2024 SRNT-Oceania Conference

Program and Abstracts

SRNT OCEANIA

30 May 2024
Brisbane, Australia

TABLE OF CONTENTS

DISCLAIMER

People who are affiliated with or employed by tobacco or vaping product entities (current or in the past 5 years), tobacco or vaping product industry consultants or lobbyists were not permitted to attend or present at the 2024 SRNT-O Conference.

For this conference, tobacco and vaping product entities were defined as:

- any company that manufactures/distributes combustible tobacco products or vaping products
- any company or organisation that is a wholly or partially owned subsidiary of any of the above
- any company whose intellectual property is owned fully or partially by any of the above

All presenters were required to list all funding sources for the presented work and any conflicts of interest.

PEER-REVIEW PROCESS

The peer-review process for the SRNT-Oceania Conference entailed abstract review by Society members. Criteria for acceptance/rejection were based upon methodological rigor and not the funding resource or research findings.

The views expressed by conference presenters are the authors' own and do not necessarily represent the views of SRNT-Oceania.

KEYNOTE SPEAKERS

Associate Professor Andrew Waa, University of Otago

*Whāia te iti kahurangi: A history of tobacco resistance and endgames in Aotearoa*

A/Prof Andrew Waa is a Research Fellow based at the Eru Pōmare Māori Health Research Centre, Department of Public Health, University of Otago. He is a Co-Director of ASPIRE Aotearoa and a trained social scientist with Postgraduate degrees in Public Health. His work includes evaluations of community, national and government level policies, programmes, and services, and he has also lectured and developed aids for teaching evaluation methods. Andrew's public health interests include teaching Hauora Māori, conducting Māori Health research and conducting research with Māori communities. He is involved with tobacco research, health promotion, evaluation and interventional design and urban Māori wellbeing.

Abstract

For Māori, tobacco is intimately associated with colonisation, exploitation and harm. As a result, Māori resistance to tobacco is closely tied to Indigenous rights and holding government to account. This presentation will provide an overview for how tobacco has, and continues, to play a role in colonial practices and how this has manifested in high smoking rates among Māori. A brief history of Māori resistance to tobacco will be provided. This will include the genesis of the Auahi Kore (Smokefree) and Tupeka Kore (Tobacco Free) movements and how their influence on government policy, in particular the government's commitment to a Smokefree Aotearoa and the eventual passing of the Smokefree legislation in 2022. Māori resistance to the subsequent repeal of the Smokefree legislation will then be highlighted. The presentation will conclude with reflections on values underpinning Māori tobacco resistance, the role of evidence, and their role in influencing tobacco control policies.

Ms Selah Hart, Te Aka Whai Ora - Māori Health Authority

Achieving Smokefree 2025 – An indigenous-led movement that continues
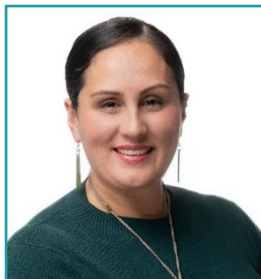
Selah Hart is Deputy Chief Executive Officer of Public and Population Health, Te Aka Whai Ora - Māori Health Authority and was an inaugural member of the National Smokefree Taskforce for Aotearoa New Zealand. Selah is of Ngāti Kuia, Ngāi Tahu, Ngāti Toa Rangatira, Ngāti Apa Ki Te Ra To, and Ngāti Kahungungu ki Wairarapa whakapapa and worked for Hāpai Te Hauora, the largest iwi owned Māori public health organisation in Aotearoa New Zealand, from 2009 and as their CEO from 2019 - 2023. Selah has led many advocacy campaigns to address inequalities and create systematic changes to the New Zealand health system. Selah has spent her working career dedicated to serving whānau, hapu, iwi and communities in Māori Health in her hometown of Blenheim, in her current home of Auckland, and now on a national level as a part of the significant health reforms, striving to achieve Pae Ora which aims to protect, promote and improve the health outcomes of Aotearoa New Zealand.

Abstract

Selah Hart will discuss the importance of achieving the Smokefree2025 goal through a sustained continuous indigenous-led movement in Aotearoa New Zealand. She will highlight the successes and challenges faced by the indigenous peoples of Aotearoa New Zealand in reducing smoking rates and the strategies needed to continue to progress towards the goal of less than 5% prevalence for all population groups in Aotearoa New Zealand. This presentation will emphasize the significance of culturally "fit-for-purpose" approaches that are community designed and community led. It will set the context for the shift in smoking rates through harm reduction products, and more importantly, the empowering of communities to live without the clutch-hold of tobacco addiction.

Prof Richard Edwards, University of Otago & Prof Chris Bullen, University of Auckland

Kia whakatōmuri te haere whakamua: Walking backwards into the future, my eyes fixed on the past - responding to the Repeal of New Zealand's Smokefree Act

Prof Richard Edwards is a Professor of Public Health at the Department of Public Health, University of Otago, Wellington. He is co-Director of ASPIRE Aotearoa Research Centre and of the Whakahā o te Pā Harakeke research programme. He is also co-Principal Investigator of the Evidence for Achieving Smokefree Aotearoa Equitably (EASE) study (New Zealand arm of the International Tobacco Control (ITC) Evaluation project). Richard is a Fellow of the New Zealand College of Public Health Medicine and of the Society of Research on Nicotine and Tobacco and serves on various expert advisory committees, including for Hāpai Te Hauora National Tobacco Advocacy Service and the Health Coalition Aotearoa. He trained as a public health physician in the UK and has over 20 years of experience in tobacco control practice and research in the UK and New Zealand. His main research interests are in tobacco use epidemiology and tobacco control, focusing particularly on population-based tobacco control policies, tobacco endgames and research to help achieve a tobacco free Aotearoa/New Zealand.

Prof Chris Bullen is a Professor of Public Health at the School of Population Health, University of Auckland, the Academic Director of the National Institute for Health Innovation, and a member of the TRANSFORM Research Centre, the Centre for Addiction Research, and Manaaki Manawa (Centre for Heart Research). Chris is a Fellow of the Society for Research on Nicotine and Tobacco (SRNT), the immediate Past-President of SRNT, and a past-President of the SRNT-Oceania Chapter. Chris is also a Fellow of the Faculty of Public Health Medicine, Royal Australasian College of Physicians, and a Fellow of the New Zealand College of Public Health Medicine. Chris trained as a physician in Aotearoa New Zealand and after a decade in clinical practice in Aotearoa and overseas, he trained as a consultant in public health medicine. Chris' current research focuses on identifying affordable, practical, and scalable interventions that address the leading non-communicable diseases in New Zealand and low- and middle-income countries. He has an international reputation for his expertise in smoking cessation research. Chris currently leads a Ministry of Health–funded project to monitor the illicit trade in

tobacco and is the principal investigator on the CENIC-NZ study, which seeks to monitor the knowledge, views and behaviours of people who smoke to policy changes.

Abstract

Under the Labour Party-led government, in December 2022, the SERPA Amendment Act was passed into law in Aotearoa, New Zealand, giving power to the government to proceed with planning and implementing three radical 'endgame' policies: retailer reduction by 80%, mandatory denicotinisation to non-addictive levels of all tobacco products, and the Smokefree Generation policy (banning the sale of tobacco to anyone born after 1st January 2009). Together, this mix of strategies, none of which have been implemented at the national level in any country, was predicted to rapidly reduce smoking prevalence for all population groups to around 5% or lower within a few years of the 2025 target date set over a decade before under a National Party-led Government. Ironically, just 16 months after the Act came into force, it was repealed by a new National Party-led Coalition government in February 2024 as part of the government's Coalition agreement. In this presentation of three parts, we outline the background to the Act – its rationale, evidence base, and its passage into law. Next, we describe the Act's repeal, including the political arguments used to support it and its origins, the efforts by the tobacco control community to stop it, and the immediate impacts on the tobacco control landscape in Aotearoa, New Zealand. Finally, we share our thoughts about the implications of this policy *volte-face* on the 2025 goal, what has been learned through this bruising experience, and what it signals for prospects for tobacco control in Aotearoa, New Zealand and elsewhere.

2024 SRNT-OCEANIA CONFERENCE – ORAL PRESENTATIONS

Time	Oral Health Centre Learning Theatre (4401)	Oral Health Centre Tutorial Room (4311)	Mayne Medical School ES Meyers Lecture Theatre (416)
8:00	Registrations open – Oral Health Centre, Foyer		
8:30	Opening Address: **Prof Coral Gartner**		
9:00	Keynote: **A/Prof Andrew Waa** *Whāia te iti kahurangi: A history of tobacco resistance and endgames in Aotearoa*		
9:25	Keynote: **Selah Hart** *Achieving Smokefree 2025 – An indigenous-led movement that continues*		
9:50	Keynote: **Prof Richard Edwards & Prof Chris Bullen** *Kia whakatōmuri te haere whakamua: Walking backwards into the future, my eyes fixed on the past - responding to the Repeal of New Zealand's Smokefree Act*		
10:20	Panel Discussion		
10:40-11:00	Morning Tea & Poster Session – Oral Health Centre, Seminar Rooms		
11:05-12:40	**Session 1A – Supply (licit and illicit)** Chair: Dr Tamara Tabbakh	**Session 1B – Smoking or vaping in pregnancy** Chair: Prof Megan Passey	**Session 1C – Vaping symposium** Chair: Dr Kylie Morphett
11:10	**1A-1 Alycia Simmonds** *Removal of tobacco vending machines from alcohol-licensed venues: An opportunity to create cessation-supportive environments*	**1B-1 Dr Larisa Barnes** *Are women vaping in pregnancy and the early postpartum? Current data from New South Wales, Australia*	**1C-1 Eve Taylor** *Comparing levels of toxicants among people who vape, smoke, dual use, or do neither among people with and without experience of psychosis*
11:25	**1A-2 Veronica Martin-Gall** *Where are legal smoking products sold in Tasmania?*	**1B-2 Dr Annelies Robijn** *Uptake of smoking cessation pharmacotherapies during pregnancy across four countries: A drug utilisation study from Australia, New Zealand, Norway, and Sweden*	**1C-2 Giang Vu** *Predicting the long-term effects of electronic cigarette use on population health: A systematic review of modelling studies*

2024 SRNT-OCEANIA CONFERENCE – ORAL PRESENTATIONS

Time	Oral Health Centre Learning Theatre (4401)	Oral Health Centre Tutorial Room (4311)	Mayne Medical School ES Meyers Lecture Theatre (416)
11:40	**1A-3 Ruth Canty** *Tobacco retailer density in the Northern Territory, Australia*	**1B-3 Dr Duong Tran** *Maternal use of smoking cessation pharmacotherapies and the risk of congenital malformations in infants: A multi-national study*	**1C-3 A/Prof Hua-Hie Yong** *Beliefs about the adverse health consequences of vaping and association with vaping relative harm misperceptions among adults who smoke cigarettes: Findings from the 2020 ITC smoking and vaping survey*
11:55	**1A-4 Dr Janine Nip** *Use of foreign, counterfeit, smuggled, or homegrown tobacco by people who smoke in Aotearoa New Zealand: Findings from the 2022 ITC New Zealand (EASE) survey*	**1B-4 Prof Gillian Gould** *The RE-AIM framework evaluation of the iSISTAQUIT implementation for training health professionals in smoking cessation care of Aboriginal and Torres Strait Islander pregnant women*	**1C-4 Dr Katherine East** *Vaping risk perceptions: A systematic review of associations with vaping and smoking behaviours and interventions to change them*
12:10	**1A-5 Alvina Pau'uvale** *Understanding the use and supply of Tapaka Tonga amongst Tongan people in New Zealand*	**1B-5 Dr Angela Ratsch** *Regional Queensland Indigenous family's patterns of tobacco, nicotine and cannabis use and exposure during pregnancy*	**1C-5 Dr Samuel Brookfield** *Transparent toilet blocks & vaping Quokkas: Frame analysis of how the Australian media has reported on youth vaping*
12:25	**1A-6 Prof Janet Hoek** *E-cigarette supply routes used by underage youth in Aotearoa: A qualitative analysis*		
12:40-1:30	Lunch & Poster Session – Oral Health Centre, Seminar Rooms		
1:35-2:55	**Session 2A – Product regulation** Chair: Dr Emily Brennan	**Session 2B – Smoking cessation 1** Chair: A/Prof Gade Waqa	**Session 2C – Youth vaping** Chair: Dr Carmen Lim
1:40	**2A-1 Dr Tamara Tabbakh** *Anti-tobacco message length and skippability: An experimental study examining impact on quit outcomes*	**2B-1 Kelsey Sharrad** *Preliminary results of a Cluster Randomized Control Trial examining a smoking cessation training program and culturally-tailored resources*	**2C-1 Prof Janet Hoek** *Young people's progression to and experiences of addiction to nicotine vaping products: A qualitative analysis from Aotearoa New Zealand*
1:55	**2A-2 Lani Teddy** *Moving beyond fear to hope: A qualitative analysis of responses to efficacy labels from people who smoke*	**2B-2 Jia-Ling Wu** *Decision tree analysis of individual and medical institution characteristics associated with successful smoking cessation in Taiwan*	**2C-2 Prof Janet Hoek** *Self-reported impacts of nicotine vaping on wellbeing in Aotearoa New Zealand: Findings from the ITC Youth & Young Adult Survey*

2024 SRNT-OCEANIA CONFERENCE – ORAL PRESENTATIONS

Time	Oral Health Centre Learning Theatre (4401)	Oral Health Centre Tutorial Room (4311)	Mayne Medical School ES Meyers Lecture Theatre (416)
2:10	**2A-3 Tegan Nuss** *Can public communication about a ban on menthol tobacco products boost quit intentions?*	**2B-3 Chun-Ying Chen** *Associations of different nicotine replacement therapy regimens with successful smoking cessation in Taiwan: using real-world data and assessing outcomes at the 6-month mark*	**2C-3 Dr Robin Quigg** *To vape is to stealth vape*
2:25	**2A-4 Dr Ernesto Sebrie** *Tobacco packaging and labeling policies in the WHO African Region: Progress 15 years after adoption of the WHO Framework Convention on Tobacco Control Article 11 Implementation Guidelines*	**2B-4 Dr Katherine Rieth** *Pre-operative tobacco treatment for patients with cancer: A trial in progress with a pivot to an opt-approach in collaboration with a preoperative anesthesia clinic*	**2C-4 Dr Mary-Ellen Brierley** *Perceptions of anti-vaping message themes: A qualitative study of Australian adolescents and adults*
2:40	**2A-5 David Sellars** *Knowledge and attitudes toward the health and environmental impacts of cigarette filters: Findings from a survey of the Australian population*	**2B-5 Melis Selamoglu** *Perceptions of Australian general practitioners on e-cigarettes as smoking cessation aids: a qualitative study*	
2:55-3:15	Afternoon Tea & Poster Session – Oral Health Centre, Seminar Rooms		
3:20-4:40	**Session 3A – Policy** Chair: A/Prof Raglan Maddox	**Session 3B – Smoking cessation 2** Chair: A/Prof Alys Havard	**Session 3C – Youth vaping and interventions** Chair: Dr Nia Luxton
3:25	**3A-1 Prof Ron Borland** *Have tobacco control measures lost their potency? Evidence from countries with long established programs*	**3B-1 Prof Christine Paul** *Co-designing models of smoking cessation care in tertiary care: Outputs and challenges in 9 cancer centres in Australia*	**3C-1 A/Prof Francis Dalisay** *Effects of the pilot version of Fuetsan Manhoben, a school-based prevention curriculum for Guam and USAPI youths, on e-cigarette use prevention*
3:40	**3A-2 Dr Wendy Winnall** *Flavourants and other chemicals in tobacco sold in Australia: Limitations of the voluntary disclosures from tobacco companies*	**3B-2 Sally Plever** *System change intervention for multi-site implementation of smoking cessation in public community psychiatric settings*	**3C-2 A/Prof Kristin Carson-Chahhoud** *Interim findings of a financial incentive to quit (I2Q) smoking and vaping pilot project*
3:55	**3A-3 Dr Amy Villarosa** *The use of dissuasive measures on cigarettes: A review of global evidence*	**3B-3 Prof Lynne Dawkins** *Evaluating the effectiveness of an e-cigarette offer versus usual care for smoking cessation among people experiencing homelessness: A cluster-randomized controlled trial in Great Britain*	**3C-3 Shu-Ying Lo** *Use of e-cigarettes rising among junior and senior high school students in Taiwan*

2024 SRNT-OCEANIA CONFERENCE – ORAL PRESENTATIONS

Time	Oral Health Centre Learning Theatre (4401)	Oral Health Centre Tutorial Room (4311)	Mayne Medical School ES Meyers Lecture Theatre (416)
4:10	**3A-4 Prof Sarah Durkin** *An experimental study of pack health warnings to inform people who smoke about the misleading effects of tobacco product manipulations*	**3B-4 Prof Kimber Richter** *Changing the default for tobacco treatment: How did opt-out treatment work at theoretical and interpersonal levels?*	**3C-4 Prof Janet Hoek** *Lived experiences of stigma and judgment among young people who vape: A qualitative study from Aotearoa New Zealand*
4:25	**3A-5 Claudia Gascoyne** *Do responses to product manipulation health warnings predict subsequent quitting-related behaviours? Findings from a cohort study of Australian adults who smoke*	**3B-5 Prof Caitlin Notley** *Smoking cessation in the emergency department - Mechanisms of action in an opportunistic intervention for supporting positive behaviour change*	**3C-5 Prof Janet Hoek** *Removing or returning freedom? Perceptions of a nicotine-free generation policy among young people who vape*
4:45-5:10	**Session 4A – Rapid Fire** Chair: Prof Sarah Durkin	**Session 4B – Rapid Fire** Chair: Prof Chris Bullen	
4:50	**4A-1 Dr Pyi Pyi Phyo** *Estimating New Zealand's Illicit tobacco trade using consumption gap analysis*	**4B-1 Aditya Gunturi** *North American College Health Services rarely highlight the harms of vaping flavors*	
4:54	**4A-2 Dr Cheneal Puljević** *Patterns of illicit tobacco use among respondents of the 2024 Global Drug Survey*	**4B-2 Dr Elizabeth Greenhalgh** *Socioeconomic inequalities in smoking among Australians with health conditions*	
4:58	**4A-3 Megan Bayly** *Opportunities to down-trade tobacco products after a tax increase in Australia*	**4B-3 Masum Billah** *Tobacco smoking of refugees and health promotion in high-income countries: A systematic review and narrative synthesis*	
5:02	**4A-4 Frankie Berardi** *Profits over people: The case for prosecuting tobacco companies for homicide offences in Queensland*	**4B-4 Dr Masudus Salehin** *Do GPs in Australia smoke? Findings from a cross-sectional study*	
5:15-5:30	Announcement of SRNT-O award winners and closing remarks: **Prof Coral Gartner & Prof Sarah Durkin**		
6:00-9:00	Evening Function – Victoria Park Function Venue, Quartz Room		

ABSTRACTS - ORAL PRESENTATIONS

Session 1A – Supply (licit and illicit)

1A-1 REMOVAL OF TOBACCO VENDING MACHINES FROM ALCOHOL-LICENSED VENUES: AN OPPORTUNITY TO CREATE CESSATION-SUPPORTIVE ENVIRONMENTS

Christina Watts[1,2], Suzan Burton[3], Natalia Lizama[4], Lorena Chapman[4], Francine Garlin[3], Michelle Daley[2], Sam Egger[1,2]. Presenter: **Alycia Simmonds**[4]. [1]The Daffodil Centre. [2]Cancer Council NSW. [3]Western Sydney University. [4]Cancer Council WA.

Background/Introduction: For people attempting to quit smoking, the ready availability of tobacco in alcohol-licensed venues can thwart a cessation attempt, particularly if they are triggered to smoke while experiencing alcohol-induced disinhibition. Removal of tobacco vending machines (VMs) from alcohol-licensed venues represents an opportunity to render these venues more conducive to smoking cessation. However, little is known about the degree of support for doing so among venue owners. This study sought to assess attitudes and experiences towards VM tobacco sales among owners or managers of alcohol-licensed venues. Methods: Owners/managers of Australian alcohol-licensed venues participated in a telephone survey. Participants who owned/managed venues with tobacco VMs described venue characteristics and mode of tobacco selling (exclusively VM or VM plus other sales modes). Logistic regression was used to examine associations between venue characteristics and mode of tobacco selling. Participants rated the importance of tobacco sales to their business and the likelihood of their venue stopping tobacco sales, and provided open-ended responses in which they explained the reason for their rating. Results: For most venues that sold tobacco exclusively via VMs, profit from tobacco sales was not considered important. Despite this, only 4% of venues reported being likely to stop selling tobacco. Concerns about stopping tobacco sales included customer dissatisfaction and potential loss of customers. Discussion/Conclusion: This study provides new evidence about attitudes towards tobacco VMs among owners/managers of alcohol-licensed venues. The results indicate that removing tobacco VMs from alcohol-licensed venues offers an opportunity to expand cessation-supportive environments without adverse financial impact on venues.

1A-2 WHERE ARE LEGAL SMOKING PRODUCTS SOLD IN TASMANIA?

Veronica Martin-Gall[1,2], Kate Chappell[2], Seana Gall[2], Mark GK Veitch[1]. [1]Department of Health, Tasmania Government. [2]Menzies Institute of Medical Research, University of Tasmania.

Background: The Tasmanian smoking product licensing scheme requires retailers to hold a licence to sell smoking products and retailers must report the volume of products sold during June each year. Volume sales data aims to inform local preventative health planning by complementing estimates of smoking prevalence, inform licensing and retail availability policy, and target smoking cessation services or interventions. We describe the findings of the first year of collection in June 2021. Methods: Retailers submit their sales via a text (csv) file or manual list of products and quantities through an online renewal and application system. Validated data of the store type, name, product type and number of smoking products were analysed in R statistical package. Results: 603 (87%) of outlets reported the volume of smoking products they sold in June 2021. Supermarkets sold most retail cigarettes (87%) then mixed businesses (6%), newsagencies (4%), and service stations (3%). The remaining points of sale, bottle shops, take aways, bars, pubs or clubs sold less than 1% of all cigarettes

sold. Loose tobacco (RYO) was purchased mainly in supermarkets (83%) then independent supermarkets (13%). Disposable e-cigarettes were mostly sold from mixed businesses (99%). The largest volume of e-liquid was sold in vape shops (63%) then by mixed businesses (37%). Discussion / Conclusion: In Tasmania, supermarkets are responsible for most tobacco product retail sales. These products cause great health and social costs. It is time to promote the prospect of voluntarily stopping selling tobacco as part of corporate social responsibility.

1A-3 TOBACCO RETAILER DENSITY IN THE NORTHERN TERRITORY, AUSTRALIA

Ruth Canty[1], Marita Hefler[1], Adam Bourke[2]. [1]Menzies School of Health Research. [2]EcoScience NT.

Background: Smoking prevalence in the Northern Territory (NT) is the highest in Australia, estimated at 17.3%. Average daily smoking prevalence among First Nations people was recently estimated at 37.3%. A decrease of nearly 10% over the previous 15 years. However, there is considerable diversity in smoking prevalence and variations between major cities and regional and remote areas. Greater densities of tobacco retailers are found in areas with greater levels of disadvantage, both globally and in Australia and have been linked to higher smoking prevalence. Restricting the availability of tobacco was identified in the National Tobacco Strategy 2023-2030 as a priority area; however, no state or territory currently regulates the location or density of tobacco retailers. Methods: With data from Licensing NT and the Australian Bureau of Statistics, we used geographic software QGIS to geolocate tobacco retailers and allocated remoteness (outer regional, remote & very remote) and socioeconomic status (SES). Descriptive analyses were used to report on the density of retailers by remoteness and SES. Results: We found that there are 439 tobacco retailers in the NT with a density per 1,000 persons ranging from 1.25 in outer regional areas (including Darwin) to 2.05 in remote areas and 3.24 in very remote areas. Conclusion: Tobacco retailer density increased with socioeconomic disadvantage and geographic remoteness, consistent with findings in other parts of Australia. In remote areas where smoking prevalence is both the highest in the country and not declining like other areas, high retailer density is a major challenge to reduce disparities.

1A-4 USE OF FOREIGN, COUNTERFEIT, SMUGGLED, OR HOMEGROWN TOBACCO BY PEOPLE WHO SMOKE IN AOTEAROA NEW ZEALAND: FINDINGS FROM THE 2022 ITC NEW ZEALAND (EASE) SURVEY

Janine Nip[1], Richard Edwards[1], James Stanley[1], Jude Ball[1], Jane Zhang[1], Andrew Waa[1], El-Shadan Tautolo[2], Thomas Agar[3], Anne C.K. Quah[3], Geoffrey T. Fong[3,4]. [1]University of Otago Wellington, Wellington, New Zealand. [2]Auckland University of Technology, Auckland, New Zealand. [3]University of Waterloo, Waterloo, ON, Canada. [4]Ontario Institute for Cancer Research, Toronto, ON, Canada.

Background: An argument made against introducing new smokefree measures is they may increase illicit and/or homegrown tobacco use. In Aotearoa New Zealand, recent smokefree measures include annual above-inflation tobacco excise increases (2010-2020) and plain packaging (2018). We analysed data from the 2022 International Tobacco Control New Zealand (EASE) Survey to describe the extent of illicit and homegrown tobacco use by people who smoke. Methods: 1,040 adults were included (698 (67%) smoked daily, 342 (33%) smoked less than daily), including 415 (40%) Māori. Data were weighted to the New Zealand Health Survey to represent the national profile of people who smoke. We asked participants about foreign, counterfeit, or smuggled (FCS) and homegrown tobacco use.

"Refused" responses were excluded. "Don't know" responses were excluded from product use analyses. Results: 79.3% of participants reported no use of FCS tobacco in the previous six months. Very few (1.2%) reported use all the time. 75.4% reported no use of homegrown tobacco in the previous six months. 2.0% said they used it all the time. When asked how easy it would be to buy FCS tobacco, 5.5% said "very easy", 17.9% "easy", 20.5% "difficult", 24.5% "very difficult", and 31.6% said "don't know". When asked how easy it would be to get homegrown tobacco, 9.3% said "very easy", 23.4% "easy", 25.6% "difficult", 12.3% "very difficult", and 29.4% said "don't know". Conclusion: Frequent use of FCS or homegrown tobacco was uncommon despite high taxation, plain packaging measures, and many participants reporting FCS and homegrown tobacco were easily accessible.

1A-5 UNDERSTANDING THE USE AND SUPPLY OF TAPAKA TONGA AMONGST TONGAN PEOPLE IN NEW ZEALAND

Alvina Pau'uvale, Malakai 'Ofanoa, Chris Bullen. School of Population Health, University of Auckland.

Background: This study explored an alternative tobacco supply, Tapaka Tonga, used by the Tongan community in New Zealand. Under new tobacco control legislation, suppliers and growers will be heavily fined if caught selling or supplying in even moderate amounts. This study aimed to understand the use and supply of Tapaka Tonga amongst Tongan people and how best to communicate new legislation. Method: The participants were Tongan males aged 18 or older who supply or use Tapaka Tonga and were recruited using the Tongan researcher's networks. We did 16 in-depth interviews and two focus groups with ten men each, all in Tongan-by-Tongan researchers. We incorporated two Pacific methodologies: one, Talanga, to ensure interactive communication, and two, the Kakala model, to structure this research. Transcripts were translated into English and inductively themed. Results: Tapaka Tonga was already growing in New Zealand. Tongan migrants were familiar with this plant, which also grows in Tonga. It grew in popularity when prices of cigarettes increased and sold for roughly $10 for a 100-gram bag. The drivers for using and supplying Tapaka Tonga were the people's beliefs in the perceived health benefits and lack of evidence of harm to health, the affordability, and cultural significance as a gift or shared in social activities. Conclusion: To raise awareness of the harms of tobacco smoking, about the new legislation, and to reduce the likelihood of breaking the law, research-informed interventions that involve Tongan people in their design and development are needed.

