



Beyond co-design: Upholding sovereign knowing and community rights to develop a smoking and vaping cessation programme for and by Aboriginal and Torres Strait Islander women

Michelle Kennedy (Wiradjuri), Felicity Collis (Gomeroi), Tanika Ridgeway (Worimi), Joley Foster (Worimi), Jesicca Bennett (Gamilaroi), Zabowie Mills (Kaurareg), Sian Maidment (Noongar), Kalinda Wills (Jerrinja) & Hayley Longbottom (Jerrinja/Cullunghutti/Wandi Wandian)

To cite this article: Michelle Kennedy (Wiradjuri), Felicity Collis (Gomeroi), Tanika Ridgeway (Worimi), Joley Foster (Worimi), Jesicca Bennett (Gamilaroi), Zabowie Mills (Kaurareg), Sian Maidment (Noongar), Kalinda Wills (Jerrinja) & Hayley Longbottom (Jerrinja/Cullunghutti/Wandi Wandian) (2024) Beyond co-design: Upholding sovereign knowing and community rights to develop a smoking and vaping cessation programme for and by Aboriginal and Torres Strait Islander women, *Global Public Health*, 19:1, 2433733, DOI: [10.1080/17441692.2024.2433733](https://doi.org/10.1080/17441692.2024.2433733)

To link to this article: <https://doi.org/10.1080/17441692.2024.2433733>



© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 27 Nov 2024.



Submit your article to this journal [↗](#)



Article views: 190



View related articles [↗](#)



View Crossmark data [↗](#)



Beyond co-design: Upholding sovereign knowing and community rights to develop a smoking and vaping cessation programme for and by Aboriginal and Torres Strait Islander women

Michelle Kennedy (Wiradjuri)^{a,b}, Felicity Collis (Gomeri)^{a,b}, Tanika Ridgeway (Worimi)^{a,b}, Joley Foster (Worimi)^{a,b}, Jessica Bennett (Gamilaroi)^{a,b}, Zabowie Mills (Kaurareg)^a, Sian Maidment (Noongar)^a, Kalinda Wills (Jerrinja)^a and Hayley Longbottom (Jerrinja/Cullunghutti/Wandi Wandian)^c

^aCollege of Health Medicine and Wellbeing, The University of Newcastle, Callaghan, Australia; ^bEquity in Health and Wellbeing Program, Hunter Medical Research Institute, New Lambton, Australia; ^cWaminda South Coast Women's Health and Wellbeing Corporation, Nowra, Australia

ABSTRACT

Indigenous people have applied their expert knowledge systems and research practices since time immemorial; however, the academy is still largely controlled by non-Indigenous people and favours Eurocentric Western methods. Indigenous people have continued to show strength and resilience despite these systems and continue to thrive through upholding sovereign knowing and wisdom. Indigenous knowledge systems are critical in driving meaningful evidence to improve health outcomes. This paper draws on our collective sovereign knowing as Aboriginal and Torres Strait Islander women to articulate the development of a smoking and vaping cessation group-based programme: *Which Way*, acknowledging the rights for our women to have culturally responsive and safe care. As such, we describe our approach to research, and how we reposition power and centre indigenous knowledges in our work to deliver meaningful outcomes that move beyond the usual application of Euro-Western co-designed research approaches which have become prevalent in the field. This is not to offer a methodological approach to research, but rather, to continue to validate and give space to indigenous researchers, students and community members ontological practices and in public health research.

ARTICLE HISTORY

Received 10 July 2024

Accepted 18 November 2024

KEYWORDS



Aboriginal and Torres Strait Islander health; indigenous methods; co-design; indigenous knowledges; methodologies

SUSTAINABLE DEVELOPMENT GOALS

SDG 3: good health and wellbeing; SDG 10: reduced inequalities

Introduction

Indigenous peoples practice expert knowing, being and doing which is actively evidenced through continued survival and the ability to thrive amidst colonisation, genocide and ongoing systemic racism. A hierarchical notion of distinct human types was used to justify colonisation, genocide and ongoing systemic racism, taking over lands and displacing many Indigenous peoples (Bonilla-Silva & Zuberi, 2008). Colonisers exploited Indigenous peoples and discredited their expert knowledge structures through weaponization of colonial governments, companies and

CONTACT Michelle Kennedy (Wiradjuri)  michelle.kennedy11@newcastle.edu.au  College of Health Medicine and Wellbeing, The University of Newcastle, Callaghan, NSW 2308, Australia; Equity in Health and Wellbeing Program, Hunter Medical Research Institute, New Lambton, NSW 2305, Australia

© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

institutions, including within the academy (Lee et al., 2023). Euro-Western medical, anthropological and social sciences were used to simultaneously document Indigenous being and validate the foundations of colonial rule, racism and slavery (Bonilla-Silva & Zuberi, 2008; Lee et al., 2023), thus positioning white researchers as the knower and Indigenous peoples as incapable of knowing. While some of these outdated scientific ideas have been discredited (Carter, 2007), they continue to be perpetuated through scientific discussions and Eurocentric Western publication structures that continue to be largely controlled and operationalised by non-Indigenous peoples (Bonilla-Silva & Zuberi, 2008; Smith, 1999; Turnbull, 2017).

Due to ongoing colonisation and contemporary coloniality of knowledge production as outlined above which informs policies and practice, indigenous people continue to experience disproportionately poor health outcomes (Anderson et al., 2016). In the field of health and medical sciences, expert knowing has been a space systematically protected and has privileged Western Eurocentric, and biomedical sciences and scientists (Bonilla-Silva & Zuberi, 2008; Yoorook Justice Commission, 2024), helping to maintain the status quo and resulting in suboptimal health outcomes. It is critical to recognise that the current deficit discourse, including deficit statistics about Indigenous health and wellbeing outcomes, and the continued measurement and monitoring of our being, has been, and continues to be, intentional. Indigenous people, reported to be inferior, were predicted to be 'a dying race'. Despite this, indigenous people have continued to show great strength and resilience. For generations, we have continued to thrive despite all attempts to the contrary. It is through our sovereign knowing, liberation and wisdom that we have, and we will continue to thrive as a people.

