Our Vision
To make real differences to the well-being of others via high-quality research
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We are very pleased to be able to present our annual report on the Cancer Society’s Social and Behavioural Research Unit for 2016. This reflects our 26th year in the business of research to inform cancer control. We believe that the Unit has continued to flourish and maintain a high research profile both nationally and internationally. Of course none of this would be possible without the critical support of the Cancer Society of New Zealand and the University of Otago.

Our profile comes from innovative and high quality research in tobacco control, sun protection, patient support and community awareness of cancer and its prevention. In no small part this reflects the Unit’s ability to attract good research students. We especially wish to recognize the contributions of Anita Grant, Manal Murad, Lindsay Robertson, and Sarah Wood to our 2016 research effort, and to the positive social climate of the Unit.

Many thanks to all the Unit staff, collaborators and participants of the 2016 research programme. We will continue to develop new SBRU research initiatives to help reduce the impact of cancer on Aotearoa New Zealand.

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Project Reports
New Zealand has an ambitious goal of becoming a smokefree nation by 2025. To achieve this a combination of traditional tobacco control measures as well as innovative endgame strategies are required. The Cancer Society Social and Behavioural Research Unit (SBRU) works towards this goal through research priorities identified by the Cancer Society of New Zealand (CS). SBRU research, conference and workshop presentations, and advocacy continued to make significant contributions to this area in 2016. While maintaining a broad interest in all aspects of tobacco control, our research team focused on the supply of tobacco and in particular tobacco retailing.

Many of the research projects which were undertaken in 2015 have now been published in peer reviewed journals and presented at national and international conferences in 2016. This included research on tobacco and alcohol imagery on New Zealand television, smokers’ perceptions of the effectiveness of retail reduction policies, and tobacco control experts’ perceptions of tobacco retailing policies.

A number of new projects were developed during the year. These include a study using the Health Promotion Agency’s Youth Lifestyle Survey to examine the promotion of non-smoking among school students, an examination of Local Authority Long terms plans and the Smokefree 2025 goal, and a study looking at smokers’ attitudes towards financial incentives for quitting. Papers have or will be submitted for publication in early 2017.

Lindsay Robertson completed her PhD thesis titled ‘Regulating the Tobacco Retail Environment in New Zealand’ with the assistance of funding from New Zealand Lottery Health and the New Zealand Asthma Foundation. Manal Murad completed her Master’s thesis examining Local Authorities’ commitment to Smokefree 2025 through their Long Term Plans.
1.1 Tobacco and alcohol imagery on New Zealand television

One third of young people in this country spend more than three hours a day watching television, and daily television viewing has increased among youth between 2001 and 2007. Levels of tobacco use portrayed on New Zealand television remained stable between 2002 and 2004 and most of these portrayals were neutral or positive. Similarly, in 2004 an image involving alcoholic beverages was shown on New Zealand television every 9 minutes, and these portrayals of alcohol rarely focused on the negative health outcomes associated with alcohol. More recent research found that 20% of music videos on New Zealand television contained alcohol imagery; only 4% of these videos were negative towards alcohol. Research in the United Kingdom found that young people believed television provided a selective image of alcohol use and that a more balanced view of alcohol use should be shown. New Zealand has had a ban on tobacco marketing and sponsorship on TV for many years, but despite this tobacco smoking is shown on children's television, prime-time television, and popular films.

Study aims

The aims of this research are to examine changes in the frequency and context of alcohol and tobacco imagery on New Zealand television from 2004 to 2014.

Progress

One paper on tobacco imagery has been published by the Australian and New Zealand Journal of Public Health in 2016, and was presented as a poster at the Society for Research on Nicotine and Tobacco 22nd annual meeting, Chicago, USA, March 2016. A letter on alcohol imagery has been accepted for publication by Drug and Alcohol Review, and accepted for a presentation at the Behavioural Research in Cancer Conference, Melbourne May 2017.

Project team

Louise Marsh, Rob McGee, Lindsay Robertson, Brett Maclellan, Rebecca Llewellyn, and Matthew Ward.

Funding

University of Otago Research Grant, and Cancer Society of New Zealand.
1.2 Smokers’ perceptions of the relative effectiveness of five retail reduction policies

A growing body of research suggests widespread retail availability of tobacco may be associated with increased risk of smoking in a number of ways. Greater density of tobacco outlets in a neighbourhood is associated with higher rates of smoking amongst both adults and youth. This may be due to increased exposure to cigarette advertising in jurisdictions without a point-of-sale display ban, greater chance of relapse after a quit attempt, and the creation of a more competitive local market, possibly driving cigarette prices down and increasing sales to minors. The density of tobacco retail outlets tends to be higher in areas of socioeconomic deprivation, which may contribute to a higher smoking prevalence amongst socioeconomically disadvantaged groups. Research also suggests that a higher density of tobacco retail outlets around a school is associated with higher levels of experimental smoking.

Reducing the widespread retail availability of tobacco could help realise tobacco endgame strategies. We conducted a randomised survey in which smokers were asked to rate the effectiveness of one tobacco retail policy on i) preventing smoking initiation for a never-smoker and ii) supporting quitting amongst adult smokers. The perceived effectiveness of these five policies was compared relative to a ‘benchmark’ policy of a 10% tobacco tax increase.

Study aim
We aimed to assess New Zealand smokers’ perceptions of the relative effectiveness of five retail reduction policies relative to a 10% tobacco tax increase.

Progress
A paper has been published by Nicotine and Tobacco Research in 2016. This research was also presented at the Society for Nicotine and Tobacco Research Meeting in Chicago, March 2016, and has been accepted for presentation at the Behavioural Research in Cancer Conference in Melbourne, May 2017.

Project team
Lindsay Roberson, Phil Gendall, Janet Hoek, Claire Cameron, Louise Marsh, and Rob McGee.

Funding
New Zealand Lottery PhD scholarship, New Zealand Asthma Foundation, and Cancer Society of New Zealand.

Lindsay Robertson presenting a poster at the 22nd Society for Research on Nicotine and Tobacco (SRNT) Annual Meeting in USA in March 2016.
1.3 Tobacco control experts' perceptions of tobacco retailing policies

Previous research has identified different approaches to reducing tobacco retail availability, several of which have been implemented internationally. Examples include registration of tobacco retailers, or licensing with conditions imposed on licensees (e.g. no licences granted within a certain distance of a school; a maximum limit on licences for a given area; no tobacco sales at alcohol-licensed premises). More far-reaching options include tobacco sales only at limited adult-only outlets, government-controlled outlets, or pharmacy-only sales. The National Smokefree Working Group recognises that tobacco retailer licensing may restrict tobacco supply, but has called for examination of a wider range of policy options. No New Zealand studies have yet examined experts’ views on different policies that could reduce tobacco retail availability. Identifying experts’ preferred policies may support and refine advocacy efforts in this area.

Study aims
This qualitative research project assessed attitudes towards a range of policy options amongst key stakeholders.

Progress
Interviews were undertaken with tobacco control experts, including Executive and Clinical Directors (n=4); Managers (n=5); Research Professors (n=2); Smokefree Coordinators/ Health Promotion Advisors (n=2), and Smokefree Enforcement Officers (n=12).

A paper is under review by the New Zealand Medical Journal. This work will also be presented at the 23rd Annual Meeting of the Society for Research on Nicotine and Tobacco, Florence, Italy, 8-11 March 2017.

Project team
Lindsay Robertson, Louise Marsh, Rob McGee, and Janet Hoek.

Funding
New Zealand Lottery Health PhD Scholarship, New Zealand Asthma Foundation, and Cancer Society of New Zealand.
1.4 Discouragement of smoking among peers

Although there is much research on the negative impacts of peers on their friends smoking behavior, positive effects can also arise from these relationships. Evidence shows that discouraging smoking among peers has been shown to be more common than peer influence of the promotion of smoking. Students who promote a non-smoking message may well influence the social norms within schools towards being smokefree, and may lead to an opportunity for health education in schools to “co-opt” students as agents of change in spreading the Smokefree 2025 message.