1A-6 E-CIGARETTE SUPPLY ROUTES USED BY UNDERAGE YOUTH IN AOTEAROA: A QUALITATIVE ANALYSIS

Anna Graham-DeMello[1] Katie Frost[2], Jude Ball[1], Michaela Pettie[1], **Janet Hoek**[1]. [1]University of Otago, Wellington, New Zealand. [2]Otago School of Medicine, University of Otago, Dunedin, New Zealand

Background: Rising youth vaping indicates that young people in many countries circumvent restrictions preventing retailers from selling electronic cigarettes (ECs) to them. We explored how underage young people develop EC supply routes and considered potential policy responses. Methods: Using in-depth interviews, we probed EC supply routes used by 30 adolescents who lived in Aotearoa New Zealand, Participants were aged 16 or 17 and vaped at least once a month. We explored the social, quasi-commercial, commercial and personal supply routes they developed to access ECs and used an inductive reflexive thematic analysis approach to interpret the data. Results: We

identified four core themes: first, sharing as a widespread and opportunistic phenomenon. Nearly all participants shared ECs with peers and non-daily vapers relied on sharing as their primary access. Second, participants used proxies (e.g., older siblings) to purchase ECs on their behalf; some also approached previously unknown people via social media or in person, and asked these people to purchase ECs for them. Third, some used quasi-commercial networks operating within schools or social media, where older peers supplied ECs on commission. Finally, participants relied on peer intelligence to identify retail outlets with lax ID practices where they purchased on their own behalf. Conclusions: Reducing ECs' affordability could reduce sharing while decreased availability could make proxy purchasing less accessible. Evidence some commercial outlets waive age verification, suggests policy makers need to fund more comprehensive monitoring and enforcement, and introduce stronger retailer penalties.

Session 1B – Smoking or vaping in pregnancy

1B-1 ARE WOMEN VAPING IN PREGNANCY AND THE EARLY POSTPARTUM? CURRENT DATA FROM NEW SOUTH WALES, AUSTRALIA

Larisa Barnes[1,2], Jo Longman[2], Cathy Adams[3], Jacinta Felsch[4], Megan Passey[1,2]. [1]Daffodil Centre. [2]The University Centre for Rural Health, Faculty of Medicine and Health, The University of Sydney. [3]Maternity and Neonatal Safety Program, Clinical Excellence Commission, NSW Health. [4]Northern NSW Local Health District, NSW Health.

Introduction: Concerns about potential detrimental effects of antenatal e-cigarette use (vaping) on mothers' and babies' health have been expressed. However, little is known about patterns of vaping in pregnancy and the early postpartum in Australia. We present interim results from an ongoing study. Methods: Women aged 16+ years and identified as 'smokers' or 'quit during this pregnancy' at their initial antenatal visit were interviewed by telephone in the first two weeks postpartum. Data from May 2022-January 2024 were analysed. Results: Of 2521 eligible women, 1358 (53.9%) participated. Of these, 6.9% reported vaping in the week before they gave birth, and 6.4% reported vaping since giving birth. A smaller subset (n=581) was also asked if they had ever vaped; 55.3% responded yes. Of these, 17.2% reported vaping in early pregnancy but stopped once they discovered they were pregnant; 16.9% reported vaping throughout pregnancy; and 65.9% reported never vaping during pregnancy. Among those vaping at pregnancy end, 33% reported not vaping since the birth and 67% reported continuing to vape. There were no significant differences in the rate of vaping at end of pregnancy by location, parity or maternal age. Co-use with combustible tobacco was common, with 57% of women vaping at end of pregnancy also smoking. Discussion: These preliminary findings indicate some Australian women vape during pregnancy, commonly co-using alongside combustible tobacco. More data will be available prior to the conference and will be presented.

1B-2 UPTAKE OF SMOKING CESSATION PHARMACOTHERAPIES DURING PREGNANCY ACROSS FOUR COUNTRIES: A DRUG UTILISATION STUDY FROM AUSTRALIA, NEW ZEALAND, NORWAY, AND SWEDEN

Annelies Robijn[1], Duong T Tran[1], Jacqueline M. Cohen[2], Sarah Donald[3], Carolyn E. Cesta[4], Kari Furu[5], Lianne Parkin[3], Sallie-Anne Pearson[6], Johan Reutfors[4], Helga Zoega[6,7], Nicholas Zwar[8], Alys Havard[1,6]. [1]National Drug and Alcohol Research Centre, Faculty of Medicine and Health, UNSW Sydney, New South Wales, Australia. [2]Department of Chronic Diseases & Centre for Fertility and Health, Norwegian Institute of Public Health, Oslo, Norway. [3]Department of Preventive and Social Medicine, Dunedin School of Medicine, University of Otago, Dunedin, New Zealand. [4]Centre for Pharmacoepidemiology, Department of Medicine Solna, Karolinska Institutet, Stockholm, Sweden. [5]Department of Chronic Diseases & Centre for Fertility and Health, Norwegian Institute of Public Health, Oslo, Norway. [6]Medicines Intelligence Research Program, School of Population Health, Faculty of Medicine and Health, UNSW Sydney, New South Wales, Australia. [7]Centre of Public Health Sciences, Faculty of Medicine, University of Iceland, Reykjavík, Iceland. [8]Faculty of Health Sciences & Medicine, Bond University, Queensland, Australia.

Background: Contemporary estimates of the use of smoking cessation pharmacotherapies during pregnancy are lacking. We quantified, across four countries, the proportion of women using smoking cessation pharmacotherapies during pregnancy, and in the first trimester, the period of vulnerability for congenital malformations. Design and methods: In this distributed cohort study, all pregnancies resulting in birth (2015-2020) in New South Wales (NSW) Australia, New Zealand, Norway, and Sweden were linked to pharmaceutical dispensing's and inpatient care records. We defined smoking cessation pharmacotherapy use during pregnancy as days' supply overlapping the period from date of conception to childbirth. For each country, we calculated prevalence of use among all pregnancies and among pregnancies of women who were recorded as smoker. Among pregnancies where a pharmacotherapy was used, we quantified the proportion with use in the first trimester. Results: Among 1.7 million pregnancies across four countries, utilisation of varenicline ranged from 0.02% to 0.14%, prescription nicotine replacement therapy (NRT) ranged from less than 0.01% to 1.86% and bupropion ranged from less than 0.01% to 0.07%. There was some use during the first trimester for over 90% of pregnancies where varenicline was used, around 60% for NRT and 80-90% for bupropion. Conclusions: Few women used varenicline or bupropion during pregnancy, whilst NRT was used by a larger proportion. In exposed pregnancies, use in the first trimester, the vulnerable period for congenital malformations, was common, indicating the need for evidence on the risk of congenital malformations for these medicines.

1B-3 MATERNAL USE OF SMOKING CESSATION PHARMACOTHERAPIES AND THE RISK OF CONGENITAL MALFORMATIONS IN INFANTS: A MULTI-NATIONAL STUDY

Duong Tran[1], Jacqueline M. Cohen[2], Sarah Donald[3], Annelies L. Robijn[1], Carolyn E. Cesta[4], Kari Furu[5], Lianne Parkin[6], Sallie-Anne Pearson[7], Johan Reutfors[8], Helga Zoega[7,9], Nicholas Zwar[10], Alys Havard[1,7]. [1]National Drug and Alcohol Research Centre, UNSW Sydney, New South Wales, Australia. [2]Department of Chronic Diseases & Centre for Fertility and Health, Norwegian Institute of Public Health, Oslo, Norway. [3]Department of Preventive and Social Medicine, Dunedin School of Medicine, University of Otago, Dunedin, New Zealand. [4]Centre for Pharmacoepidemiology, Department of Medicine Solna, Karolinska Institutet, Stockholm, Sweden. [5]Department of Chronic Diseases & Centre for Fertility and

Health, Norwegian Institute of Public Health, Oslo, Norway. [6]Department of Preventive and Social Medicine, Dunedin School of Medicine, University of Otago, Dunedin, New Zealand. [7]Medicines Intelligence Research Program, School of Population Health, UNSW Sydney, New South Wales, Australia. [8]Centre for Pharmacoepidemiology, Department of Medicine Solna, Karolinska Institutet, Stockholm, Sweden. [9]Centre of Public Health Sciences, Faculty of Medicine, University of Iceland, Reykjavík, Iceland. [10]Faculty of Health Sciences & Medicine, Bond University, Queensland, Australia.

Background: Evidence about the safety of smoking cessation pharmacotherapies in pregnancy is inadequate. We assessed whether first trimester use of nicotine replacement therapy (NRT), varenicline, and bupropion increased the risk of major congenital malformations (MCMs). Methods: This distributed cohort study linked records of all livebirths (2003-2020) in New Zealand, New South Wales (Australia), Norway and Sweden to prescription dispensing, inpatient/outpatient care, and death data. We defined exposed pregnancies as a pharmacotherapy supply overlapped the first 13 weeks of gestation, and propensity-score matched with pregnancies of mothers who smoked without using pharmacotherapy. We identified MCMs overall and by body-system. We combined adjusted rate ratios (RR) using meta-analysis. Results: In total, 9325, 3031, and 1042 pregnancies were exposed to NRT, varenicline and bupropion, respectively. There were no major differences in MCMs overall for NRT (3.8% vs 3.4%; RR 1.10, 95%CI 0.98-1.22), varenicline (3.3% vs 3.7%; 0.90, 0.73-1.10), or bupropion (3.3% vs 3.8%; 0.93, 0.67-1.29). NRT analyses showed no differences in cardiac, limb, genital, renal, oral cleft or respiratory MCMs, but higher risk of digestive organ MCMs albeit small proportions (0.4% vs 0.3%; 1.53, 1.05-2.23). Varenicline analyses revealed no differences in cardiac, limb, or genital MCMs but higher risk of renal malformations (1.1% vs 0.4%; 2.75, 1.42-5.34). For bupropion, data were sparse to calculate body-system MCMs. Conclusions: NRT use during pregnancy does not increase the risk of MCM overall and for most body systems. Varenicline and bupropion do not increase the risk of MCM overall; larger studies are needed to robustly assess body-system malformations.

1B-4 **THE RE-AIM FRAMEWORK EVALUATION OF THE ISISTAQUIT IMPLEMENTATION FOR TRAINING HEALTH PROFESSIONALS IN SMOKING CESSATION CARE OF ABORIGINAL AND TORRES STRAIT ISLANDER PREGNANT WOMEN**

Gillian Gould, Gina La Hera Fuentesy, Marilyn Clarke, Rebecca Hyland, Karen McFadyen, Nicole Ryan, Ratika Kumar. Southern Cross University.

Introduction: The implementation phase of iSISTAQUIT (Supporting Indigenous Smokers To Assist Quitting) is the first Australia-wide implementation trial to train health professionals (HPs) in culturally-competent smoking cessation in pregnant Aboriginal and Torres Strait Islander women. The project used the RE-AIM framework (Reach, Effectiveness, Adoption, Implementation, and Maintenance) for evaluation. Methods: A single-arm, multicentre design in Aboriginal Community Controlled Health Organisations (ACCHOs) and Mainstream Health Services (N=40). Services received interactive, co-designed, online training utilising an Aboriginal pedagogy, videos and text, plus hardcopy treatment manuals and patient resources. iSISTAQUIT used the ABCD approach (A-ask/assess, B-brief advice, C-cessation, D-discuss the psychosocial context). Sites could opt to collect patient data through iSISTAQUIT medical software (research package). Results: Reach: Seventy services were approached: 40 (57%) agreed to participate; 73% ACCHOs. Four services chose the research package; others chose training only. Effectiveness: Comparison of HPs' pre and post training

surveys revealed improvements in knowledge (p<0.0001), particularly re Nicotine Replacement Therapy (NRT) use. HPs' confidence/optimism in the effectiveness of their intervention increased significantly. HPs increased their perception of having time (p=0.001) and resources (p<0.0001) to assist pregnant women to quit smoking. Adoption: Among 85 HPs completing pre-training surveys, 58 (68%) completed training. Implementation: 50% of services receiving the research package installed iSISTAQUIT software. Maintenance: Services requested ~340 additional resources over 6 months after study completion. Twenty-three (58%) sites expressed interest in the iSISTAQUIT's scale-up phase. Conclusion: Results suggest promising reach, effectiveness, adoption and continued interest from participating services for maintenance, highlighting the potential for scaling-up the project.

1B-5 REGIONAL QUEENSLAND INDIGENOUS FAMILY'S PATTERNS OF TOBACCO, NICOTINE AND CANNABIS USE AND EXPOSURE DURING PREGNANCY

Angela Ratsch, Elizabeth Burmeister. QHealth.

Background/Introduction: Maternal smoking and second-hand smoke exposure are recognised risk factors for adverse maternal and foetal outcomes. However, over the past 30 years, the type and range of tobacco and nicotine products has rapidly changed, therefore reporting on the broader product use and exposure (rather than maternal smoking alone) is important for estimating the impact on pregnancy outcomes. Methods: In a regional Queensland location, families expecting an Indigenous baby were conveniently recruited when they were either attending for antenatal care at a local Indigenous health service and/or the local Hospital and Health Service. At each antenatal visit, a specifically constructed assessment tool was used to record the mothers' self-reported pattern of tobacco, nicotine and cannabis use and second-hand exposure. Combusted tobacco use was confirmed by exhaled carbon monoxide assessment, and non-combusted nicotine use was confirmed by point of care cotinine saliva testing. Results: Eighty-two families were recruited, and the results show that 13 mothers had no tobacco, nicotine or cannabis use or second-hand exposure. Of the remainder, most used and were exposed to multiple products. Combusted tobacco was used by 52% of mothers, with 78% exposed; 17% of mothers used vapes (exposed 38%); and 26% used cannabis (exposed 41%). Discussion/Conclusion: Providing families with a mechanism whereby open, non-judgemental dialogue about tobacco, nicotine and cannabis use is critical if we are to meaningfully engage expectant families in conversations that can increase health literacy, decrease tobacco, nicotine and cannabis use, and improve the short, medium and long-term health outcomes for neonates.

Session 1C – Vaping symposium

1C-1 COMPARING LEVELS OF TOXICANTS AMONG PEOPLE WHO VAPE, SMOKE, DUAL USE, OR DO NEITHER AMONG PEOPLE WITH AND WITHOUT EXPERIENCE OF PSYCHOSIS

Eve Taylor[1], Ann McNeill[1], Katherine East[1], Harry Tattan-Birch[2], Deborah Robson[1]. [1]National Addiction Centre, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK. [2]Department of Behavioural Science and Health, University College London, London, UK.

Background: Levels of toxicant exposure are lower among people who vape compared to smoke, but little is known about whether this differs by mental health status. We compare levels of toxicants

among people with and without experience of psychosis (EoP) who exclusively vaped, exclusively smoked, dual-used, or neither smoked nor vaped in the past 30-days. Methods: Data were from 5750 adults (aged 18+) from Wave 5 (2018) of the US Population Assessment of Tobacco and Health (PATH) Study. Linear regression models assessed associations between urinary toxicants (nicotine metabolites, metals, Volatile Organic Compounds (VOCs), Tobacco Specific Nitrosamines (TSNAs)), past 30-day smoking/vaping status, and EoP, adjusting for demographics and cannabis use. Results: Among people with (n=361, 6.3%) and without EoP (n=5389, 93.7%), urinary levels of TSNAs, cadmium, and most VOCs, were higher among people who smoked or dual-used compared to people who vaped. Nicotine metabolites were lower among people without EoP who vaped compared to people who smoked or dual-used. However, nicotine metabolite levels were similar among people with EoP who vaped, smoked or dual-used. Levels of nicotine metabolites, some metals, and VOCs were higher among people who vaped compared to neither smoked nor vaped, but differences were only significant among people without EoP. Results for comparisons of product use and toxicant levels between people with and without EoP will also be discussed. Discussion: Levels of toxicant exposure are lower among people who vape compared to smoke among those with and without EoP.

1C-2 PREDICTING THE LONG-TERM EFFECTS OF ELECTRONIC CIGARETTE USE ON POPULATION HEALTH: A SYSTEMATIC REVIEW OF MODELLING STUDIES

Giang T Vu[1,2], Daniel Stjepanović[1,2], Tianze Sun[1,2], Janni Leung[1,2], Jack Chung[1,2], Jason Connor[1,2,3], Phong Thai[4], Coral Gartner[5], Bach Xuan Tran[6,7], Wayne Hall[1,4], Gary Chan[1,2]. [1]National Centre for Youth Substance Use Research (NSYCUR), The University of Queensland, Brisbane, Australia. [2]School of Psychology, The University of Queensland, Brisbane, Australia. [3]Discipline of Psychiatry, The University of Queensland, Brisbane, Australia. [4]Queensland Alliance for Environmental Health Sciences (QAEHS), The University of Queensland, 20 Cornwall Street, Woolloongabba, Queensland 4102, Australia. [5]NHMRC Centre of Research Excellence on Achieving the Tobacco Endgame, School of Public Health, Faculty of Medicine, The University of Queensland. [6]Institute for Preventive Medicine and Public Health, Hanoi Medical University, Hanoi, Vietnam. [7]Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD 21205, USA.

Background: This study aims to systematically review and synthesise the findings of modelling studies on the population impacts of e-cigarette use and identify potential gaps requiring future investigation. Methods: Three databases were searched for modelling studies of e-cigarette use on population health published between 2010 and 2023. A total of 32 studies were included. Data on study characteristics, model attributes and estimates of population impacts including health outcomes and smoking prevalence were extracted from each article. The findings were synthesised narratively. Results: The introduction of e-cigarettes was predicted to lead to decreased smoking-related mortality, increased quality-adjusted life years and reduced health system costs in 29 studies. Seventeen studies predicted a lower prevalence of cigarette smoking. Models that predicted negative population impacts assumed very high e-cigarette initiation rates among non-smokers and that e-cigarette use would discourage smoking cessation by a large margin. The majority of the studies were based on US population data and few studies included factors other than smoking status, such as, jurisdictional tobacco control policies or social influence. Discussion: A population increase in e-cigarette use may result in lower smoking prevalence and reduced burden of disease in the long run, especially if their use can be restricted to assisting smoking cessation. Given the assumption-dependent nature of modelling outcomes, future modelling studies should consider incorporating

different policy options in their projection exercises, using shorter time horizons and expanding their modelling to low- and middle-income countries where smoking rates remain relatively high.

1C-3 BELIEFS ABOUT THE ADVERSE HEALTH CONSEQUENCES OF VAPING AND ASSOCIATION WITH VAPING RELATIVE HARM MISPERCEPTIONS AMONG ADULTS WHO SMOKE CIGARETTES: FINDINGS FROM THE 2020 ITC SMOKING AND VAPING SURVEY

Hua-Hie Yong[1], Katherine East[2], Shannon Gravely[3], Kylie Morphett[4], Gary C.K. Chan[5], Eve Taylor[2], Andrew Hyland[6], K. Michael Cummings[7], Geoffrey T. Fong[3,8,9]. [1]School of Psychology, Deakin University, Geelong, Victoria, Australia. [2]National Addiction Centre, Institute of Psychiatry, Psychology, and Neuroscience, King's College London, London, UK. [3]Department of Psychology, University of Waterloo, Waterloo, Ontario, Canada. [4]School of Public Health, The University of Queensland, Brisbane, Queensland, Australia. [5]National Centre for Youth Substance Use Research, The University of Queensland, Brisbane, Queensland, Australia. [6]Roswell Park Comprehensive Cancer Center, Buffalo, New York, USA. [7]Hollings Cancer Center, Medical University of South Carolina, Charleston, South Carolina, USA. [8]School of Public Health Sciences, University of Waterloo, Waterloo, Ontario, Canada. [9]Ontario Institute for Cancer Research, Toronto, Ontario, Canada.

Background: Evidence has shown that using nicotine vaping products exposes people to far fewer toxicants than cigarettes, but the long-term health effects of vaping remain unclear. This study assessed the prevalence of beliefs about the adverse health consequences of vaping, its socio-demographic correlates and association with harm perceptions of vaping relative to smoking among adults who smoke cigarettes. Methods: Data from 9050 adults who smoked (≥ monthly) and participated in the 2020 ITC Four Country Smoking and Vaping Survey (Canada, US, England and Australia) were analysed to estimate the prevalence of beliefs that vaping causes lung damage, heart disease, or cancer and their association with vaping relative harm perceptions. Results: Overall, 64% of adults who currently smoke, regardless of whether they vape or not, believed that vaping causes lung damage, 38% believed vaping causes heart disease, and 37% believed vaping causes cancer, with 67% endorsing at least one such belief. Being younger in age, female, high income or education level, residing in the US or Canada (vs Australia/England), and being a never/past-vaper was associated with endorsing at least one such belief. Those who endorsed at least one such belief (vs none at all) were more likely to perceive that vaping is equally/more harmful than smoking (56% vs 26%, p<.001). Discussion: Beliefs about vaping causes lung damage, heart disease and cancer are widespread and likely contribute to the misperceptions that vaping is equally/more harmful than smoking, which could undermine its use for replacing cigarettes and/or as a method for smoking cessation.

1C-4 VAPING RISK PERCEPTIONS: A SYSTEMATIC REVIEW OF ASSOCIATIONS WITH VAPING AND SMOKING BEHAVIOURS AND INTERVENTIONS TO CHANGE THEM

Katherine East[1], Erikas Simonavičius[1], Eve Taylor[1], Leonie Brose[1], Deborah Robson[1], Lynn Kozlowski[2], Ann McNeill[1]. [1]National Addiction Centre, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK. [2]Department of Community Health and Health Behavior, School of Public Health and Health Professions, University at Buffalo, NY, US.

Background: Vaping risk perceptions are increasingly out of line with current evidence in many countries, such that more people are inaccurately perceiving vaping as equally/more harmful than

smoking. We systematically reviewed literature to assess to what extent: 1) interventions communicating vaping risks change vaping perceptions; 2) vaping risk perceptions predict changes in vaping/smoking behaviours. Methods: Systematic review searching 5 databases from 01/01/07-24/01/23. Included quantitative studies with >1 timepoint. Results: Of 14,964 identified records, 97 were included. Interventions varied widely - among youth, most communicated that vaping is harmful while, among adults, most communicated reduced risks of vaping relative to smoking. Interventions communicating reduced relative risks, usually via writing/warning labels, increased perceptions that vaping is less harmful than smoking. Communicating accurate nicotine information (e.g., nicotine not the main cause of smoking-related harms), usually via writing/warning labels, increased accurate nicotine perceptions. Communicating vaping risks (e.g., addiction, diseases) to youth, usually via writing, video games, or educational workshops, increased perceptions that vaping harms health and is equally/more harmful than smoking. Studies assessing interventions were limited by short follow-up. Perceiving vaping as less harmful than smoking predicted subsequent vaping initiation/increases among youth/young adults and adult smokers. Perceiving vaping as harmful predicted not initiating vaping. Perceiving vaping as equally/more harmful than smoking predicted smoking relapse among adult former smokers. Discussion: Communicating vaping risks is generally effective in changing perceptions, at least in the short-term, but message content varies widely. Vaping risk perceptions predict subsequent vaping behaviours, and accurate relative messages about vaping may reduce tobacco smoking.

1C-5 TRANSPARENT TOILET BLOCKS & VAPING QUOKKAS: FRAME ANALYSIS OF HOW THE AUSTRALIAN MEDIA HAS REPORTED ON YOUTH VAPING

Samuel Brookfield[1], Nathan A. Chye[2], Nicholas Carah[3], Coral Gartner[1]. [1]NHMRC Centre of Research Excellence on Achieving the Tobacco Endgame, The University of Queensland. [2]School of Public Health, The University of Queensland. [3]Faculty of Humanities, Arts and Social Sciences, The University of Queensland.

Background: Youth vaping has become an issue of extreme concern in the Australian public and political discourse, recently culminating in a further tightening of restrictions on the sale and use of nicotine vaping products (NVPs) by the Federal Government. We examine how youth vaping has been framed in the Australian news media in the six months leading up to the announcement of these new measures in May 2023. Methods: Drawing a sample from the Factiva database, we conducted a frame analysis on articles published during the analysis period, identifying framings that include the necessary components of a distinct Problem Definition, Causal Attribution, Moral Evaluation, and Treatment Recommendation. Results: We identified 124 relevant articles, and four dominant framings being applied. Most common was that of A Failure of Control, followed by A Poisonous Epidemic, A Health Behaviour Needing Regulation, and A Moral Failure. Conclusion: These findings are discussed in the context of moral panic theory and how the framings constructed by the media in collaboration with policy actors support particular policy measures.

Session 2A – Product regulation

2A-1 ANTI-TOBACCO MESSAGE LENGTH AND SKIPPABILITY: AN EXPERIMENTAL STUDY EXAMINING IMPACT ON PERCEIVED EFFECTIVENESS AND QUIT OUTCOMES

Tamara Tabbakh, Sarah Durkin. Centre for Behavioural Research in Cancer, Cancer Council Victoria, Melbourne, Australia. * Results to be published *

2A-2 MOVING BEYOND FEAR TO HOPE: A QUALITATIVE ANALYSIS OF RESPONSES TO EFFICACY LABELS FROM PEOPLE WHO SMOKE

Anna Graham-DeMello, **Lani Teddy**, Ellen Ozarka, Mei-Ling Blank, Andrew Waa, Janet Hoek. University of Otago, New Zealand.

Introduction: Many countries require all tobacco packages to feature pictorial warning labels (PWLs), which arouse fear and may motivate quit attempts. However, threat appeals may also elicit maladaptive responses, particularly if people who smoke lack self-efficacy (confidence in quitting) and response-efficacy (beliefs quitting will bring benefits). We explored whether an on-pack efficacy label could complement PWLs. Method: We conducted in-depth, in-person interviews with 27 people from Aotearoa New Zealand who currently smoked roll-your-own tobacco. Participants created an efficacy label comprising an explanatory message outlining methods or benefits of quitting, delivered in a testimonial or informational tone, and an image and headline they thought would prompt thoughts of quitting. We explored eight concepts: creating a better life; managing social situations; knowing smoking triggers; regaining control; health and recovery; setting a quit date; dealing with cravings; and positive role models. Results: Most participants viewed efficacy labels as encouraging and complementary to PWLs. All concepts received support, particularly those promoting a smokefree life, offering practical tips, and outlining short-term benefits. We identified two overarching themes: participants saw cessation as a hopeful journey where benefits accrued quickly, they overcame setbacks, and did not face judgement. They also found efficacy messages empowering, and thought these returned agency and enabled them to make their own decisions. Conclusion: Current PWLS risk leaving people who smoke feeling alienated and disempowered. Efficacy labels featuring diverse positive themes could encourage people who smoke to believe they can become smokefree while recognising they are not a homogenous group.

2A-3 CAN PUBLIC COMMUNICATION ABOUT A BAN ON MENTHOL TOBACCO PRODUCTS BOOST QUIT INTENTIONS?