The rights of indigenous peoples to uphold their sovereign knowing have been ratified globally through the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). Notably the right;

... to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts. They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions. Article 31 (United Nations, 2007)

Rights of Indigenous peoples

In Australia, the UNDRIP is broadly applied to research conducted with Aboriginal and Torres Strait Islander peoples through ethical guidelines, principles and practices (AH&MRC, 2020; AIAT-SIS, 2020; NHMRC, 2018). A recent enquiry into the policy level application of the UNDRIP in Australia found that '*there is currently no single or centralised mechanism for implementing UNDRIP*' (The Joint Standing Committee on Aboriginal and Torres Strait Islander Affairs, 2023); however, a practical application of the UNDRIP has been reportedly aligned with the national Agreement on Closing the Gap, a national Government commitment to address health inequities between Aboriginal and Torres Strait Islander people and other Australians. Although, UNDRIP is not referenced in the Closing the Gap agreement. In 2019, the Australian Government acknowledged the lack of true partnership with Aboriginal and Torres Strait Islander people in the Closing the Gap agreement and have recently revised processes and targets under the National Agreement on Closing the Gap to align more closely with some of the rights acknowledged in the UNDRIP (Australian Government, 2020), although a recent review reports much more work remains to uphold self-determination (Australian Government, 2024).

Aboriginal and Torres Strait Islander priorities

Current priorities and targets to improve the health and wellbeing of Aboriginal and Torres Strait Islander people include addressing the health and wellbeing of mothers and babies. Smoking during

pregnancy is linked to a range of infant and maternal poor health outcomes (Liu et al., 2020) and is a key target in several national strategies (Australian Government, 2022, 2023). However, to date, evidence has largely measured and monitored smoking and cessation outcomes, reporting a 3-fold prevalence among Aboriginal and Torres Strait Islander women (AIHW, 2024), which has had limited improvement or investment over the past decade.

Acknowledging that indigenous knowledge systems are critical in driving meaningful evidence to inform policy and practice, our indigenous-led research-centring Indigenous knowing and knowledges has moved beyond deficit discourse and comparative reporting. This work critically addresses power dynamics in health research to improve Aboriginal and Torres Strait Islander health outcomes and recognises the rights for Aboriginal and Torres Strait Islander women to have access to culturally responsive and supportive smoking and vaping cessation care. Our research has found significant changes in smoking behaviours, such as reducing smoking during pregnancy and having smoke-free periods (Bovill, 2020; Bovill et al., 2017; Bovill et al., 2019a; Rahman et al., 2021) which were accompanied by a lack of appropriate and culturally responsive health provider support offered to Aboriginal and Torres Strait Islander women to quit smoking (Bovill, 2020; Bovill et al., 2017).

This paper is a product of our work, drawing on our sovereign knowing from our kinship, Country and song lines. It is through our knowing that we, as Indigenous women and researchers, work in service to our communities, to inform Indigenous-led evidence in smoking and vaping cessation through the 'Which Way?' project. We write this paper on the unceded lands of the Worimi and Awabakal people; we acknowledge their continued caretaking of these lands, seas, skies and waterways since time immemorial. As Aboriginal and Torres Strait Islander women, we write this paper to uphold our rights to develop our knowledges through academic emancipation that generates space for the belonging of our sovereign knowledges to inform sciences.

Which Way? Project

The Which Way? project was informed by the first author (MK) that witnessed, recognised and captured the voices and experiences of Aboriginal and Torres Strait Islander women to inform smoking cessation care through her doctoral research (Bovill, 2020, 2017; Bovill et al., 2019a; Bovill et al., 2019b). Which Way? is a community-led project to build Indigenous-led evidence for empowering smoking cessation care (Bovill et al., 2021). The project has been led by the priorities and research questions of Aboriginal and Torres Strait Islander women and communities for over five years. To understand what smoking and vaping cessation supports are meaningful and desired by Aboriginal and Torres Strait Islander women, the Which Way? project has conducted national surveys of Aboriginal and Torres Strait Islander women (Kennedy et al., 2022a; Kennedy et al., 2022b; Kennedy & Longbottom, 2022; Kennedy & Maddox, 2022a, 2022b) and their Aboriginal and Torres Strait Islander health workers and practitioners (Kennedy et al., 2023; Mersha et al., 2023b). During this early research, Aboriginal and Torres Strait Islander women and their health workers requested the development and implementation of new and innovative supports utilising technology, and group-based models to support and empower women to be smoke and vape free in pregnancy and beyond.

Utilising integrated knowledge translation, the first author has conducted local, jurisdictional and national level activities and communications to community organisations, policy holders and Aboriginal and Torres Strait Islander women. Through the extensive and ongoing knowledge translation process, the research developed and implemented is aligned with Aboriginal and Torres Strait Islander knowledge systems and ways of implementing health programmes. Through partnerships and translation, we work at the praxis of research and health service practice. Indigenous leadership is embedded throughout the research process and practice including the research team, governance of Aboriginal community partners as the decision makers and translation to policy

holders. We have reported this practice in detail elsewhere (Bovill et al., 2021; Kennedy & Longbottom, 2022).

In this paper, we report the process of developing the Which Way? Women's group-based smoking and vaping cessation programme. The programme, requested by Aboriginal and Torres Strait Islander women and their health providers (Kennedy et al., 2022b; Kennedy et al., 2023), was developed through privileging Indigenous knowing. Whilst co-design research approaches have become prevalent in the field of Aboriginal and Torres Strait Islander health (Butler et al., 2022), the inherent power imbalance remains largely unaddressed to give genuine partnership and ownership to the communities involved in research. This work intentionally moves beyond Western Eurocentric co-designed research approaches and draws on Indigenous knowledges and knowledge systems. This work comes from the sovereign knowledges of Worimi, Awabakal, Darkinjung, Wandj Wandandian, Jerrinja, Cullunghutti, and Wodi Wodi communities and our positioning as Wiradjuri, Worimi, Gamilaroi/Gomeri, Kaurareg, Noongar, Wandj Wandandian, Jerrinja, Cullunghutti, and Wodi Wodi women.

It is not our intention in writing this manuscript to present to the reader a methodological approach to research that can be picked up and applied in their context. Our work is collective, and it is only through this collective wisdom that our research practice can be enacted. We do not assert that this can be replicated, we acknowledge that Indigenous peoples are not homogenous, and these knowledges do not represent all Aboriginal and Torres Strait Islander women or their communities. It is our intention in writing this that Indigenous researchers, students and community members can be assured that their Indigenous knowing and their ontological and axiological research practices are validated in public health research.

Methods

Research team

This work is led only by Aboriginal and Torres Strait Islander women, centring our knowing, being and doing in the research practice. The researchers leading this work hold knowledges beyond the academy and PhD qualifications. Collective knowledges drive this work, including complex and dynamic hierarchical knowledges or power structures that are time, place and space specific (Moreton-Robinson, 2017). Acknowledging the importance of relational research practices, the relationships between the communities and researchers have been developed and cared for over the past 5 years. The lead researcher (MK) connected with communities throughout the knowledge translation process of her PhD, which transformed to be an ongoing and intentional relationship with no hierarchy or extractive expectations of the community. Importantly, the symbiotic nature of the relationships ensures ongoing accountability and trust is maintained with integrity.

