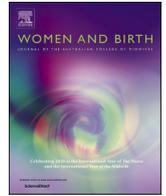




Contents lists available at ScienceDirect

Women and Birth

journal homepage: www.sciencedirect.com/journal/women-and-birth

My quitting stories: A qualitative study exploring Aboriginal women's experiences of smoking cessation and preventing relapse in the context of pregnancy

Tabassum Rahman^{a,b,d,*}, Alyce Weatherall^a, Michelle Kennedy^{a,b}, Amanda L. Baker^{a,b}, Gillian S. Gould^c

^a School of Medicine and Public Health, The University of Newcastle, University Drive, Callaghan, NSW 2308, Australia

^b Hunter Medical Research Institute, New Lambton Heights, NSW 2305, Australia

^c Faculty of Health, Southern Cross University, Coffs Harbour, NSW 2450, Australia

^d Indigenous Epidemiology and Health Unit, Centre for Epidemiology and Biostatistics, Melbourne School of Population and Global Health, Faculty of Medicine, Dentistry and Health Sciences, The University of Melbourne, VIC 3053, Australia

ARTICLE INFO

Keywords:

Smoking cessation
Relapse prevention
Aboriginal and Torres Strait Islander women
Smoke-free, Qualitative
Tobacco use

ABSTRACT

Background: Most women who give up smoking during pregnancy relapse to smoking postnatally. Evidence on strategies that are helpful in maintaining smoking cessation during and beyond pregnancy is limited.

Aim: This paper aims to explore Aboriginal women's experiences of quitting smoking, relapsing, and preventing relapse, focusing on the strategies they applied for attaining and maintaining abstinence and the support they received.

Methods: Qualitative interviews were conducted between October 2020 and June 2021, in urban New South Wales, Australia, with 12 Aboriginal women who either smoked tobacco or quit smoking and had been pregnant in the last five years. Aboriginal Research Assistants recruited participants, participated in data collection and data analysis. Data were thematically analysed.

Results: Major themes that emerged from the data include: a) aspiration to be abstinent; b) strong mindset; c) strategies to stay smoke-free; d) supports received; and e) service and policy recommendations. Protecting children from second-hand smoke had salience for the maintenance of abstinence. Having a strong mindset was perceived as a prerequisite to staying smoke-free. Use of multiple coping strategies in combination was frequently expressed. Knowledge about tobacco-related harms, the way nicotine dependence works, and the available support options was empowering and enabled informed decision making and actions around smoking cessation.

Conclusion: This qualitative study conducted with 12 Aboriginal women revealed that Aboriginal women employ multiple strategies (cognitive, behavioural and social) to quit smoking and stay smoke-free. The strategies warrant further exploration with different Aboriginal communities across Australia and consideration of inclusion in smoking cessation care.

Statement of Significance

Problem or issue

Relapse to smoking is common among pregnant and postpartum Aboriginal women, despite high motivation for quitting.

What is already known

Evidence on effective relapse prevention strategies among pregnant and postpartum Aboriginal women is limited, with no study primarily exploring strategies Aboriginal women apply to abstain from smoking after quitting.

What this paper adds

* Correspondence to: School of Medicine and Public Health, The University of Newcastle, Hunter Medical Research Institute, Level 4- West, 1/1 Kookaburra Circuit, New Lambton Heights, NSW 2305, Australia.

E-mail addresses: tabassum.rahman@uon.edu.au (T. Rahman), alyce_weatherall@live.com.au (A. Weatherall), michelle.kennedy11@newcastle.edu.au (M. Kennedy), amanda.baker@newcastle.edu.au (A.L. Baker), gillian.gould@scu.edu.au (G.S. Gould).

<https://doi.org/10.1016/j.wombi.2022.07.172>

Received 17 March 2022; Received in revised form 24 July 2022; Accepted 24 July 2022

1871-5192/© 2022 Published by Elsevier Ltd on behalf of Australian College of Midwives.

Aboriginal women used multiple coping strategies in combination to remain abstinent before and after having their babies. There is a need for more relatable information on how to better manage nicotine craving, which can be provided via women's groups, with a strong focus on Aboriginal culture. A need for more support from health professionals to achieve long-term smoking abstinence was highlighted. New initiatives may include restricting the availability and accessibility of tobacco and more Aboriginal-led smoking cessation services.