Tegan Nuss[1], Claudia Gascoyne[1], Melanie Wakefield[1,2], Sarah Durkin[1,2], Ashleigh Haynes[1,2], Emily Brennan[1,2]. [1]Centre for Behavioural Research in Cancer, Cancer Council Victoria. [2]Melbourne School of Psychological Sciences, University of Melbourne.

Background: The forthcoming ban on tobacco products containing menthol and other flavours and containing flavour capsules ('crushballs') could motivate people using them to quit smoking. Conversely, they may switch to remaining tobacco products, especially if these products are misperceived to be less harmful than banned products. We examined whether messaging could increase quit intentions in response to the menthol and flavoured crushball (MFC) ban, reduce

misperceptions, and promote accurate knowledge about the ban. Methods: In an online experiment, 502 Australian adults who currently smoked MFC cigarettes at least weekly were recruited from an online research panel and randomised to one of three message conditions. Condition A introduced the MFC ban and rationale and encouraged quitting, Conditions B and C additionally described the harmfulness of remaining products, and Condition C additionally described other negative attributes of remaining products. Results: Exposure to the most (versus least) detailed message was marginally associated with greater intentions to quit following the ban (30% cf. 22%; p=0.08) and was significantly associated with more accurate knowledge (51% cf. 40%) and less uncertainty about the ban's rationale (8% cf. 18%). Remaining and banned tobacco products were perceived as similarly harmful, while e-cigarettes/vapes were perceived as less harmful than MFC products, with no differences by condition. Conclusions: Messaging about the MFC ban should describe the rationale and encourage quitting, plus emphasise the harmfulness and negative attributes of remaining products. To optimise impact, interventions boosting motivation and capacity to quit should be deployed ahead of and during the ban's implementation.

2A-4 TOBACCO PACKAGING AND LABELING POLICIES IN THE WHO AFRICAN REGION: PROGRESS 15 YEARS AFTER ADOPTION OF THE WHO FRAMEWORK CONVENTION ON TOBACCO CONTROL ARTICLE 11 IMPLEMENTATION GUIDELINES

Ernesto Sebrie[1], Kaitlin Donley[1], Kai Wasson[1], Caroline Fuss[1], Bintou Camara[1], Monique E Muggli[1], Eric Crosbie[2]. [1]Campaign for Tobacco-Free Kids, Washington, DC, USA. [2]School of Public Health, University of Nevada Reno, Reno, NV.

Background: Tobacco packaging and labelling policies aligned with the WHO FCTC's Article 11 are a cost-effective strategy to reduce tobacco consumption. This study aimed to identify successes and gaps in adoption of these policies in the WHO African Region (AFRO). Methods: We reviewed laws adopted in all AFRO countries from the Campaign for Tobacco-Free Kids' Tobacco Control Laws database. Based on Article 11 and its Guidelines we assessed three sub-policy areas: health warning labels, descriptive constituents and emissions information, and misleading packaging and labeling. We developed a scoring system to rank countries and documented progress between 1985 and 2023. Results: Of the 47 countries in AFRO, 39 adopted national laws. Twenty-five countries adopted pictorial HWLs; 34 require HWLs to be printed on the front and back of smoked tobacco packaging, and 12 countries require 70% coverage of the pack's principal display areas. Benin and Mauritius have the largest HWLs in the region at 90%. Thirty-one countries banned brand descriptors, and 26 banned figures, colours, and other signs on packaging. Cote d'Ivoire and Mauritius are the only countries that adopted standardized packaging. Before approval of the WHO FCTC Article 11 Guidelines in November 2008, 23 countries had adopted text-only HWLs, whereas 24 adopted pictorial HWLs following their adoption. Conclusion: Several AFRO countries have adopted tobacco packaging and labeling policies that align with WHO FCTC Article 11 Guidelines. Increased efforts should be directed toward the Southern sub-region to improve national HWL policies, as well as increase dissemination of standardized packaging throughout AFRO.

2A-5 KNOWLEDGE AND ATTITUDES TOWARD THE HEALTH AND ENVIRONMENTAL IMPACTS OF CIGARETTE FILTERS: FINDINGS FROM A SURVEY OF THE AUSTRALIAN POPULATION

David Sellars, Kylie Morphett, Coral Gartner. University of Queensland.

Introduction: Our study in Australia examined public awareness, attitudes, and support for policies addressing the environmental impact of cigarette filters, which are slow to biodegrade. Despite growing calls to ban these filters, limited research exists on this topic. Methods: A nationally representative online survey of Australian adults (N=1606: 520 people who smoke) assessed knowledge and attitudes to cigarette filters, tobacco product waste and smoking status differences. The study also explored support for policies like mandatory product stewardship, banning filtered cigarette sales, and requiring anti-littering messages on cigarette sticks. Results: Almost all (97%) participants reported noticing cigarette butt litter in their daily lives. There was very little difference between perceptions of environmental harm from cigarette butts between people who smoke (76.3%) and those that do not (83.8%). Most participants (77.3%) supported the statement, "Manufacturers should pay the full costs of disposal of tobacco product waste, including littered cigarette butts". Respondents agreed (85.8%) people who smoke should be responsible for cleaning up littered cigarette butts and other tobacco product waste. Only 46.3% of respondents knew cigarette filters are synthetic. Respondents supported measures such as printing anti-littering messages directly onto cigarettes (77.3%) and increased enforcement of current laws (76.8%). Only 57.8% of respondents supported a policy of banning cigarettes with filters. Conclusions: Australians know the environmental harms of discarded cigarette filters but lack a clear understanding of filter materials. They favour anti-littering messages on cigarettes, stricter enforcement of littering laws, and strongly support a product stewardship scheme. However, there is no clear support for banning cigarettes with filters.

Session 2B – Smoking cessation 1

2B-1 PRELIMINARY RESULTS OF A CLUSTER RANDOMIZED CONTROL TRIAL EXAMINING A SMOKING CESSATION TRAINING PROGRAM AND CULTURALLY-TAILORED RESOURCES

Tahlia Grammatopoulos[1,2], **Kelsey Sharrad**[1,2], Nicholas Marlow[3], Sasha Stewart[3], Alwin Chong[4], Adrian Esterman[3], Alyson Crozier[3], Ian Gwilt[5], Ross Smith[5], Antony Veale[6], Malcolm Brinn[1], Kristin Carson-Chahhoud[1,2,3,7]. [1]Adelaide Medical School, The University of Adelaide, South Australia, Australia. [2]Houd Research Group, Houd Enterprises, South Australia, Australia. [3]Allied Health and Human Performance, The University of South Australia, South Australia, Australia. [4]Arney Chong Consulting, Adelaide, Australia. [5]Australian Research Centre for Interactive and Virtual Environments, The University of South Australia, South Australia, Australia. [6]Respiratory Medicine Unit, The Queen Elizabeth Hospital, South Australia, Australia. [7]Australian Centre for Precision Health, UniSA, South Australian Health and Medical Research Institute, South Australia, Australia.

Introduction/Aim: Research shows that smoking cessation counselling increases the chances of successful abstinence compared with less intensive support. Further, training Health Professionals (HPs) in smoking cessation counselling programs enhances their knowledge, skills and confidence to deliver smoking cessation. Critically, smokers are more likely to quit if asked, and HPs are more likely to ask if trained. Methods: This research investigates whether a smoking cessation training program

and culturally-tailored resources enhance HPs' ability to provide counselling. This project 'nests' a pilot Cluster Randomized Control Trial (CRCT) within a larger feasibility study to determine the viability of the CRCT method for upscale. Results: Preliminary recruitment patterns differed between sites. In one site, all participants took part due to encouragement from senior staff (n=26). Initial participation at the second site was due to the desire of individual staff (n=7), but was quickly surpassed with enrolments due to encouragement from senior staff (n=21). Nurses and allied health professionals were the most represented professions, with patient engagement occurring most frequently within the inpatient setting. A snapshot of preliminary data indicates that 100% of participants reported that 'HPs should routinely ask patients if they were using a tobacco product', but only 75% of HPs reported they 'Probably' knew which smoking cessation questions to ask. Conclusion: Preliminary data suggests that it is possible to identify and recruit health professionals using the prescribed method. This is significant considering HPs overwhelmingly believe it is their responsibility to discuss smoking, yet 25% are unclear of how to facilitate these discussions.

2B-2 DECISION TREE ANALYSIS OF INDIVIDUAL AND MEDICAL INSTITUTION CHARACTERISTICS ASSOCIATED WITH SUCCESSFUL SMOKING CESSATION IN TAIWAN

Jia-Ling Wu[1], Shang-Chi Lee[1], Chun-Ying Chen[1], Mei-Tzu Huang[1], Chao-Chun Wu[2], Shu-Ying Lo[3], Chung-Yi Li[1], Ya-Hui Chang[1]. [1]Department of Public Health, College of Medicine, National Cheng Kung University, Tainan, Taiwan. [2]Health Promotion Administration, Ministry of Health and Welfare, Taipei, Taiwan. [3]Tobacco Control Division, Health Promotion Administration, Ministry of Health and Welfare, Taipei, Taiwan.

Introduction: Prior studies employing regression models to pinpoint factors linked to successful smoking cessation encountered challenges in characterizing smokers with higher success probability. This study employed decision tree analysis to uncover characteristics of smokers associated with higher probability of successfully quitting smoking. Methods: Secondary data analysis of the smoking cessation service encompassed 906,827 records from 646,851 smokers. Records aggregated all counselling sessions within a year for each individual, capturing characteristics, medical institution details, and smoking cessation status from the first and last sessions annually. Decision tree modelling identified homogeneous population subgroups based on the six-month point status of smoking abstinence. Analysed factors included the type of medical institution, region and urbanization of residence, age, duration of total sessions in a year, daily cigarette consumption, duration of smoking, morning smoking time, and Fagerstrom test scores. Results: The subgroup with the highest smoking cessation probability (0.59) comprised those with >6 weeks of medication and initiating the first cigarette >30 minutes after waking up, constituting 16% of participants. Another sizable group (39%) with a success probability of 0.53 included those engaged in >6 weeks of medication, initiating the first cigarette within 30 minutes, and smoking fewer than 20 cigarettes daily. The subgroup with lower success probabilities (0.42) encompassed individuals with <6 weeks of medication and >10 daily cigarettes, representing 29% of all participants. Discussion/Conclusion: Decision tree analysis adeptly identifies subgroups within smoking cessation service users. Prolonged treatment engagement and delaying the first morning cigarette positively impacted success rates.

2B-3 **ASSOCIATIONS OF DIFFERENT NICOTINE REPLACEMENT THERAPY REGIMENS WITH SUCCESSFUL SMOKING CESSATION IN TAIWAN: USING REAL-WORLD DATA AND ASSESSING OUTCOMES AT THE 6-MONTH MARK**

Chun-Ying Chen[1], Jia-Ling Wu[1], Shang-Chi Lee[1], Ya-Hui Chang[1], Mei-Tzu Huang[1], Chao-Chun Wu[2], Yu-Ying Hung[2], Chung-Yi Li[1]. [1]Department of Public Health, College of Medicine, National Cheng Kung University, Tainan, Taiwan. [2]Health Promotion Administration, Ministry of Health and Welfare, Taipei, Taiwan.

Introduction: Previous smoking cessation pharmaco-therapy studies often relied on randomized controlled trials (RCTs), lacking real-world generalization. Utilizing Taiwan's national smoking cessation service system database, we examined different nicotine replacement therapy (NRT) regimens for successful smoking cessation. Methods: In Taiwan's free smoking cessation program, participants aged 18 or older with a tobacco addiction (FTND score >=4 or daily smoking >=31 cigarettes) were eligible. Each participant could undergo up to two annual courses, each lasting eight weeks. Smoking cessation success, defined as abstaining for over seven days, was evaluated through interviews at the 6-month mark post each course. Analysing 32,079 treatment courses for 25,996 first-time participants from January 1, 2020 to June 30, 2022, we employed logistic regression with generalized estimation equation. Factors assessed included various NRT regimens, adjusted for demographics, tobacco-related factors, hospital-related factors, district-based factors, treatment course details, and consult combined use. Results: The overall 6-month cessation prevalence was 39.1%, with 41.3%, 35.7%, and 39.2% for short-acting (n=14,614 courses), long-acting (n=9,156 courses), and combined (n=8,309) NRT, respectively. Adjusting for potential confounders, long-acting (aOR=0.88, 95%CI=0.83-0.94) were less likely to lead to cessation compared to short-acting NRT. On the other hand, short-acting and combined NRT (aOR=1.00, 95%CI=0.93-1.06) showed no significant difference in cessation prevalence. Discussion/Conclusion: Contrary to prior RCTs, our study indicates better smoking cessation outcomes with short-acting NRT, potentially influenced by Taiwan's hot weather affecting long-acting NRT patch adherence. Unmeasured factors like family and workplace support may also contribute. Assessing smoking cessation interventions requires considering real-world conditions with diverse contexts.

2B-4 **PRE-OPERATIVE TOBACCO TREATMENT FOR PATIENTS WITH CANCER: A TRIAL IN PROGRESS WITH A PIVOT TO AN OPT-APPROACH IN COLLABORATION WITH A PREOPERATIVE ANESTHESIA CLINIC**

Katherine Rieth[1], Arlette Chávez-Iñiguez[2], AnaPaula Cupertino[3]. [1]University of Rochester Medical Center. [2]Department of Public Health Sciences, University of Rochester Medical Center. [3]Department of Surgery, University of Rochester Medical Center.

Background: Smoking throughout cancer treatment is associated with adverse events that can lead to interruptions in treatment and increased mortality. For patients with surgery as part of their treatment, the effects of smoking can compound adverse events in the perioperative and adjuvant treatment periods. Our aim is to describe a study protocol to begin cessation treatment prior to an oncologic surgery. Methods: Participants were identified by a cancer surgeon at the University of Rochester Medical Center (URMC). Eligibility criteria included: current smoking and a scheduled oncologic surgical procedure. The surgeon introduced and placed a referral to the URMC tobacco

treatment program, which includes text message support and free nicotine replacement therapy (NRT). Results: The participating surgeons referred 102 patients to the URMC tobacco treatment program. Of these, 30 patients (29%) enrolled in treatment, however only 5 (4.9%) were able to be consented for our study. Three have completed 3 months of treatment and were all still smoking at 3 months. Because only 29% enrolled in the program and fewer were consented, in phase 2 we used an opt-out approach with an exempt consent. The protocol was modified to identify eligible patients from the surgeons' operating schedule and to engage a preoperative anesthesia clinic in enrolling patients into tobacco treatment prior to their cancer surgery. Conclusion: Engaging the preoperative anaesthesia clinic to facilitate tobacco treatment as part of pre-surgical optimization for patients with cancer surgery through an opt-out approach will hopefully increase engagement with treatment, improve cessation rates, decrease surgical complications, and improve overall survival.

2B-5 PERCEPTIONS OF AUSTRALIAN GENERAL PRACTITIONERS ON E-CIGARETTES AS SMOKING CESSATION AIDS: A QUALITATIVE STUDY

Melis Selamoglu[1], Bircan Erbas[2], Hester Wilson[3,4,5], Chris Barton[1]. [1]Department of General Practice, Monash University, Melbourne, Australia. [2]Department of Public Health, La Trobe University, Melbourne, Australia. [3]Population and Community Health, South Eastern Sydney Local Health District, Australia. [4]School of Population Health, University of New South Wales, Australia. [5]Centre for Primary Health Care and Equity, University of New South Wales, Australia.

Introduction: A significant policy change in Australia impacting the availability of nicotine for use in e-cigarettes took effect in October, 2021. Australian general practitioners (GPs) are given the authority to prescribe nicotine e-liquids to patients who are intending to use e-cigarettes as smoking cessation aids. We aimed to explore GPs perceptions about the role of e-cigarettes and understand their intentions to prescribe e-cigarettes as smoking cessation treatments. Methods: A qualitative study design was employed. Purposeful sampling was used to recruit participants from a larger survey study of e-cigarette knowledge, attitudes and prescribing intentions. Results: Thirteen GPs (M:6, F:7) across Australia were interviewed. GPs held mixed views about using e-cigarettes to quit smoking. Some recommended e-cigarettes to older smokers and to smokers unable to quit using evidence-based cessation methods, whilst others didn't believe there was sufficient evidence and raised concerns about their safety and efficacy. GPs felt the prescribing policy in Australia around e-cigarettes was not sufficiently established which impacted their intentions to prescribe. Most didn't feel confident to prescribe or have discussions about e-cigarettes with patients. Overall, more information and training were desired amongst GPs to help them confidently prescribe e-cigarettes to patients. Conclusion: The findings from this study indicate that Australian GPs have diverse attitudes about e-cigarettes in the context of smoking cessation and their role prescribing nicotine e-liquids. Clarity in guidelines and consumer product information are required to enable GPs to provide consistent and accurate advice to patients that wish to use e-cigarettes as smoking cessation aids.

Session 2C – Youth vaping

2C-1 YOUNG PEOPLE'S PROGRESSION TO AND EXPERIENCES OF ADDICTION TO NICOTINE VAPING PRODUCTS: A QUALITATIVE ANALYSIS FROM AOTEAROA NEW ZEALAND

Anna Graham-DeMello[1], Olivia Sloan[2], Katie Frost[2], **Janet Hoek**[1]. [1]Department of Public Health, University of Otago, Wellington, New Zealand. [2]Otago School of Medicine, University of Otago, Dunedin, New Zealand.

Background/Introduction: Young people who use nicotine-containing electronic cigarettes (ECs), or "vapes", risk becoming addicted to these products. While several studies document dependency symptoms, few report in-depth qualitative analyses of how addiction evolves. Methods: We explored experiences of self-reported vaping addiction using in-depth interviews with 22 young people aged 16-20 who vaped and lived in Aotearoa New Zealand (Aotearoa NZ). Our semi-structured interview guide probed participants' early experiences and how they progressed from experimentation to addiction, and then explored how addiction affected their perceptions and daily routines. We used an inductive reflexive thematic analysis approach to interpret the data. Results: Vaping's pervasiveness piqued participants' curiosity and encouraged trial. Most transitioned from experimentation to addiction within a couple of months (sometimes within a few weeks). While a minority described a slower progression, nearly all felt irritable, angry or uncomfortable if they had to delay vaping. Intense cravings disrupted school and work routines, and dictated how participants spent their time. Many saw vaping as a threat to the wellbeing of younger youth, who they tried to shield from addiction. Discussion/Conclusion: We extend earlier studies by revealing the multi-faceted burden vaping comes to represent and offer new insights into young people's everyday experiences of vaping addiction. Our findings could inform health promotion campaigns, cessation programmes, and policy on vaping product availability. Understanding the speed with which addiction can occur and its impact on daily life could inform a more strategic and sorely-needed approach to reducing youth vaping.

2C-2 SELF-REPORTED IMPACTS OF NICOTINE VAPING ON WELLBEING IN AOTEAROA NEW ZEALAND: FINDINGS FROM THE ITC YOUTH & YOUNG ADULT SURVEY

Jude Ball[1], Jessica L. Reid[2], Andrew Waa[1], Richard Edwards[1], Lani Teddy[1], Lesieli Katoa[1], Robin Burkhalter[2], **Janet Hoek**[1], Anna De Mello[1], David Hammond[2]. [1]University of Otago, New Zealand. [2]University of Waterloo, Canada

Background: Better understanding of the impacts of nicotine vaping on the wellbeing of young people is vital to inform policy and practice. Methods: We used data from the New Zealand ITC Youth & Young Adult Survey of 16-29 year-olds, collected in Aug-Sept 2023 (N=3414). The survey included questions about whether vaping had affected participants' i) physical health, ii) mental health, iii) other aspects of wellbeing. We used thematic analysis to explore open text responses (n=1322) to three follow-up questions asking how they had been affected. Results: The proportion reporting impacts on physical, mental and other aspects of wellbeing in closed questions was 33% (27% negative, 6% positive), 27% (13% negative, 14% positive) and 22% 'yes' respectively among participants who had ever vaped (n=2006); and higher among daily vapers (n=671). In open-text responses, the most commonly reported detrimental effects were on fitness, respiratory health and financial wellbeing. In contrast, a small number reported improved physical, mental and/or financial wellbeing after switching from

smoking to vaping. Reported impacts on social wellbeing and mental health were mixed, e.g. vaping both created interpersonal conflict yet made socialising easier; vaping reportedly both eased and caused anxiety and distress. Many respondents were troubled by becoming addicted to vaping. Discussion: Our findings align with the view that vaping is harmful, but not as harmful as tobacco smoking. They highlight harms beyond biomedical impacts and provide insights that can inform policies and programmes. For example, prevention messages focused on addiction, fitness and financial impacts may resonate with young people.

2C-3 TO VAPE IS TO STEALTH VAPE

Robin Quigg, Louise Marsh, Sade Gilbert-Perenise. Ōtākou Whakaihu Waka/University of Otago.

Vaping use is increasing, particularly among young people who have never been cigarette smokers. Stealth vaping, that is, discrete use in places where it is prohibited, is also reported to be increasing. Regular vape use is high among those who identify as Māori and vape companies are reported to be targeting Indigenous communities. This kaupapa Māori qualitative study used whakaroopū interviews to explore stealth vaping with young Māori participants in the New Zealand Indigenous context. The data is currently being analysed and results will be presented.

2C-4 PERCEPTIONS OF ANTI-VAPING MESSAGE THEMES: A QUALITATIVE STUDY OF AUSTRALIAN ADOLESCENTS AND ADULTS

Mary-Ellen Brierley[1], Isabella Kirley[1,2], Michelle Jongenelis[1]. [1]Melbourne Centre for Behaviour Change, Melbourne School of Psychological Sciences, The University of Melbourne. [2]Melbourne School of Population and Global Health, The University of Melbourne.

Introduction: Minimising e-cigarette uptake and encouraging cessation are current priorities of public health agendas. Mirroring the successful use of well-designed anti-smoking campaigns, attention has turned to developing health communications targeting e-cigarette use. We aimed to identify message themes perceived to be effective at minimising e-cigarette use and generate evidence to inform the development of future health communication campaigns in terms of execution and delivery. Methods: We conducted 16 focus groups with adolescents, young adults, and adults, stratified by age, gender, and vaping status. Groups discussed messages that may minimise e-cigarette use and provided feedback on message themes developed by the research team. We used reflexive thematic data analysis. Results: Message themes believed to be effective focused on the health harms associated with use, the chemical ingredients in e-cigarettes, functional impacts of nicotine dependence, and changing social norms. Groups discussed the importance of personal testimonies and reported that messages would be most effectively communicated via social media, in physical public places, and at point of sale. Conclusion: Results extend current research by confirming message themes perceived to be most effective and informing how campaigns featuring these messages should be executed. These findings could be utilised in future co-design of health communication campaigns. Further research may explore the real-world impact of these messages on use-related intentions and behaviours.

Session 3A – Policy

3A-1 HAVE TOBACCO CONTROL MEASURES LOST THEIR POTENCY? EVIDENCE FROM COUNTRIES WITH LONG ESTABLISHED PROGRAMS

Ron Borland. University of Melbourne and Deakin University.

This paper explores the possibility that key tobacco control initiatives may have lost or are losing their potency in countries with long-standing tobacco control policies like Australia. Method: Primarily uses evidence from the ITC surveys, with a primary focus impact health warnings, and secondarily using population data to estimate effects of pricing policies (i.e. taxation). Results: Proximal reactions to health warnings, such as noticing them and reporting avoiding them remain higher in countries with strong warnings as compared to the USA with weak warnings. However, for Australia at least, subsequent reactions like thoughts about quitting have declined to levels no different to those in the US. Population smoking prevalence data comparing Australia which is implemented a much higher taxing regime and some other countries particularly the USA, shows that the decline in prevalence in Australia has slowed the levels below that in comparable other countries where the price is considerably cheaper. Discussion: These data suggest that warning labels gradually lose their potency among continuing smokers, but has nothing to say about likely persisting effects on discouraging uptake. Evidence of lower rates of decline in smoking prevalence in Australia compared with lower taxing countries is a much blunter measure of effect as it is due to the combination of forces on the market. Clearly there are forces stronger than price. These data suggest that the more of the same approach to tobacco control will at best be slower to achieve targeted reductions in smoking prevalence and that additional policies re likely to be needed.

3A-2 FLAVOURANTS AND OTHER CHEMICALS IN TOBACCO SOLD IN AUSTRALIA: LIMITATIONS OF THE VOLUNTARY DISCLOSURES FROM TOBACCO COMPANIES

Wendy Winnall[1], Ashleigh Haynes[1,2], Emily Brennan[1,2], Kimberley Dunstone[1], Michelle M. Scollo[1], Melanie A. Wakefield[1,2]. [1]Centre for Behavioural Research in Cancer, Cancer Council Victoria, Melbourne, VIC, Australia. [2]Melbourne School of Psychological Sciences, University of Melbourne, Melbourne, VIC, Australia.

Background: Tobacco companies add hundreds of chemicals to their products that increase their attractiveness, addictiveness and toxicity. Three companies voluntarily disclose their additives in cigarettes sold in Australia, but not other tobacco products. Most of the disclosed chemicals are labelled as "flavours". This study aims to detect flavourants and other chemicals in cigarette and roll-your-own (RYO) tobacco sold in Australia and compare these to industry disclosures. Methods: Non-targeted gas chromatography/mass spectrometry was used to detect flavourants and other chemicals in 14 cigarette and 17 RYO tobacco brands. Peak identification used the spectra of known flavourants and standard mass spectrometry libraries. Results: Our analysis detected 74 chemicals in cigarette tobacco, 54 of which were not disclosed by tobacco companies. Of these, 30 are on the FEMA flavour database, indicating roles as flavourants. RYO and cigarette tobacco shared 43 chemicals in our analysis. We detected 51 chemicals unique to RYO that were absent in the tested cigarette brands and industry disclosures. These include phenol and cresols; identified by the FDA as toxic, and three flavourants considered as "characterising flavours". Conclusions: Characterising flavourants and toxic

chemicals were found in RYO tobacco that were absent in tested cigarette tobacco and industry disclosures of cigarette additives. These chemicals may not be added by the tobacco companies, but may naturally occur in the plant, or be produced by chemical reactions during processing. However, our results demonstrate that industry disclosures fall far short of covering highly relevant flavourants and other chemicals found in tobacco sold in Australia.

3A-3 THE USE OF DISSUASIVE MEASURES ON CIGARETTES: A REVIEW OF GLOBAL EVIDENCE

Amy Villarosa, Sinan Brown, Emily Banks. National Centre for Epidemiology and Population Health, Australian National University.

Background/Introduction: The effectiveness of dissuasive messages on tobacco product packaging has been demonstrated. However, evidence suggests this messaging may be losing impact over time due to consumer desensitisation. Including dissuasive measures on the cigarette itself may complement existing tobacco control measures. Methods: This rapid review aimed to summarise the contemporary global evidence on dissuasive measures on tobacco products. We searched electronic databases PubMed, Scopus and Ovid in May 2023 and grey literature via Google in June 2023. Articles were screened in Covidence for eligibility. Quality assessments were conducted for eligible studies where relevant. Results: A total of 40 relevant studies relating to cigarettes was identified. Empirical evidence was unavailable at the time of this study, as no country had yet implemented dissuasive cigarettes. Evidence investigated perceptions and preferences of both dissuasive colours and warnings. Dark brown and green cigarettes were consistently rated least attractive, most harmful and most unfavourable. The skull and crossbones symbol was found to be unappealing, with cigarettes displaying mortality statistics (including 'minutes of life lost') and cigarettes showing social and financial consequences of smoking found to be particularly dissuasive for Australian participants. Warnings touching on personal appearance, the effect of smoking on others, and proximal smoking impacts were also effective. Participants believed dissuasive cigarettes would shift smoking behaviour and perceptions. Discussion/Conclusion: Overall, the reviewed evidence highlighted the potential for cigarette characteristics to complement existing tobacco control measures, particularly as the cigarette itself is viewed >100 times per day by the average smoker and those around them.