We draw on our individual and collective strength as Aboriginal (MK, TLR, FC, JB, SM, JF, HL and KW) and Torres Strait Islander (ZM) women with connections to Wiradjuri (MK), Worimi (TLR and JF), Gamilaroi (JB), Gomeri (FC), Noongar (SM), Jerrinja, (HL and KW) Cullunghutti and Wandj Wandian (HL) and Kaurareg (ZM) countries. We bring lived experience as mothers (MK, JF, ZM, FC and JB) and aunts and expertise in health service delivery (JB (nursing), HL, KW and JF (Aboriginal Health Workers), TLR (Medicine student), ZM (Psychology student), and MK and FC (social work)).

Indigenous methodology and methods

This research centres Indigenous knowing through Indigenist methodology (Rigney, 1999), the standpoint of the research team and communities involved, application of the Yarning method (Bessarab & Ng'andu, 2010) and relational research practices (Moreton-Robinson, 2017). These methodologies and methods are applied through a weaving research framework outlined in Figure 1.

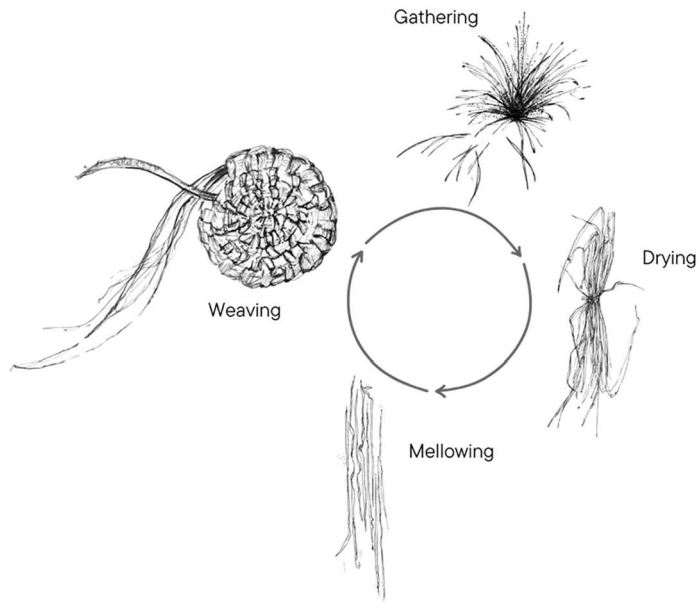


Figure 1. Weaving research framework.

The research process to develop the Which Way? Women's project is akin to our traditional weaving practices. The processes were not prescriptive; they did not follow a Western Eurocentric co-design or qualitative analysis method. Rather, a process to privilege Indigenous knowing was enacted through the weaving practices of gathering, drying, mellowing and weaving. Applying the weaving research framework to develop Which Way? Women's Programme has taken three years. Like the process to weave, this has required slow and intentional work that holds time and space for communities, not dictated by academic pursuit. Throughout the weaving of knowledges, we have had to return to the gathering, drying and mellowing processes. While we have attempted to follow a structure to present our knowing as is standard in a Euro-Western journal article format, this process and resulting outcomes are intertwined with our being, and as such is challenging to articulate in writing which is a limitation to this work.

We used an integrated knowledge translation approach through our relational research practices in which each phase of the research was shared with community partners and broader Aboriginal and Torres Strait Islander communities to provide opportunities for further knowledge sharing, culminating in the development of an Aboriginal and Torres Strait Islander led smoking and vaping group-based programme. [Figure 2](#) outlines the weaving research framework, methods and timeline.

Ethics and governance

The project was developed and is governed by the Aboriginal communities in which the research is being conducted. This is consistent with local Aboriginal and Torres Strait Islander ethical research practices, and in line with the Aboriginal Health & Medical Research Council (AH&MRC) updated guidelines for ethical research with Aboriginal and Torres Strait Islander communities. Ethics approvals have been granted by AH&MRC (#2170/23) University of Newcastle HREC (H-2023-0432) and the Local Health District ethics committee (2023/ETH01745).

Aboriginal and Torres Strait Islander care taking of knowledges through relational research practices				
Indigenist Methodologies and Standpoint of the research team				
Methods	Gathering	Drying	Mellowing	Weaving
	<ul style="list-style-type: none"> • Yarning • Systematic review • Iterative co-design of program and resources 	<ul style="list-style-type: none"> • Workshop identifying Behaviour Change Techniques and core considerations for effective group-based model of care 	<ul style="list-style-type: none"> • Iterative co-design of program and resources 	<ul style="list-style-type: none"> • Pilot testing and refining of program and resources.
Timeframe	<i>Year 1-3</i>	<i>Year 2</i>	<i>Year 3 Ongoing</i>	<i>Year 3 Ongoing</i>
Integrated knowledge translation				

Figure 2. Weaving research framework and overview.

Results

Gathering: yarning

Before one can weave, they must first gather the materials from Country. The process of gathering begins by travelling to Country where grasses and reeds grow. Depending on your intention for the weaving, you may forage sticks and various objects. These processes vary from Country, community and kin, and in this instance, there were two components to our gathering (Figure 3):

- 1) Yarning, and
- 2) Systematic review

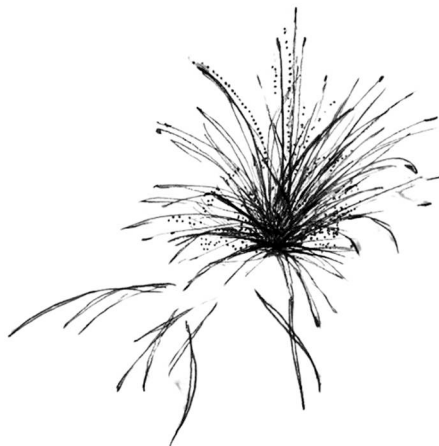


Figure 3. Gathering.

Yarning

Like the process of gathering materials from Country, the first process we undertook was to sit with Aboriginal and Torres Strait Islander women to gather their knowledges on what a group-based programme could and should look like through Yarning circles (Bessarab & Ng'andu, 2010). Yarning circles were audio-recorded. COVID significantly impacted this process, and several Yarning circles were cancelled to keep communities safe. In June 2021, MK and TLR travelled to Darkinjung Country to sit with a collective of nine Aboriginal women and Elders to understand what core components were required to develop a group-based smoking and vaping cessation programme for our women.

self-care and practising self-compassion and just another sister to talk to.