Study aims

The aim of this research is to determine the extent to which students discourage other students at their school from smoking, and what factors are associated with discouraging smoking amongst peers.

Progress

A paper has been submitted to the Australian and New Zealand Journal of Public Health. This research was also presented as a poster at the Society for Research on Nicotine and Tobacco 22nd annual meeting, Chicago, USA, March 2016.

Project team

Louise Marsh, Ella Iosua, Rob McGee, and Joanna White.

Funding

1.5 Local Authority Long terms plans and Smokefree 2025

Tobacco use is the leading cause of preventable death in New Zealand. The harmful effects of tobacco is not restricted to smokers but extends to non-smokers such as children and young people. The government has set a goal to make New Zealand smokefree by 2025, which will require a multi sector approach and coordinated effort to achieve. Local authorities play an important role in improving well-being through local policies and projects.

Study aims
To examine the commitment of local councils in the Canterbury/West Coast region to Smokefree 2025 using their Long Term Plan as a measure. In addition, it aims to examine the role of community consultation which is an essential part of the Long Term Plan.

Progress
A Master’s thesis based on this research has been completed, and a paper has been submitted to the Australian and New Zealand Journal of Public Health.

Project team
Manal Murad, Louise Marsh, and Rob McGee.

Funding
University of Otago, and Cancer Society of New Zealand.

1.6 Smokers’ attitudes towards financial incentives for quitting

Financial incentives are a potentially effective method of encouraging healthy behaviours. Evidence regarding the acceptability of this approach is conflicting, and little is known about New Zealand stakeholders’ perceptions of financial incentives. We assessed New Zealand smokers’ attitudes towards financial incentives for smoking cessation and the factors associated with supporting financial incentives. This study used a predominantly quantitative online survey, with an open-ended question included to allow a qualitative exploration of smokers’ views towards financial incentives.

Study aims
This research examined whether financial incentives are viewed by smokers as an acceptable and effective cessation intervention that New Zealand should consider in its quest to become smokefree by 2025.

Progress
A draft paper has been completed and will be submitted for publication in early 2017. This research was presented as a poster at the Society for Research on Nicotine and Tobacco 22nd annual meeting, Chicago, USA, March 2016, and to the Smokefree 2025 Research Symposium, 26 October 2016, Wellington.

Project team
Lindsay Robertson, Phil Gendall, Janet Hoek, Louise Marsh, and Rob McGee.

Funding
New Zealand Lottery PhD scholarship, New Zealand Asthma Foundation, and Cancer Society of New Zealand.
1.7 Quitting and tobacco retailer density

The widespread availability of tobacco is a major form of tobacco marketing. Greater access to tobacco retail outlets in an area is associated with higher rates of smoking, and exposure to a tobacco retail outlet can undermine smokers’ attempts to quit, even in the absence of point-of-sale tobacco displays. In this study we mapped the home and daytime addresses of a sample of “motivated quitters” (i.e. smokers who are attempting to quit) in relation to a Geographic Information System database of national tobacco retail outlets that we compiled in a previous research study.

Study aims
The aim of this project is to examine whether greater access to tobacco retail outlets around 1) the home and 2) the workplace (or main daytime location) is associated with smoking status 6 months after a quit attempt.

Progress
Data analysis has been completed and a draft paper will be completed and submitted to a peer reviewed journal in 2017.

Project team
Lindsay Roberson, Louise Marsh, Ella Iosua, and Crile Doscher.

Funding
New Zealand Lottery PhD scholarship, New Zealand Asthma Foundation, and Cancer Society of New Zealand.

1.8 Does quitting smoking lead to less binge drinking?

There is a cross-sectional association between binge alcohol drinking and tobacco smoking among young people. Paradoxically, in our recent study of low-rate, non-daily smoking, we found that weekly binge drinking at age 21 was associated with decreased odds of increased smoking by age 38. This may reflect a pattern whereby younger low-frequency smokers tend only to smoke while drinking alcohol, and as their drinking patterns change over time, they either quit by age 38 or remain as long-term low-frequency smokers.

Study aims
This research will investigate the significance of changes in tobacco smoking on binge drinking, using longitudinal data from the Dunedin Multidisciplinary Health and Development study.

Progress
Data analysis is in progress and a draft paper will be completed and submitted to a peer reviewed journal in 2017.

Project team
Rob McGee, Louise Marsh, and Bob Hancox.

Funding
Cancer Society of New Zealand.
1.9  Supporting informed e-cigarette use: qualitative analysis

This HRC funded project, led by Professor Janet Hoek, examines how smokers, and susceptible non-smokers perceive and use e-cigarettes (ECs). The first phase involves 50 in-depth interviews with Māori, Pacific and New Zealand European EC users, including daily and intermittent smokers, quitters, former smokers, and non-smokers susceptible to experimentation with ECs aged 16-65 years. The in-depth interviews explore participants’ tobacco and EC use histories, and probe the risks and benefits they associate with ECs, participants’ knowledge and understanding of ECs’ risks and benefits, the beliefs they hold about ECs, their attitudes, likely future use, motivations for use, and product information they would find helpful.

Study aims
To explore e-cigarette users’ knowledge and understanding of e-cigarettes.

Progress
Around half of the data collection has been completed and analysis is underway.

Project team
Janet Hoek, Lindsay Roberson, Rose Richards, Mei-Ling Blank, Anna Dawson, Claire Cameron, and Phil Gendell.

Funding
Health Research Council grant.
Psycho-social-spiritual cancer research continues to grow nationally and internationally. Those impacted by cancer and their healthcare professionals are recognising the importance of caring for the whole person and considering their whānau. 2016 saw the launch of He Anga Whakahuru, a supportive care framework, that the Central Cancer Network developed; the framework explicitly mandates a holistic approach with standards and competencies for all domains of supportive care.

While aspirational, this framework gives some direction and suggestions for evaluation and research. The SBRU PSS team worked on a range of projects this year, particularly contributing to the Cancer Awareness in Aotearoa New Zealand (CAANZ) study (see Section 4 Cancer awareness below), collaborations with the MidCentral Health District Health Board, and the development of innovative research proposals, for example to examine values and attitudes in relation to euthanasia / aid-in-dying in New Zealand.
2.1 New Zealand nurses’ views on spirituality and spiritual care

This study was the first baseline examination of New Zealand registered nurses’ understandings and perceptions of spirituality, patient spiritual needs, spiritual care provision, spiritual care policy and education. A cross-sectional electronic survey design reproduced the 2010 UK Royal College of Nursing questionnaire, combined with New Zealand-specific questions. Results will provide data on spiritual care understandings, needs and provision, and this study will allow for a comprehensive view of spiritual care as provided by New Zealand nurses.

Study aims

To understand nurses’ views on spirituality and spiritual care in nursing practice, five research questions underpinned this project:

1. What do New Zealand nurses understand by the terms spirituality and spiritual care?
2. Do New Zealand nurses consider spirituality to be a legitimate area of nursing practice?
3. Do New Zealand nurses believe that they receive sufficient support, guidance and training in spiritual matters?
4. How do New Zealand nurses perceive and utilise chaplaincy services?
5. How do New Zealand nurses recognise and support Māori values and spiritual beliefs?

Progress

The data have now been analysed and reports for the various stakeholders developed and a paper submitted to a journal.

Project team

Dr Richard Egan, Rebecca Llewellyn, Associate Professor Brian Cox, Léonie Walker, and Sande Ramage.

Funding

University of Otago Research Grant, and Cancer Society of New Zealand.
2.2 MidCentral District Health Board Spiritual Care Advisory Group: qualitative study

Spiritual care is increasingly understood as part of best practice holistic care across many healthcare settings. However, health service delivery evidence shows that the spiritual needs of patients are sometimes under recognised in contrast to their more physical needs. This may be, in part, due to factors such as institutional barriers, care prioritisation, lack of knowledge, changing societal situation, or attitudes of staff relating to confidence in, or the perceived relevance of spiritual care10.