3A-4 AN EXPERIMENTAL STUDY OF PACK HEALTH WARNINGS TO INFORM PEOPLE WHO SMOKE ABOUT THE MISLEADING EFFECTS OF TOBACCO PRODUCT MANIPULATIONS

Emily Brennan[1,2], Claudia Gascoyne[1], Kimberley Dunstone[1], Gayathri Srinivasan[1], James F Thrasher[3], Janet Hoek[4], Melanie Wakefield[1,2], **Sarah Durkin**[1,2]. [1]Centre for Behavioural Research in Cancer, Cancer Council Victoria, Melbourne, Victoria, Australia. [2]Melbourne School of Psychological Sciences, University of Melbourne, Melbourne, Victoria, Australia. [3]Department of Health Promotion, Education and Behaviour, Arnold School of Public Health, University of South Carolina, Columbia, SC, USA. [4]Department of Public Health, University of Otago, Wellington, New Zealand.

Background: The tobacco industry has long manipulated cigarettes to provide sensory cues that mislead people who smoke about harms. We tested pack health warnings (HWs) that pilot research found improved understanding of various misleading product attributes, including filter ventilation, menthol and roll-your-own additives. Methods: Australian adults who smoke (N=2,548) were randomly assigned to view: control pharmaceutical HWs; tobacco HWs (THWs) with images of

smoking harms; tobacco product attribute HWs (PAHWs); or PAHWs plus a video (PAHW+video). At baseline, participants were exposed to 7 condition-specific HWs (+ video for PAHW+video); then potentially re-exposed to one HW daily for up to 7 days (+ up to six video viewings for PAHW+video). 1,418 participants were followed-up at 8 days. Results: Compared to controls, PAHWs elicited: greater increases in concern when inhaling smoke with misleading sensory cues; higher smoking discord and unease; higher knowledge of industry manipulation; greater self-centric negative emotional responses, and industry-centric negative emotional responses; and higher likelihood of rumination about HWs. Compared to THWs, PAHWs elicited significantly greater knowledge of industry manipulation and industry-centric negative emotional responses, but similar elevated self-centric negative emotional responses and rumination about HWs. The PAHW and PAHW+video conditions elicited similar elevated negative emotional responses and rumination, but only the PAHW+video condition elicited greater inter-personal discussion and online information-seeking compared to control. Conclusions: Compared to THWs, PAHWs that challenge long-standing myths fostered by tobacco companies yield many similar outcomes, but also offer unique beneficial outcomes. Nations should look to include PAHWs in their suites of tobacco HWs.

3A-5 DO RESPONSES TO PRODUCT MANIPULATION HEALTH WARNINGS PREDICT SUBSEQUENT QUITTING-RELATED BEHAVIOURS? FINDINGS FROM A COHORT STUDY OF AUSTRALIAN ADULTS WHO SMOKE

Emily Brennan[1,2], **Claudia Gascoyne**[1], Kimberley Dunstone[1], Gayathri Srinivasan[1], Janet Hoek[3], James F Thrasher[4], Melanie Wakefield[1,2], Sarah Durkin[1,2]. [1]Centre for Behavioural Research in Cancer, Cancer Council Victoria, Melbourne, VIC. [2]Melbourne School of Psychological Sciences, University of Melbourne, Melbourne, VIC. [3]Department of Public Health, University of Otago, Wellington, New Zealand. [4]Department of Health Promotion, Education, and Behavior, Arnold School of Public Health, University of South Carolina, Columbia, SC, USA.

Background: Pictorial tobacco health warnings (THWs) can stimulate responses that lead to quit attempts. We aimed to examine if responses unique to novel product attribute health warnings (PAHWs) predicted subsequent quitting-related behaviours. Method: We analysed data from a four-arm between-subjects online experimental study of pictorial warnings. Australian adults who smoke were randomly assigned to view either control pharmaceutical warnings, tobacco health warnings (THWs), new PAHWs that educated about product manipulations (filter-venting, menthol, or roll-your-own additives) known to mislead people about harms, or PAHWs+video. Participants were exposed to seven different condition-specific warnings after completing a baseline survey and then potentially exposed again to one of their assigned HWs daily for up to 7 days (plus up to 6 additional video viewings for PAHW+video). Adjusted bivariate logistic regressions examined associations between five responses unique to PAHWs (+/- video) with four quitting-related behaviours measured at 4-weeks after initial exposure (N=441). Adjusted multivariable models then identified independent predictors of quitting-related behaviours. Results: Responses uniquely influenced by PAHWs - knowledge of industry manipulation of cigarettes, smoking discord (feeling uneasy about smoking), and feeling angry at or deceived by industry - were strongly predictive of subsequent quitting-related behaviours. Multivariable models found that online information-seeking and interpersonal discussion - both uniquely activated by PAHW+video exposure - were the strongest independent predictors of help-seeking and smoke-limiting behaviours, respectively. Smoking discord was the strongest independent

predictor of quit attempts and 7-day abstinence (all p<0.05). Conclusion: Introducing PAHWs within a current suite of HWs may promote smoking abstinence above and beyond THWs alone.

Session 3B – Smoking cessation 2

3B-1 CO-DESIGNING MODELS OF SMOKING CESSATION CARE IN TERTIARY CARE: OUTPUTS AND CHALLENGES IN 9 CANCER CENTRES IN AUSTRALIA

Christine Paul[1], Melissa McEnally[1], Alison Young[1], Vaibhav Thawal[1], Fiona Day[2], Shalini Vinod[3], Emily Stone[4], Bianca Devitt[5], Po-Yee Yip[6], Abhijit Pal[7]. [1]University of Newcastle. [2]Calvary Mater Newcastle. [3]Liverpool Hospital. [4]St Vincents' Hospital Sydney. [5]Eastern Health, Melbourne. [6]Campbelltown Hospital. [7]Bankstown Hospital.

Background: Care to Quit is a stepped wedge cluster randomised controlled trial which aimed to optimise the delivery of smoking cessation care in cancer centres by co-designing and supporting evidence-based models of care which were adapted to the circumstances of individual cancer centres. Methods: The implementation intervention was based on the Theoretical Domains Framework and delivered in consultation with clinical stakeholders who participated in an APEASE criteria rating exercise of identified strategies. The on-the-ground models of care involving application of an Ask-Advise-Act/Help approach to care. The co-design process involved extensive consultation with stakeholders such as oncologists, nurses, nurse unit managers, care coordinators, pharmacists and IT staff at nine cancer centres across NSW and Victoria. Results: The various models of care created across the nine centres are presented, each differing according to the needs and resources of the site and departments within each site. The nature and outcomes of the consultation processes are described in both quantitative and qualitative terms. Centre-specific variations were related to level of engagement across disciplines, with impacts on the intensity of smoking cessation care that could be delivered, particularly in relation to pharmacotherapy. There were varying levels of capability and motivation to complete the Act/Help part of evidence-based cessation support across cancer centres and specialties. Conclusion: Implementing evidence-based cessation care in cancer centres is time intensive and highly subject to the circumstances of the individual department and cancer centre with potential implications for cessation success.

3B-2 SYSTEM CHANGE INTERVENTION FOR MULTI-SITE IMPLEMENTATION OF SMOKING CESSATION IN PUBLIC COMMUNITY PSYCHIATRIC SETTINGS

Sally Plever[1,2,3], Steve Kisely[4,5], Billie Bonevski[2,3,6], Irene McCarthy[1], Emma Ballard[7], Melissa Anzolin[1], Dan Siskind[3,4], Brett Emmerson[1], Coral Gartner[2,3]. [1]The Queensland Mental Health Clinical Collaborative, Metro North Hospital and Health Service, Brisbane, QLD. [2]The University of Queensland, School of Public Health, Brisbane, QLD. [3]NHMRC Centre of Research Excellence on Achieving the Tobacco Endgame, The University of Queensland, Brisbane, QLD. [4]The University of Queensland, School of Clinical Medicine, Department of Psychiatry. [5]Metro South Addiction and Mental Health Service, Brisbane, QLD. [6]Flinders Health and Medical Research Institute, College of Medicine and Public Health, Flinders University, Bedford Park, SA. [7]QIMR Berghofer Medical Research Institute, Brisbane, QLD.

Background: Tobacco-related disease is a leading cause of premature mortality for people experiencing mental illness. Tobacco treatment is not routinely provided in psychiatric settings with systemic barriers preventing access to treatment. To overcome these barriers, a system change intervention, combined with a service level incentive payment, was implemented across publicly funded outpatient psychiatric services. The following study examines the effectiveness of this approach to implementing tobacco treatment statewide. Method: Secondary analysis of statewide health administrative data was conducted. Changes in the documentation of tobacco status and delivery of a tobacco treatment brief intervention (the Pathway) was evaluated using interrupted time series analysis from July 2017 to June 2023. A four-year implementation period, divided into incentive payment targets, and a post incentive payment period of two-years (maintenance period) was defined. Results: Statewide documentation of tobacco status was significantly higher than set targets during implementation and despite a 2% decrease following removal of incentive payments, reporting during maintenance remained above the 85% set target. The Pathway documentation remained significantly higher than set targets and showed no decline during maintenance (70% set target). Conclusions: People experiencing mental illness are more likely to die from tobacco-related disease than the general population. To reduce this health disparity tobacco treatment should be embedded in psychiatric settings, but this requires substantial system change. The following study demonstrates the potential of a system change intervention to influence this change and address the gap in tobacco treatment in psychiatric settings.

3B-3 EVALUATING THE EFFECTIVENESS OF AN E-CIGARETTE OFFER VERSUS USUAL CARE FOR SMOKING CESSATION AMONG PEOPLE EXPERIENCING HOMELESSNESS: A CLUSTER-RANDOMIZED CONTROLLED TRIAL IN GREAT BRITAIN

Lynne Dawkins[1], Kirstie Soar[1], Allison Ford[2], Rachel Brown[3], Caitlin Notley[4], Sharon Cox[5]. [1]London South Bank University. [2]University of Stirling. [3]Cardiff University. [4]University of East Anglia. [5]University College London.

Background: Smoking is four times higher than the national UK average among people experiencing homelessness, and traditional treatments are associated with low quit rates. E-cigarettes (EC) are effective for quitting but have not been widely tested in adults experiencing homelessness. Following a successful feasibility study, we explored the effectiveness and cost-effectiveness of offering free EC starter kits to people who smoke accessing homeless centres, compared with usual care (UC). Methods: Multi-centre two-arm cluster randomised controlled trial with mixed-methods process and economic evaluation in 32 centres across Great Britain (GB). Centre staff were trained and participants randomised to either an EC starter pack with weekly supply of e-liquid (provided in centres) for 4-weeks, or usual care, comprising very brief advice (VBA+) and signposting to a local Stop Smoking Service. Participants were followed up at 4-, 12- and 24-weeks. Smoking abstinence was CO-verified. Results: 477 participants were randomised. Follow up rates were 74%, 60%, and 58% respectively at 4-, 12-, and 24-weeks. At the conference, we will be able to present, for the first time (pre-publication), sustained CO-validated 24-week quit rates between groups (primary outcome) and secondary outcomes relating to 7-day point prevalence, 50% smoking reduction, and changes in risky smoking practices (e.g. sharing cigarettes, smoking discarded cigarettes). Discussion: This is the first smoking cessation study to randomly assign people experiencing homelessness to an EC vs. UC intervention. If effective, results will inform decision-making around using ECs to aid smoking cessation and reduce smoking-related inequalities.

3B-4 CHANGING THE DEFAULT FOR TOBACCO TREATMENT: HOW DID OPT-OUT TREATMENT WORK AT THEORETICAL AND INTERPERSONAL LEVELS?

Kimber P Richter[1], Jinxiang Hu[2], Tresza Hutcheson[1], Babalola Faseru[1], Delwyn Catley[3], Byron J Gajewski[2], Edward F Ellerbeck[1]. [1]Department of Population Health, University of Kansas Medical Center. [2]Department of Biostatistics & Data Science, University of Kansas Medical Center. [3]Center for Children's Healthy Lifestyle and Nutrition, Children's Mercy Kansas City.

Background: A recent RCT demonstrated that opt-out care significantly enhanced treatment reach, quit attempts, and short-term cessation among smokers - regardless of motivation to quit. This study explores mediators of cessation and how counsellors provided opt-out care to unmotivated smokers. Methods: Mediation analyses used Structural Equation Models among all 739 participants to determine whether the relationships between counselling participation, medication utilization, and default-theory based variables explained the effect of treatment arm (Opt out vs Opt in) on cessation. To understand how counsellors delivered opt-out care to unmotivated patients, we conducted qualitative analyses of audio-recorded sessions among 40 randomly-selected participants. Results: The pathway from Treatment Arm (Opt out vs Opt in) to Counselling Participation to Cessation was significant (b= 0.193, 95% CI [0.083, 0.303]), as was the pathway from Treatment Arm to Perceived Recommendation to Counseling Participation to Cessation (b = 0.010, 95% CI [0.010, 0.018]). Paths through Medication Utilization were not significant. With respect to counselling strategies, although unmotivated, most patients (28/40) accepted counselling, inpatient and outpatient medication. Strategies counsellors used to either pre-emptively avoid or respond to patient disinterest in treatment included emphasizing autonomy, highlighting advantages of treatment, offering treatment options, acknowledging resistance, reflective listening, and troubleshooting concerns. Conclusion: Opt-out care increased cessation by boosting counselling but not medication utilization. It did so by creating the impression that the provider believed in and recommended treatment-confirming default theory. Patient-centred counselling strategies overcame resistance among smokers who had concerns about care.

3B-5 SMOKING CESSATION IN THE EMERGENCY DEPARTMENT - MECHANISMS OF ACTION IN AN OPPORTUNISTIC INTERVENTION FOR SUPPORTING POSITIVE BEHAVIOUR CHANGE

Caitlin Notley, Pippa Belderson, Emma Ward, Ian Pope. University of East Anglia.

Background: The Cessation of Smoking in the Emergency Department trial (NCT04854616) randomised adults who smoke to receive brief advice, an e-cigarette starter kit and referral to stop smoking services vs control. The primary outcome was biochemically validated abstinence at six months. The trial found the intervention to be effective for sustained smoking abstinence. An embedded process evaluation study sought to understand the mechanisms by which the intervention may be having an effect. Methods: A sub-sample of trial participants (N=34) were purposefully sampled for qualitative interviews. Interviews explored views and experiences of the intervention, to understand barriers and facilitators, and to assess patient's perspectives. Thematic coding of data was additionally analysed using the COM-B framework to hypothesise mechanisms of action. Results: A key mechanism of action was provision of the opportunity for change - giving people a physical e-cigarette starter kit to try immediately, capturing people during a hospital attendance at an opportune time to support behaviour change, and providing brief advice and support 'in the moment', were key

aspects of thematic coding for people who went on to quit smoking. Increasing capability and motivation for a population who were not actively seeking cessation support were secondary to providing the opportunity, but also important aspects underpinning the theory of change. Conclusions: An opportunistic smoking cessation intervention comprising brief advice, an e-cigarette starter kit and referral to stop smoking services was effective for sustained smoking abstinence, potentially due to providing the opportunity for change, but also increasing personal capability and motivation.

Session 3C – Youth vaping and interventions

3C-1 EFFECTS OF THE PILOT VERSION OF FUETSAN MANHOBEN, A SCHOOL-BASED PREVENTION CURRICULUM FOR GUAM AND USAPI YOUTHS, ON E-CIGARETTE USE PREVENTION

Francis Dalisay[1], Scott Okamoto[2], Yoshito Kawabata[1], Thaddeus A. Herzog[2], Pallav Pokhrel[2].
[1]College of Liberal Arts and Social Sciences, University of Guam. [2]Population Sciences in the Pacific Program, University of Hawaii Cancer Center, University of Hawaii at Manoa.

Background: E-cigarette use among young adolescents in Guam, and potentially other regions of the USAPI, is markedly higher than among similarly aged adolescents in the general U.S. population. The objective was to test a 4-lesson, pilot version of a school-based e-cigarette, other tobacco product, and betel nut use prevention curriculum, named Fuetsan Manhoben, on e-cigarette use outcomes among Guam middle school students. Methods: The intervention involved 4 video-based, culturally-grounded curriculum delivered in the classroom by health educators. Eight public middle schools were randomly assigned to either the intervention or the control condition. Participants (n=273) in the intervention condition received the 4-lesson curriculum, whereas participants (n=273) in the control condition did not receive any intervention. Participants in both conditions provided data at pretest, posttest (4 weeks after pretest), and 3-month follow-up. The current analyses pertain to e-cigarette-related outcomes only. Results: No statistically significant intervention effects were detected at immediate posttest on e-cigarette use initiation, escalation, or openness to future e-cigarette use. No statistically significant intervention effects were detected on ever or current e-cigarette use at 3-month follow-up. However, receiving the intervention was associated with 51% decrease in openness to future e-cigarette use at 3-month follow-up. Conclusions: Four lessons delivered over 4 weeks may not produce immediate short-term preventive effects, except potentially reducing e-cigarette use susceptibility at 3-month follow-up. Further research is needed to expand the content and duration of the Fuetsan Manhoben curriculum and to test the longer-term effects of the curriculum.

3C-2 INTERIM FINDINGS OF A FINANCIAL INCENTIVE TO QUIT (I2Q) SMOKING AND VAPING PILOT PROJECT

Carson-Chahhoud KV[1,2], Sharrad K[1,2], Perveen S[1,2], Grammatopoulos T[1,2], Phillips-Chantelois D[1,2], Owen S[3], Tharpa P[1,2,3], Surman B[4], Cenko C[4]. [1]School of Medicine, The University of Adelaide. [2]Houd Research Group. [3]Northern Adelaide Local Health Network. [4]Tobacco Control Unit, Drug and Alcohol Services South Australia.

Introduction: Financial incentives are known to be effective in aiding sustained smoking abstinence, though less is known about their impact for vaping. In a world first, South Australia's Tobacco Control Strategy recommended implementation of a government supported pilot program to investigate the role of a contingency management to aid smoking/vaping abstinence. Methods: Following a community co-design phase, a pre-post pilot evaluation of I2Q commenced in Feb 2023 across four health service groups within the Northern Adelaide Local Health Network (NALHN). Smokers/vapers were offered up to $150 over three time points to encourage smoking/vaping abstinence and enrolment in Quitline. Primary outcome was biochemically validated point prevalence abstinence. Secondary implementation targets included enrolment of n=600 smokers/vapers into I2Q, >28% participant enrolment with Quitline, n=70 Health Professionals (HPs) trained in delivery of brief advice and n=13 health service sites onboarded to deliver I2Q. Results: Among participants who reached the 6-month milestone, 18.7% reported validated point prevalence abstinence (n=17/91), which assumed lost-to-follow-up continued smoking/vaping. Quit rate only among participants receiving follow-up was 80%. Secondary implementation targets were n=214/600 participants recruited; 55%/28% enrolled in Quitline counselling; n=211/70 HPs trained, and n=27/13 health sites onboarded. Discussion/Conclusion: These interim findings suggest that I2Q may offer an effective and in demand service for smokers/vapers wanting to quit, while also stimulating uptake of existing underutilised services like Quitline counselling. A digital version of I2Q with streamlined incentives are now being considered for implementation to increase follow-up and participant recruitment and retention to extend the current NALHN pilot.

3C-3 USE OF E-CIGARETTES RISING AMONG JUNIOR AND SENIOR HIGH SCHOOL STUDENTS IN TAIWAN

Shu-Ying Lo, Chao-Chun Wu, Shu-Li Chia, Po-Chang Tseng, Yin-Ting Zhong. Health Promotion Administration, Ministry of Health and Welfare, Taiwan.

Background: According to the World Health Organization (WHO) report, e-cigarette use is doubling from 2008 to 2012 among adolescents. In Taiwan, e-cigarettes contain nicotine are controlled under Pharmaceutical Affairs Act since 2009, but it will violate Tobacco Hazards Prevention Act if e-cigarettes are in the form of tobacco products. This study aims to demonstrate the prevalence of e-cigarette use and reasons for trying e-cigarettes among adolescents. Methods: Data were drawn from the Taiwan Global youth tobacco survey (Taiwan GYTS) conducted under a school-based and cross-sectional study from 2014 to 2022. The annual sample size is approximately 28,000 persons. Results: Although tobacco use by adolescents has declined substantially over the past few years, the prevalence of e-cigarette use by junior and senior high school students has risen from 2.0% and 2.1% in 2014 to 3.9% and 8.8% in 2022 respectively, which rapidly increased within this eight years. 80.8% of junior high school students and 70.0% of senior high school students who have never used any tobacco product. "Friends are using them" and "The flavour or smell is better" are the two major reasons for trying e-cigarettes among adolescents. Our findings also show that e-cigarette use by adolescents is influenced by the views on conventional tobacco use from parents and friends. Conclusions: Facing the rapid development of e-cigarettes, Taiwan's governments have cooperated with each other to comprehensively block hazards from e-cigarettes by border seizure and inspection, source tracking, channel inspection, monitoring and management, education broadcasting and cessation guidance, etc. Taiwan's Tobacco Hazards Prevention Act is now in the process of amending to regulate e-cigarettes under two laws - Pharmaceutical Affairs Act and Tobacco Hazards Prevention Act - with the

prohibitions on import, manufacture, and sale, persons under 20 years old shall not use e-cigarettes is also prohibited. Last year in Taiwan, Tobacco Hazards Prevention Act has been amended, featuring to several critical issues, such as banning e-cigarettes, imposing stringent regulations and pre-market health risk assessment review on heated tobacco products (HTPs), and planning to ban the additives used in tobacco products to prevent teenagers from using flavoured tobacco products. According to countries around the world are facing the challenge of regulating new types of tobacco products, including HTPs, and the regulations on prohibited flavouring additives of the tobacco products.

3C-4 LIVED EXPERIENCES OF STIGMA AND JUDGMENT AMONG YOUNG PEOPLE WHO VAPE: A QUALITATIVE STUDY FROM AOTEAROA NEW ZEALAND

Carissa Sanders[1], **Janet Hoek**[2], Renee Hosking[3], Anna Graham-DeMello[2]. [1]University of Otago, Dunedin, New Zealand. [2]Department of Public Health, University of Otago, Wellington, New Zealand. [3]Otago School of Medicine, University of Otago, Dunedin, New Zealand.

Background/Introduction: Rapid vaping uptake among young people, most of whom have never smoked regularly, has caused considerable concern about the physical risks they may face. Yet vaping poses other serious risks, including stigma and negative self-judgment, that have received less attention. We addressed this gap by exploring the negative affect young people who vape experience and the impact it has on them. Methods: We interviewed 20 adolescents aged 16-18 who lived in Aotearoa New Zealand and who had a moderate to heavy addiction to vaping, assessed using the E-cigarette addiction severity scale. Using in-depth, semi-structured qualitative interviews, we explored participants' experiences of vaping addiction, and interpreted data using an inductive reflexive thematic analysis approach. Results: We identified three key themes. First, vaping adversely affected participants' physical and mental health (some found vaping triggered anxiety) and disrupted their sleep. Second, addiction greatly diminished the pleasure they first experienced when vaping; many felt pessimistic that they would ever quit, given the social normativity and pervasiveness of vaping. Third, participants felt judged by others who could not understand their struggle with addiction, and vaping had led them to feel self-blame, regret, disappointment, guilt and embarrassment, emotions that changed how they viewed themselves. Discussion/Conclusion: Although vaping appears a pleasurable social practice, addiction occurs rapidly and creates a negative vortex from which young people feel they cannot escape. Young people who vape urgently need cessation support while more effective regulation, particularly of vape accessibility, could protect those who do not vape from starting.

3C-5 REMOVING OR RETURNING FREEDOM? PERCEPTIONS OF A NICOTINE-FREE GENERATION POLICY AMONG YOUNG PEOPLE WHO VAPE

Renee Hosking, Anna Graham-DeMello, Carissa Sanders, **Janet Hoek**. University of Otago, New Zealand.

Background: Despite legislation restricting vape availability, youth vaping rates remain higher in Aotearoa NZ than in other countries. Some countries have proposed creating a nicotine free generation (NFG) that would end the sale of any nicotine product to young people born after a designated date. Yet, while young people strongly support a smokefree generation, the wider use and acceptability of vaping products raise important questions about how they would view an NFG.

Methods: Using in-depth semi-structured qualitative interviews we explored how 20 young people aged 16-18, who lived in Aotearoa and felt addicted to vaping, perceived an NFG policy. We probed their views on an NFG, its implementation and likely effectiveness, and its potential impact on their freedoms. Results: We identified two specific and one overarching theme. First, participants thought an NFG could help them quit vaping, something all wanted, and that it would reduce overall health care costs. Second, despite envisaging benefits, participants identified implementation challenges, particularly social supply. Third, although they expected an NFG policy to present personal challenges, participants thought restricting access to vapes would ensure young people remained free from nicotine addiction. The overarching theme of freedom reflected participants' willingness to accept a restrictive policy that would help them end addiction and protect younger people from the difficulties they now faced. Conclusions: Despite anticipating some implementation problems, young people strongly supported an NFG policy, which they viewed as protective and empowering, and one of the only ways they could regain the agency lost to addiction.

ABSTRACTS - RAPID FIRE PRESENTATIONS

Session 4A – Rapid Fire

4A-1 ESTIMATING NEW ZEALAND'S ILLICIT TOBACCO TRADE USING CONSUMPTION GAP ANALYSIS

Pyi Pyi Phyo, Chris Bullen. University of Auckland.

In 2022, New Zealand introduced legislation to roll out radical tobacco control strategies, including retailer reduction in 2024 and denicotinisation in 2025. Monitoring changes in the illicit tobacco trade will be essential as these strategies are implemented. As part of a baseline assessment using a range of measures to estimate illicit tobacco trade, we did a consumption gap analysis (CGA) to measure the difference between the estimated consumption of cigarettes and tax-paid tobacco sales. We estimated the number of annual cigarettes smoked by multiplying the smoking population, the estimated number of cigarettes smoked and applying an uplift factor (1.3) to adjust for under-reporting. We used upper, middle, and lower limits of daily smokers (â‰¥15 years) from annual national Health Surveys. Tax-paid sales data were obtained from the annual returns by tobacco companies to the Ministry of Health. The proportion of illicit sticks out of all tobacco in 2012 was 6.33% (10.92%, 0.39%) and trended downward to -3.09% (8.43%,-15.09%) in 2022. Illicit tobacco estimates reduced every year except 2019, when there was a peak followed by a sharp decline in 2021, possibly due to COVID-19 border closures. CGA includes many assumptions. Its value lies in assessing trends as policies change and should supported by other methods, such as discarded pack surveys and tracking online advertising.

4A-2 PATTERNS OF ILLICIT TOBACCO USE AMONG RESPONDENTS OF THE 2024 GLOBAL DRUG SURVEY

Cheneal Puljević[1], Jason Ferris[2], Coral Gartner[3]. [1]Tobacco Endgame CRE. [2]Centre for Health Services Research, The University of Queensland. [3]School of Public Health, The University of Queensland.