Women spoke to specific content to include in the programme including understanding other ways to have physical input, support and ideas for distractions, and the importance and power of self-care. Women also, although not all were using social media, felt that an online social component would be beneficial for daily check in and support. Women spoke to the '*emotional, mental and physical*' drivers to smoking and vaping that require a holistic support approach to achieve cessation and the strength found in connection with each other and the community that should be at the forefront of the programme.

just making that connection with checking in and seeing if she's okay.

Women shared their experiences of smoking and quitting, drawing on their sovereign knowing. Experiences included the use of Government supported phone apps such as MyQuitBuddy which was found to be useful. Women appreciated the incorporation of tools that provided self-reflection, feedback on success and information on how their health is improving each day they are smoke-free.

After gathering knowledges from Darkinjung, MK, TLR and JF were invited to share the research and knowledges gathered throughout the Which Way? Project with the local maternal health teams, the maternal health workers that cared for MK through her pregnancies and whom JF previously worked for, on Worimi Country. While sharing findings of the research, health workers requested to partner on the project to share their knowing in what was needed to develop a group-based model that is relevant to their model of health care. While not conducted as a formal Yarning circle, MK, TLR and JF sat with maternal health teams and heard their knowing about applying the research to their practice. Workers identified challenges that could arise when implementing a group-based programme in the community and current gaps in resources and information on effective smoking and vaping cessation programmes. This information was gathered to inform the next stage of the process.

Systematic review

Ensuring that our foraging process gathered a range of materials and knowledges, we also conducted a systematic review to understand how group-based models have been designed previously and what were the effective behaviour change techniques applied. This review has been published elsewhere (Mersha et al., 2023a). The findings gathered from this review were presented to communities to determine the relevance and appropriateness of the identified behaviour change techniques for Aboriginal and Torres Strait Islander women in a process of *drying* as described below.

Drying: workshop

Once weaving fibres have been gathered, they must be bound together and left in the sun to dry. This is a time sensitive process that depends on the individual strand of grass, the sun light, and the temperature. The drying process began with a workshop returning to the maternal health team on Worimi Country.

The workshop was led by MK, SM, TLR and JF and posed two key questions to the workers (Figure 4):

- 1) 'What could a group-based programme to empower Aboriginal and Torres Strait Islander women look like and include?' and
- 2) 'What behaviour change techniques do you think are most important to include in a smoking and vaping programme for Aboriginal and Torres Strait Islander women?'

Aboriginal and Torres Strait Islander health workers led discussions among small groups with TLR, SM and JF present. Utilising butchers' papers, markers and key discussion points the curing of knowledges shared during foraging processes begun (see Figure 5).

Participant experience

Women's experiences were central to the discussions and workers highlighted that feedback and evaluation on the programme is required as well as time and flexibility to adjust the programme once women have participated to ensure it is responsive to women's needs and interests. Aboriginal Health Workers articulate a desire to offer the programme to all new clients who smoke or vaped, or are recent quitters, to address the high rates of relapse. To provide women all the resources to support their quitting journey, it was recommended that information on nicotine replacement therapy (NRT) is included as well as having NRT available to women within the programme. Workers noted the benefits of holistic approaches to wellbeing and not only focussing on smoking and vaping cessation. A short group-session time was recommended to allow other guest speakers, or wellbeing programmes to be integrated with the smoking and vaping cessation such as exercise and nutrition.

Programme delivery. Ensuring that the programme is feasible for both women to attend and health workers to deliver, it was recommended to keep the learning content to 30–60 min and offering flexible delivery was important to Aboriginal Health Workers. Workers suggested the programme runs for 6 sessions and can be offered twice during a woman's pregnancy care period. Alternatively, workers highlighted the benefit of having a programme run consistently throughout the year that



Figure 4. Drying.



Figure 5. Response to workshop questions.

women can come in and out of attendance. The incorporation of online components was suggested including zoom session, community forums or Facebook groups to support women to connect if they are unable to attend face to face regularly.

Resources required. To support the delivery of the programme, it was recommended that resources are developed for workers with clear session outlines and all relevant health education information in one folder. They also recommended that women's resources are developed and include information covered in the sessions and sections for women to set goals and note personal reflections during their journey.

Behaviour change techniques (BCT) to incorporate

Health workers raised the importance of positive self-talk and building self-esteem as critical to any smoking and vaping cessation programme for Aboriginal and Torres Strait Islander women. These were the most discussed and prioritised BCT's and recommended to be at the core of the Which Way? Women's group-based smoking and vaping cessation programme.

Mellowing: community-led design

To prepare the fibres before weaving, they must mellow. They must be softened to allow them to become pliable and malleable through this process. Mellowing may take longer, or shorter, with the amount of time dependent on the environment and conditions in which they have been gathered and left to mellow. It is important to check throughout the mellowing process that when you

bend the fibres, there is no breakage or splintering. The mellowing process in this instance was conducted over 18 months and included a return to the gathering and drying processes. The collective mellowing incorporated:

- 1) Collective programme development
- 2) Draft design of programme and resources
- 3) Workshops to further develop and refine

Collective programme development

The kitchen table has been shared by Indigenous researchers as a safe space for knowledge collection and sharing (Johnson, 2008; Racette, 2022; Shawanda, 2022). Around MK's kitchen table, TLR, FC, SM, JF and ZM sat, mellowing the generated knowledges, building on the processes outlined above, and began moulding the fibres for weaving. The process begun with individual reflections on what the earlier processes had informed us as Aboriginal and Torres Strait Islander women. Collective sharing, reflecting and considering the ways in which these knowledges could be brought together to support and empower our women began to unfold. The team drew on the recommendation to develop a six-session programme and begun sorting recommended BCTs and considered women's journey through the programme to map health education, objectives for each section and potential activities and resources.

Draft design of programme and resources

Taking the butchers paper and ideas from the kitchen table to the desktop was the next phase. MK, JF, TLR and SM began developing resources for health workers and for women. Drawing on the recommendations from the drying process, the team began to develop session outlines for a health provider manual. The research team gathered regularly to enact the group-session and refine the content. This process also mapped and gathered knowledges on other effective group-based programmes in Aboriginal and Torres Strait Islander health to better understand structures for resources, and sessions. Ultimately, the team returned to our sovereign knowing and developed a programme and resources based on our collective knowledges. This process took months with high and low intensity periods. Never rushing the process and embedding opportunities for reflective practices and thoughtful conversations.