Introduction

Smoking in pregnancy persists as a serious public health concern in high-income countries. Drawing on population and clinic-based studies, a systematic review reported that 4–70 % of the women who smoke in the general population would quit smoking during pregnancy, and up to 90 % would start smoking again after a year, indicating high postpartum relapse [1]. Key barriers to the maintenance of abstinence in the general population included: the women's perception of smoking as a means for stress management, lack of social and partner support, extrinsic motivation (i.e. pregnancy) for quitting, and the perception that smoking was part of their identity prior to pregnancy [2]. Internationally, the resumption of smoking is not proportionately spread across socioeconomic groups [3], indicating an impact of the social determinants of health on the maintenance of abstinence. Relapse is more common in women with lower socioeconomic status, lower educational attainment, lack of social support, and postpartum depression [4]. Other factors include easy access to cigarettes, low confidence and self-efficacy, not intending to quit for long-term, and other smokers in the household [5]. Protective factors are strong social networks and partner support, maintaining a smoke-free environment for the child's health, and employing effective coping strategies to avert cravings [4].

Indigenous women in high-income countries may experience a similar risk of relapsing to smoking postpartum. In Canada, among Alaskan Native women, seven out of nine (78 %) who were not smoking at the time of childbirth resumed smoking during the 12 months after their children were born [6]. In Australia, there has been substantial progress in reducing the prevalence of smoking among Aboriginal and Torres Strait Islander peoples (hereafter Aboriginal peoples with recognition of the autonomy of all Aboriginal and Torres Strait Islander people) aged 18 years and above by 9.8 % points between 2004 and 05 and 2018–19, ascribed to quitting and not taking up smoking [7]. However, among pregnant Aboriginal women who use tobacco, the decline in the proportion of smokers was only three percentage points between 2008 and 2014–15, and has not been in line with the overall smoking cessation progress achieved among Aboriginal peoples [8]. It has been suggested that the resumption of postpartum smoking among Aboriginal women is also frequent [9], despite a high motivation to quit in pregnancy [10]. Smoking cessation messages that pregnant and postpartum Aboriginal women receive appear to lack consistency and clarity and tend not to focus on long-term abstinence [10]. Second-hand smoke exposure in infancy is associated with increased risk of respiratory, neurological and immunological morbidity [11], sudden infant death syndrome [12], ear infections [11], and adverse behavioural and cognitive outcomes [11]. Thus, relapse to smoking postnatally among Aboriginal women who have previously quit has enduring implications for their babies and poses risks of tobacco-related morbidity and mortality for themselves [13].

To date the literature has mostly included relapse issues as part of studies exploring the overall smoking cessation experiences of pregnant Aboriginal women, rather than as a dedicated topic. This has included barriers to and enablers for maintaining abstinence [9,14]. However, strategies women say they use to stay abstinent have not been studied and the focus of the literature has not been entirely on relapse prevention as a topic. Previous research conducted with Aboriginal women

reported some key barriers to abstaining from smoking postpartum, such as day-to-day stressors [9,14], visiting places or meeting people associated with smoking [9], and having a household member who smoked [15]. Strategies used to avoid smoking included keeping busy by doing household work to avert smoking [9] and not socialising with peers who smoked [14].

There are few smoking cessation and relapse prevention interventions specifically tailored for pregnant Aboriginal women and limited positive evidence to date from clinical trials [3]. The Royal Australian College of General Practitioners' smoking cessation guidelines recommend pharmacological support if counselling alone was not effective for pregnant women [16]. The previous iteration of the guideline also recommended follow-up, along with screening for smoking status of any individual who sought care, advising them to quit, and assisting them to quit [17]. These supports however, are inconsistently offered [10,18]. Not sustaining quit attempts made during pregnancy appears to be a key factor contributing to the continued high prevalence of smoking during pregnancy among Aboriginal women despite high motivation for quitting [19] enabling continued exposure to smoking-related morbidity and mortality. There is a need for further knowledge on what Aboriginal women do to stay abstinent when they are on their quitting journey, as their strategies can be a source of learning for many others who embark on the same journey. This paper aims to explore Aboriginal women's experience of quitting and period of abstinence with a focus on the strategies they applied and the supports they received.