Background: Illicit tobacco products are any products for which legally-required taxes or duties have not been paid. Although many countries report recent increases in illicit tobacco use (e.g., Australia,

United Kingdom), little is known about the consumers of these products, or their patterns of use. Methods: This study uses data from the Global Drug Survey (GDS), the world's largest survey of drug use. Individuals aged 16+ and who have used at least one drug in the past year are eligible to participate. In the 2024 GDS, respondents were asked about perceived ease of purchasing illicit tobacco, and those who reported past year use of illicit tobacco were asked about frequency and duration of use, products used, source (e.g., friend, tobacconist), price paid, reasons for use, and perceived effective deterrents of use. Results: Data collection for the 2024 GDS is currently underway and will close on 30 April 2024. Data will be ready for analysis in May 2024. Discussion/Conclusions: This study will provide a valuable overview of country-level trends in illicit tobacco use among a large international sample of people who use drugs.

4A-3 OPPORTUNITIES TO DOWN-TRADE TOBACCO PRODUCTS AFTER A TAX INCREASE IN AUSTRALIA

Megan Bayly, Michelle Scollo. Cancer Council Victoria.

Background: Tobacco markets - such as Australia's - with a wide range of product sizes and price segments provide many opportunities for people who smoke to minimise the impact of a tax increase by down-trading. Methods: Online listings of tobacco products were recorded from two major supermarkets in August and November 2019, before and after the 1 September 2019 12.5% excise increase. The pack and per stick prices of factory-made cigarette (FMC) and roll-your-own (RYO) tobacco products were calculated in each month. We examined the proportion of products from August that had at least one cheaper, similar (within 5%), or only more expensive, alternative products available after the tax increase. Four different consumer behaviour scenarios were tested. Results: For those willing to switch to any other FMC (or RYO) product, more than 90% of products had an available alternative that was cheaper or similar in per pack or per stick price following the tax increase. For those who wished to continue purchasing a product from their own brand, at least 61% of FMC products, and at least 19% of RYO products, had a cheaper or similarly priced alternative. Conclusions: Using real-world pricing data, this study found that people who smoke are readily able avoid price increases by switching to another product, undermining the intended impact of tobacco tax increases. Standardising the size of tobacco products and introducing minimum pricing policies would markedly reduce price dispersion in the Australian tobacco market and greatly increase the efficiency of tax increases in reducing tobacco consumption.

4A-4 PROFITS OVER PEOPLE: THE CASE FOR PROSECUTING TOBACCO COMPANIES FOR HOMICIDE OFFENCES IN QUEENSLAND

Frankie Berardi[1], Radha Ivory[2], Coral Gartner[1]. [1]School of Public Health, Faculty of Medicine, The University of Queensland, Herston QLD 4006 Australia. [2]TC Beirne School of Law, Faculty of Business, Economics and Law, The University of Queensland, St Lucia QLD 4072 Australia.

Background: Smoking is the leading cause of preventable death in Australia, accounting for approximately 20,500 deaths annually. However, Australia's tobacco industry continues to prosper despite public awareness of the harms associated with cigarettes. Further, scientific studies and the tobacco industry's internal document disclosures show that tobacco companies have long known that nicotine is addictive and smoking causes pre-mature death. Aim: This research uses Queensland as a

test case to examine the value in considering prosecution against Australia's tobacco companies for homicide. Approach: The murder and manslaughter laws in Queensland were analysed and compared. Then a case analysis was conducted to ascertain the meaning of ambiguous legal terms in homicide statutes. Afterwards, a review was undertaken to identify tobacco company conduct that may be able to satisfy the elements of Queensland's homicide statutes. Specific attention was given to the time at which tobacco companies knew of the harms of smoking and the addictiveness of nicotine. These data were compiled to draw conclusions about the prospect of prosecuting tobacco companies for homicide in Queensland. Outcome: Prosecuting tobacco companies for homicide in Queensland is possible but challenging. Significance: No company has ever been prosecuted for homicide in Australia. The tobacco industry has never been successfully prosecuted for homicide anywhere in the world. This research demonstrates value in continuing this investigation and replicating this analysis in other jurisdictions across Australia.

Session 4B – Rapid Fire

4B-1 NORTH AMERICAN COLLEGE HEALTH SERVICES RARELY HIGHLIGHT THE HARMS OF VAPING FLAVORS

Aditya Gunturi[1], Jessica Rosman[2], Ryan Mulhern[2], Bedant Chakraborty[2], Holly Widanka[2], Sangeeta Gajendra[2], Francisco Cartujano-Barrera[2], Deborah J. Ossip[2], Scott McIntosh[2]. [1]University of Rochester. [2]University of Rochester Medical Center.

Background: Over half of young adults (YA, ages 18-24) express a desire to quit vaping, but just over a third report trying in 2021. The demographic of college students (CS) specifically suffers from higher rates of drug misuse and increased substance experimentation, yet fewer resources are targeted to this population. The present study assessed the availability of CS-targeted vaping information and cessation resources on North American college and university websites. Methods: 64 North American college websites were chosen by size and representativeness of their home territory in each of the 50 US States, the US Capital, and 13 Canadian provinces. Each one was observationally audited to locate CS-targeted vaping cessation resources. An audit checklist was used to assess websites on the presence or absence of cessation information and resources targeted to college students. Results: 23/64 of college websites surveyed had no observable information or support for CS-targeted vaping cessation resources. Of these 23 institutions, a further 4/23 of websites had no resources for smoking, vaping, or substance misuse altogether. The remaining 19/23 of websites did have dedicated pages for smoking cessation, although none of them mentioned vaping or ENDS. Conclusion: Representative North American colleges currently offer little support for college students interested in quitting vaping, as just over one-third of websites lacked any mention of vaping. As we learn more about why CSs are unable to quit as much as they desire, colleges are encouraged to add resources targeted towards vaping to facilitate their journey toward quitting.

4B-2 SOCIOECONOMIC INEQUALITIES IN SMOKING AMONG AUSTRALIANS WITH HEALTH CONDITIONS

Elizabeth Greenhalgh, Michelle Scollo. Quit, Cancer Council Victoria.

Background: Higher smoking prevalence among lower socioeconomic status (SES) groups is a known contributor to the "social gradient of health": the higher rates of poor health, poorer treatment outcomes, and mortality among disadvantaged people. Reducing smoking-related disparities is a priority for tobacco control, and it is important to understand current smoking and quitting behaviours among Australians with health conditions - particularly those experiencing disadvantage -in order to effectively target interventions. Method: Analysis of data from Australia's National Drug Strategy Household Survey 2019. Smoking prevalence, quit attempts, and use of cessation aids were examined by quintile of disadvantage among people with various health conditions - diabetes; hypertension; heart disease; asthma; cancer; chronic pain; and mental illness. Results: The prevalence of regular smoking among people with each of the health conditions was substantially higher in lower compared with higher socioeconomic areas. For example, the prevalence of smoking among low SES asthmatics was 30%, compared with 8% in the most advantaged areas. Within the lowest socioeconomic group, smoking was significantly higher among those with asthma, chronic pain, and mental illness than those without. Nonetheless, quit attempts were generally similar within and between SES and health condition groups. Likewise, the use of cessation aids and receiving support and motivation from a GP was generally equal or higher among low SES smokers. Conclusions: In order to reduce disparities in smoking and health outcomes, we need to target and tailor interventions for people with health conditions who smoke, particularly those whose health outcomes are compounded by disadvantage.

4B-3 TOBACCO SMOKING OF REFUGEES AND HEALTH PROMOTION IN HIGH-INCOME COUNTRIES: A SYSTEMATIC REVIEW AND NARRATIVE SYNTHESIS

Masum Billah[1], Ratika Kumar[1,2], Gail Moloney[1], Michele Greenwood[3], Gurpreet Singh[1], Gillian Gould[1]. [1]Faculty of Health, Southern Cross University, NSW, Australia. [2]School of Dentistry, The University of Queensland, Herston, QLD, Australia. [3]Mid North Coast Local Health District, Coffs Harbour, NSW, Australia.

Background: Being a refugee is a risk factor for poorer health. Tobacco smoking is common among refugees, indicating the likelihood of developing non-communicable diseases (NCDs). Increasingly, there is a focus on multi-morbidity in populations in HICs, and yet the prevalence of NCDs in refugees has not been adequately researched. Health promotion interventions are currently insufficient. A better understanding of why health promotion and how it can be achieved is needed for these populations. Methods: This systematic review applied the standard Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Four electronic bibliographic databases, MEDLINE, CINAHL, PsycINFO, and Web of Science, were searched. Medical subject headings (MESHs) and keywords concerning refugees, tobacco smoking, and health promotion were search strategies. Out of 205 studies assessed to check eligibility criteria, after excluding 197 studies, 8 met the inclusion criteria for full-text review. A narrative synthesis method was used to synthesise findings from multiple studies. Results: Refugees had high rates of tobacco smoking. Men had a higher prevalence of tobacco smoking than women, suggesting gender-disproportionate NCDs. Length of stay, nativity, and PTSD accelerated tobacco smoking and are likely to contribute to developing heart disease, lung

cancer, diabetes, hypertension, and overweight/obesity among refugees. Culture and language-sensitive health materials, educational campaigns, and partnership development in refugee communities were health promotion interventions for refugees. Conclusion: Future public health policies may follow the Ottawa Charter's protocols and emphasise multisectoral collaboration for health promotion interventions by engaging all the relevant stakeholders. Co-design and more longitudinal studies may be future priorities.

4B-4 DO GPS IN AUSTRALIA SMOKE? FINDINGS FROM A CROSS-SECTIONAL STUDY

Masudus Salehin[1,2], Muhammad Aziz Rahman[1,2], Louisa Lam[3]. [1]Institute of Health and Wellbeing, Federation University Australia. [2]Collaborative Evaluation and Research Centre (CERC), Federation University Australia. [3]School of Nursing, Midwifery and Paramedicine (VIC), Faculty of Health Sciences, Australian Catholic University, Australia.

Background: General Practitioners (GPs) are the first point of contact for more than 85% of Australians, however little is known about their smoking behaviour. Given their critical role in smoking cessation promotion, this study aimed to explore the prevalence and predictors of smoking and smoking cessation attitudes among GPs in Australia. Methods: A cross-sectional online survey was conducted among GPs working across Australia between September 2020 and January 2021. The questionnaire was based on the Global Health Professional Survey, Motivation to Stop Smoking (MTSS) scale and the Smoking Abstinence Self-Efficacy Questionnaire (SASEQ). Results: A total of 178 GPs took part in the survey; mean age was 45.56 (+7.2) years, 57% were males and 92% were migrants. Daily smoking prevalence was 7.3%, the preferred form of smoking was cigarettes (55%), followed by e-cigarettes (16%) and water pipes (7%). Only 15% of the smokers had attempted to quit smoking in the preceding 12 months, and 59% could remain abstinent for more than 6 months. The mean (2.37 (+ 2.16) of MTSS scale indicated smokers only had the desire but not the intention to quit. The SASEQ scale score (14.31 (+ 5.6) showed moderate self-efficacy. Being older (41+ years) (AOR 4.22 [95% CIs 1.35-13.21]) or male (44.47 [9.92-199.20]) were associated with ever-smoking; length of smoking (>10 years) was associated with current smoking (9.31 [1.81-47.78]). Conclusions: Current Australian GP smokers lacked strong motivation and self-efficacy to quit. This warrants GP-specific smoking cessation programs given their important role in the Australian society.

2024 SRNT-OCEANIA CONFERENCE – POSTERS

Number	Poster Title	Authors
1	Co-designing a smoking cessation chatbot with end-users and smoking cessation professionals: A focus group study	**Hollie Bendotti**, Sheleigh Lawler, David Ireland, Coral Gartner, Henry M Marshall
2	Information technology self-confidence and internet use differs by smoking status in lung cancer screening participants interested in the Screen2Quit (S2Q) randomised controlled trial	**Hollie Bendotti,** Jenny Peek, Peter Vardon, Linda Passmore, Ian Yang, Emily Stone, Renee Manser, Paul Fogarty, Fraser Brims, Annette McWilliams, Coral Gartner, Leanne Hides, Sheleigh Lawler, Kwun M Fong, Henry M Marshall
3	The middle way: A proposal for pharmacist-only supply of nicotine vaping products	**Samuel Brookfield**, Kathryn Steadman, Lisa Nissen, Coral Gartner
4	A scoping review of Asian Adolescent Vaping	Ko Ko, **Chris Bullen**, Joanna Ting Wai Chu
5	Understanding more about Asian Adolescent Vaping in New Zealand: The ASH (Action for SMOKEFREE 2025) Year 10 Snapshot Survey Analysis	Ko Ko, **Chris Bullen**, Joanna Ting Wai Chu
6	The impact of tobacco endgame policies on smoking prevalence, population health, and costs: A systematic review of modeling studies	**Eunsil Cheon**, Heewon Kang, Jungmi Park, Jaeyoung Ha, Hae-ryoung Chun, Sung-il Cho
7	The effect of tobacco tax increase on price-minimising tobacco purchasing behaviours: A systematic review and meta-analysis	**Ara Cho**, Carmen Lim, Tianze Sun, Gary Chan, Coral Gartner
8	Experiences of smoking acceptability in people who currently smoke in Aotearoa New Zealand: Findings from the 2022 ITC New Zealand (EASE) survey	**Tiara Das**, Janine Nip, Richard Edwards, Jude Ball, James Stanley, El-Shadan Tautolo, Andrew Waa, Jane Zhang, Janet Hoek, Geoffrey T Fong, Thomas Agar, Anne CK Quah
9	Internet-based programs to support tobacco cessation: A systematic review and meta-analysis of randomised controlled trials	**Coral Gartner**, Kylie Morphett, Isabel Meciar, Heewon Kang, Tesfa Yimer, Caitlin McClure-Thomas, Janni Leung, Hollie Bendotti, Daniel Stjepanović, Tianze Sun, Shaun Foo, Gary Chan, Cheneal Puljević
10	Barriers and implementation strategies of tobacco endgame: Stakeholder mapping in South Korea	**Jaeyoung Ha**, Heewon Kang, Eunsil Cheon, Jungmi Park, Hae-ryoung Chun, Sung-il Cho
11	'We are not blagging about the cataclysm': Applications of the Policy Dystopia Model in New Zealand's endgame policy regulation submissions	Ellen Ozarka, Coral Gartner, **Janet Hoek**
12	A content analysis of illicit tobacco-related crimes reported in Australian media	Isabel Meciar, Cheneal Puljević, **Alice Holland**, Coral Gartner
13	Modelling tobacco endgame policies in Canada	**Samantha Howe**, Driss Ait Ouakrim, Tim Wilson, Michael Chaiton

Number	Poster Title	Authors
14	Forecasting smoking rates by multiple sociodemographic groups in Australia	**Samantha Howe**, Driss Ait Ouakrim, Tim Wilson, Tony Blakely, Coral Gartner
15	Utilizing data of the Second-Generation Smoking Cessation Service Plan in Taiwan to analyze the association of service interventions with success of smoking succession	**Mei-Tzu Huang**, Shang-Chi Lee, Ya-Hui Chang, Chun-Ying Chen, Shu-Ying Lo, Yu-Ying Huang, Chao-Ying Tsai, Chung-Yi Li, Jia-Ling Wu
16	Faith-based smoking cessation interventions: A Scoping Review	**Abdullah Kalantan**, Chris Bullen, Samantha Marsh, Amer Siddiq Bin Amer Nordin, Sarah Monshi
17	Experts' views towards tobacco endgame goal and policies in South Korea	**Heewon Kang**, Jungmi Park, Eunsil Cheon, Jaeyoung Ha, Hae-Ryoung Chun, Sung-il Cho
18	Restricting supply of tobacco products to pharmacies: A scoping review	**Heewon Kang**, Kathryn J Steadman, Janet Hoek, Wayne Hall, Coral Gartner
19	Tobacco control interventions for populations living in subsidised, low-income housing: A scoping review	**Germaine Lai**, Kylie Morphett, Samantha Howe, Driss Ait Ouakrim, Kate Mason, Vaughan W Rees, Stephen Li, Coral Gartner
20	Does second-hand smoking mass-media campaign increase public awareness and reduce second-hand smoke exposure? A systematic review	**Carmen CW Lim**, Brienna Rutherford, Coral Gartner, Caitlin McClure-Thomas, Shaun Foo, Fang-yi Su, Roman Scheurer, Susy Sebayang, Gary Chan, Daniel Stjepanović, Fitri Fausiah, Ghea Farassania, Janni Leung
21	Prevalence and associated factors related to tobacco consumption among adults in Taiwan	Li-Chuan Chang, Yu-Hsuan Chen, Pei-Ching Chen, Yue-Chune Lee, Yi-Jyun Chen, Yi-Chieh Chu, **Shu-Ying Lo**, Po-Chang Tseng
22	Amendment of Tobacco Hazards Prevention Act in Taiwan: Brought about a reduction of 1,100,000 smokers and cut health inequality pragmatically within fourteen years	**Shu-Ying Lo**, Chao-Chun Wu, Shu-Li Chia, Po-Chang Tseng, Yin-Ting Zhong
23	Interventions to reduce lung cancer and COPD-related stigma: A systematic review	**Kylie Morphett**, Nathan Harrison, Henry Marshall, Coral Gartner, Julia Yamazaki
24	Use of heated tobacco products and vapes in people who smoke or recently quit smoking in Aotearoa New Zealand: Findings from the 2022 ITC New Zealand (EASE) survey	**Janine Nip**, Richard Edwards, James Stanley, Jude Ball, Jane Zhang, Andrew Waa, El-Shadan Tautolo, Thomas Agar, Anne CK Quah, Geoffrey T Fong
25	Attitudes of people diagnosed with cancer and cancer care providers towards use of nicotine vaping products in high-income countries: A scoping review	**Lavender Otieno**, Jeffin Baiju, Joshua Trigg
26	Public support for tobacco endgame policies in South Korea: Results from an online survey	**Jungmi Park**, Heewon Kang, Eunsil Cheon, Jaeyoung Ha, Hae-ryoung Chun, Sung-il Cho

2024 SRNT-OCEANIA CONFERENCE – POSTERS

Number	Poster Title	Authors
27	Are smoking cessation care practices different for cancer patients who are current smokers versus recent or 'new' quitters? A cross-sectional study in Australian oncology care	**Christine Paul**, Alison Luk Young, Vaibhav Thawal, Melissa McEnallay, Sarah Morris, Elena Stefanovska, Fiona Day, Emily Stone, Bianca Devitt, Po Yee Yip, Craig Kukard, Abhijit Pal, Gavin Wright, Alison Hofman
28	Developing a pathway for the inclusion of Culturally and Linguistically Diverse participants in smoking cessation research	**Christine Paul**, Alison Luk Young, Della Yates, Melissa McEnally, Ashley Young, Shingisai Chando, Vaibhav Thawal
29	What does substance abstinence cost? A review on the efficacy of financial incentives to treat substance use disorders	**Damon Phillips-Chantelois**, Kelsey Sharrad, Tahlia Gammatopoulos, Shagufta Perveen, Nawal Usmani, Kristin Carson-Chahoud
30	A Scoping Review of economic or econometric methods to measure changes in illicit tobacco use among tobacco users	**Pyi Pyi Phyo**, Erwann Sbai, Braden Te Ao, Natalie Walker, Chris Bullen
31	Systematic review and meta-analysis of text messaging interventions to support tobacco cessation	**Cheneal Puljević**, Isabel Meciar, Alice Holland, Daniel Stjepanović, Centaine L Snoswell, Emma E Thomas, Kylie Morphett, Heewon Kang, Gary Chan, Etienne Grobler, Coral Gartner
32	Systematic review and meta-analysis of cytisine to support tobacco cessation	**Cheneal Puljević**, Daniel Stjepanović, Isabel Meciar, Heewon Kang, Gary Chan, Kylie Morphett, Hollie Bendotti, Garry Kunwar, Coral Gartner
33	Prevalence and predictors of smoking among healthcare professionals in Australia: A scoping review	**Masudus Salehin**, Muhammad Aziz Rahman, Louisa Lam
34	Australian general practitioners' perceptions on e-cigarettes as a smoking cessation aid: Baseline vs Follow-up	**Melis Selamoglu**, Bircan Erbas, Hester Wilson, Jamie Brown, Chris Barton
35	Augmented reality technology to support Aboriginal and Torres Strait Islander smoker cessation: Health professional perspectives	**Kelsey Sharrad**, Tahlia Grammatopolous, Shagufta Perveen, Sasha Stewart, Nicholas Marlow, Alwin Chong, Adrian Esterman, Alyson Crozier, Ian Gwilt, Ross Smith, Antony Veale, Malcolm Brinn, Kristin Carson-Chahhoud
36	Effects of supplementary capacity-building messages for disadvantaged areas during a statewide campaign	**Tamara Tabbakh**, Tegan Nuss, Eve Mitsopoulos, Sarah Durkin
37	Association of anxiety and depression symptoms with perceived health risk of nicotine vaping products for smoking cessation	**Joshua Trigg**, Ryan Calabro, Patrick Anastassiadis, Jacqueline Bowden, Billie Bonevski
38	Enablers and barriers for the phasing out of retail tobacco sales: A scoping review	**Joshua Trigg**, Benjamin Fox

Number	Poster Title	Authors
39	Quantifying the longitudinal association between social norms and relative harm perception towards cigarettes and heated tobacco products and subsequent product use among people who use cigarettes and heated tobacco products in Japan: Findings from the 2018-2021 ITC Japan Surveys	**Giang T Vu**, Janni Leung, Ara Cho, Daniel Stjepanović, Tianze Sun, Jason Connor, Phong Thai, Coral Gartner, Wayne Hall, Geoffrey T Fong, Shannon Gravely, Anne CK Quah, Steve X Xu, Itsuro Yoshimi, Yumiko Mochizuki, Kota Katanoda, Takahiro Tabuchi, Kayo Togawa, Gary Chan
40	Analyzing spatial and temporal trends of tobacco use over a five-year period (2017 - 2022) in Australia	**Zhe Wang**, Qiuda Zheng, Shiyu Wang, Jingyi Yuan, Jake W O'Brien, Benjamin J Tscharke, Kevin V Thomas, Jochen F Mueller, Phong K Thai
41	The impact of nicotine metabolism on smoking cessation during pregnancy: A scoping review	**Min-Tz Weng**, Angela Ratsch, Jared A Miles, Kathryn J Steadman
42	Exploring the nicotine metabolite ratio amongst a population of smokers and vapers in Brisbane, Australia	**Min-Tz Weng**, Qiuda Zheng, Shakti Shrestha, Yao Deng, Coral E Gartner, Wenqing Fan, Phong Thai, Kathryn J Steadman

ABSTRACTS - POSTERS

1 - CO-DESIGNING A SMOKING CESSATION CHATBOT WITH END-USERS AND SMOKING CESSATION PROFESSIONALS: A FOCUS GROUP STUDY

Hollie Bendotti[1], Sheleigh Lawler[2], David Ireland[3], Coral Gartner[4], Henry M Marshall[1,5]. [1]Thoracic Research Centre, Faculty of Medicine, University of Queensland, Australia. [2]School of Public Health, Faculty of Medicine, University of Queensland, Australia. [3]The Australian e-Health Research Centre, Commonwealth Scientific and Industrial Research Organisation, Queensland, Australia. [4]NHMRC Centre of Research Excellence on Achieving the Tobacco Endgame, School of Public Health, University of Queensland, Australia. [5]The Prince Charles Hospital, Metro North Hospital and Health Service, Queensland, Australia.

Introduction: 'Quin' is a prototype chatbot co-designed to provide evidence-based, personalised smoking cessation support via a smartphone app. Our focus group (FG) study aimed to gather feedback on the user-experience of the Quin prototype from end-users and smoking cessation professionals (SCPs). Methods: End-users and SCPS from Queensland, Australia, were recruited using active and passive methods. Participants tested Quin for 1-2 weeks before their focus group, and they could log conversation feedback within the app. Focus groups of SCPs were completed first to review smoking cessation information, and major updates were implemented using Agile processes before end-user FGs. Logged feedback was categorised using content analysis, and FG transcripts were thematically analysed. Results: Six online FGs including nine SCPs and seven end-users were completed between August 2022 and June 2023. Four SCPs had previously smoked, and most end-users currently smoked cigarettes on a daily (n=3) or less than daily basis (n=2), and two had quit smoking. Four major themes were derived from focus group feedback: (1) Conversation design; (2) Functionality; (3) Relationality and anthropomorphism; and (4) Role as a smoking cessation support tool. Two major updates were made to Quin between cohorts: (1) Improvements to conversation flow; and (2) Addition of 'Moments of Crisis' conversation tree.
Conclusion: Participants' feedback highlighted the importance of chatbot functionality as this underpinned Quin's conversation design and relationality. Accessibility of accurate cessation information and impartial support Quin provides was recognised as a key benefit. Findings will inform the ongoing development of a mature prototype for clinical testing.

2 - INFORMATION TECHNOLOGY SELF-CONFIDENCE AND INTERNET USE DIFFERS BY SMOKING STATUS IN LUNG CANCER SCREENING PARTICIPANTS INTERESTED IN THE SCREEN2QUIT (S2Q) RANDOMISED CONTROLLED TRIAL

Hollie Bendotti[1,2], Jenny Peek[2,3], Peter Vardon[2,3], Linda Passmore[2,3], Ian Yang[2,3], Emily Stone[4], Renee Manser[5], Paul Fogarty[6], Fraser Brims[7], Annette McWilliams[8], Coral Gartner[9], Leanne Hides[10], Sheleigh Lawler[1], Kwun M Fong[2,3], Henry M Marshall[2,3]. [1]School of Public Health, University of Queensland, [2]Thoracic Research Centre, Faculty of Medicine, University of Queensland. [3]Department of Thoracic Medicine, The Prince Charles Hospital, Brisbane, QLD. [4]St Vincent's Hospital, Sydney, NSW. [5]Royal Melbourne Hospital, Melbourne, Vic. [6]Epworth Hospital, Box Hill, Vic. [7]Sir Charles Gairdner Hospital, Perth, WA. [8]Fiona Stanley Hospital, Perth WA. [9]NHMRC Centre of Research Excellence on Achieving the Tobacco Endgame, School of Public Health, University of Queensland. [10]School of Psychology, University of Queensland.

Background: Smartphone apps and websites may improve access to smoking cessation support. It is unclear if people use digital technology variably according to smoking status. Methods: Participants undergoing lung cancer screening in the International Lung Screen Trial (aged 55-80 years) were invited to join S2Q RCT to assess the effectiveness of a smoking cessation smartphone app versus a website. For this study, we analysed the eligibility assessment questionnaires of potential S2Q participants, including questions from the Australian Digital Inclusion Index. Respondents consented for their data to be analysed regardless of final S2Q eligibility. Internet use frequency and self-rated confidence in using information technology (IT) [range 0-100] were compared between smoking categories using Fisher's exact test and Mann-Whitney U test, respectively. Results: Twenty-two respondents currently smoked (CS) and 31 respondents formerly smoked (FS). The FS group used the internet more frequently ('almost constantly/several times per day' FS 87.1%, CS 54.5% vs 'once a day or less' FS 12.9%, CS 45.5%, p=0.012), and had greater IT self-confidence than the CS group (mean [SD] 81.39 [2.81] and 68.09 [4.42] respectively, p=.009). Few had used smoking cessation apps or websites (CS 13.6%, FS 3.2% and CS 4.5%, FS 6.5% respectively, p=0.29). Conclusion: IT self-confidence and internet use was significantly lower among people aged 55-80 years who currently smoke compared to those who formerly smoked. Most respondents had never used digital smoking cessation resources. Future studies of digital smoking cessation interventions should consider internet use patterns and digital confidence as potential confounders when assessing effectiveness.