Workshops to further develop and refine

MK, JF and TLR held workshops with each community partner to share the drafted resources and programme meoutline. The workshops were attended by Aboriginal Health Workers and maternal health teams to seek further feedback and direction within their respective community contexts (see Figure 5). Workshop notes were taken to support updates and enhancements to the resources and programme. This process was conducted initially face to face with ongoing guidance and feedback offered by services over a 9-month period.

During the workshops with drafted materials, workers confirmed the programme design and content was aligned with their ways of working and recommended the development and design of content to support the service to deliver the programme (Figure 6).

Through these reflective practices, the team identified that, while the original planning arranged the sessions into six, one-hour sessions, over six weeks. This may not be feasible or practical for all Aboriginal and Torres Strait Islander women. Through a collective yarning workshop, the project team re-arranged the content into six sessions with increased delivery flexibility. This will allow communities to run the programme how they deem appropriate for their community's priorities and commitments. The programme delivery options include the combination of sessions to deliver the programm in short day events or over weeks without losing BCT's and key components

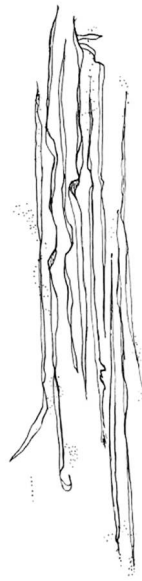


Figure 6. Mellowing.

identified in the drying and mellowing processes. The content of the Which Way? Women's Programme can be found in [Table 1](#).

Weaving: community pilot

The cultural practice and art of weaving for Aboriginal and Torres Strait Islander women has long been valued for its healing, and as a vessel for connection to Country, ceremony and kin. Weaving has no printed patterns, rather is crafted through a collective synergy exchanged between the woven object and weaver. Often conducted in circles, weaving has been used as a communicative social method for women to sit, share and support each other, uninterrupted or constrained by time. Carefully intertwined fibres lay the path for passing on of knowledge, and creation of space and place for new knowledge and ways of being to emerge. The weaving of knowledges is enacted by gathering knowledges from Aboriginal communities and Aboriginal and Torres Strait Islander women through the trialling of the group-based programme in a pilot study ([Figure 7](#)).

Indigenous lived experience is necessary to ensure that the programme developed is meaningful and embodies Indigenous knowing, being and doing. The project partners who shared their knowledges to develop the programme are leading the facilitation of the group programme in their community, and the University based team will lead the facilitation in our Worimi and Awabakal community as well as online through an online platform developed and cared for by the team. Conducted as a single arm pilot feasibility, the facilitation of groups will ensure the weaving of knowledge systems only acquired through experience, can be upheld.

Aboriginal and Torres Strait Islander women who live in New South Wales, who smoke and want to quit, are welcome to group facilitation. While we acknowledge the programme has been developed with a focus on women of reproductive age, recognising the processes of intergenerational sharing of knowledges, and the importance of eldership guiding caring for women and children, all Aboriginal and Torres Strait Islander women are welcome.

The following will weave the details of our pilot facilitation. Each strand has been carefully considered through the earlier weaving processes and bring together our ethical research practices to create the base weave.

Table 1. Content of which way? Women's smoking and vaping cessation programme.

Stages	Session	Content
Pre-quit	Session 1	<p>Smoking harms and the benefits of quitting Session aim:</p> <ul style="list-style-type: none"> • Understand the potential health risks associated with smoking. • Understand the multitude of health benefits that can be gained by quitting smoking. • Discuss practical approaches to minimise exposure to passive smoke.
	Session 2	<p>Reasons for smoking & challenges Session aim:</p> <ul style="list-style-type: none"> • Reflect on personal motivations and reasons for quitting smoking, exploring the potential benefits and positive changes that can be experienced. • Reflect and understand motivations behind smoking, which may include social influences, stress relief, habit formation, peer pressure, or psychological factors. • Understand the difficulties and obstacles often encountered when attempting to quit smoking.
	Session 3	<p>Nicotine dependence, smoking cessation supports & starting the quitting process Session aim:</p> <ul style="list-style-type: none"> • Understand how nicotine affects the brain and creates a physiological and psychological dependency. • Understand how NRT and other cessation supports in the journey of quitting smoking. • Understand strategies for effectively addressing the challenges that may have arisen during previous attempts to quit smoking. • Initiate the process of creating a comprehensive quit plan to enhance successfully quitting. • Combination NRT will be offered based on preference and participants will be instructed to start using the NRT on their quit day.
Quit	Session 4	<p>Behaviour Change Techniques & quit plan Session aim:</p> <ul style="list-style-type: none"> • Discuss replacement behaviours for managing smoking urges and cultivating new habits. • Discuss relapse prevention including strategies and techniques to anticipate, manage, and ultimately avoid returning to smoking after quitting. • Finalise the quit plan and share with the group.
	Session 5	<p>Successes, barriers, and positive self-building Session aim:</p> <ul style="list-style-type: none"> • Learning about motivation, building habits and self-rewards. • Participants will share stages to talk about change after quitting. • Discuss and explore strategies for social support to stay smoke-free.
	Session 6	<p>Graduation Session aim:</p> <ul style="list-style-type: none"> • Empower participants. • Discuss future plans beyond the programme. • Reinforcing learning so far.

Which Way? Women's pilot protocol

Participant recruitment

Groups will be facilitated in a range of community-led ways over a six month period from May-November 2024. Drawing on best practice approaches informed in earlier processes, and community-led approaches to implementation, the programme will engage Aboriginal and Torres Strait Islander women through:

- (1) Online social media recruitment using Facebook advertising, posts shared by community partners and the project team. The advertisement will have a links to self-referral to the online programme.

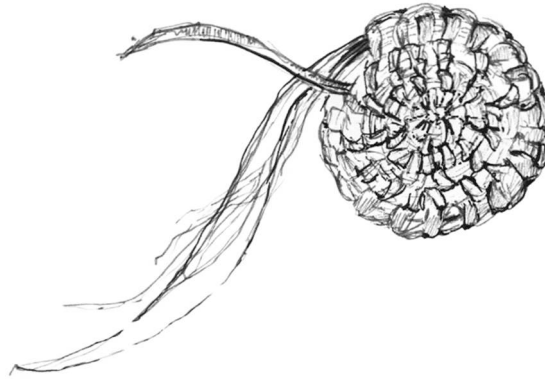


Figure 7. Weaving.

- (2) Face to face recruitment through community partners (in line with annual health checks, visits to the doctor and at community events). Recruitment posters with a QR code to register will be provided by the University team, developed in partnership with community to ensure the images reflect the community. All women will provide full and informed consent.