Following on from our 2015 MidCentral District Health District Health Board (MCDHB) Oncology Ward project, in 2016 we worked in partnership with the DHB’s spiritual care team to evaluate their Spiritual Care Advisory Group. This group is unique in New Zealand’s health system and impacts directly on the spiritual care of patients, particularly those affected by cancer.

Study aims
To explore the perceptions of the members of the MCDHB Spiritual Care Working Group regarding the successes, challenges and possible improvement to the functioning and effectiveness of the Group, and the implementation of the spiritual care project across the DHB. A secondary objective is to explore how Group members’ perceptions and understanding of spirituality may have changed over the course of their involvement with the Group.

Progress
The interviews, analysis and report are all complete. The report was well received and recommendations are being taken into consideration. Further dissemination is planned. A paper was submitted in 2016 based on the oncology ward project.

Project team
Dr Richard Egan, Mei-Ling Blank, Sande Ramage, and Barry Keane.

Funding
MidCentral District Health Board, and Cancer Society of New Zealand.

2.3 Projects in development

During 2016, a significant amount of work went into the development of projects that have yet to be funded. For example, in conjunction with Dr Chris Jackson (Medical Director of Cancer Society of New Zealand), the PSS team and an extensive group of collaborators, have developed a euthanasia / aid-in-dying research proposal. The proposed research project aims are:

1. To learn what different groups of New Zealanders, including Māori, understand about end-of-life decisions, the contexts in which a hastened death might be provided, the reasons for their opposition or support a law change, and to explore the implications of their views (this will incorporate the draft ‘End-of-Life Choice Bill’ that is in the ballot).
2. To learn whether the views of New Zealanders change through a deeper understanding of the issues, facilitated debate and deliberation.
3. Based on the above aims, to inform the public and politicians about the range of positions on possible law changes regarding hastening death.

The proposed methods include qualitative, quantitative and kaupapa Māori approaches.

Further, Dr Richard Egan is co-investigator in a funding proposal looking at exceptional cancer trajectories (ECTs). Led by Victoria University’s Professor Kevin Dew, this project hopes to use innovative qualitative methods to understand these rare extraordinary survivorship pathways and, what can be learnt from these people that others like them might benefit from for their own cancer experiences.
In New Zealand, skin cancer is by far the most common cancer type and nearly 500 New Zealanders die from skin cancers annually. In addition, New Zealand has the world’s highest incidence and mortality rates for cutaneous malignant melanoma (melanoma), the deadliest of the skin cancers. And yet, unlike many other cancer types, we know the main cause of skin cancer, and that the risk of developing it can be mitigated by minimising exposure to ultraviolet radiation (UVR). An estimated 90% of skin cancers are potentially preventable.

Australia, which has similarly high rates of melanoma as New Zealand, is the world leader in skin cancer control. For over 30 years Australian agencies have implemented a comprehensive primary prevention focus (i.e. preventing the onset of skin cancer by reducing population exposure to UVR), including SunSmart policies and practices in schools, workplaces and outdoor recreational settings, as well as widespread media coverage promoting SunSmart behaviour. Australians are now starting to reap the benefits of this commitment, with a downward trend appearing in melanoma rates among the younger age groups who have benefited from these SunSmart policies. The release of David Whiteman’s paper in 2016 noted that New Zealand now had the world’s highest rate of melanoma. The most recent development in skin cancer control in Australia is legislation related to the use of commercial sunbeds. Australian politicians have weighed the compelling scientific evidence for the association between skin cancer and sunbed use against the individual’s right to choose and concluded that there was a clear need to legislate for a total ban on all commercial sunbeds. Unfortunately, despite similarly high melanoma rates, large numbers of non-melanoma skin cancer cases, seasonally extreme levels of UVR and the popularity of outdoor lifestyles, New Zealand continues to lag behind Australia in applying evidenced-based skin cancer control policies.

SBRU research and advocacy continued to make a significant contribution to this area in 2016. Research from SBRU received considerable media attention, including several high visibility television and radio interviews as well as substantial print media. It is possible that this may indicate a shift in public interest towards skin cancer prevention. SBRU staff participated in the New Zealand Skin Cancer Steering Committee processes to produce the New Zealand Skin Cancer Primary Prevention and Early Detection Strategy 2017 to 2022 which is due early in 2017.

Bronwen McNoe and Tony Reeder were both interviewed in a 30 min programme about melanoma.
### 3.1 Skin cancer primary prevention in New Zealand public secondary schools

The Cancer Society of New Zealand developed and implemented a high profile SunSmart Schools Accreditation Programme and commissioned quality curriculum-linked resources for primary and intermediate schools. In contrast, relatively little is known about skin cancer primary prevention within secondary school contexts, either in New Zealand or overseas. Evidence from our site visits to 50 secondary schools throughout New Zealand in 2004 indicated that many young New Zealand adults lacked sun-protective attitudes and failed to practice appropriate sun protection, while schools often did not have policies and practices in place to reinforce sun protection.

**Study aims**

1. To document the current sun protection policies and practices of New Zealand secondary schools in order to provide a baseline against which any future changes can be compared;

2. To identify factors associated with the reporting of appropriate sun protective policies and practices.

**Progress**

A paper was published in *Preventive Medicine Reports*. This project is now complete and will be used to inform intervention programme development.

**Project team**

Tony Reeder, Bronwen McNoe, and Ella Iosua.

**Funding**

Cancer Society of New Zealand, and University of Otago.
3.2 Quantifying the association between sun exposure and vitamin D status

Exposure of the skin to solar UVR is the primary source of vitamin D in humans, but this has potentially negative implications for skin cancer control. Achieving positive outcomes with respect to both vitamin D levels and skin cancer requires appropriate levels of UVR exposure and protection against excess.

**Study aims**

1. To relate sun exposure, measured by electronic UVR dosimeters, to changes in blood vitamin D levels among 500 New Zealand adults (330 in Auckland, 170 in Dunedin);
2. To determine the wavelength dependence of UVR that produces vitamin D, and the extent to which vitamin D levels may be influenced by artificial UVR sources;
3. To estimate how much UVR exposure is required by major ethnic groups in the adult New Zealand population to maintain vitamin D levels considered necessary for good health.

**Progress**

One paper, entitled “Sun exposure and 25-hydroxyvitamin D3 levels in a community sample: Quantifying the association with electronic dosimeters”, was published in the *Journal of Exposure Science and Environment*. Another paper, “Factors associated with clothing coverage in non-summer months among a New Zealand community sample” was published in *Photochemical and Photobiological Sciences*. This project has now been completed.

**Project team**

Tony Reeder, Andrew Gray, Vanessa Hammond, Jan Jopson, Kenneth Gibbs, and Nathalie Huston, in collaboration with teams led by co-principal investigators Richard McKenzie, and Robert Scragg whose full teams were named in our 2007 Annual Report.

**Funding**

Cancer Society of New Zealand, and University of Otago.

3.3 Sunburn in a New Zealand urban population, 1994–2006

Skin cancer health promotion programmes have been supported in New Zealand since 1988. The Cancer Society of New Zealand initiated the Triennial Sun Protection Survey series in 1994 in order to better understand the target audiences for primary prevention messages. Data from five survey waves (1994, 1997, 1900/00, 2002/03, 2005/06) were analysed for this project, including those commissioned by the Health Sponsorship Council (now the Health Promotion Agency).

**Study aims**

1. To describe patterns of sunburn and their association with demographic variables across the survey years;
2. To investigate predictors of sun protection and sunburn using multivariable modelling and addressing potential confounding by climatic factors.

**Progress**

A paper was published in the *Australian and New Zealand Journal of Public Health*. Data analysis is on-going for a proposed final paper which will complete this project.

**Project team**

Geraldine McLeod, Tony Reeder, Andrew Gray, Rob McGee, and Jean-Luc Bulliard (advisor for initial PhD project).