3 - THE MIDDLE WAY: A PROPOSAL FOR PHARMACIST-ONLY SUPPLY OF NICOTINE VAPING PRODUCTS

Samuel Brookfield[1], Kathryn Steadman[2], Lisa Nissen[3], Coral Gartner[1]. [1]School of Public Health, The University of Queensland. [2]School of Pharmacy, The University of Queensland. [3]Centre for the Business and Economics of Health, The University of Queensland.

Background: Regulation of nicotine vaping products (NVPs) is an ongoing challenge across the world. Australia currently has a globally unique NVP regulatory model that requires a medical prescription to purchase and use NVPs, with further restrictions announced in May 2023 in response to evidence of widespread illicit NVP sales. Methods: Against this background, we examine the new measures and consider a modification of the model to pharmacist-only supply as an option for widening access to NVPs for smoking cessation, while retaining health practitioner oversight of supply. We describe the strengths and challenges of implementing a pharmacist-only NVP supply option in Australia. Results: Compared to the current prescription-only model, pharmacist-only supply could increase access to a lower risk nicotine product in a highly regulated therapeutic context while addressing youth access and purchasing for non-therapeutic use, reduce demand for illicit products for smoking cessation purposes, and avoid overburdening medical services with consultations to obtain NVP prescriptions. This approach can also accommodate the changes called for by current government proposals such as eliminating NVP advertising, youth-focused branding, and supply from grocery and convenience stores. Conclusion: The Australian government should consider alternatives to the prescription-only model that will reduce overall costs and harm related to NVP use.

4 - A SCOPING REVIEW OF ASIAN ADOLESCENT VAPING

Ko Ko, **Chris Bullen**, Joanna Ting Wai Chu. University of Auckland.

Introduction: The prevalence of adolescent vaping has recently increased in many countries including New Zealand. However, little is known about vaping among Asian adolescents. Method: We did a scoping review of the international literature on vaping among Asian adolescents aged between 10-19 years and published between 2010-2022 inclusive, by searching mainly in three electronic databases (PubMed, Scopus, and the Cochrane Library). Results: The prevalence of Asian adolescent vaping varied from 2.1% to 32.2% for ever vaping and from 1.0% to 11.8% for current vaping with the highest prevalence seen in Indonesia and the lowest in Japan. Vaping prevalence and a country's e-cigarette policies appeared to be correlated. In both Asian and Western contexts, the most common reasons for Asia adolescent vaping were curiosity and peer influence. Vaping was thought to be a risk factor for smoking initiation, including for those who have never or ever smoked. Flavoured vaping and current smoking status were associated with continued vaping. One popular source of information on vaping identified in the Asian context is the internet. In Asian countries, the desire to quit smoking and the ability to vape indoors were the most common reasons for frequent vaping whereas in Western countries, the top three reasons were nicotine concentration, nicotine dependence, and more daily vaping sessions. Conclusion: To date, relatively little research has been conducted on Asian adolescent vaping worldwide including in New Zealand. Ongoing monitoring and more targeted research to understand their vaping behaviours will need to be undertaken on this heterogeneous and important population group.

5 - UNDERSTANDING MORE ABOUT ASIAN ADOLESCENT VAPING IN NEW ZEALAND: THE ASH (ACTION FOR SMOKEFREE 2025) YEAR 10 SNAPSHOT SURVEY ANALYSIS

Ko Ko, **Chris Bullen**, Joanna Ting Wai Chu. University of Auckland.

Introduction: In New Zealand, there have been increasing prevalence rates of vaping among adolescents aged 14 to 15 in recent years. However, there is a lack of studies on vaping among Asian adolescents. Method: Analysis of the ASH Year 10 Snapshot Survey (from 2014 to 2022) was conducted on vaping by ethnicity (Asian vs Non-Asian), by Asian major subgroups (Chinese vs Indian vs 'Other Asian) and by gender (girl vs boy vs other) as well as on smoking for comparative purposes. A Chi-square test and a binary logistic regression test were performed to detect the association and a linear trend respectively. Results: In both groups, the prevalence of vaping increased (a slower rate in the Asian group) while the prevalence of smoking decreased. Between 2021 and 2022, except for Indian group, the vaping prevalence fell (but not statistically significant) for the first time. In 2022, the prevalence of ever and current vaping by Asian adolescents was 16.4% and 4.5% compared to 44.2% and 20.3% for Non-Asian. Among Asian subgroups, vaping by Indian adolescents showed the highest prevalence with 21.1% for ever vaping and 6.2% for current vaping. In all groups, the prevalence of vaping in girls had overtaken that of boys. Social supply, experimentation and pleasure were the commonest associated factors, but a significant association was found with experimentation (by ethnicity and by Asian gender) and pleasure (by ethnicity only). Conclusion: Asian adolescents in New Zealand also reveal similar risky behaviours and attitudes about vaping. Ongoing monitoring and more in-depth research (such as qualitative research) will be needed to further examine and understand

their vaping behaviours to better inform targeted messaging to them, parents, and schools, as well as for appropriate policies and regulations.

6 - THE IMPACT OF TOBACCO ENDGAME POLICIES ON SMOKING PREVALENCE, POPULATION HEALTH, AND COSTS: A SYSTEMATIC REVIEW OF MODELING STUDIES

Eunsil Cheon[1], Heewon Kang[2,3], Jungmi Park[1], Jaeyoung Ha[1], Hae-ryoung Chun[1], Sung-il Cho[1,2]. [1]Department of Public Health Sciences, Seoul National University Graduate School of Public Health, Seoul, The Republic of Korea. [2]Institute of Health and Environment, Seoul National University, Seoul, Republic of Korea. [3]The NHMRC Centre of Research Excellence on Achieving the Tobacco Endgame, School of Public Health, The University of Queensland, Brisbane, Queensland, Australia.

Introduction: As only a few jurisdictions have adopted tobacco endgame policies, their impact has primarily been evaluated through simulation models. We aimed to systemically review the impact of tobacco endgame policies by examining studies that utilized simulation modelling. Methods: We searched Embase, PubMed, Scopus, CINAHL, Web of Science, Google, and Google Scholar on 8 August 2023 (updated on 2 December 2023). Reference lists were hand-searched. Simulation studies assessing the effect of endgame policies on smoking prevalence, health outcomes, and socioeconomic costs, were included. Experimental and observational studies, and studies with conflicts-of-interest were excluded. Data extraction and quality assessment were conducted by four investigators and cross-checked by three investigators. Results: A total of 30 studies were included. The most frequently explored policy was mandating a very low nicotine content (VLNC) standard (n=9), tobacco-free generation (n=9), and substantial tax increases (n=9). The impact of endgame policies was assessed primarily through smoking prevalence (n=20) and life-years gained (n=13). VLNC was found to reduce smoking prevalence by a range of 2.7% (US, 2001-2075) to 55.6% (US, 1965-2018), while tobacco-free generation ranged from 0.2% to 42.1% (Solomon Islands, 2016-2036), and tax increase ranged from 2.4% to 26.4% (Solomon Islands, 2016-2036). Quality assessment scores ranged from 4 to 8 out of 9 with the most lacking aspect being assessing the model's estimation of effects on major smoking-related diseases. Conclusion: VLNC was identified as the most effective endgame policy to reduce smoking prevalence. Further research incorporating additional policy scenarios and diverse geographical contexts is warranted.

7 - THE EFFECT OF TOBACCO TAX INCREASE ON PRICE-MINIMISING TOBACCO PURCHASING BEHAVIOURS: A SYSTEMATIC REVIEW AND META-ANALYSIS

Ara Cho[1,2], Carmen Lim[2,3], Tianze Sun[3], Gary Chan[3], Coral Gartner[2]. [1]Faculty of Medicine, School of Public Health, The University of Queensland, Australia. [2]The NHMRC Centre of Research Excellence on Achieving the Tobacco Endgame, The University of Queensland, Australia. [3]The National Centre for Youth Substance Use Research, The University of Queensland, Australia.

Background and Aims: Increased tobacco taxes are a cost-effective approach to reducing tobacco consumption, yet the impact of these taxes can be undermined by the tobacco industry's pricing and marketing strategies. This systematic review investigated the influence of tobacco tax increase on consumers' price-minimising behaviours (PMB s) that lower their tobacco expenses, whether PMBs intensify following tobacco tax increases, and whether PMBs predict ongoing smoking. Methods: Seven databases were searched from inception to March 2023. Studies were narratively synthesised.

Using a random effects meta-analytic model, the pooled effects of one-off and multiple tax increases were examined on comparable estimates of PMBs: purchasing roll-your-own tobacco (RYO), lower-priced brands and cartons. Results: Eighty-one percent of the 74 included studies reported legal PMBs such purchasing cheaper cigarette brands, RYO, non-cigarette tobacco/nicotine products, in bulk, or from cheaper retailers. A third (28%) reported illicit cigarette purchases (packs without a tax stamp/health warning label, untaxed packs, illegal brands, loose cigarettes, or from informal sellers). Meta-analysis showed that consecutive tax increases were positively associated with RYO (odds ratio (OR)=1.60, 95% confidence interval (CI)=1.04-2.46) and lower-priced brands purchases (OR=1.76, 95% CI=0.93-3.32), especially in higher tobacco taxing environments. These effects were heterogeneous in high I-square. Less evidence associated illicit tobacco purchases with tax increases, and PMBs to smoking cessation. Conclusions: PMBs could undermine tobacco tax increases' public health benefits. Simple tax structures, floor and ceiling prices, reducing pricing differentials across all tobacco products and retailers, and banning price promotions could improve the public health impact of tobacco tax increases.

8 - EXPERIENCES OF SMOKING ACCEPTABILITY IN PEOPLE WHO CURRENTLY SMOKE IN AOTEAROA NEW ZEALAND: FINDINGS FROM THE 2022 ITC NEW ZEALAND (EASE) SURVEY

Tiara Das[1], Janine Nip[1], Richard Edwards[1], Jude Ball[1], James Stanley[1], El-Shadan Tautolo[2], Andrew Waa[1], Jane Zhang[1], Janet Hoek[1], Geoffrey T Fong[3,4], Thomas Agar[3], Anne CK Quah[3]. [1]University of Otago, Wellington, New Zealand, [2]Auckland University of Technology, Auckland, New Zealand, [3]University of Waterloo, Waterloo, ON, Canada, [4]Ontario Institute for Cancer Research, Toronto, ON, Canada.

Background: Declining social acceptability of smoking may have contributed to reductions in current smoking prevalence from 18.4% in 2011/12 to 8.3% in 2022/23 in Aotearoa New Zealand. To explore perceptions and experiences of smoking's acceptability, we analysed data from the 2022 EASE/International Tobacco Control NZ Survey. Methods: We used data from 1,040 participants who currently smoke (698 smoked daily and 342 non-daily) and weighted the data to represent the national profile of people who smoke. We asked participants whether they agreed with statements about smoking's social acceptability. We excluded 'Don't know' and 'Refused' responses from our analyses. Results: 58% (95%CI 54.0-61.9%) of participants reported there were fewer and fewer places where they felt comfortable smoking. 35.8% (32.2-39.5%) reported receiving disapproving looks or coughs and 37.7% (34.0-41.5%) reported feeling ashamed when others saw them smoking. 26.5% (23.5-29.9%) reported trying to hide their smoking from friends and family and 25.5% (22.4-28.9%) reported feeling like an outsider within their social groups because they needed to smoke. People who intended to quit reported higher levels of smoking unacceptability (e.g., 45.7% reported feeling ashamed) compared to those who did not intend to quit (e.g., 20.9% reported feeling ashamed). Conclusion: Many people who smoke in Aotearoa New Zealand reported experiences and perceptions of smoking's decreased social acceptability, which could have negative effects on well-being. However, positive associations between quit intentions and social unacceptability of smoking suggest these perceptions and experiences may also positively influence behaviors and encourage smoking cessation.

9 - INTERNET-BASED PROGRAMS TO SUPPORT TOBACCO CESSATION: A SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMISED CONTROLLED TRIALS

Coral Gartner[1], Kylie Morphett[2], Isabel Meciar[2], Heewon Kang[2], Tesfa Yimer[2], Caitlin McClure-Thomas[2], Janni Leung[2], Hollie Bendotti[2], Daniel Stjepanović[2], Tianze Sun[2], Shaun Foo[2], Gary Chan[2], Cheneal Puljević[2]. [1]Tobacco Endgame CRE, SPH, UQ. [2]The University of Queensland.

Background: Internet interventions for tobacco cessation are potentially a highly cost-effective way to disseminate behavioural support to people stopping tobacco use. We conducted a systematic review to evaluate the effectiveness of internet-based interventions for tobacco cessation as tested in randomised controlled trials (RCTs). Methods: We searched PubMed, CINAHL, Cochrane, Embase, PsycINFO, Scopus and Web of Science on 8 June 2022. Additional searches were conducted using the Google Scholar search engine, trial registries and secondary references, with an updated search conducted on 9 July 2023. No language or country restrictions were applied. RCTs of internet-based tobacco cessation interventions for people aged 15 and over who used tobacco regularly. Five independent reviewers extracted the data, which was checked by one reviewer. The outcomes of the studies were narratively summarised and a meta-analysis performed for studies that were combinable and that reported outcomes at least 6 months post-randomisation. Certainty of the evidence was assessed using the GRADE criteria. Results: Seventy-six RCTs were identified that met the inclusion criteria. There was substantial heterogeneity in the interventions, comparator conditions, and populations. Overall, the meta-analysis indicated that internet interventions were not more likely to result in abstinence at follow-ups of 6 months or longer compared to minimal/no intervention (RR 1.11, 95% CI 0.98-1.25, 16 RCTs), or compared to less interactive/functional/tailored internet interventions (RR 1.12, 95% CI 0.96-1.31, 15 RCTs), or when delivered with additional counselling or coaching (RR 1.10, 95% CI 0.75-1.61, five RCTs), or with pharmacotherapy (RR 1.28, 95% CI 0.94-1.74, 7 RCTs). Conclusions - Internet-based interventions have substantial potential to deliver smoking cessation support widely at low cost. However, the certainty of evidence on their effectiveness is very low. There are also wide variations in program content and adherence. Further research is needed to develop standardised internet interventions that effectively support long-term abstinence.

10 - BARRIERS AND IMPLEMENTATION STRATEGIES OF TOBACCO ENDGAME: STAKEHOLDER MAPPING IN SOUTH KOREA

Jaeyoung Ha[1], Heewon Kang[2,3], Eunsil Cheon[1], Jungmi Park[1], Hae-ryoung Chun[1], Sung-il Cho[1,2]. [1]Department of Public Health Sciences, Seoul National University Graduate School of Public Health, Seoul, The Republic of Korea. [2]Institute of Health and Environment, Seoul National University, Seoul, Republic of Korea. [3]The NHMRC Centre of Research Excellence on Achieving the Tobacco Endgame, School of Public Health, The University of Queensland, Brisbane, Queensland, Australia.

Introduction: Understanding the political and social dynamics that sustain the tobacco epidemic is crucial for successfully achieving the tobacco endgame. We explored potential challenges and implementation strategies of tobacco endgame using a stakeholder mapping approach. Methods: Eleven participants relevant to tobacco control were recruited for in-depth interviews by purposive sampling: government officials, members of society organizations, and academic researchers. Three main questions were asked for stakeholder mapping: 1) perception of tobacco endgame policy; 2)

mapping key stakeholders in terms of their political influence and interest; and 3) strategies to promote the political process of the endgame strategy. Data were analysed through content analysis. Results: Tobacco endgame was perceived as the ultimate goal of existing tobacco-related policies, with supply regulations as the key element. Participants structured the composition of stakeholders involved in tobacco production and supply, highlighting tobacco companies as the strongest opposing group. These companies supported retailers to safeguard their livelihoods and employed tactics to promote a positive brand image to influence the public. Conversely, potential proponents for the tobacco endgame were noted as unorganized in leading public advocacy. Public support was highlighted as the key for successful endgame implementation, with a focus on value-based messaging, particularly to protect younger generations from tobacco use. Conclusion: Mobilizing the public is paramount for achieving the tobacco endgame. An organized group of proponents, supported by the public, will play a crucial role. Value-based messaging is vital to counter industry influence on the public.

11 - 'WE ARE NOT BLAGGING ABOUT THE CATACLYSM': APPLICATIONS OF THE POLICY DYSTOPIA MODEL IN NEW ZEALAND'S ENDGAME POLICY REGULATION SUBMISSIONS

Ellen Ozarka[1], Coral Gartner[2], **Janet Hoek**[3]. [1]Department of Public Health, University of Otago. [2]NHMRC Centre of Research Excellence on Achieving the Tobacco Endgame, University of Queensland. [3]ASPIRE Aotearoa, University of Otago, Wellington.

Introduction: Aotearoa New Zealand's endgame legislation (SERPA), which included measures to reduce tobacco's retail availability, denicotinise smoked tobacco, and create a smokefree generation, involved an extensive public consultation process. Submissions made during this process provide a unique opportunity to analyse discursive strategies opposing endgame measures. Methods: Using an Official Information Act request to the Ministry of Health, we obtained 18 submissions commenting on draft regulations designed to implement the endgame measures. The sample included submissions from tobacco companies, individuals and groups that receive industry funding, retailers, and stakeholders that had previously opposed the endgame measures. We deductively and inductively analysed these submissions using the Policy Dystopia Model (PDM), a framework developed to review and classify arguments advanced by the Tobacco Industry (TI). Results: Most submissions aligned strongly with the PDM framework and presented the government as autocratic and incompetent, predicted dire consequences for small retailers, anticipated a burgeoning illicit market, and claimed a violent crime wave would follow SERPA's implementation. However, a subgroup were pragmatic and saw risks as manageable rather than catastrophic, though they were not unequivocally supportive of SERPA. We also identified new arguments commodifying the principles of harm reduction. Conclusions: While our analysis demonstrates the PDM's ongoing relevance, we identified new arguments, particularly lawlessness, violent crime, and robberies, while other areas of the PDM were less prominent. We recommend a revised PDM could assist Public Health communicators and advocates, particularly given rising TI disinformation in response to endgame initiatives.

12 - A CONTENT ANALYSIS OF ILLICIT TOBACCO-RELATED CRIMES REPORTED IN AUSTRALIAN MEDIA

Isabel Meciar[1], Cheneal Puljević[1,2], **Alice Holland**[1], Coral Gartner[1]. [1]NHMRC Centre of Research Excellence on Achieving the Tobacco Endgame, School of Public Health, The University of Queensland, Queensland, Australia. [2]Centre for Health Services Research, The University of Queensland, Queensland, Australia.

Background/Introduction: Australian survey and seizure data suggest a growing illicit tobacco market. As an illicit product, accurately tracking trends in illicit tobacco growing, manufacture and sales is challenging. We examined trends in Australian illicit tobacco-related crimes using a content analysis of news articles. Methods: A content analysis was performed on news media articles identified in the Factiva database and government agency websites (AFP, ABF, ATO, ACIC) about crimes related to illicit tobacco between January 2000 and December 2023 (data collection ongoing). Articles were coded for the type of crime, location, product type, dollar value of seized products, methods of distribution or storage, agencies involved, and other crimes involved. Results: We identified 402 crimes reported in 343 articles. The number of illicit-tobacco related crimes reported increased since 2012. The most common crimes were possession of illicit tobacco (52.8%) between 2000 and 2010, and illicit tobacco smuggling (43.4%) between 2011 and 2022. There was an estimated increase of $4,660,000 in the median dollar (worth) value per seizure of illicit tobacco products in the last decade, ranging between $43 and $67,000,000. Discussion/Conclusion: Our findings suggest the illicit tobacco market increased in Australia since 2012, potentially undermining the impact of tobacco control policies to reach a tobacco endgame by 2030. These findings highlight a need for improved border detection measures and campaigns promoting community tip offs.

13 - MODELLING TOBACCO ENDGAME POLICIES IN CANADA

Samantha Howe[1,2], Driss Ait Ouakrim[1,2], Tim Wilson[1,2], Michael Chaiton[3]. [1]University of Melbourne. [2]NHMRC Centre for Research Excellence on Achieving the Tobacco Endgame. [3]University of Toronto.

Background: In 2018, the Government of Canada set an endgame target to reach <5% tobacco use by 2035. Previous simulation modelling showed that a 20% yearly increase in the tobacco tax rate, a standard tobacco control measure, was required to reach the 2035 goal. More radical strategies therefore warrant exploration. Methods: We forecast smoking rates under 'business-as-usual' (BAU) in Canada, by sex and age, using logistic regression on historic trends. We then applied a validated Markov model & proportional multistate lifetable to simulate the impact of a tobacco endgame policy package on smoking rates, deaths averted, and health-adjusted life years (HALYs) gained in the Canadian population from 2021-2039. The policy package comprised of 'denicotinisation' of cigarettes, reduction of tobacco retail availability by 95%, and a 'smokefree generation' policy.
Results: Our forecasts indicate that the endgame goal is unlikely to be achieved under BAU, with smoking prevalence reaching 7% for females and 13% for males by 2035. The intervention package saw smoking rates falling below 5% within two years of implementation for females, and three years for males. The package resulted in 11,800 (95% uncertainty interval [UI] 1,350-27,700) fewer deaths and 161,000 (95% UI 63,000-286,000) HALYs gained compared to BAU, over 18-years (discounted at 3% pa). The main impact (approximately 90% of the total benefit) resulted from the denicotinisation policy. Discussion: Novel strategies should be considered to reach the 2035 endgame goal in Canada.

Future modelling should consider the impact on smoking inequity, and the dynamics of smoking and vaping.

14 - FORECASTING SMOKING RATES BY MULTIPLE SOCIODEMOGRAPHIC GROUPS IN AUSTRALIA

Samantha Howe[1,2], Driss Ait Ouakrim[1,2], Tim Wilson[1,2], Tony Blakely[1,2], Coral Gartner[3,2]. [1]University of Melbourne. [2]NHMRC Centre for Research Excellence on Achieving the Tobacco Endgame. [3]University of Queensland.

Background: The tobacco endgame target set in Australia's National Tobacco Strategy, of ‰¤5% smoking prevalence by 2030, ignores large variations in smoking across sociodemographic groups and risks perpetuating current smoking inequities. Methods: We calculated future smoking rates in Australia under business-as-usual (BAU) trajectories for multiple sociodemographic categories and compared them to the endgame target. We applied a simulated annealing optimisation method to estimate historic daily smoking rates by six dimensions (sex, age, geographic location, socioeconomic status, and Indigenous status) using multiple available datasets from 2001-2019. Logistic regression was applied to the modelled outputs to forecast smoking rates to 2049. Results: Daily smoking rates are expected to reach 7.9% by 2030 under BAU. To reach an endgame target by 2030, smoking rates would need to decrease by 9.3% per year from 2023 (three times the projected average yearly rate of change under BAU). Of the 15 strata combinations of geographic location and socioeconomic status in the model, only four met the 2030 target. Prevalence remaining highest (32% in 2030) for people in the most disadvantaged areas - a yearly 24% reduction in smoking rates would be required for this group to reach the target. Discussion: If equity is not at the forefront of tobacco policy, ongoing smoking inequities are likely to continue even under a tobacco endgame strategy. Our approach provides a comparative baseline for evaluating tobacco control interventions by different sociodemographic dimensions and presents a methodological framework that could be adapted for analysing smoking-related inequities in other jurisdictions.

15 - UTILIZING DATA OF THE SECOND-GENERATION SMOKING CESSATION SERVICE PLAN IN TAIWAN TO ANALYZE THE ASSOCIATION OF SERVICE INTERVENTIONS WITH SUCCESS OF SMOKING SUCCESSION

Mei-Tzu Huang[1], Shang-Chi Lee[1], Ya-Hui Chang[1], Chun-Ying Chen[1], Shu-Ying Lo[2], Yu-Ying Huang[2], Chao-Ying Tsai[2], Chung-Yi Li[1], Jia-Ling Wu[1]. [1]Department of Public Health, College of Medicine, National Cheng Kung University, Tainan, Taiwan. [2]Tobacco Control Division, Health Promotion Administration, Ministry of Health and Welfare, Taipei, Taiwan.

Introduction: To investigate the relationship between smoking cessation methods and the six-month smoking abstinence rate in Taiwan's second-generation cessation service plan.
Methods: We conducted secondary data analysis using data from the Ministry of Health and Welfare's medical institution-based smoking cessation service system. Our study included individuals participating in the cessation program, covering smoking cessation therapy involving prescription medications (Varenicline and Bupropion), nicotine replacement therapy (NRT), and educational sessions from 2012 to 2022, with a focus on those completing six months of follow-up. Generalized Estimating Equations were used to examine the relationship between cessation methods and the six-month abstinence rate. Results: After adjusting for ecological, institutional, and individual factors,

individuals solely receiving treatment regimens or combining them with educational sessions had significantly higher odds of successful smoking cessation compared to those only attending educational sessions, with adjusted odds ratios (aOR) of 1.38 and 1.56, respectively. Among those who received treatment regimens, a longer duration of participation was associated with a higher likelihood of successful smoking cessation. During treatment regimens, individuals who solely used medications had a significantly increased aOR at 1.60, whereas those using NRT alone (aOR= 1.33) or both medications and NRT (aOR= 1.31) had slightly smaller but also significantly increased aOR of successful cessation. Discussion/Conclusion: Receiving treatment regimens or combining with educational sessions was associated with significantly higher odds of successful smoking cessation. Longer participation in treatment regimens increased success rates, and the use of both medication and NRT during treatment significantly improved the likelihood of quitting smoking successfully.

16 - FAITH-BASED SMOKING CESSATION INTERVENTIONS: A SCOPING REVIEW

Abdullah Kalantan[1], Chris Bullen[1], Samantha Marsh[1], Amer Siddiq Bin Amer Nordin[2], Sarah Monshi[3]. [1]The University of Auckland. [2]Universiti Malaya, Malaysia. [3]Umm Al-Qura University, Saudi Arabia.

Religion has long been involved in promoting health and improving the well-being of communities, including proscribing the smoking of tobacco. Religion, faith, and spirituality are associated with lower smoking and increased smoking cessation rates. Potential advantages of incorporating religion in smoking cessation interventions include reaching disadvantaged communities, establishing social support through congregations, providing a trusted environment to implement health interventions, and boosting motivation by seeking help from a higher power. However, there is a lack of rigorous research to support faith-based approaches to smoking cessation. To date, most studies have focused on interventions undertaken in Christian contexts in developed countries. This scoping review aims to map and summarise available evidence on faith-based smoking cessation interventions across all faiths and countries. Consistent with the JBI guidance for scoping reviews and PRISMA-ScR guidelines, the following databases were searched: Embase, MEDLINE, PsycINFO, Web of Science, and Cochrane Library. The World Health Organisation's regional offices' websites were searched for grey literature. Titles, abstracts, and full texts were screened against inclusion criteria. The initial search yielded 1343 published articles and 104 grey literature. A total of 15 published articles and six grey literature were selected. Most studies were conducted in Western countries, focused on Christianity and Islam. Interventions varied in content, mode of delivery, duration and frequency, and degree of religious incorporation. Faith-based interventions can potentially increase quitting rates; however, evidence for their effect is limited. Further empirical research is warranted to understand how religion may influence smoking behaviours and evaluate the efficacy of faith-based intervention for smoking cessation.