Community-led implementation

A facilitators manual, videos to introduce each session and content to be covered and ‘cheat sheets’ were developed during the mellowing process. JF, MK and TLR led face to face and online training sessions with community partners, their Aboriginal health workers and maternal health teams to support the facilitation of the group-based programme. Through our relational research practice, support for pilot implementation has, and will continue to follow the needs and requests of community partners. A series of online content including videos introducing content covered in each section have been developed and uploaded to a password secure platform to support implementation.

Data collection

To understand the experiences of Aboriginal and Torres Strait Islander women and their health providers in participating in, and facilitating the groups we will draw on both quantitative and qualitative methods. Women will be sent automated text messages with direct links to their surveys after registering for Which Way? Women’s programme. Survey’s will be collected at baseline, 3- and 6-week follow-up periods. Surveys will seek to understand experiences of the programme and any changes in smoking and vaping behaviours and quit attempts. Surveys were developed drawing on previous survey tools developed in partners with Aboriginal community partners (Kennedy et al., 2022a; Kennedy et al., 2022b; Kennedy & Longbottom, 2022) and collective Yarning processes with the authorship team.

Qualitative data collection. Yarning will be conducted by JF, MK and ZM with Aboriginal and Torres Strait Islander women and their health workers at the end of the pilot programme. Yarning will seek to explore the experiences that cannot be quantified including acceptability and areas of improvement for the group-based programme. The interview with the partnering service staff will explore the barriers and facilitators to facilitating the group sessions and areas of improvement.

Benefits and reimbursement to participants

Participants will be provided with Indigenous evidence-based resources that have been developed to be responsive, appropriate and safe to support their quitting attempt. The study will benefit women by identifying effective ways to support smoking and vaping cessation attempts. Aboriginal and Torres Strait Islander women attending group-based programmes will receive an Aboriginal art backpack, drink bottle, smoking cessation workbook/diary and optional free NRT posted to their home. All participants who complete an interview will be offered a \$30 gift card, with digital or physical cards offered. Participants will be asked to indicate if they would like to receive a summarised finding of the study. Plain summary and infographics of the main findings will be prepared and provided.

Benefit to communities

All community partners in the research are full owners of the project and data collected. The study has been co-designed with them and based on the interests and needs of Aboriginal and Torres Strait Islander women and Aboriginal Community Controlled Health Services. The study implementation has been designed to minimise the burden placed on communities, for example, communities are not asked to recruit and follow-up women, this is managed externally. Partnering services select the location, time and dates for implementing the programme, and the University team provide appropriate posters, social media tiles, etc. to engage participants and conduct all data collection externally through push text notification to women who register. Partnering services will be reimbursed \$10,000 per 6-session programme to support the staffing costs of running the programme, fees for room hire, catering, engagement in the evaluation of the programme and any other priorities for the community to implement the programme in a culturally responsive way. Communities will be able to use the programme resources and implement groups beyond the research component of the programme and if desired they can facilitate groups that do not include a research component.

Aboriginal data sovereignty

Which Way? Project acknowledges the rights of Aboriginal and Torres Strait Islander peoples to govern the creation, collection, ownership and application of their data and has developed a data management plan through consultations with the partnering communities and will continue to monitor the implementation of this plan through the Research Governance Committee. Which Way? acknowledges the partnering communities as the knowledge holders and as such the owners of all data collected. Study data is collected and loaned to the researcher for the planned Which Way? study. No data will be used without full consultation, plan, review and approval by all communities and all community partners and staff are offered authorship of publications arising from the study. While the research institution manages the safe storage of the data, following the policies and procedures for this, no data is used or shared beyond what is approved and overseen by community partners. The project team also ensures the community partners have ongoing access to the data and data analysis in meaningful ways. The project team is responsible for attending to community requests for data extraction, analysis and reporting for community priorities beyond the research. For example, the community might request reporting for funding applications, community forums or reports. This process has been upheld for the five years of the Which Way? Project and will continue.

Discussion

This paper presents the process of developing the smoking and vaping group-based programme that was requested by Aboriginal and Torres Strait Islander women and communities. This work moves beyond Western Eurocentric co-design that is common to the public health research field and in doing so upholds and privileges our sovereign knowing as Aboriginal and Torres Strait

Islander women to develop our own evidence base. This process, like the process to weave, incorporates intentional, purposeful, thoughtful and respectful practices aligned with Indigenous ontology and axiology. There is a critical need for governments and scientific institutions to acknowledge Indigenous knowing, being and doing in the development and implementation of tobacco control and smoking and vaping cessation policy and programmes. The development and documentation of Indigenous-led programmes is critical in shifting the knowledge base to appropriately align with UNDRIP and World Health Organisation Framework Convention on Tobacco Control (World Health Organisation, 2003).

The Which Way? Women's programme addresses a national priority area for Aboriginal and Torres Strait Islander people by providing necessary evidence on a new and innovative programme to support smoking and vaping cessation. Through the conducted in Indigenist research practice that moves beyond participatory approaches and privileges Indigenous knowledge systems, Which Way? will generate crucial knowledge on innovative and scalable smoking and vaping cessation strategies. As this is a pilot study, lessons learned will provide the foundational weaving base for future work. A larger, state-wide implementation has been funded by the Medical Research Future Fund (#MRF2022138) and will be rolled out state-wide in New South Wales, Australia in 2025. Through our continual weaving process, each community that joins and implements the Which Way? Women's programme will incorporate their own gathered, dried and mellowed knowledges, continuing to grow and expand the programme, weaving new layers to the knowledge base privileging our diverse expert knowing in caring for our current and future generations.

Strengths and limitations

The collective, Indigenous-led nature of this work, privileging Indigenous methodologies and methods is a core strength of this work. The development of the Which Way? Women's programme has been conducted by Aboriginal and Torres Strait Islander women who have upheld the caretaking of knowledges gathered to weave a meaningful programme that draws and builds on the inherent strengths of Aboriginal and Torres Strait Islander women. Our study is led by Aboriginal and Torres Strait Islander women from a range of communities and kinship ties. These collective knowledges, beyond academic knowledges, provide strength to the work.

We recognise that Aboriginal and Torres Strait Islander people are diverse and that the programme may not be reflective of the knowledges and needs of all Aboriginal and Torres Strait Islander women, which is a limitation of this work.

Conclusion

This paper draws on our collective sovereign knowing and being as Aboriginal and Torres Strait Islander women to articulate the development of a smoking and vaping cessation group-based programme. The programme has been designed for and by Aboriginal communities who will be the custodians and caretakers of the knowledge and continue the production of new knowledges as the programme is implemented across New South Wales, Australia.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by the National Heart Foundation of Australia Aboriginal and Torres Strait Islander Award [Grant number 106200].

