant and urgently needs 'buy-in' by the Commonwealth Government. Interestingly, since this work was conducted the Commonwealth Government have in fact invested A$10 million on a national campaign.[13] Cancer Councils in some states in Australia have, or have previously, received hypothecated tax which partially funds their primary prevention activities. In NZ there was initial leadership and funding for skin cancer prevention.[29] Explicit funding for skin cancer prevention activities by the Crown Entity responsible for social marketing and health promotion in NZ has halved over the past 15 years resulting in a loss of momentum.

The importance of supportive workplace health and safety legislation where employers are accountable was highlighted in Australia. The dispute mechanism available via litigation has been an important factor in driving change in the occupational sector, ensuring employers take responsibility for employees' UVR exposure. Although NZ has similar workplace legislation, employees cannot directly sue their employer for compensation and so potentially may be less likely to engage in sun-safe activities. It may be possible to seek compensation from the ACC, a government funded no-fault insurance scheme for injury-related harm. The regulatory entity generally responsible for workplace health and safety in NZ (Worksafe) does have a mandate to protect workers from harm, but currently is focused on preventing workers from immediate harm, such as falls from scaffolding or tractor roll-overs. It may be that explicit resourcing for skin cancer prevention is required to enable Worksafe to expand their current activities to include UVR exposure. Ministerial intervention may be required to enable this to occur.

Strong scientific evidence was considered important by stakeholders. Australia appears to have had success in using evidence to inform policy, particularly good economic analyses, unlike NZ.[29] A number of the Australian stakeholders did caution that although economic analysis is necessary it is not sufficient to drive change. Experts in NZ identified the lack of a recent economic analysis as a barrier for generating political priority.[29]

The importance of media in driving public opinion and thereby potentially influencing politicians' actions was highlighted by stakeholders. This was particularly evident with the solarium ban, where two dedicated patient advocates gained a substantial media following, which was influential in shifting public opinion in favour of the ban.[30] Although in NZ there is sporadic media coverage on the importance of skin cancer prevention, to date this does not appear to have shifted politicians' actions. The Clare Oliver story was broadcast in NZ, but disappointingly, the National-led government of the time did not ban solaria, choosing instead to limit use to adults. The actions of patient advocates also demonstrated that

people with lived experience can be far more compelling for advocacy efforts than an academic expert – something well recognised in health advocacy literature more generally.[31]

This is the first paper, to our knowledge, to capture the views of a diverse group of expert Australian stakeholders on skin cancer prevention. Previously, direct comparisons have been made with Australia on the prevention and diagnosis of melanoma[32] and policy framing of sun-safety.[33] There are a number of potential study limitations. First, it is not possible to identify the relative weight that different factors have played for influencing skin cancer control. Second, although every effort was made to include stakeholders from different sectors, we were not successful in interviewing politicians. Third, not all identified stakeholders agreed to be interviewed so it is possible their views may differ from stakeholders interviewed.

Conclusion

Advocates identified a number of key strategies that they have used successfully to gain momentum in achieving Australia's comprehensive Sunsmart program. These have included: state government investment, strong sector leadership, legislation including the banning of solaria and effective workplace health and safety legislation, a critical mass of key advocates from a range of disciplines including clinicians and patients, and the advantageous use of media to drive change. Australia demonstrates what can be achieved when skin cancer prevention is taken seriously. The challenge for NZ and other nations is to apply the lessons learned in Australia to our own jurisdictions.

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Supporting Information

Additional supporting information may be found in the online version of this article:

Supplementary File 1: Interview schedule (skin cancer prevention).