17 - EXPERTS' VIEWS TOWARDS TOBACCO ENDGAME GOAL AND POLICIES IN SOUTH KOREA

Heewon Kang[1,2], Jungmi Park[3], Eunsil Cheon[3], Jaeyoung Ha[3], Hae-Ryoung Chun[3], Sung-il Cho[3]. [1]The University of Queensland. [2]Seoul National University. [3]Graduate School of Public Health, Seoul National University.

Introduction: With limited empirical data, expert opinions are crucial in decision-making. We aimed to examine experts' perspectives on establishing a tobacco endgame goal and adopting related

policies in South Korea. Methods: A bibliometric analysis identified Korean authors with at least two tobacco control studies in the past five years. Participants were surveyed online to express their views on the Korean endgame goal (including timeframe and scope) and to rate the potential effectiveness and feasibility of 13 tobacco endgame policies on a 5-point scale (1=lowest, 5=highest). Results: Among 63 participants, 95.3% supported establishing an endgame goal to reduce adult smoking prevalence to <5%, with 44.3% each supporting a timeframe of 10 or 20 years. The majority believed that the Korean endgame goal should encompass cigarettes, heated tobacco products (HTPs), and vaping products (63.5%), followed by cigarettes and HTPs (17.5%), and cigarettes only (14.3%). Policies perceived as highly effective and feasible included banning sales within 500m of schools (effectiveness=3.8, feasibility=4.3), allowing sales only in specialised tobacco shops inaccessible to minors (effectiveness=4.2, feasibility=3.7), and a 20% annual tax increase until prevalence falls below 5% (effectiveness=4.4, feasibility=3.0). The least feasible policies included transitioning cigarette consumers to e-cigarettes, performance-based regulation of tobacco companies, and requiring a purchase license/prescription. Discussion: Experts expressed support for establishing an endgame goal within 10-20 years, encompassing the three primary products available in South Korea. Future research could focus on investigating the outcomes and implementation strategies for policies perceived as effective and feasible, such as restricting retailers and substantially increasing taxes.

18 - RESTRICTING SUPPLY OF TOBACCO PRODUCTS TO PHARMACIES: A SCOPING REVIEW

Heewon Kang[1,2], Kathryn J Steadman[3], Janet Hoek[4], Wayne Hall[5], Coral Gartner[6]. [1]The University of Queensland. [2]Seoul National University. [3]School of Pharmacy, Faculty of Health and Behavioural Sciences, The University of Queensland. [4]Department of Public Health, University of Otago Wellington, Wellington, New Zealand. [5]National Centre for Youth Substance Use Research, Faculty of Health and Behavioural Sciences, The University of Queensland. [6]The NHMRC Centre of Research Excellence on Achieving the Tobacco Endgame, School of Public Health, Faculty of Medicine, The University of Queensland.

Introduction: We synthesised the published literature on proposals to restrict tobacco supply to pharmacies, covering: (1) policy concept/rationale, (2) policy impact and implementation, and (3) evidence gaps and research recommendations. Methods: We searched eight databases (PubMed, CINAHL, Scopus, Web of Science, Embase, IPA, ProQuest, and OATD) for publications with at least an English abstract. We searched reference lists of included publications manually. One author screened all publications, and a second author reviewed a 10% subset. We focused on approaches to restrict the supply of tobacco products to pharmacies, without any restrictions on study design, location, participants, or publication date. Results: A total of 18 publications were identified. Among the thirteen studies conducted in specific geographical contexts, eight were from Aotearoa/New Zealand. The largest number of publications (n=8) focused on effectiveness domains, indicating potential reductions in retailer density, smoking prevalence, disease burden, cost, and increased opportunities for cessation advice. Seven explored policy acceptability among experts, pharmacists, and people who smoke. Publications noted that pharmacy-only supply aligns with other programs involving pharmacists, such as needle exchange programs, but conflicts with efforts to phase out tobacco sales from US and Canadian pharmacies. Conclusions: Progress in tobacco retailing policy (e.g., licensing, retailer incentives) and research (e.g., assessment of policy equity and durability, application in other geographic contexts) are needed before a pharmacy-only tobacco supply model would be feasible.

19 - TOBACCO CONTROL INTERVENTIONS FOR POPULATIONS LIVING IN SUBSIDISED, LOW-INCOME HOUSING: A SCOPING REVIEW

Germaine Lai[1], Kylie Morphett[1], Samantha Howe[2], Driss Ait Ouakrim[2], Kate Mason[2], Vaughan W Rees[3], Stephen Li[1], Coral Gartner[1]. [1]NHMRC Centre of Research Excellence on Achieving the Tobacco Endgame, School of Public Health, Faculty of Medicine, The University of Queensland, Brisbane, Queensland, Australia. [2]Melbourne School of Population and Global Health, University of Melbourne, Melbourne, Victoria, Australia. [3]Department of Social and Behavioral Sciences, Harvard T.H. Chan School of Public Health, Boston, Massachusetts, USA.

Objectives: People living in subsidised, low-income housing have higher smoking prevalence and exposure to second-hand smoke. Despite advances in the adoption of tobacco control interventions, this population continues to experience increased risk of tobacco-related harms. We summarised peer-reviewed and grey literature sources documenting tobacco control interventions targeted at this population to investigate and synthesise the literature on interventions that have been implemented worldwide. Methods: We searched five databases (PubMed, Scopus, Web of Science, CINAHL and EMBASE) for original empirical research, and conducted targeted searches using Google Advanced search for grey literature sources. Eligible sources that detailed tobacco control interventions targeted at publicly subsidised, low-income housing settings were included. Backwards snowballing was used to identify additional studies. We adhered to the JBI Scoping Review Methodology and Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) checklist. Results: Of the 57 sources included, the most common type of intervention was smoke-free housing policy (n=32), followed by cessation-focused intervention (n=19), and other types of intervention (n=6). Most interventions were implemented in the United States (n=53), with the remaining (n=4) in Canada, England and Singapore. Evidence in this review suggests that such interventions implemented in subsidised housing context have a positive impact on cessation behaviours and second-hand smoke exposure. Conclusion: Tobacco control interventions implemented in subsidised, low-income housing commonly focused on smoke-free housing policies or cessation-focused interventions delivered on-site. Future research on a wider range of interventions that target tobacco use and exposure, are needed to inform future policy and practice in addressing smoking in subsidised housing populations.

20 - DOES SECOND-HAND SMOKING MASS-MEDIA CAMPAIGN INCREASE PUBLIC AWARENESS AND REDUCE SECOND-HAND SMOKE EXPOSURE? A SYSTEMATIC REVIEW

Carmen CW Lim[1,2,3], Brienna Rutherford[1,2], Coral Gartner[3], Caitlin McClure-Thomas[1], Shaun Foo[1], Fang-yi Su[1], Roman Scheurer[4], Susy Sebayang[5], Gary Chan[1], Daniel Stjepanović[1], Fitri Fausiah[6], Ghea Farassania[6], Janni Leung[1]. [1]National Centre for Youth Substance Use Research, The University of Queensland, Australia. [2]School of Psychology, The University of Queensland, Brisbane, Australia. [3]NHMRC Centre of Research Excellence on Achieving the Tobacco Endgame, School of Public Health, The University of Queensland, Australia. [4]Queensland Centre for Mental Health Research, The Park Centre for Mental Health, Australia. [5]School of Public Health, Universitas Airlangga, Indonesia. [6]School of Psychology, Universitas Indonesia, Indonesia.

Background: This systematic review summarised the characteristics and outcomes of mass media campaigns on second-hand smoking (SHS) prevention. Methods: PubMed, Embase, Web of Science,

and grey literature were searched for SHS campaigns implemented between 2016-2022, using terms related to smoking, media, and behavioural outcomes. The database search identified 1,413 peer-reviewed titles, where 82 full-texts were screened, with 14 meeting the eligibility criteria. The grey literature search identified 9807 sources and 61 were included. We extracted data on the campaign characteristics, metrics, and smoking-related outcomes. Results: The various campaigns reached up to 378 million people. The reported recall rates range from 8%-76%. Of the 11 studies that reported smoking-related outcomes, 10 reported increased knowledge in understanding the SHS risks (73%-85%), 5 reported increased prevalence of smoke-free homes, and 2 reported persuading others to quit smoking among participants. A reduction in overall smoking was reported (2 studies) and in the presence of children (3 studies). Conclusion: Based on limited evidence, SHS campaigns could reduce the occurrence of smoking in the home and around children. There is little evidence that quit attempts were sustained. A thorough outcome evaluation of SHS campaigns would assist policy makers to understand the full impact of these campaigns.

21 - PREVALENCE AND ASSOCIATED FACTORS RELATED TO TOBACCO CONSUMPTION AMONG ADULTS IN TAIWAN

Li-Chuan Chang[1], Yu-Hsuan Chen[2], Pei-Ching Chen[3], Yue-Chune Lee[2,4], Yi-Jyun Chen[1], Yi-Chieh Chu[1], **Shu-Ying Lo**[5], Po-Chang Tseng[5]. [1]Geriatric and Long-Term Care Research Center, Chang Gung University of Science and Technology, Taoyuan City, Taiwan. [2]Institute of Health and Welfare Policy, National Yang Ming Chiao Tung University, Taipei, Taiwan. [3]Department of Health and Welfare, University of Taipei, Taipei, Taiwan. [4]Master Program on Trans-disciplinary Long-Term Care and Management, National Yang Ming Chiao Tung University, Taipei, Taiwan. [5]Health Promotion Administration, Ministry of Health and Welfare, Taiwan.

Background/Introduction: Tobacco use remains a significant global public health concern. Despite the decline in traditional cigarette usage, new products are becoming increasingly popular. This study aimed to investigate the prevalence of e-cigarettes, HTPs and WTS, separately, among adults in Taiwan and determined demographic factors associated with use. Methods: This population-based pooling cross-sectional study was conducted using survey data of the 2020 Adult Smoking Behavior Surveillance System and 2022 National Health Promotion and Health Behavior Surveillance Survey. The outcome measure were current e-cigarettes use, current HTPs use, and ever WTS use. Multiple logistic regressions were carried out to examine the association between year, demographic and environmental covariates and each tobacco consumption among adults. Results: The prevalence of current e-cigarette use was 1.70% in 2020 and 1.41% in 2022. Multivariate analysis showed that current smokers or with higher educational attainment were more likely to report current e-cigarette use. The prevalence of current HTPs use was 0.53% in 2020 and 0.35% in 2022. Multivariate analysis showed that males or adults with higher monthly income were more likely to report current HTPs use. The prevalence of ever WTS was 0.41% in Taiwan in 2022, respectively. Multivariate analysis showed that male and people with second-hand smoke exposure or with higher monthly income were more likely to report ever WTS. Discussion/Conclusion: Both the current WTS and HTPs were low. Meanwhile, HTPs can be legally sold after the health risk assessments review and being approved. Continuing surveillance is required to monitoring tobacco use and strengthening tobacco control.

22 - AMENDMENT OF TOBACCO HAZARDS PREVENTION ACT IN TAIWAN: BROUGHT ABOUT A REDUCTION OF 1,100,000 SMOKERS AND CUT HEALTH INEQUALITY PRAGMATICALLY WITHIN FOURTEEN YEARS

Shu-Ying Lo, Chao-Chun Wu, Shu-Li Chia, Po-Chang Tseng, Yin-Ting Zhong. Health Promotion Administration, Ministry of Health and Welfare, Taiwan.

Background: Smoking kills more than 27,000 people each year. Amendment of the Tobacco Hazards Prevention Act came into effect with expanded ban of smoking including all public indoor places and some public outdoor places. This study aims to evaluate the effectiveness of this amendment on smoking rate and health inequality. Methods: Data were drawn from the Taiwan Adult Smoking Behavior Survey (TASBS) conducted under a nationally representative cross-sectional study with telephone interviews from 2004 to 2022. Probability proportional to size (PPS) sampling and post-stratification were used to better represent the characteristics of the population. The annual sample size is approximately 15,000-26,000 persons. Results: The adult smoking rate declined from 21.9% in 2008 to 14.0% in 2022, indicating a 36.3% decline in smoking rate and a reduction in the number of smokers by approximately 1,100,000 within fourteen years. The speed of reduction in this period was more remarkable than that experienced in 4 years before the amendment. Among different subgroups, the reduction was more significant in males aged 18-24 and 25-39 than those aged 40-64, and people of lowest level of education (junior high or lower) than those of higher education. Conclusions: Implementation of the amended Tobacco Hazards Prevention Act has managed to remarkably reduce both smoking rate itself and inequality in smoking rates. However, continued efforts are needed to achieve the goal of a 30% relative reduction in smoking rate by 2025 set by the World Health Organization (WHO), decreasing the adult smoking rate from 20% in 2010 to 14% in 2025.

23 - INTERVENTIONS TO REDUCE LUNG CANCER AND COPD-RELATED STIGMA: A SYSTEMATIC REVIEW

Kylie Morphett[1], Nathan Harrison[2], Henry Marshall[3,4], Coral Gartner[1], Julia Yamazaki[1]. [1]School of Public Health, The University of Queensland. [2]College of Medicine and Public Health, Flinders University. [3]The Prince Charles Hospital. [4] The University of Queensland Thoracic Research Centre.

Background: Evidence shows that individuals with lung cancer and chronic obstructive respiratory disease (COPD) experience high levels of stigma, attributed partly the strong association between these diseases and smoking behaviours. Stigma can be external in the form of discrimination or judgemental comments or internalised in the form of self-blame or shame due to smoking behaviours. Stigma is linked to psychological distress, lower quality of life, and delayed help-seeking in patients with these conditions. Developing interventions to address stigma has been identified as a priority. This systematic review aimed to identify and describe existing interventions in peer-reviewed literature, and to synthesise evidence on their efficacy. Methods: PsycINFO, CINAHL, PubMed, and Scopus were searched for relevant records until December 2022. Studies were eligible for inclusion if they described an intervention designed to reduce internalized or external stigma associated with COPD or lung cancer. Results: We identified 427 papers, ten of which were eligible for inclusion, with nine interventions identified. Interventions included educational materials, guided behaviour change programs, and psychotherapeutic approaches to increase wellbeing and reduce self-blame associated

with smoking behaviours. They were aimed at people with either a diagnosis or higher risk of COPD or lung cancer, or clinical staff. No interventions aiming to reduce stigma associated with lung cancer or COPD in the general community were identified. Most interventions yielded a statistically significant reduction in at least one measure of stigma, or a decrease in qualitatively reported stigma. Most were in a pilot stage and required further evaluation. Conclusions: The emerging literature on interventions to reduce stigma associated with lung cancer and COPD suggests that such interventions can reduce internalised stigma, but larger evaluations using randomised controlled trials are needed. Research is needed on campaigns and interventions to reduce stigma at the societal level to reduce exposure to external stigma amongst those with COPD and lung cancer.

24 - USE OF HEATED TOBACCO PRODUCTS AND VAPES AMONG PEOPLE WHO SMOKE OR RECENTLY QUIT SMOKING IN AOTEAROA NEW ZEALAND: FINDINGS FROM THE 2022 ITC NEW ZEALAND (EASE) SURVEY

Janine Nip[1], Richard Edwards[1], James Stanley[1], Jude Ball[1], Jane Zhang[1], Andrew Waa[1], El-Shadan Tautolo[2], Thomas Agar[3], Anne CK Quah[3], Geoffrey T Fong[3,4]. [1]University of Otago Wellington, Wellington, New Zealand. [2]Auckland University of Technology, Auckland, New Zealand. [3]University of Waterloo, Waterloo, ON, Canada. [4]Ontario Institute for Cancer Research, Toronto, ON, Canada.

Background: The Aotearoa New Zealand government is making changes to smokefree policy, including the regulation of vapes (electronic cigarettes) and heated tobacco products (HTPs). We analysed data from the 2022 International Tobacco Control New Zealand (EASE) Survey to measure use of these products as smoking cessation aids in Aotearoa New Zealand. Methods: The EASE Survey included 1478 adults (1040 currently smoked, 438 stopped smoking in the past two years). 597 participants (40%) were Māori. Participants that attempted to stop smoking in the past 12 months were asked about use of cessation aids. Data were weighted to the New Zealand Health Survey to represent the national profile of people who smoke or recently stopped smoking. "Don't know" and "Refused" responses were excluded. Results: Of 429 participants who smoked who had attempted to stop smoking in the past 12 months 60.0% used vapes in their most recent smoking cessation attempt, 9.0% used HTPs, 43.2% used nicotine replacement therapy (NRT), and 14.8% used prescription medicine. 197 participants successfully stopped smoking in the past 12 months, of whom 64.3% used vapes in their most recent cessation attempt, 3.0% used HTPs, 30.7% used NRT, and 12.0% used prescription medicine. Conclusion: Vapes were commonly used smoking cessation aids, highlighting the importance of considering the impacts of policy changes to their availability, addictiveness, and palatability on people trying to stop smoking. Unsuccessful attempts to stop smoking were common, despite use of a range of cessation aids, suggesting further measures to support people to stop smoking are needed.

25 - ATTITUDES OF PEOPLE DIAGNOSED WITH CANCER AND CANCER CARE PROVIDERS TOWARDS USE OF NICOTINE VAPING PRODUCTS IN HIGH-INCOME COUNTRIES: A SCOPING REVIEW

Lavender Otieno, Jeffin Baiju, Joshua Trigg. Flinders Health and Medical Research Institute, College of Medicine and Public Health, Flinders University.

Introduction: E-cigarette use is reported among people diagnosed with cancer, and may have a higher prevalence among younger, compared to older, cancer survivors. Given the increased risk of developing health conditions during cancer treatment, and the role of e-cigarettes in tobacco smoking cessation, views on their use vary in this population. This scoping review aimed to investigate the attitudes, beliefs, and perceptions of people diagnosed with cancer and their support groups on use of nicotine vaping products. Methods: Two electronic databases (Scopus and OVID Medline) were searched with the final search in September 2022. Two authors independently selected the studies, appraised their quality and extracted data, with conflicts resolved through discussion. Reporting follows the PRISMA Scoping Reviews checklist. Results: Results indicated that e-cigarettes were commonly perceived as less harmful when compared to cigarettes, among cancer patients and survivors. Cancer patients cited smoking cessation as the most common reason for e-cigarette use. Nevertheless, low levels of clinician support were also identified regarding recommendation of e-cigarettes as a smoking cessation tool due to insufficient knowledge and belief about their effectiveness. Conclusion: Findings show differences in views and attitudes of e-cigarettes as smoking cessation tools between clinicians and people diagnosed with cancer. Additional research into the health impacts of e-cigarettes in cancer patients will allow for greater congruence regarding use between patients and clinicians and assist providers in recommending effective tools for smoking cessation within this population.

26 - PUBLIC SUPPORT FOR TOBACCO ENDGAME POLICIES IN SOUTH KOREA: RESULTS FROM AN ONLINE SURVEY

Jungmi Park[1], Heewon Kang[2,3], Eunsil Cheon[1], Jaeyoung Ha[1], Hae-ryoung Chun[1], Sung-il Cho[1,2]. [1]Department of Public Health Sciences, Seoul National University Graduate School of Public Health, Seoul, The Republic of Korea. [2]Institute of Health and Environment, Seoul National University, Seoul, Republic of Korea. [3]The NHMRC Centre of Research Excellence on Achieving the Tobacco Endgame, School of Public Health, The University of Queensland, Brisbane, Queensland, Australia.

Introduction: Strong public support is crucial for the tobacco endgame. While smoking prevalence has substantially reduced in South Korea over the past decades, recent stagnation underscores the need for innovative endgame approaches. We aimed to investigate the level of support among the South Korean public to identify implementable endgame policies. Methods: We conducted an online survey of 1,544 Korean adults aged 20-69, comprising 510 current smokers, 279 former smokers, and 755 non-smokers (November, 2023). The survey collected demographic characteristics, tobacco use history, and support for establishing the tobacco endgame goal and adopting 15 endgame policies. Support levels were estimated overall and by smoking status. Survey weights, calculated based on region, gender, age, and smoking status, ensured population representativeness of the estimates. Results: Strong support for establishing the endgame goal was identified, with 80.8% favouring a governmental goal to reduce adult smoking prevalence to below 5% within a set timeframe. Of these, 31.7% supported a 10-year target, and 30.4% supported a 5-year one. All proposed endgame policies received majority support, notably banning tobacco sales near schools (85.3%), banning sales in all retailers except for specialized shops inaccessible to minors (82.5%), and banning all additives in tobacco products (81.8%). Compared to smokers, non-smokers and former smokers showed substantially higher support for tax increases by more than 20% per annum, reducing the number of retailers by 95%, and the sinking-lid approach. Conclusion: We identified significant public support in South Korea, indicating public readiness for more stringent measures to end the tobacco epidemic.

27 - ARE SMOKING CESSATION CARE PRACTICES DIFFERENT FOR CANCER PATIENTS WHO ARE CURRENT SMOKERS VERSUS RECENT OR 'NEW' QUITTERS? A CROSS-SECTIONAL STUDY IN AUSTRALIAN ONCOLOGY CARE

Christine Paul[1], Alison Luk Young[1], Vaibhav Thawal[1], Melissa McEnallay[1], Sarah Morris[1], Elena Stefanovska[1], Fiona Day[2], Shalini Vinod[3], Emily Stone[4], Bianca Devitt[5], Po Yee Yip[6], Craig Kukard[7], Abhijit Pal[8], Gavin Wright[9], Alison Hofman[10]. [1]University of Newcastle. [2]Calvary Mater Hospital, Newcastle. [3]Liverpool Hospital. [4]St Vincent's Hospital, Sydney. [5]Eastern Health. [6]Campbelltown Hospital. [7]Gosford Hospital. [8]Bankstown Hospital. [9]St Vincents Hospital, Melbourne. [10]North West Cancer Centre.

Background: Smoking is a chronic relapsing condition and current smoking is under-reported in oncology settings. Consequently, both current smokers and recent quitters should receive cessation support following a cancer diagnosis. The purpose of the current study is to identify whether differences exist in the smoking cessation support given to current smokers and recent quitters in oncology. Method: As part of the Care to Quit Trial, a cross-sectional baseline survey exploring smoking cessation practices was completed by oncology staff across nine cancer clinics in New South Wales and Victoria, Australia. Results: The 177 participants who completed the survey included Medical Oncologists (n=45), Radiation Oncologists (n=16), other specialists (n=13), nurse specialists (n=52), registered nurses (n= 36) and allied health professionals (n=15). Recent quitters were less likely than current smokers to be asked about their smoking history and provided advice about cancer-specific benefits of abstinence from smoking. Differences were evident in the reported provision of referrals to Quitline (25% for current smokers vs 10% for recent quitters), referral to a general practitioner or Aboriginal Health service (34% vs 13%), and the provision of follow-up about a patient's tobacco smoking or quit attempt (29% vs 18%). Doctors had higher rates of asking, and advising of cancer-benefits than other HCPs, while nurses reported higher rates of referral to Quitline than doctors. Conclusion: The relative lack of smoking cessation care provided to recent quitters in oncology suggests the high risk of relapse is not well-recognised by HCPs.

28 - DEVELOPING A PATHWAY FOR THE INCLUSION OF CULTURALLY AND LINGUISTICALLY DIVERSE PARTICIPANTS IN SMOKING CESSATION RESEARCH

Christine Paul[1], Alison Luk Young[1], Della Yates[1], Melissa McEnally[1], Ashley Young[2], Shingisai Chando[3]. Vaibhav Thawal[1]. [1]University of Newcastle. [2]Hunter New England Health. [3]Cancer Institute NSW.

Background: Under-representation of people from culturally and linguistically diverse (CALD) backgrounds in research limits our understanding of how these groups experience cessation support. Low research participation rates for CALD populations are in part due to the cost and difficulty of incorporating interpreter services into the operations of study consent and data collection. Methods: People who smoke and present to nine cancer centres in Australia are eligible for the 'Care to Quit' trial. Consultation between an interpreter service and research team explored options for including people with limited or no English in the trial. Translated study recruitment documents, videos and text messages in Arabic, Greek, Simplified Chinese and Vietnamese were developed. Recruitment protocols for communication and liaison across the teams and between settings were developed for use in participant recruitment, data collection and follow-up. Results: One health service which had a strong champion and an agreed priority around research inclusion, facilitated the involvement of

interpreters in research. The logistics of the approved recruitment process are described via a series of flow charts which illustrate the many steps and resources required to support participation by CALD populations. The process is also illustrated using the study recruitment materials. The actual experiences of the initial cohort of potential participants (n=10) is described, including some variations on the initially-intended protocols. Conclusions: While inclusive approaches to study recruitment remain challenging and somewhat complex, it is possible to make progress on inclusion where supportive leaders and policies can be identified.

29 - WHAT DOES SUBSTANCE ABSTINENCE COST? A REVIEW ON THE EFFICACY OF FINANCIAL INCENTIVES TO TREAT SUBSTANCE USE DISORDERS

Damon Phillips-Chantelois[1,2], Kelsey Sharrad[1,2], Tahlia Gammatopoulos[1,2], Shagufta Perveen[2,3], Nawal Usmani[2], Kristin Carson-Chahoud[1,2,4]. [1]Faculty of Health and Medical Sciences, School of Medicine, University of Adelaide, South Australia, Australia. [2]Houd Research Group, Houd Enterprises, South Australia, Australia. [3]Faculty of Health and Medical Sciences, School of Public Health, University of Adelaide, South Australia, Australia. [4]Allied Health and Human Performance, University of South Australia, South Australia, Australia.

Approximately 1 in 20 Australians grapple with addiction or substance use disorder (SUD), costing the economy $80 billion in 2021 alone. Financial incentive interventions are a promising tool to increase health behaviour change including substance abstinence. However, the last systematic review of financial incentives for SUD was undertaken in 2014 and didn't evaluate key characteristics that may inform optimisation for future treatment options such as individually tailored machine learning algorithms. Medline, PsychINFO, and EMBASE were searched with no date limitations for randomised controlled trials (RCTs) on financial incentives for SUD. Two independent reviewers screened titles, abstracts, and full texts against eligibility criteria. Primary outcome was substance abstinence at longest follow-up. The review was undertaken in accordance with Cochrane Systematic Review and PRISMA guidelines. A total of 4,388 studies were identified for title and abstract screening after duplicates and non-RCTs were removed. Of these, 198 were shortlisted for full-text review with preliminary data extraction completed for 20 included RCTs with 4,643 participants. Studies were published between 2007 and 2022, 15 were undertaken in the USA with SUD categories spanning nicotine (n=16), alcohol (n=1), opioids (n=1), marijuana (n=1), and multiple SUDs (n=1). Thirteen of the 20 studies reporting the primary outcome produced 7 statistically significant abstinence results in favour of the intervention. Findings from this preliminary investigation suggest that financial incentives are an effective tool for increasing substance abstinence. A matrix of intervention, participant and study design characteristics for effective studies is now being produced.

30 - A SCOPING REVIEW OF ECONOMIC OR ECONOMETRIC METHODS TO MEASURE CHANGES IN ILLICIT TOBACCO USE AMONG TOBACCO USERS

Pyi Pyi Phyo, Erwann Sbai, Braden Te Ao, Natalie Walker, Chris Bullen. University of Auckland.