Methods

The study employed a basic qualitative enquiry approach [20] where the participants were interviewed following a conversational approach. A storytelling method was used to explore sensitive information, so that participants could set the pace of the conversation and engage in a more natural reflective style of sharing their stories with the researcher. The researcher assumed the role of a listener and asked questions or probed for clarification or for bringing up topics that warranted further inquiry such as support they received from family and friends, and health professionals [20,21]. The researcher used a topic guide in this study to guide the discussion and explore relevant issues, for example smoking cessation related service utilisation and supports received.

The transcripts of the stories were thematically analysed using an inductive approach or 'bottom-up' way of analysing qualitative data. The codes and themes emerged from the participants' stories, and not from a pre-existing coding frame or theoretical standpoint [22]. Two Aboriginal Research Assistants were employed on this study. Before data collection began, both Aboriginal Research Assistants received training on the fundamentals of qualitative research and data collection. The first Aboriginal Research Assistant commenced the recruitment. However, she was unable to continue. Thus, the second Aboriginal Research Assistant, AW, led the recruitment and participated in data collection and data analysis. She also received training on qualitative data analysis. Training was provided by TR, who is a non-Indigenous person of colour, with guidance from MK, an Aboriginal academic, ALB, a non-Indigenous senior academic, and GSG, non-Aboriginal senior academics. As part of the training, a practice session was arranged, under the supervision of MK, with six Aboriginal women studying a research methodology course. Practice sessions with the students offered an opportunity to implement the topic guide in practice and to learn from the reflections of the participating students and MK.

This study was guided by an Aboriginal Reference Group that included two Aboriginal women, an Aboriginal neonatal nurse, and an Aboriginal academic. The Aboriginal Reference Group provided guidance on recruitment of participants, refining the questions to be asked during the interviews, cultural safety during data collection, and reporting of evidence. Ethics approval was sought and secured from the Aboriginal Health and Medical Research Council of New South Wales,

Australia.

Recruitment

Aboriginal women who were at least 16 years old, had a pregnancy in the last five years, smoked tobacco in any amount or were ex-smokers, able to give informed consent, and were living in New South Wales, Australia, were deemed eligible for this study. Twelve Aboriginal women living in urban New South Wales shared their stories of smoking cessation attempts. Participants were recruited using a three-pronged recruitment strategy: social media, opportunistic personal intercept, and professional networks. Firstly, a dedicated Facebook page entitled *My Quitting Stories* was created for this study. The Facebook page was created by TR. The Facebook page was managed by AW and TR where they created and made posts inviting Aboriginal women to participate in the study. The Facebook page was promoted by Aboriginal team members of the larger research team of MK and GSG to facilitate recruitment. No paid advertisement was used for the Facebook page.

Secondly, potential participants were approached via personal intercept at schools and childcare centres by AW, utilising her local network. Thirdly, AW and TR visited two branches of a local Aboriginal Medical Service, twice a week (four hours per day), between May and June 2021 to approach potential participants. The midwives and nurses working at these sites volunteered to promote the study. Additionally, the study was promoted using posters and flyers in the waiting room and the antenatal clinic space. Recruitment was impacted by the COVID-19 pandemic. This included a sustained halt on face-to-face recruitment, less opportunity for AW to engage with potential participants in-person and only online promotion and recruitment of participants for most of the study period. Opportunities for having more participants were missed on occasions when participants could not be reached over the telephone for an interview. Participants were reimbursed with an AUD 30 grocery voucher for their time, which could not be used to purchase tobacco or alcohol.

Data collection

Data were collected between October 2020 and June 2021. The convenience of the participants and attempts to reduce non-essential face-to-face interactions, and the requirement for working remotely in compliance with COVID-19 restrictions influenced data collection mode. Due to the constraints listed above, all interviews were conducted over the telephone, although on some occasions, an initial approach was made in person.