**Funding**

Health Sponsorship Council (SunSmart scholarship to 2010), Cancer Society of New Zealand, and University of Otago.
3.4  Systematic review of interventions for the primary prevention of skin cancer

A systematic review of interventions designed to increase UVR protective practices / reduce harmful exposure identified that there was only sufficient evidence of effectiveness for educational and policy interventions implemented in primary schools and in recreational and tourism settings. Insufficient evidence was found with respect to other settings and types of interventions. However, that review only included studies published up to 2000 and there remained 10 years of additional interventions to be critically reviewed.

Study aims
1. To update the previous review that was published in 2004;
2. To provide timely, evidence-based recommendations to help guide health promotion practice and identify research priorities.

Progress
The SBRU team was invited to join an international team coordinated through the US Centers for Disease Control and Prevention (Atlanta) in 2010 and this collaboration continued thereafter. To date, draft updates of reviews of five intervention settings have been posted on the Community Guide website. A combined review of two intervention types (mass media campaigns, alone, and multicomponent communitywide interventions) has been published in the American Journal of Preventive Medicine.

Project team
Tony Reeder and Bronwen McNoe in collaboration with the Atlanta CDC-led international review team and reporting to the US Community Preventive Services Task Force.

Funding
Cancer Society of New Zealand grant, and University of Otago.

3.5  Systematic review of interventions for the primary prevention of skin cancer – update

The SBRU is represented on the New Zealand Skin Cancer Steering Committee which helps set the agenda for subsequent actions in the primary prevention of skin cancer. To inform this process, SBRU staff were contracted to update the systematic review (project 3.4, above) on interventions for the primary prevention of skin cancer.

Study aims
1. To update the previous review;
2. To provide timely, evidence based recommendations to help guide recommendations in the review document.

Progress
A report was produced for the New Zealand Skin Cancer Steering Committee and a summary of results presented at their face-to-face meeting. The drafting of a paper based on the information obtained is under consideration.

Project team
Bronwen McNoe, Ella Iosua, and Tony Reeder.

Funding
Health Promotion Agency.
3.6 Adolescent sports events: an observational study

Excessive UVR exposure and sunburn in adolescence is an important risk factor for the later development of skin cancer. Adolescents often spend long periods out in the sun, but do not use adequate sun protection. Although the school environment may be a convenient place to reach this adolescent population, the educational curriculum is already crowded, so getting sun exposure included is problematic. However, organised outdoor sporting events provide an alternative setting within which to target adolescents who are at high risk of excessive UVR exposure.

**Study aims**

1. To observe and record the sun protective behaviour of adolescents (and officials) engaged in school athletics sports days;
2. To observe the physical environment in which these sports days take place in terms of accessibility to shade and sunscreen, time spend exposed to the sun, and adult role modelling.

**Progress**

A paper was published in the *Australian New Zealand Journal of Public Health*.

**Project team**

Bronwen McNoe, and Tony Reeder.

**Funding**

Department of Preventive & Social Medicine, University of Otago.

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3.7 Reducing harm from commercial sunbeds: Submission to Ministry of Health

There is strong scientific evidence showing the association between sunbed use and both melanoma and nonmelanoma skin cancers. Australia has recently implemented a complete ban on commercial solaria, nationwide. Unfortunately, New Zealand continues to lag behind Australia in banning commercial sunbeds. In November 2015, the Ministry of Health released consultation documents on “Reducing Harm from Commercial Sunbeds”, with their preferred option being the regulation of sunbed operators. Taking into account the scientific evidence, in our view this does not go far enough. We do not believe that businesses should be allowed to offer a purely cosmetic service selling exposure to a type-1 carcinogen (UVR) for financial gain. This should not be acceptable to an organisation (the Ministry of Health) charged with protecting the health and wellbeing of New Zealanders.

To provide evidence for this submission we conducted two studies.

1. An audit of indoor tanning services in New Zealand – including the provision of (and cost of) sunbeds and spray tanning services nationwide;
2. Surveillance of Trade Me© as the largest auction site to monitor sales of second hand sunbeds.

**Progress**

The submission document was submitted to the Ministry of Health in February 2016. A paper was subsequently published in the *New Zealand Medical Journal*. The audit of tanning services is complete. We are continuing to monitor Trade Me© for the sale of second hand sunbeds.

**Project team**

Bronwen McNoe, and Tony Reeder.

**Funding**

University of Otago, and Cancer Society of New Zealand.
3.8 Appearance-based intervention in secondary schools

There is some evidence that appearance-based interventions to reduce UVR exposure or increase sun protection behaviours may be effective, in particular, by the provision of photographic feedback from a UVR camera (indicative of early facial skin damage from UVR exposure). However, most studies have been among small, select US college populations, and only one of these included participants less than 18 years of age. In addition, few studies have at least one year of follow-up, leaving largely unresolved the question of effect sustainability from summer to summer.

Study aims

Using photographic equipment loaned to us by the Health Promotion Agency we are currently pre-testing a proposed intervention, among the New Zealand secondary school students, to:

1. Test the reliability and evaluate intervention effectiveness of a Stages of Change theory-linked instrument (of known validity and internal consistency) for measuring sun protective behaviour;
2. Determine the feasibility of implementing an appearance-based RCT intervention;
3. Provide preliminary feasibility data for a funding application for an RCT.

Progress

An educational power-point presentation, experimental materials and survey instrument were developed for this intervention. This was delivered in a classroom environment to two separate classes in a co-educational secondary school in Otago.

Project team

Bronwen McNoe, Tony Reeder, and Ella Iosua.

Funding

University of Otago.
3.9 Using wearable cameras to obtain data on the sun protective behaviours of primary school children and characteristics of school environments

Few studies have used methods of direct observation to assess sun protection in schools.

Study aims
To assess the clothing worn and the shade used by New Zealand primary school children, as well as school shade sufficiency as part of the broader Kid’s Cam project.

Progress
A systematic sample of 320 images passively captured by 15 children who took part in the Kid’s Cam project in the summer terms (September 2014 to March 2015) was selected. Children photographed in the images (1278 children across eight schools) were categorised to estimate the mean body surface area covered by clothing (Acov), and shade use. Data on school sun-safety policies were obtained via telephone. A number of papers are in preparation for publication.

Project team
Ryan Gage, William Leung, James Stanley, Tony Reeder, Tim Chambers, Moira Smith, Michelle Barr, and Louise Signal.

Funding
University of Otago.
Community awareness and understandings of cancer are important across the cancer spectrum. SBRU is in a strong position to explore these issues, working within several key behavioural risk factors for cancer and across both health promotion and supportive care areas. Increasing cancer awareness and access to information are highlighted within the New Zealand Cancer Plan.

Of particular relevance are the goals that, by 2018, “More people will be aware of cancer risks and will be doing something about them” and that “More people will have access to easily understood and nationally consistent information resources”. However, perceptions about cancer risk, early detection and treatment are also highly relevant to broader goals such as reducing delay in receiving diagnosis or treatment as they may act as barriers or facilitators to help seeking.

Much of the work in this area is drawn from the Cancer Awareness in Aotearoa New Zealand (CAANZ) study. Data for CAANZ were collected via telephone interviews in 2001 (n = 436) and 2014/5 (n = 1064). The objectives of the study are to a) provide a baseline for current rates of awareness which can be used to evaluate progress on the New Zealand Cancer Plan goals, and b) describe changes over the past 14 years (since 2001) to inform reflection on past cancer control initiatives and to plan future directions. In addition to exploring access to cancer information from an individual perspective, this research area also explores media provision of information, as a key contributor to the cancer information 'landscape' that individuals experience. Findings will be used to help understand the media context in which cancer control initiatives are taking place. It will also provide insights into the role that media could play in raising cancer awareness and the key messages that are currently being conveyed to the wider public.
4.1 Changes in awareness of cancer risk factors among adult New Zealanders: 2001 to 2015

An individual’s awareness of risks and benefits contributes to the development of positive attitudes and intentions towards performing health promoting behaviours. In New Zealand, increased awareness of the link between cancer and risk behaviours is identified as a government goal for 2018. Target behaviours explicitly identified include eating well, keeping active, and maintaining a healthy body weight. Presently only 40% of the adult population meet national guidelines for vegetable and fruit consumption, 51% are physically active, and 31% are obese. There are also other cancer risk behaviours with potential scope for improvement within the New Zealand population, including 17% who are current smokers, 18% who meet the criteria for ‘hazardous’ drinking, and 15% who reported being sunburnt during the previous weekend.