Background: New Zealand's new government is repealing legislation to achieve the Smokefree Aotearoa 2025 goal (reducing retailers, denicotinised tobacco) in part because of concerns about illicit trade. Predicting and monitoring the illicit tobacco trade with policy changes is essential. We conducted a scoping review to identify appropriate economic or econometric methods to use in the

New Zealand setting as tobacco control policy changes. Methods: We developed a protocol using the University of Southern Australia scoping review guide and JBI manual. Search criteria were illegal, tobacco products, economic/econometric, models/methods, and not drugs. We searched five databases, resulting in 512 publications. All co-authors independently screened the articles by titles and abstracts on Rayyan, with blinding on and reconciliations. We pre-selected 54 papers to review. Inclusion criteria were English, economic, or econometric models/methods, including consumption GAP (CGAP) analysis, from 2010 onwards. We identified 35 articles that matched the criteria. Results: Of the selected 35 articles, 21 (60%) used economic and econometric methods, and 14 (40%) used CGAP. The former methods mostly used the behavioural economic framework to assess or predict individual behaviour as policies changed. CGAP was used to determine illicit market trends. Data sources include surveys or experiments and tobacco return data reporting to governments for tax. Conclusion: Experiments can help predict the behaviour of tobacco smokers before implementing a new policy. Models to estimate product demand and cross-price elasticity on legal and illicit products are appropriate methods. CGAP can help assess illicit market trends.

31 - SYSTEMATIC REVIEW AND META-ANALYSIS OF TEXT MESSAGING INTERVENTIONS TO SUPPORT TOBACCO CESSATION

Cheneal Puljević[1], Isabel Meciar[1], Alice Holland[1], Daniel Stjepanović[1,2], Centaine L Snoswell[3,4], Emma E Thomas[3,4], Kylie Morphett[1], Heewon Kang[1,5], Gary Chan[1,2], Etienne Grobler[1,6], Coral Gartner[1]. [1]NHMRC Centre of Research Excellence on Achieving the Tobacco Endgame, School of Public Health, Faculty of Medicine, The University of Queensland, Australia. [2]National Centre for Youth Substance Use Research, The University of Queensland, Australia. [3]Centre for Online Health, The University of Queensland, Brisbane, Australia. [4]Centre for Health Services Research, The University of Queensland, Brisbane, Australia. [5]Seoul National University Institute of Health and Environment, Seoul, The Republic of Korea. [6]Department of Psychology, The University of Cape Town.

Background: Text messages are a feasible, cost-effective form of smoking cessation support. We aimed to review randomised controlled trials (RCTs) investigating the effectiveness of text message-based interventions for smoking cessation, including the effects of dose (number of text messages) and concomitant use of behavioural or pharmacological interventions. Method: We searched seven databases (PubMed, CINAHL, PsycINFO, Scopus, EMBASE, Cochrane Library, Web of Science), Google Scholar, and the reference lists of relevant publications for RCTs. Eligible studies included participants aged ≥15 years who smoked tobacco at enrolment. One reviewer screened titles and abstracts and two reviewers independently screened full texts of articles. Results: 30 of the 40 included studies reported higher rates of smoking cessation among those receiving text messaging interventions compared to comparators, but only ten were statistically significant. A meta-analysis of seven RCTs found that participants receiving text messages were significantly more likely to quit smoking compared to participants in no/minimal intervention or 'usual care' conditions (Risk Ratio = 1.87, 95%CI 1.52, 2.29, $p<0.001$). Three trials found no benefit from a higher dose of text messages on smoking cessation. Two trials that tested the added benefit of text messaging to pharmacotherapy reported outcomes in favour of adding text messaging. Conclusions: Findings suggest that text messaging-based interventions are effective at promoting smoking cessation. Further research is required to establish if any additional benefit is gained from an increased number of text messages or concurrent pharmacotherapy or behavioural counselling.

32 - SYSTEMATIC REVIEW AND META-ANALYSIS OF CYTISINE TO SUPPORT TOBACCO CESSATION

Cheneal Puljević[1], Daniel Stjepanović[1,2], Isabel Meciar[1], Heewon Kang[1,3], Gary Chan[1,2], Kylie Morphett[1], Hollie Bendotti[1], Garry Kunwar[4], Coral Gartner[1]. [1]NHMRC Centre of Research Excellence on Achieving the Tobacco Endgame, School of Public Health, Faculty of Medicine, The University of Queensland, Australia. [2]National Centre for Youth Substance Use Research, The University of Queensland, Australia. [3]Seoul National University Institute of Health and Environment, Seoul, The Republic of Korea. [4]Medical School, Faculty of Medicine, The University of Queensland, Australia.

Background: Cytisine is a low-cost partial agonist of nicotinic acetylcholine receptors used to assist tobacco cessation. This study aims to review the effectiveness of cytisine for tobacco cessation and the effects of dose and co-use of behavioural or other pharmacological interventions on cessation outcomes. Methods: We searched seven databases (PubMed, CINAHL, PsycINFO, Scopus, EMBASE, Cochrane Library, and Web of Science), Google Scholar, and the reference lists of included publications for randomised controlled trials investigating use of cytisine as a smoking cessation aid. Studies were eligible if participants were aged ≥15 years and smoked tobacco upon study enrolment. One reviewer screened titles and abstracts and two reviewers independently screened full texts of articles. We conducted four random effects meta-analyses, including leave-one-out and trim-and-fill analyses to test for publication bias. We used the Cochrane risk-of-bias tool for randomised trials version 2 to assess risk of bias in included studies. Results: Twelve of the 14 included studies reported higher rates of smoking abstinence among participants receiving cytisine compared to placebo, varenicline, nicotine replacement therapy, or behavioural counselling. Participants using cytisine were significantly more likely to quit smoking than participants who received placebo/no intervention/usual care (Risk Ratio (RR)=2.651, 95%CI 1.50-4.67, 6 trials, 5194 participants). Two trials examined the impact of longer versus shorter treatment duration, finding higher abstinence rates with longer treatment (RR=1.29, 95%CI 1.02-1.63, 2 trials, 1009 participants). Studies reported mixed findings in terms of adverse events. Discussion and Conclusions: Findings suggest that cytisine is an effective aid for tobacco cessation. Future trials of cytisine should investigate the effects of extended regimens and concurrent intensive behavioural support.

33 - PREVALENCE AND PREDICTORS OF SMOKING AMONG HEALTHCARE PROFESSIONALS IN AUSTRALIA: A SCOPING REVIEW

Masudus Salehin[1,2], Muhammad Aziz Rahman[1,2], Louisa Lam[3]. [1]Institute of Health and Wellbeing, Federation University Australia, Victoria, Australia. [2]Collaborative Evaluation and Research Centre (CERC), Federation University Australia, Victoria, Australia. [3]School of Nursing, Midwifery and Paramedicine (VIC), Faculty of Health Sciences, Australian Catholic University, Australia.

Background: Studies showed healthcare professionals who are non-smokers are more likely to deliver cessation advice to their patients than those who are smokers. However, healthcare professionals continue to smoke across the globe. This scoping review assessed the available data on prevalence and predictors of smoking among healthcare professionals in Australia. Methods: Guided by Arksey and O'Malley's framework for scoping review, a systematic literature search was done on CINAHL, MEDLINE, APA PsycINFO, Scopus, Web of Science and Cochrane Library in October 2022. A total of 1485 articles published between 1990 and 2022 were considered, finally 25 papers met the inclusion and exclusion criteria. Results: Included studies showed varying smoking prevalence, mostly with a

declining trend. For physicians it was 10.2% in 1990 to 7.4% in 2013; among dentists it was 6% in 1993 to 4.9% in 2004, for nurses it was 21.7% in 1991 and declining to 10.3% during 2014-15. Among aboriginal health workers (AHWs), smoking rates were astronomically high at 63.6% in 1995 to 38% in 2012. Younger or older age was found to be a positive predictor for smoking among the nurses, so was male gender among dentists, physicians and nurses; other predictors included area of specialty and lower emotional wellbeing, etc. Conclusion: This review highlighted active smoking among healthcare professionals in Australia; however, the declining trend was not proportionate among different specialties, especially among nurses or AHWs. Due to paucity of recent data, further research is warranted on this topic to ensure current data for policy makers.

34 - AUSTRALIAN GENERAL PRACTITIONERS' PERCEPTIONS ON E-CIGARETTES AS A SMOKING CESSATION AID: BASELINE VS FOLLOW-UP

Melis Selamoglu[1], Bircan Erbas[2], Hester Wilson[3,4,5], Jamie Brown[6], Chris Barton[1]. [1]Department of General Practice, Monash University, Melbourne, Australia. [2]Department of Public Health, La Trobe University, Melbourne, Australia. [3]Population and Community Health, South Eastern Sydney Local Health District, Australia. [4]School of Population Health, University of New South Wales, Australia. [5]Centre for Primary Health Care and Equity, University of New South Wales, Australia. [6]Department of Behavioural Science and Health, University College London, UK.

Introduction: Since October 2021 nicotine containing e-liquids are only available in Australia by prescription from a doctor for the purpose of smoking cessation (SC). We assessed general practitioners' (GPs) knowledge, attitudes, beliefs and intentions to prescribe nicotine for use with e-cigarettes for SC. Methods: GPs were invited to complete an online survey between December 2021 and March 2022 (T1), and again between January and April 2023 (T2). Data was analysed using SPSS. Results: 264 GPs completed the baseline (T1) survey and 94 provided responses at follow-up (T2). Over half were female (T1 n=170, 64.4%, T2 n=57, 60.6%) and aged between 30-39 years (T1 n=80, 37.2%, T2 n=28, 29.8%). Less than half of GPs agreed that e-cigarettes were suitable SC aids and this did not change between T1 and T2 (n=121, 49.8%, vs n=45, 50.0%). The knowledge score of GPs at T1 (median = 3/6) was not significantly different to that at T2 (median = 2/6). At follow-up, 48.3% of GPs (n=43) were confident in their abilities to discuss e-cigarettes compared to baseline (n=63, 26.1%). 40.7% of respondents (n=98) at baseline and 43.7% at follow-up (n=38) indicated they would not prescribe e-cigarettes for SC. Conclusion: There was little change among Australian GPs perceptions with respect to e-cigarettes as SC aids between T1 and T2. GPs' knowledge about e-cigarettes remained limited, however, GPs at follow-up were more confident in their abilities to discuss e-cigarettes with their patients compared to baseline respondents. Overall, GPs did not prescribe nicotine e-liquids to patients.

35 - AUGMENTED REALITY TECHNOLOGY TO SUPPORT ABORIGINAL AND TORRES STRAIT ISLANDER SMOKER CESSATION: HEALTH PROFESSIONAL PERSPECTIVES

Kelsey Sharrad[1], Tahlia Grammatopolous[1], Shagufta Perveen[1], Sasha Stewart[2], Nicholas Marlow[2], Alwin Chong[3], Adrian Esterman[2], Alyson Crozier[2], Ian Gwilt[5], Ross Smith[5], Antony Veale[4], Malcolm Brinn[2], Kristin Carson-Chahhoud[1,2,6]. [1]School of Medicine, The University of Adelaide, South Australia, Australia. [2]Allied Health and Human Performance, The University of South Australia, Australia. [3]Lowitja

Institute, Victoria, Australia. [4]Respiratory Medicine Unit, The Queen Elizabeth Hospital, South Australia, Australia. [5]Australian Research Centre for Interactive and Virtual Environments, The University of South Australia, Australia. [6]Australian Centre for Precision Health, UniSA, South Australian Health and Medical Research Institute, South Australia, Australia.

Introduction: Aboriginal and Torres Strait Islander Australians experience a smoking prevalence almost 3 times that of non-Indigenous Australians. Health professionals (HPs) play an integral role in smoking cessation, but report reluctance to counsel Aboriginal smokers due to lack of confidence in their skills, and time constraints. This research aimed to explore acceptability of culturally-tailored, evidence-based, augmented reality (AR) smoking cessation resources among HPs. Methods: Smoking cessation resources for both Aboriginal smokers and HPs were developed via 3 rounds of an iterative, co-design process, under the guidance of an Aboriginal advisory group. Resources utilise 'Ask, Advise, Help' counselling techniques, and address common barriers to cessation in a culturally-appropriate format. Acceptability was explored through analysis of qualitative interviews and questionnaires with n=18 HPs, coded using the Theoretical Framework of Acceptability. Results: Participants were very supportive of the development of resources, and felt that the use of AR technology would be well-received by their patients. While initial iterations were considered too burdensome, subsequent options were lauded as 'information at your fingertips'. The brief advice on evidence-based approaches was reported by most participants to be a valuable addition to current practice, and would both improve HP knowledge and confidence, as well as provide a reminder to simply 'have the conversation'. Conclusion: High acceptability of culturally-tailored, AR resources demonstrates a potential avenue for delivery of support to HPs caring for Aboriginal patients who smoke.

36 - EFFECTS OF SUPPLEMENTARY CAPACITY-BUILDING MESSAGES FOR DISADVANTAGED AREAS DURING A STATEWIDE CAMPAIGN

Tamara Tabbakh, Tegan Nuss, Eve Mitsopoulos, Sarah Durkin. Centre for Behavioural Research in Cancer, Cancer Council Victoria.

Background: People who smoke from disadvantaged areas tend to have greater difficulty staying quit. Supplementing motivational campaigns with capacity-building messages may be beneficial. Methods: Capacity-building messages were delivered to disadvantaged areas alongside a statewide campaign. People who smoke completed mid-campaign (n=803) and follow-up (n=542) surveys. After adjusting for recruitment method, heaviness of smoking, past year quit attempts, and current vaping status, as well as number of days between surveys for follow-up measures only, those who recalled both capacity-building and statewide campaigns were compared to those who recalled the statewide campaign only and those did not recall either campaign. Results: By mid-campaign, 27% recalled both campaigns, increasing to 36% by follow-up. Over half of those who recalled both campaigns reported being confident to resist urges to smoke, confident to stick with quitting, and agreed that community leaders would support them if they tried quitting, significantly more than those who recalled the statewide campaign only or did not recall either campaign. Among those who had thought about quitting in the past month, those who recalled both campaigns were more likely to have discussed quitting with a Quitline counsellor, health professional and used pharmacotherapy. At follow-up, those who recalled both campaigns were more likely to have made a quit attempt and remain quit for at least five days than those who recalled the statewide campaign only, and those who did not recall

either campaign. Conclusions: Findings suggest including capacity-building messages aimed at disadvantaged communities during statewide motivational campaigns is a promising strategy.

37 - ASSOCIATION OF ANXIETY AND DEPRESSION SYMPTOMS WITH PERCEIVED HEALTH RISK OF NICOTINE VAPING PRODUCTS FOR SMOKING CESSATION

Joshua Trigg[1], Ryan Calabro[2], Patrick Anastassiadis[2], Jacqueline Bowden[3], Billie Bonevski[1]. [1]Flinders Health and Medical Research Institute, College of Medicine and Public Health, Flinders University, Adelaide (Kaurna) South Australia, Australia. [2]Behavioural Research Unit, Cancer Council SA, Adelaide (Kaurna), South Australia, Australia. [3]National Centre for Education and Training on Addiction, Flinders University, Bedford Park (Kaurna), South Australia, Australia.

Background/Introduction: The health of people with mental health conditions is a priority of Australia's National Preventive Health Strategy, with a higher smoking prevalence (20.2%) than in the wider population (9.9%). With 21% of Australians reporting experiencing a mental health condition in the past year, this indicates a greater need for smoking cessation support. This study aimed to explore the association of anxiety and depression with perceived health risk of prescription versus non-prescription access nicotine vaping products (NVP) for smoking cessation. Methods: Surveyed South Australians reported smoking and vaping status, anxiety and depression symptoms, risk of nicotine addiction from NVPs, and perceived health risk of prescription access versus non-prescription access NVPs for smoking cessation. Regression models were fitted for influence of demographics, general addiction risk perception and anxiety and depression symptoms on perceived health risk of prescription versus non-prescription access NVPs for smoking cessation. Results: Concern about nicotine addiction risk of NVP-facilitated smoking cessation was related to greater heath concerns of NVP use, irrespective of device source. Anxiety and depression did not directly influence perceived health risks of NVP-facilitated smoking cessation, however interaction of vaping and depression symptoms was associated with higher perceived health risk ratings for prescription sourced NVPs. Discussion/Conclusion: People with depression who vape might be less likely to engage with the prescription access system for quitting, highlighting the importance of integrating mental health considerations into this system. People who vape and experience depression symptoms may see greater health risk in using NVP prescription access, compared to those without symptoms.

38 - ENABLERS AND BARRIERS FOR THE PHASING OUT OF RETAIL TOBACCO SALES: A SCOPING REVIEW

Joshua Trigg, Benjamin Fox. College of Medicine and Public Health, Flinders University, Adelaide (Kaurna) South Australia, Australia.

Background/Introduction: The Australian government is aiming for daily smoking rates of <10% by 2025 and 5% or less by 2030, which will impact Australian retail tobacco sales, with approximately 11 billion cigarette sticks sold in 2020, primarily via supermarkets and convenience stores. To accelerate the goal of retail phase out of tobacco, policymakers need to consider relevant implementation factors. We aimed to review research literature on key enablers, barriers, and needs for phasing out retail tobacco sales. Methods: Peer-reviewed articles indexed in Scopus were searched from 2013 to December 2023, in English language, limited to studies from the United States, United Kingdom, Australia, Canada and New Zealand. Studies addressing tobacco sales phase out or bans were eligible

for inclusion, those restricting specific product characteristics were excluded (e.g., menthol), and protocols and commentaries were excluded. Two reviewers screened titles and abstracts independently for eligibility. The full text of the selected articles will be screened independently by two reviewers to confirm eligibility. One reviewer will extract data from studies relating to implementation barriers, enablers, needs, and opportunities. Results: From 420 initial records, we identified 115 eligible studies for full-text screening. Full-text screening is currently being completed, with extraction and narrative synthesis of review data to be finalised. Discussion/Conclusion: Initial findings from the review of retail tobacco phase out implementation enablers and barriers will be presented, and the implications for tobacco endgame and tobacco control policy measures will be discussed.

39 - QUANTIFYING THE LONGITUDINAL ASSOCIATION BETWEEN SOCIAL NORMS AND RELATIVE HARM PERCEPTION TOWARDS CIGARETTES AND HEATED TOBACCO PRODUCTS AND SUBSEQUENT PRODUCT USE AMONG PEOPLE WHO USE CIGARETTES AND HEATED TOBACCO PRODUCTS IN JAPAN: FINDINGS FROM THE 2018-2021 ITC JAPAN SURVEYS

Giang T Vu[1,2], Janni Leung[1,2], Ara Cho[5], Daniel Stjepanović[1,2], Tianze Sun[1,2], Jason Connor[1,2,3], Phong Thai[4], Coral Gartner[5], Wayne Hall[1,2], Geoffrey T Fong, Shannon Gravely, Anne CK Quah, Steve X Xu, Itsuro Yoshimi, Yumiko Mochizuki, Kota Katanoda, Takahiro Tabuchi, Kayo Togawa, Gary Chan[1]. [1]National Centre for Youth Substance Use Research (NSYCUR), The University of Queensland, Brisbane, Australia. [2]School of Psychology, The University of Queensland, Brisbane, Australia. [3]Discipline of Psychiatry, The University of Queensland, Brisbane, Australia. [4]Queensland Alliance for Environmental Health Sciences (QAEHS), The University of Queensland, Australia. [5]NHMRC Centre of Research Excellence on Achieving the Tobacco Endgame, School of Public Health, Faculty of Medicine, The University of Queensland.

Aims: To examine the differences in social norms towards heated tobacco products (HTPs) and cigarettes across those who use HTPs or cigarettes exclusively or both products concurrently and to quantify the longitudinal association between social norms on cigarettes and HTPs and subsequent tobacco product use. Methods: Data were collected from people who used tobacco products and participated in at least two consecutive waves of ITC Japan study conducted between 2018 (Wave 1) and 2021 (Wave 4). Socio-economic characteristics, patterns of tobacco products use, harm perception towards HTP and social norms towards cigarettes and HTPs uses were compared between those who use HTPs or cigarettes exclusively or use both products concurrently. Association between social norms at baseline wave and tobacco product use in the follow-up wave were assessed using generalized estimating equations on weighted data, controlling for demographics. Results: While most perceive HTP use as less harmful than cigarettes, 29.6% of those who use cigarette exclusively lack awareness of HTP harm. Across groups (exclusive cigarette, exclusive HTP, dual product uses), many have smoking friends (84.7%, 83.3%, 85.3%) and perceive disapproval of smoking from close circles (49.3%, 52.5%, 57.2%) and society (67.2%, 67%, 65.5%). Those who use HTP exclusively more often have friends using HTPs (78.16%) and perceive disapproval of HTP use from friends (39.1%) and society (38.9%). While most continue product use in the follow-up wave, those who use HTP exclusively were more likely transition to non-current users. Perceived positive social norms towards cigarette use were significantly associated with continued exclusive cigarette use in the next wave. Having friends using HTPs increased the likelihood of using HTP in the next wave, either exclusively or concurrently with cigarettes, or reducing tobacco product use to non-current level, relative to exclusive cigarette use.

However, perceiving that the public was approved of or being neutral towards HTP use was also associated with increased likelihood of continued cigarette use in the next wave, mostly concurrently with HTP. Conclusions: To address these dynamics, public health interventions should focus on clear communication, targeted education, and promoting healthier social norms, while simultaneously dispelling misconceptions about HTP harm and creating supportive environments for smoking cessation.

40 - ANALYZING SPATIAL AND TEMPORAL TRENDS OF TOBACCO USE OVER A FIVE-YEAR PERIOD (2017 - 2022) IN AUSTRALIA

Zhe Wang, Qiuda Zheng, Shiyu Wang, Jingyi Yuan, Jake W O'Brien, Benjamin J Tscharke, Kevin V Thomas, Jochen F Mueller, Phong K Thai. Queensland Alliance for Environmental Health Sciences, The University of Queensland, Brisbane, Australia.

Background: Analysing anabasine as biomarker of tobacco in wastewater could better reflect current trends in tobacco use than nicotine biomarkers. In this study, we aimed to investigate the spatial and temporal trends of tobacco use across Australia by analysing anabasine in wastewater samples collected by the National Drug Wastewater Monitoring Program. Methods: One-week of daily wastewater samples were collected and pooled into one composite sample from 18 sites from six States of Australia every 2 month (urban) or 4 months (regional) from 2017 to 2022. Tobacco specific biomarker, anabasine, was analysed using a direct injection liquid chromatography-tandem mass spectrometry method. The daily mass load of anabasine was back-calculated by combining with flow rate and population. Results/Discussions: Nationally, temporal trend of tobacco use based on anabasine mass load was decreasing but non-significant over the period ($p > 0.05$), suggesting tobacco control is becoming less effective. Among the six States, the Northern Territory and Tasmania exhibited the highest levels of tobacco use, while the Australian Capital Territory showed the lowest. Tobacco use in major cities was significantly lower compared to regional areas ($p < 0.05$). Over the studied period, a slight increase in tobacco use was observed in major cities ($p > 0.05$), while a slight decrease occurred in regional area ($p > 0.05$). Conclusions: This study underscores the importance of objective evidence provided by wastewater analysis surveillance for evaluating the progress of tobacco control. The significant disparity between major cities and regional areas in tobacco use levels highlights the need for targeted interventions and policies.

41 - THE IMPACT OF NICOTINE METABOLISM ON SMOKING CESSATION DURING PREGNANCY: A SCOPING REVIEW

Min-Tz Weng[1], Angela Ratsch[2,3], Jared A Miles[1,4], Kathryn J Steadman[1]. [1]School of Pharmacy, The University of Queensland, Brisbane, Queensland. [2]Wide Bay Hospital and Health Services, Queensland Hervey Bay. [3]Rural Clinical School, The University of Queensland, Brisbane, Queensland. [4]Poche Centre for Indigenous Health, The University of Queensland, Brisbane, Queensland.

Background: In general populations, nicotine metabolite ratio (NMR), the ratio of 3-hydroxycotinine and cotinine, is associated with smoking behaviours and smoking cessation success. During pregnancy, evidence demonstrates that smoking is detrimental to the mother and foetus; accordingly, mothers are strongly encouraged to quit smoking. Our goal was to review NMR during pregnancy in relation to smoking cessation based on ethnicities. Methods: A literature search was conducted from inception

to April 2023 using PubMed, EMBASE, CINAHL, PsycINFO, Web of Science, and Medline. Results: Ten studies were found, none of which were conducted in Australia, and in six out of the ten studies, 89% or more of participants were White. Five studies demonstrated increased NMR values during pregnancy. One study found that NMR could be a biomarker for identifying heavy or light cigarette use. One study revealed pregnant women with higher NMR values are less likely to quit smoking. Additionally, two US-based studies found opioid use can increase NMR values, and greater nicotine dependence is observed in pregnant women with higher NMR values. Regarding pregnancy outcomes, one study found a correlation between lower NMR values with lower birth weight, particularly among African American populations compared to White populations. Conclusions: NMR values tend to increase during pregnancy, making it more difficult for women to quit smoking. However, although race is an important determinant of NMR, the range of ethnic backgrounds involved in the studies on NMR values during pregnancy is limited. Further studies are needed to better understand NMR values in specific populations.

42 - EXPLORING THE NICOTINE METABOLITE RATIO AMONGST A POPULATION OF SMOKERS AND VAPERS IN BRISBANE, AUSTRALIA

Min-Tz Weng[1], Qiuda Zheng[2], Shakti Shrestha[1], Yao Deng[1], Coral E Gartner[3], Wenqing Fan[1], Phong Thai[2], Kathryn J Steadman[1]. [1]School of Pharmacy, The University of Queensland, Brisbane, Queensland. [2]Queensland Alliance for Environmental Health Sciences, The University of Queensland, Brisbane, Australia. [3]School of Public Health, The University of Queensland, Brisbane, Australia.

Background: The nicotine metabolite ratio (NMR), calculated as the ratio of 3-hydroxycotinine (3HC) to cotinine (COT), indicates activity of CYP2A6 enzyme in metabolising nicotine. There has been limited consideration of variation in nicotine metabolism among vapers. This study aimed to explore NMR values in a cohort of individuals who either smoke tobacco or use nicotine vaping products (NVP). Methods: A secondary analysis was conducted using data of 43 participants from a prospective observational study of 74 participants. Their 24-hour urine samples were analysed for 3HC and COT for calculation of NMR and comparison with participant gender, age, ethnicity, nicotine source, nicotine and its metabolites levels and nicotine product use (cigarettes or puffs per day). Results: NMR values were higher in female participants than male participants. NMR values demonstrated a moderate correlation with cigarettes per day (r= 0.4332; P= 0.0440), but no association was observed with NVP puffs per day. Participants were categorised as either slower or faster metabolisers using a threshold value of 3, chosen because it evenly divided the cohort. Those with faster metabolism (higher NMR values) exhibited a higher total quantity of nicotine and its metabolites, as well as elevated 3HC levels than their counterparts with slower metabolism (lower NMR values). There was no difference in NMR between cigarette and NVP users. Conclusions: Higher urine NMR values were observed in females and in individuals with higher total nicotine intake. NMR does not serve as a reliable biomarker for distinguishing between cigarette and NVP users.