Before the interviews, participants were provided with the participant information sheet and the consent form via a Research Electronic Data Capture link, which participants could access using a computer, tablet computer or mobile telephone [23]. TR conducted the interviews with AW to ensure cultural safety in the data collection process. Interviews were initiated by AW, describing the interview process and introducing TR to the participants. TR then introduced herself and explained the purpose of the study in plain language. Considering the sensitive nature of the topic, TR also explained to the participants that they reserved the right to decide what they would like to share of their stories. TR explained that the role of AW as a support person for the participants, if need be, during the interview. An interview topic guide was used to aid the storytelling by the participants. The interview topic guide was developed via discussion with MK and GSG. To make the data collection process culturally safe and respectful, and comfortable for participants, the interviews were conducted following a conversational approach [21]. The conversation started with the participants being requested to tell their smoking and smoking cessation stories. Additional questions were asked to clarify an aspect of the stories as the conversation progressed [10]. Therefore, interviews did not always follow the same trajectory. Supplementary questions were asked following the topic guide to exploring the stories further if required.

Interviews were 30 min long on average and were audio-recorded using the in-built recording option on an iPad with the participant's permission. Audio recorded interviews were then transcribed verbatim using a professional transcription service. Transcriptions were checked for consistency by TR and AW. AW sent transcripts to participants who wished to receive a copy of their stories for a member check. Member check is a method used in qualitative research to enhance validity of the research. It is also known as participant or respondent validation [24]. All but one participant was willing to receive a transcript of their stories. No revisions were requested.

Analysis

The authors coded and managed the data using NVivo qualitative data analysis software version 12 [25]. Thematic analysis was performed following steps described by Braun and Clarke [22]. TR and AW independently read and re-read four interviews to familiarise themselves with the data and coded these line-by-line to develop a codebook. TR and AW exchanged independently developed codebooks to compare and identify concordance and discrepancies. Disagreements were resolved via frequent discussion and guidance from MK and GSG. Subsequently, TR coded the rest of the interviews following the codebook. Additionally, TR raised discussion with AW whenever any new code emerged. AW randomly selected and checked 50 % of the remaining interviews for consistency. TR then performed a higher-level analysis to reach emergent themes, with frequent reflexive discussions and review with MK and GSG. Following this, TR defined and named the themes. The theme definitions and names were finalised in thorough discussion among all authors. MK provided cultural oversight and guidance in answering the research questions. MK, ALB and GSG provided overall guidance to data analysis and reporting of the evidence. Reflexivity was practised at all stages of the study: research question formation, determining topics to explore under the model in use, data collection, analysis and reporting of evidence [26]. TR maintained a reflexive diary and met with MK, ALB and GSG as required. Data have been reported using the Standards for Reporting Qualitative Research checklist [27].

Table 1
Demographic characteristics of participants (N = 12).

Variables	Numbers
Age (Years)	
≤ 25	2
26–30	8
≥ 35	2
Median (Q1-Q3)	28 (26–30)
Educational attainment	
Up to Year 9	6
Year 10–12	3
Current Technical and Further Education/University student or graduate	3
Currently pregnant	
Yes	1
No	11
Number of children	
1–2	5
≥ 3	7
Partner	
Yes	5
No	7
Smoking status	
Smoker	8
Ex-smoker	4
Number of smokers in the house	
0	2
1–2	8
≥ 3	2

Results

Table 1 presents a brief description of study participants. All participants were Aboriginal. The median age of participants was 28 years (26–30). Most participants completed up to nine years of education, did not have a partner, and two-thirds currently smoked tobacco.

The themes identified were a) aspiration to be smoke-free; b) having a strong mindset ('willpower' as the participants termed) to be smoke-free; c) strategies to stay smoke-free; d) supports received; and service and policy recommendations (**Table 2**). The following subsections describe the themes.

Aspiration to be smoke-free

All participants expressed aspirations for a smoke-free future. Children were found to be the main motivation to have a smoke-free life. Half of the participants indicated they would like to set a good example to their children so that they do not think smoking is normal or start smoking in the future. Knowing the harms of tobacco on children and self was empowering for some participants as it helped them think about the health of their children and themselves in the future and make decisions around their smoking. The urge for protecting children from the harms of parental second-hand smoking was more prominent when awareness of tobacco-related harms was relatively high.