Study aims

This study aims to describe unprompted and prompted awareness of cancer risk factors among adult New Zealanders in 2014/5 and identify changes in patterns of awareness since 2001.

Progress

Most New Zealand adults could identify at least one action they could take to reduce their risk of cancer. However, when asked to provide specific examples, less than a third (in the 2014/5 sample) recalled key cancer risk reduction behaviours such as adequate sun protection, physical activity, healthy weight, limiting alcohol and a diet high in fruit. There had been some promising changes since the 2001 survey, however, with significant increases in awareness that adequate sun protection, avoiding sunbeds/solaria, healthy weight, limiting red meat and alcohol, and diets high in fruit and vegetables decrease the risk of developing cancer. While some positive directions are indicated here, the diversity of findings also serve as a reminder of the complexity of the relationship between behaviour and awareness, and the need to situate awareness interventions within broader socio-environmental strategies to promote behaviour change.

This research has been accepted for publication in the journal Health Education Research.

Project team

Rose Richards, Bronwen McNoe, Ella Iosua, Tony Reeder, Richard Egan, Louise Marsh, Lindsay Robertson, Brett Maclennan, Anna Dawson, Robin Quigg, Anne Cathrine Petersen.

Funding

Cancer Society of New Zealand, Lottery Health New Zealand, and the University of Otago.
4.2 Changes in awareness of risk factors for lung, bowel, melanoma, breast, cervical and prostate cancer among adult New Zealanders: 2001 to 2015

Cancer risk reduction messages such as being smokefree, sunsmart, maintaining a healthy weight and eating a diet high in fruit and vegetables are common to cancer control programmes around the world. While these messages are important for overall cancer burden, the more complex reality is that risk factors differ across different cancer types. This creates challenges for communication of cancer risk information, with providers needing to balance the provision of accurate and accessible information for all cancer types, with concerns about ‘cancer information overload’ and disempowering public perceptions that ‘everything seems to cause cancer’.

Study aims

This study aims to describe unprompted awareness of risk factors for lung, bowel, melanoma, breast, cervical, and prostate cancers among adult New Zealanders in 2014/5 and identify changes in patterns of awareness since 2001.

Progress

Preliminary findings from the study suggest that risk awareness varied widely across the different cancer types. An inability to recall any risk factors (evidence-based or otherwise) was the simplest measure of awareness used, with a broad range observed across lung (1.6%), melanoma (3.3%), bowel (34.8%), breast (48.8%), cervical (53.9%), and prostate cancers (60.9%). While lung cancer and melanoma showed high levels of awareness of their primary risk factors, very few participants recalled key evidence-based risk factors for cervical (HPV infection), breast (diet, overweight and alcohol consumption), and bowel cancer (alcohol consumption, overweight and inactivity). While this, unfortunately, suggests relatively few individuals had a clear understanding of how to reduce their cancer risk, there were also some positive patterns observed across time, with increases in awareness of asbestos and occupational exposures for lung cancer risk, sunlamps and tanning beds for melanoma, dietary factors (and meat and alcohol consumption in particular) for bowel cancer, and alcohol and family history for breast cancer. These gains are important achievements, showing that population awareness can be increased, even in the context of a contested and rapidly evolving cancer information environment.

A research paper based on these findings has been submitted for publication.

Project team

Rose Richards, Bronwen McNoe, Ella Iosua, Tony Reeder, Richard Egan, Louise Marsh, Lindsay Robertson, Brett Maclellan, Anna Dawson, Robin Quigg, Anne Cathrine Petersen.

Funding

Cancer Society of New Zealand, Lottery Health New Zealand, and the University of Otago.
4.3 Cancer information seeking among adult New Zealanders: a national cross-sectional study

Information about health and wellbeing is omnipresent in daily life, featured in news and entertainment and embedded within cultural practices. Only a small portion of the information encountered is produced by the health sector using scientific evidence to support individual and population wellbeing. Even when health information is limited to a single illness, such as cancer, the provision of information is still a significant task. Resources need to be readily available for different cancer types, meet the needs of different information seekers, and reach across the breadth of the cancer control spectrum including: risk reduction, early detection, screening, diagnosis, treatment, follow-up care, and palliative care. Organisations seeking to provide leading and evidence-based cancer information resources for the public need to understand and be responsive to patterns and motivators for information seeking.

Study aims

The aim of this study is to describe cancer information seeking among New Zealand adults over a 12 month period, specifically: who was searching, what prompted the search, what they were looking for, and what resources they found useful.

Progress

This study suggests there is a sizable audience for cancer information resources in New Zealand, with a third of women and a quarter of men deliberately searching for these over the past year. A search was most frequently prompted by a cancer diagnosis of a family member or friend (43.3%), a desire to educate themselves (17.5%), experience of potential symptoms or a positive screening test (9.4%), family history of cancer (8.9%) or the respondent’s own cancer diagnosis (7.7%). Across the cancer control spectrum the information sought was most commonly about treatment and survival (20.2%), symptoms/early detection (17.2%) or risk factors (14.2%), although many were general or non-specific queries (50.0%). The internet was most commonly identified as a helpful source of information (71.7%), followed by health professionals (35.8%), and reading material (e.g. books, pamphlets) (14.7%). This study provides a snapshot of cancer information seeking in New Zealand to help shape resource delivery to better meet the diverse needs of information seekers and address potential unmet needs, where information seeking is less prevalent.

This research has been published in the Journal of Cancer Education and presented at the Inaugural Dunedin School of Medicine and Southern District Health Board Public Symposium The Future Face of Healthcare, November 2016.

Project team

Rose Richards, Bronwen McNoe, Ella Iosua, Tony Reeder, Richard Egan, Louise Marsh, Lindsay Robertson, Brett Maclennan, Anna Dawson, Robin Quigg, Anne Cathrine Petersen.

Funding

Cancer Society of New Zealand, Lottery Health New Zealand, and the University of Otago.
4.4 New Zealand adults’ awareness of the Cancer Society of New Zealand services

Study aims
The Cancer Society of New Zealand provides a variety of services. This study aimed to provide some descriptive information about levels of awareness of The Cancer Society of New Zealand services among the adult population.

Progress
Within the 2014/15 CAANZ study, 17.3% of all respondents had visited a Cancer Society of New Zealand office before. Significantly more females (21.7%) than males (11.8%) reported having visited, however, there were no statistically significant differences in the proportions that had visited across age groups, or by socioeconomic status. Visiting a Cancer Society of New Zealand office was more common among those who reported they had sought cancer information over the past year (27.0% total, 20.8% male and 31.3% female). When asked to identify Cancer Society of New Zealand services, 71.6% of respondents could identify at least one service that they associated with the Cancer Society of New Zealand. Females (81.0%) were more likely to be able to identify a service than males (59.5%). There were no statistically significant differences in ability to identify a service across different age or socioeconomic status groups. Among those who had searched for cancer information over the past year, 88% (63% male and 84% female) could identify at least one service as being provided by the Cancer Society of New Zealand.

This research has been published as a Technical Report to the National Office of the Cancer Society of New Zealand.

Project team
Rose Richards, Bronwen McNoe, Ella Iosua, Tony Reeder, Richard Egan, Louise Marsh, Lindsay Robertson, Brett Maclennan, Anna Dawson, Robin Quigg, Anne Cathrine Petersen.

Funding
Cancer Society of New Zealand, Lottery Health New Zealand, and the University of Otago.
4.5 Changing perceptions of cancer mortality, early detection and treatment among adult New Zealanders between 2001 and 2014/5

Minimising delay in accessing cancer treatment is a key target for the National Cancer Programme in New Zealand. Theoretical models of health behaviour suggest that beliefs related to the cancer experience can play an important role in engagement with health services. These include perceptions about risk of developing cancer and benefits or barriers to cancer related issues such as early detection and treatment experiences.