Data availability statement

No data available for this manuscript.

References

- Aboriginal Health & Medical Research Council. (2020). *AH&MRC ethical guidelines: key principles (2020) V2.0*. AH&MRC. <https://www.ahmrc.org.au/publication/ahmrc-guidelines-for-research-into-aboriginal-health-2020/>.
- Anderson, I. P., Robson, B. P., Connolly, M. M. P. H., Al-Yaman, F. P., Bjertness, E. P., King, A. M. D., Tynan, M. P., Madden, R. P., Bang, A. M. D., Coimbra, C. E. A. P., Pesantes, M. A. P., Amigo, H. P., Andronov, S. P., Armien, B. M. D., Obando, D. A. B. S., Axelsson, P. P., Bhatti, Z. S. M., Bhutta, Z. A. P., Bjerregaard, P. P., ... Yap, L. M. P. H. (2016). Indigenous and tribal peoples' health (The Lancet –Lowitja Institute Global Collaboration): A population study. *The Lancet (British edition)*, 388(10040), 131–157. [https://doi.org/10.1016/S0140-6736\(16\)00345-7](https://doi.org/10.1016/S0140-6736(16)00345-7)
- Australian Government. (2020). *National agreement on closing the gap*. Department of Health and Welfare. https://www.closingthegap.gov.au/sites/default/files/2022-09/ctg-national-agreement_apr-21-comm-infra-targets-updated-24-august-2022_0.pdf.
- Australian Government. (2022). *National Aboriginal and Torres Strait Islander health workforce strategic framework and implementation plan 2021–2031*. Department of Health and Aged Care. <https://www.health.gov.au/sites/default/files/documents/2022/03/national-aboriginal-and-torres-strait-islander-health-workforce-strategic-framework-and-implementation-plan-2021-2031.pdf>.
- Australian Government. (2023). *National tobacco strategy 2023–2030*. Department of Health. <https://www.health.gov.au/sites/default/files/2023-05/national-tobacco-strategy-2023-2030.pdf>.
- Australian Government. (2024). *Review of the national agreement on closing the gap: Study report*. Department of Health and Welfare. <https://www.pc.gov.au/inquiries/completed/closing-the-gap-review/report/closing-the-gap-review-report.pdf>.
- Australian Institute of Aboriginal and Torres Strait Islander Studies. (2020). *AIATSIS code of ethics for Aboriginal and Torres Strait Islander research*. AIATSIS. <https://aiatsis.gov.au/sites/default/files/2020-10/aiatsis-code-ethics.pdf>.
- Australian Institute of Health and Welfare. (2024). *National Drug Strategy Household Survey 2022–2023: First Nations people's use of alcohol, tobacco, e-cigarettes and other drugs*. AIHW. <https://www.aihw.gov.au/reports/first-nations-people/first-nations-use-alcohol-drugs#:~:text=Source%3A%20NDSHS%202022%E2%80%93E2%80%8D2023%2C%20Table%201.1.,-Many%20of%20these&text=First%20Nations%20people%20were%201.4%20times%20as%20likely%20as%20non,in%20the%20period%20of%2012%20months>.
- Bessarab, D., & Ng'andu, B. (2010). Yarning about yarning as a legitimate method in indigenous research. *International Journal of Critical Indigenous Studies*, 3(1), 37–50. <https://doi.org/10.5204/ijcis.v3i1.57>
- Bonilla-Silva, E., & Zuberi, T. (2008). Toward a definition of White logic and White methods. In T. Zuberi, & E. Bonilla-Silva (Eds.), *White logic, white methods: Racism and methodology* (pp. 3–30). Rowman & Littlefield Publishers. <http://catdir.loc.gov/catdir/toc/ecip084/2007046456.html>.
- Bovill, M. (2020). What ngidhi yinaaru nhal yayi (this woman told me) about smoking during pregnancy. *Medical Journal of Australia*, 212(8), 358–369. <https://doi.org/10.5694/mja2.50523>
- Bovill, M., Bar-Zeev, Y., Bonevski, B., Gruppetta, M., Oldmeadow, C., Hall, A., Reath, J., & Gould, G. S. (2019a). Aboriginal Wingadhnan Birrang (woman's journey) of smoking cessation during pregnancy as they participate in the ICAN QUIT in pregnancy pilot step-wedge trial. *Women and Birth*, 33(3), 300–308. <https://doi.org/10.1016/j.wombi.2019.05.003>
- Bovill, M., Bar-Zeev, Y., Gruppetta, M., Clarke, M., Nicholls, K., O'Mara, P., Bonevski, B., Reath, J., & Gould, G. (2019b). Giri-nya-la-nha (talk together) to explore acceptability of targeted smoking cessation resources with Australian Aboriginal women. *Public Health*, 176, 149–158. <https://doi.org/10.1016/j.puhe.2018.08.010>
- Bovill, M., Chamberlain, C., Bennett, J., Longbottom, H., Bacon, S., Field, B., Hussein, P., Berwick, R., Gould, G., & O'Mara, P. (2021). Building an indigenous-led evidence base for smoking cessation care among aboriginal and torres strait islander women during pregnancy and beyond: Research protocol for the which way? Project. *International Journal of Environmental Research and Public Health*, 18(3), 1342. <https://doi.org/10.3390/ijerph18031342>
- Bovill, M., Gruppetta, M., Cadet-James, Y., Clarke, M., Bonevski, B., & Gould, G. S. (2017). Wula (Voices) of Aboriginal women on barriers to accepting smoking cessation support during pregnancy: Findings from a qualitative study. *Women and Birth*, 31(1), 10–16. <https://doi.org/10.1016/j.wombi.2017.06.006>
- Butler, T., Gall, A., Garvey, G., Ngampromwongse, K., Hector, D., Turnbull, S., Lucas, K., Nehill, C., Boltong, A., Keefe, D., & Anderson, K. (2022). A comprehensive review of optimal approaches to co-design in health with first nations Australians. *International Journal of Environmental Research and Public Health*, 19(23), 16166. <https://doi.org/10.3390/ijerph192316166>
- Carter, R. (2007). Genes, genomes and genealogies: The return of scientific racism? *Ethnic and Racial Studies*, 30(4), 546–556. <https://doi.org/10.1080/01419870701355983>