**Study aims**

This study describes changes in perceptions of cancer mortality, early detection and treatment among adult New Zealanders between two cross-sectional studies conducted in 2001 and 2014/5. In this study participants were asked to identify the most common three causes of cancer mortality among women and then men. They were also asked to note if they agreed, disagreed or were not sure in response to a series of list of statements about early detection and treatment of cancer; ‘overall survival time is much better when cancer is identified and treated early, than when it is not identified and treated until later;’ ‘even with early detection there is not much chance of curing cancer;’ ‘most cancer treatment is so terrible it is worse than death;’ ‘alternative therapy for cancer has an equal or better chance of curing cancer as medical treatment’.

**Progress**

Preliminary findings from the CAANZ cohort suggest some positive changes in perceptions of treatment and awareness of types of cancer with the highest mortality, which should support timely engagement with early detection and treatment services.

A paper based on this research is in preparation for publication.

**Project team**

Rose Richards, Bronwen McNoe, Ella Iosua, Tony Reeder, Richard Egan, Louise Marsh, Lindsay Robertson, Brett Maclennan, Anna Dawson, Robin Quigg, Anne Cathrine Petersen.

**Funding**

Cancer Society of New Zealand, Lottery Health New Zealand, and the University of Otago.

4.6 What helps you get through a diagnosis of cancer – a cross-sectional study of New Zealand adults

Previous work by SBRU has highlighted the importance of empowerment within the cancer journey, working with cancer survivors to identify factors that can support the coping and support mechanisms people used to help understand and manage their cancer experience. This current study extends this question to a general population sample to explore what the wider community understands about what factors are important for those experiencing cancer.

**Study aims**

This study aims to describe perceptions about what things help a person ‘get through’ a diagnosis of cancer among a cross-sectional sample of New Zealand adults in 2014/5.

**Progress**

Preliminary findings from this study suggest that the wider community understand the importance of family and friends, good information and quality engagement with health care professionals and treatment to support a person during cancer journey. There were, however, some gaps in understanding, for example, the role that the workplace can play in supporting individuals and the importance of provision of culturally responsive services.

A paper based on this research is in preparation for publication.

**Project team**

Rose Richards, Bronwen McNoe, Ella Iosua, Tony Reeder, Richard Egan, Louise Marsh, Lindsay Robertson, Brett Maclennan, Anna Dawson, Robin Quigg, Anne Cathrine Petersen.

**Funding**

Cancer Society of New Zealand, Lottery Health New Zealand, and the University of Otago.
4.7 New Zealand media reports about cancer and cancer perceptions among New Zealand adults

The news media plays an important part in shaping understandings of health and health risk behaviour. Studies from overseas have found tensions between media reporting of cancer and the need to meet requirements for content and deadlines. This may make it challenging for media outlets to provide balanced and comprehensive information about cancer control. The CAANZ study found substantial gaps in public understanding of behaviours that they can undertake to reduce their cancer risk. This study will describe the ‘landscape’ of media reporting on cancer in New Zealand to explore its alignment with evidence about cancer risk and prevalence and framing of cancer prevention and experience.

Study aims
The current study aims to complete a content analysis of New Zealand media reports about cancer over the same period as the CAANZ15 study was conducted, to compare and contrast public perceptions of cancer risk factors and media representation of cancer, with evidence-based recommendations about cancer risk reduction.

Progress
The content analysis for this study is underway. Based on the data gathered from this process above, frequencies will be presented to describe patterns of reporting of cancer by the media. This will include description of broad issues such as which cancer types receive the most media coverage in New Zealand and more specific details regarding mentions of behavioural risk factors, symptoms, screening, and treatment. This information will then be discussed in the context of CAANZ15 perceptions measured over the same period.

A report based on this research is in preparation.

Project team
Johanna Nee-Nee, Rose Richards, Anne Cathrine Petersen.

Funding
HRC Pacific Summer Studentship, Cancer Society of New Zealand, and the University of Otago.
4.8 Qualitative analysis of New Zealand media’s coverage of melanoma, non-melanoma and sun safe behaviours during spring 2016

Spring time is an important time for sun protection efforts, as variable weather and the novelty of warmth after winter may offer challenges in prevention of excessive UVR exposure. The media plays a role in reminding the public of rising UVR levels during this time and appropriate sun safe behaviours that need to be re-established during this season. Understanding the media’s coverage of sun safety and melanoma during spring will give the health sector information with which to engage with media organisations to affirm and challenge articles regarding sun safety during this period.

Study aims
The goal of this research is to describe how the New Zealand media portrays melanoma and sun safe messages during spring (September-November) 2016.

Progress
Over the three month period over 5000 articles were identified which mentioned cancer. Of these, 87 were specifically related to sun protection. These are being coded to describe prevention strategies mentioned and shown in photographs.

A report based on this research is in preparation.

Project team
Elizabeth Peterson, Rose Richards, Bronwen McNoe, Anne Cathrine Petersen.

Funding
Division of Health Sciences – Summer Studentship, Cancer Society of New Zealand, and the University of Otago.
Alcohol is the most widely used psychoactive substance in New Zealand. Over half the population aged 16-64 years consume alcohol at least weekly, and 15% percent of adults aged 15 years and over (530,000 New Zealanders) drink in a way that is hazardous to their health. This has important implications for cancer control. Alcoholic beverages are classified as a Group 1 carcinogen by the International Agency for Research on Cancer.

Scientific evidence for a causal relationship between alcohol use and cancer is strong. Any amount of alcohol increases the risk of developing cancer and the level of risk increases with the amount consumed. Even if used in moderation, the volume of alcohol one drinks in a lifetime contributes to the risk of developing cancer. It was recently estimated that, among New Zealanders aged less than 80 years, 242 (30%) of the 802 alcohol-attributable deaths in the year 2007 were due to cancer. This equated to 4% of all cancer deaths recorded in this age group that year. Reducing the amount of alcohol people consume is an important cancer prevention strategy.

5.1 Evaluation of New Zealand's alcohol laws

Hazardous drinking and alcohol-related harm are most effectively reduced by policies that limit the availability and promotion of alcohol, however, starting with the 1989 Sale of Liquor Act, successive New Zealand governments have liberalised alcohol policy. These changes have been associated with an increase in alcohol-related harm. Public concern over this increase was the catalyst for a comprehensive review of alcohol laws by the Law Commission. The Government's response was to amend the Land Transport Act (1998), reducing the legal alcohol limit for driving from 0.08 g/dL to 0.05 g/dL, and pass the Sale and Supply of Alcohol Act (2012).

The object of the Sale and Supply of Alcohol Act is to “minimise the harm caused by the excessive consumption of alcohol.” A major theme in the Act's development was giving communities more say on where and when alcohol is sold in their area. The Act has broadened the criteria on which the public can object to applications for a license to sell alcohol and provided for the development of Local Alcohol Policies (LAPs) by Territorial Authorities (i.e. city/district councils). LAPs can be introduced voluntarily by Territorial Authorities and may include regulations around outlet density and hours of sale, important determinants of hazardous drinking and alcohol-related harm.

Study aims

To evaluate the effectiveness of the new alcohol laws in:

1. Improving public input into local licensing decisions;
2. Reducing the availability of alcohol;
3. Reducing hazardous drinking and alcohol-related harm in New Zealand communities.

Progress

A paper presenting the results of a randomised trial of incentives on response to our 2014 National Survey was published in European Journal of Public Health. Analysis of the 2014 National Survey data and of interviews with Territorial Authority staff regarding the development of LAPs continued.

Project team

Brett Maclennan, Kypros Kypri, Jennie Connor, Tuari Potiki, and Robin Room.

Funding

Health Research Council project grant, and Cancer Society of New Zealand.
**Dr Richard Egan**

Lectures presented to ‘PUBH 713 Society, Health and Health Promotion’ – teaches the whole course.

Lectures presented to ‘PUBH 743 Health Promotion Programme Planning and Evaluation’ – teaches the whole course.

Four presentations to ‘4th Year Medical Student Public Health Attachment Preventive and Social Medicine’, *Health promotion*, University of Otago, 22 March, 3 June, 5 July, and 20 September 2016.

Lectures presented to ‘PUBH 311/411 Research methods in Public Health’, *Qualitative research methods*.

Lecture presented to ‘PUBH 202 Health Promotion’, *Mental health promotion, planning and evaluation*, University of Otago, 30 September 2016.

Lecture presented to School of nursing, Spirituality matters in healthcare, Otago Polytechnic, Aug 2016.

**Professor Rob McGee**

Lectures presented to ‘PUBH 202 Health Promotion’, *Tobacco Control and Sun Protection*, University of Otago, Term 2 2016.

Lectures presented to ‘PUBH 311/411 Research methods in Public Health’, *Qualitative research methods*.

**Dr Rosalina Richards**

Lecture presented to ‘PUBH 714 Public Policy and Health Systems’, *Community development, the Ottawa Charter, policy analysis and socioeconomic determinants of health*, University of Otago, 13 September 2016.

Lecture presented to ‘HUND 472 Dietetics’, *Brockville Community Development Project*, University of Otago, 8 August 2016.

**Ms Lindsay Robertson**

Lecture presented to ‘PUBH 192 Foundations of Epidemiology’, *Tobacco Control in New Zealand*, University of Otago, 30 September 2016.


Four presentations to ‘4th Year Medical Student Public Health Attachment Preventive and Social Medicine’, *Tobacco Control in New Zealand*, University of Otago, 7 April, 9 June, 14 July, and 21 September 2016.
Contributions to student supervision

**PhD students**

**Lindsay Robertson**, *Regulation of tobacco retailing.*
Supervisors: Louise Marsh, Rob McGee, Janet Hoek.

**Aimee Ward**, *Mobility Health: Bridging the gap between youth travel behaviour and well-being.*
Supervisors: Rob McGee, Claire Freeman, Claire Cameron.

**Masters’ students**

**Judy Clarke**, *A study of health capability in a group of female health care assistants working in the aged-care residential sector.*
Supervisors: Richard Egan, Trudy Sullivan.


**Anita Grant**, *Secondary School Health Education: An analysis of the underlying processes.*
Supervisors: Richard Egan, Catherine Morrison.

**Manal Murad**, *Local authority Long Term Plans and Smokefree 2025: how committed are councils to the goal?*
Supervisors: Louise Marsh, Rob McGee.

**Sarah Wood**, *New Zealand health promotion planning and evaluation: a qualitative study.*
Supervisors: Richard Egan, Rose Richards.

**Summer students**

**Emilie Butterfield**, *New Zealand health promoters: A national cross-sectional survey.*
Supervisor: Richard Egan.

**Johanne Nee-Nee**, *New Zealand media reports regarding cancer.*
Supervisor: Rose Richards.

**Elizabeth Peterson**, *New Zealand media reports regarding sun safe behaviours and melanoma coverage.*
Supervisor: Rose Richards.

**Mary Jane Kivalu**, *A review of DHB interpretation and translation services as a barrier to Pacific access to appropriate healthcare.*
Supervisor: Rose Richards.
Dr Richard Egan
Board member of the Health Promotion Forum of New Zealand
Past President Public Health Association of New Zealand
Advisor to Age Concern New Zealand “policy skills bank”
Ian and Elespie Prior Trust for Health and Well-being (founding Trustee)
Trustee - The New Zealand Institute for Cancer Research Trust
Member Psycho-oncology New Zealand
Member Psycho-oncology Cooperative Research Group (Australia/New Zealand)
Chairperson - Spirituality and Well-being Strategy Group
Examiner: Master’s thesis for Otago, Auckland and Massey Universities

Reviewed papers submitted to:
Journal of Primary Health Care, New Zealand Medical Journal, Health & Social care in the Community, Focus on Health Professional Education

Dr Brett Maclennan
Member of Cancer Society New Zealand Physical Activity, Alcohol and Nutrition Operational Group

Reviewed papers submitted to:
Drug and Alcohol Review, Contemporary Drug Problems, Health Education Research, Social Psychiatry and Psychiatric Epidemiology, Alcohol and Alcoholism

Dr Louise Marsh
Member of New Zealand Public Health Association
Member of ASPIRE 2025

Reviewed papers submitted to:

Professor Rob McGee
Member of Board, Cancer Society New Zealand Otago & Southland Division
Member of Research Coordinating Group, New Zealand Youth Tobacco Monitor, Health Promotion Agency
Member of ASPIRE 2025

Reviewed papers submitted to:

Mrs Bronwen McNoe
Member of Coordination Team for the Community Guide Skin Cancer Review update (convened by the Centers for Disease Control and Prevention, Atlanta)
**Associate Professor Tony Reeder**

Coordination Team for the Community Guide Skin Cancer Review update (Convened by the Centers for Disease Control and Prevention, Atlanta, Georgia, USA)

Member of International Scientific Advisory Committee for 3rd International Conference on UV and Skin Cancer Prevention

New Zealand Primary Prevention and Early Detection Research Advisory Group (HPA)

Research Coordinating Group for the New Zealand Sun Exposure Survey (HPA)

New Zealand Skin Cancer Primary Prevention and Early Detection Steering Committee (HPA, CS, etc.)

NZSCPREDS Sub-Committee for the 2015 Melanoma Summit primary prevention stream (HPA, CS etc.)

Reviewed papers submitted to:
American Journal of Preventive Medicine, Australasian Journal of Dermatology, Cancer Epidemiology, Dermatology and Therapy (2), Health Education Research, Health Promotion Journal of Australia, JAMA Dermatology

Reviewed grant applications submitted to:
Croatian Science Foundation (HRZZ)

Reviewed conference papers:
3rd International Conference on Radiation and Application in Various Fields of Research (RAD)

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**Ms Lindsay Robertson**

Member of Aspire 2025 research collaboration and University of Otago research theme

World Heart Federation Emerging Leader Think-Tank, 2016

Reviewed papers submitted to:
An extensive backlist of publications is produced separately and available from our website, where further information is also available about our staff and postgraduate students.

**Referred papers**


**Letters published in scientific journals**


**Theses**


**Reports**


Edited volume of conference proceedings


Conference contributions (published proceedings)


Conference presentations


Egan, R. *Cancer Stories How can a cancer diagnosis possibly be positive?* Verbal presentation at the Department of Preventive and Social Medicine In-House convention, Dunedin, New Zealand, 21 June 2016.


Ramage, S., Keane, B., Egan, R. *Talking past each other: The results of a quality improvement project to address spiritual care in a cancer treatment ward*. Verbal presentation at the conference for Chaplaincy in Aotearoa / New Zealand: development, dialogue & diversity: telling our story, Dunedin, 2 December 2016.

Richards, R. *Cancer awareness among NZ adults*. Verbal presentation at the Department of Preventive and Social Medicine In-House convention, Dunedin, New Zealand, 21 June 2016.

Workshop presentations


McGee, R. *Should we pay people to stop smoking?* Presentation to the Smokefree 2025 Research Symposium, Wellington, 26 October 2016.


Public seminars and lectures

Egan, R. *Spirituality is a public health issue*. Public Health Seminar Series, Department of Preventive & Social Medicine in association with the Public Health Association Otago/Southland, University of Otago, Dunedin, 20 October 2016.

Marsh, L., & Robertson, L. *New Zealand's tobacco retail landscape: problems and potential strategies*. Public Health Seminar Series, Department of Preventive & Social Medicine in association with the Public Health Association Otago/Southland, University of Otago, Dunedin, New Zealand, 7 April 2016.


Richards, R. *Brockville Community Development Project: A health perspective*. Public Health Seminar Series, Department of Preventive & Social Medicine in association with the Public Health Association Otago/Southland, Dunedin, 17 March 2016.


Professional publications


Media Releases

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McNoe, B. & Reeder, A.I. NZ banning sunbeds will have little impact on jobs: Otago University, media release, 2 December 2016.