- Johnson, J. (2008). Kitchen table discourse: Negotiating the “Tricky ground” of indigenous research. *American Indian Culture and Research Journal*, 32(3), 127–137. <https://doi.org/10.17953/aicr.32.3.n614240262468465>
- Joint Standing Committee on Aboriginal and Torres Strait Islander Affairs. (2023). Inquiry into the application of the United Nations Declaration on the Rights of Indigenous Peoples in Australia. https://www.aph.gov.au/Parliamentary_Business/Committees/Joint/Aboriginal_and_Torres_Strait_Islander_Affairs/UNDRIP/Report/Chapter_2_Implementation_in_Australia.
- Kennedy, M., Barrett, E., Heris, C., Mersha, A., Chamberlain, C., Hussein, P., Longbottom, H., Bacon, S., & Maddox, R. (2022a). Smoking and quitting characteristics of Aboriginal and Torres Strait Islander women of reproductive age: Findings from the which way? Study. *Medical Journal of Australia*, 217(S2), S6–S18. <https://doi.org/10.5694/mja2.51630>
- Kennedy, M., Heris, C., Barrett, E., Bennett, J., Maidment, S., Chamberlain, C., Hussein, P., Longbottom, H., Bacon, S., Field, B. G., Field, B., Ralph, F., & Maddox, R. (2022b). Smoking cessation support strategies for Aboriginal and Torres Strait Islander women of reproductive age: Findings from the which way? Study. *Medical Journal of Australia*, 217(S2), S19–S26. <https://doi.org/10.5694/mja2.51631>
- Kennedy, M., & Longbottom, H. (2022). Doing “deadly” community-based research during COVID-19: The which way? Study. *Medical Journal of Australia*, 217(2), 86–87. <https://doi.org/10.5694/mja2.51624>
- Kennedy, M., Longbottom, H., Mersha, A., Maddox, R., Briscoe, K., Hussein, P., Bacon, S., & Bar-Zeev, Y. (2023). Which way? Indigenous-led smoking cessation care: Knowledge, attitudes and practices of Aboriginal and Torres Strait Islander health workers and practitioners - A national cross-sectional survey. *Nicotine & Tobacco Research*, 25(4), 788–795. <https://doi.org/10.1093/ntr/ntac256>
- Kennedy, M., & Maddox, R. (2022a). Miilwarranha (opening): introducing the which way? Study. *Medical Journal of Australia*, 217(S2), S3–S5. <https://doi.org/10.5694/mja2.51626>
- Kennedy, M., & Maddox, R. (2022b). Ngaaminy (find, be able to see): summary of key findings from the which way? Project. *Medical Journal of Australia*, 217(S2), S27–S29. <https://doi.org/10.5694/mja2.51622>
- Lee, J. P., Maddox, R., Kennedy, M., Nahvi, S., & Guy, M. C. (2023). Off-White: Decentring Whiteness in tobacco science. *Tobacco Control*, 32(5), 537. <https://doi.org/10.1136/tc-2023-057998>
- Liu, B., Xu, G., Sun, Y., Qiu, X., Ryckman, K. K., Yu, Y., Snetselaar, L. G., & Bao, W. (2020). Maternal cigarette smoking before and during pregnancy and the risk of preterm birth: A dose-response analysis of 25 million mother-infant pairs. *PLOS Medicine*, 17(8), e1003158. <https://doi.org/10.1371/journal.pmed.1003158>
- Mersha, A. G., Bryant, J., Rahman, T., McGuffog, R., Maddox, R., & Kennedy, M. (2023a). What are the effective components of group-based treatment programs for smoking cessation? A systematic review and meta-analysis. *Nicotine & Tobacco Research*, 25(9), 1525–1537. <https://doi.org/10.1093/ntr/ntad068>
- Mersha, A. G., Maddox, R., Maidment, S., Booth, K., Briscoe, K., Hussein, P., Longbottom, H., Bar-Zeev, Y., & Kennedy, M. (2023b). It needs a full-time dedicated person to do this job in our local communities with our Aboriginal health services”: Aboriginal and Torres Strait Islander health workers and practitioners perspectives on supporting smoking cessation during pregnancy. *International Journal of Environmental Research and Public Health*, 20(1), 28. <https://doi.org/10.3390/ijerph20010028>
- Moreton-Robinson, A. (2017). Relationality: A key presupposition of an indigenous social research paradigm. In C. Anderson, & J. O’Brien (Eds.), *Sources and methods in indigenous studies* (pp. 69–77). Routledge. <https://doi.org/10.4324/9781315528854>
- National Health and Medical Research Council. (2018). *Ethical conduct in research with Aboriginal and Torres Strait Islander Peoples and communities: Guidelines for researchers and stakeholders*. NHMRC. <https://www.nhmrc.gov.au/about-us/resources/ethical-conduct-research-aboriginal-and-torres-strait-islander-peoples-and-communities>.
- Racette, S. (2022). Kitchen tables and beads: Space and gesture in contemplative and creative research. In H. Igloliorte, & C. Taunton (Eds.), *The routledge companion to indigenous art histories in the United States and Canada* (pp. 52–60). Routledge. <https://doi.org/10.4324/9781003014256>
- Rahman, T., Baker, A. L., Gould, G. S., Palazzi, K., Lambkin, D., & Kennedy, M. (2021). Factors associated with smoke-free pregnancy among Aboriginal and Torres Strait women and their experience of quitting smoking in pregnancy: A mixed method cross-sectional study. *International Journal of Environmental Research and Public Health*, 18(21), 11240. <https://doi.org/10.3390/ijerph182111240>
- Rigney, L.-I. (1999). Internationalization of an indigenous anticolonial cultural critique of research methodologies: A guide to indigenist research methodology and its principles. *Wicazo Sa Review*, 14(2), 109–121. <https://doi.org/10.2307/1409555>
- Shawanda, A. (2022). Anishinaabe research methodology that assisted in the act of resistance by resurging anishinaabe motherhood traditional teachings and pedagogies. *Asia-Pacific Journal of Canadian Studies*, 28(1), 85–100. <https://doi.org/10.22691/kacs280106>
- Smith, L. T. (1999). *Decolonizing methodologies: Research and Indigenous peoples*. Zed Books Ltd.
- Turnbull, P. (2017). *Science, museums and collecting the indigenous dead in colonial Australia*. Palgrave.
- United Nations. (2007). *United Nations declaration on the rights of Indigenous peoples*. UN. <https://social.desa.un.org/issues/indigenous-peoples/united-nations-declaration-on-the-rights-of-indigenous-peoples>.

World Health Organisation. (2003). *World Health Organisation framework convention on tobacco control*. <https://iris.who.int/bitstream/handle/10665/42811/9241591013.pdf?sequence=1>.

Yoorook Justice Commission. (2024). *Transcript of day 2 - Public hearing, 28 May 2024*. Yoorook Justice Commission. <https://yoorrookjusticecommission.org.au/public-hearing/public-hearings-27-may-31-may-2024/>.