Richards, R. New Zealanders need high quality cancer information: Otago University, media release, 2 December 2016.
Submissions to government agencies


Media reports 2016

09/03/2016 Day-to-day life forces reflection, Hawkes Bay Today
30/03/2016 Study rates NZ worst in world for melanoma, NZDoctor.co.nz
30/03/2016 Kiwis harming themselves in the sun with world-worst melanoma rates, stuff.co.nz
30/03/2016 Study finds NZ's melanoma rates highest in world, voxy.co.nz
30/03/2016 NZ now has highest melanoma rate in world, NZCity
30/03/2016 NZ has highest melanoma rate in world, SkyNews
30/03/2016 NZ melanoma rate overtakes Australia, Lucy Warhurst, Newshub
30/03/2016 NZ now has highest melanoma rate in world, Alicia Burrow, Newstalk ZB
30/03/2016 Kiwi mum petitions for free sunscreen as NZ overtakes Australia's melanoma rate, NZ Herald
30/03/2016 Schools: Not enough money to mow lawns let alone supply sunblock, NZ News
30/03/2016 NZ Overtakes Australia As Country With Worse Rate For Invasive Melanoma, Techtimes
30/03/2016 NZ overtakes Australia's skin cancer rate, Otago Daily Times
30/03/2016 NZ highest rate of melanoma worldwide, Checkpoint with John Campbell, Radio NZ
30/03/2016 NZ has the highest Melanoma rate in the world as the disease gets worse, TV3, Wellington, Newshub Late, Samantha Hayes
30/03/2016 NZ is now the country with the highest melanoma rate while cases of skin..., PRIME, Wellington, Prime News, Eric Young
30/03/2016 NZ has the highest rate of invasive melanoma - the deadliest form of skin...Radio NZ - National, Wellington, Checkpoint, John Campbell
30/03/2016 NZ now has the highest rate of invasive melanoma in the world, overtaking Australia.... Newstalk ZB, Auckland, Newsreader
30/03/2016 Study finds NZ's melanoma rates highest in the world, The News-Westport, General News
30/03/2016 Schools don't have resources to be sunsmart, Newstalk ZB
31/03/2016 Secondary students not getting enough sun protection, study finds, The Dominion Post
31/03/2016 Secondary schools not so sun safe, Radio NZ
31/03/2016 Teens not acting on sunsmart message, researchers warn, One News, tvnz
31/03/2016 Schools: Not enough money to mow lawns let alone supply sunblock, Newstalk ZB
31/03/2016 Sun protection study's long shadow, NZ Herald, Auckland
31/03/2016 Slip, slop, slack Sporty teens at risk, The Dominion Post
31/03/2016 Skin cancer rate 'a wake up', NZ Herald
31/03/2016 Schools score badly for sun sense, Otago Daily Times
31/03/2016 NZ worse than Aust for melanoma rates, Nelson Mail
31/03/2016 NZ melanoma rates pass Aust’s, Otago Daily Times
31/03/2016 Numbers nearly double in 30 years, The Dominion Post
31/03/2016 Mother petitions Government to provide free sunscreen for all children, Greymouth Star
31/03/2016 More melanoma prevention needed, Manawatu Standard
31/03/2016 Wake-up call – NZ tops world melanoma rates, Hokitika Guardian
31/03/2016 NZ overtakes Australia’s invasive melanoma rate, Gisborne Herald
31/03/2016 Melanoma rates rising, Hawke’s Bay Today, Daily Post, Northern Advocate, Wairarapa Times Age, Bay of Plenty Times, Wanganui Chronicle
31/03/2016 University of Otago Associate Professor Tony Reeder says Dunedin high schools do not... Newstalk ZB
31/03/2016 The University of Otago has presented research that shows Dunedin high schools are not... Newstalk ZB
31/03/2016 University of Otago research has highlighted concerns over the melanoma risk for... TV2, Paul Henry
31/03/2016 University of Otago researchers have found that Dunedin students have poor ‘sun smart’ habits. Newstalk ZB
31/03/2016 A University of Otago study has shown that only 3% of high school students wear hats or... TV3, Paul Henry
31/03/2016 University of Otago researchers found that only 3% of high school students wore.... Newstalk ZB
31/03/2016 Some NZ secondary schools say they lack the resources to protect students... Newstalk ZB
31/03/2016 University of Otago research shows that Dunedin high schools are not providing... Radio 531pi
31/03/2016 The Government is being urged to assist young NZ students with avoiding skin... TV3, Paul Henry interviews Tony Reeder
31/03/2016 Hosking says University of Otago research shows that secondary school children in New.... Newstalk ZB, Tony Reeder speaks to Mike Hosking
31/03/2016 University of Otago researchers have found that ten Dunedin schools do not have... Newstalk ZB
31/03/2016 New research shows NZ high schools may be lagging behind primary schools... Newstalk ZB
31/03/2016 New research from University of Otago suggests that NZ high schools are... Newstalk ZB
31/03/2016 Lynch explains that NZ has the highest rates of melanoma in the world. Newstalk ZB Christchurch, Canterbury Mornings, Chris Lynch
31/03/2016 Otago University researchers have surveyed the sun smart habits of Dunedin high school... Newstalk ZB
1/04/2016 NZ schools score badly for sun sense, Hokitika Guardian
2/04/2016 Time to shed thick skin on melanoma, Wanganui Chronicle
2/04/2016 ‘D’ for high school on sun care, Dominion Post Weekend
2/04/2016 Time to shed our thick skin on melanoma, Weekend Herald
2/04/2016 NZ Melanoma stats ‘should be wake-up call’, Ashburton Guardian
4/04/2016 NZ’s sun is a killer, The Press
10/04/2016 Call for clampdown on tobacco sales outlets, Radio NZ National
10/04/2016 Tobacco controls needed, Radio NZ
10/04/2016 Specialist tobacco stores only, Radio NZ
11/04/2016 New research shows that teenagers are less knowledgeable about being sun smart ... TV ONE NEWS
11/04/2016 Teenagers ignoring sun messages, TV ONE NEWS
11/04/2016  Teenagers’ sunsmart knowledge lacking, TV ONE NEWS
11/04/2016  NZ has the highest rate of invasive melanoma in the world, and research ...TV ONE NEWS
12/04/2016  Only 3% of high school students wearing sun hats on sports day – study, TV ONE NEWS
25/09/2016  Melanoma. The Burning Issue, Channel 39.conz, interview with Tony Reeder and Bronwen McNoe
02/12/2016  New Zealanders need high quality cancer information, World News Report – EIN, Medical Xpress
02/12/2016  Otago Uni study calls for sunbed ban, Yahoo!NZ, NZ City, MSN NZ
02/12/2016  Sainsbury raises Otago University researcher’s call to get rid of sunbeds. Mawley says sunbeds are ‘appalling’, TV3, Paul Henry
02/12/2016  Ban sunbeds to reduce skin cancer rates, Science Media Centre
02/12/2016  Calls for ban of commercial sunbeds, NZ Herald
02/12/2016  Outright ban on sunbeds would reduce skin cancer rates – study, Newstalk ZB
02/12/2016  Academics call for sunbed ban in bid to shrink cancer rates, Newshub
03/12/2016  High demand for cancer info revealed, Newstalk NZ, NZ City, MSN NZ
03/12/2016  Study Finds Banning of Tan Beds Would Save Lives. Is It Feasible? Yahoo! News
04/12/2016  Research shows commercial sunbed ban would have minimal impact on jobs, Australasian Leisure Management
05/12/2016  New Zealanders need high quality cancer information, NZDoctor.co.nz
06/12/2016  New Zealanders need high quality cancer information, Oncology News Australia
06/12/2016  Ban on sunbeds, TVNZ 1 – Breakfast, interview with Bronwen McNoe
06/12/2016  Ban on sunbeds, Radio NZ, interview with Bronwen McNoe
06/12/2016  Sunbed Dangers Highlighted Again, World News Report – EIN
11/12/2016  Caring for our elderly, Radio NZ, Sunday morning Wallace Chapman