It's very different when you can put yourself in place of responsibility for your child's health. She's got asthma and things like that. Having it around and the thought that statistically a lot of children smoke when their parents smoke. So, I don't want her to smoke. (P2)

Two participants mentioned their children being supportive of being smoke-free by expressing that they would like their mothers to give up smoking. One participant aspired to have a longer life with her children. Concern over one's own health was observed among some of the participants. Participants appreciated the health benefits they had noticed in themselves while being smoke-free for as long as they were. However, some participants expressed worry about what to anticipate when they finally give up smoking as they were *depend(ent) on it (smoking) a bit too much (P8)*. On the other hand, few participants felt that they had the self-confidence necessary for quitting or enough knowledge of tobacco-related harms. Nevertheless, some participants expressed ambivalence even after having the knowledge.

I don't want to smoke. ... But I just can't stop. I'm destined for things like lung cancers ... It's definitely something that I know that I need to stop. I want to stop. (P1)

Having a strong mindset to do it

A strong mindset was mentioned concerning averting nicotine withdrawal symptoms. Some participants highlighted the importance of mindset. Participants referred to it as 'willpower'. A few of them found that distracting one's mind to do something different, i.e., not smoking

Table 2

Major themes that emerged from the interviews with 12 Aboriginal women.

Themes	Subthemes
Aspiration to be smoke-free	
Having a strong mindset or the willpower to be smoke-free	
Strategies to stay smoke-free	Replacing smoking with an activity It's about keeping yourself busy and wanting better for yourself <i>Not putting self around it</i> and eliciting support from the environment
Supports received	Family and friends Health professionals

Service and policy recommendations

when the urge was felt, was easy.

You've got to want better for yourself. Like, no one can help you, that's one thing with this smoking, no one can help you do that, you know ... Like how you think of things, your routine, keep yourself busy. I know when I first started quitting, I was doing a lot of sleeping (P7).

Others acknowledged that it could be difficult not to smoke and would need a strong will not to. While access to smoking cessation support was seen as important, participants maintained that having supports available might not necessarily be sufficient for staying smoke-free; one needed the determination to stay smoke-free.

I think it is because you can have all the support in the world, but if you don't feel like you can do it then you're going to end up back where you started (P11).

Although participants were strategically replacing having a cigarette with different activities and practices, tackling nicotine withdrawal could be challenging because of the effect nicotine has on one's physiology.

(Y)ou would have to ride out the actual withdrawal process. Nothing could replace that ... You just keep reminding yourself that it's not forever feeling.... it's really up to yourself. (P2)

Strategies for staying smoke-free

Replacing smoking with an activity

Bringing in changes in the daily routine appeared to be an important strategy participant applied to stay smoke-free. Changes included a different utilisation of time, incorporating new activities to avert the triggers of smoking, and alternate ways of stress relief and relaxation. Participants mentioned modifying their morning routine to avert relapse, for instance, instead of having a morning coffee and cigarette, some participants took time to get prepared for work and listened to music. Some participants reported replacing drinking coffee with an alternative such as juice. Other participants mentioned using break periods during work or studied differently. Replacing smoking with a healthful practice such as *having something to eat, having time to make a cuppa, and sit down and enjoy cuppa (P1)* were found to be useful in averting the resumption of smoking. Participants emphasised that such pre-emptive actions were time-critical to avert a potential slip up. Learning how nicotine dependence worked was deemed helpful in planning actions to avert urges to smoke. For example, knowing potential triggers and how to deal with those, and being prepared to deal with triggers was found to be helpful in abstaining from smoking.

Keeping kind of busy right up until you're ready to go to bed, especially after every meal, it's just, like, okay, jump onto an activity, or engage in a conversation or something that's gonna throw you off that cigarette that you have when you eat, replacing that habit straight away, It's really tricky. (P2)

Avoiding anything that triggered having a cigarette and finding *other ways to relax without having that smoke (P1)* were helpful. Some participants resorted to eating specific food items instead of smoking, such as sweets, chocolate, bread and chewing gum.

It's about keeping yourself busy and wanting better for yourself. Engaging in activities helped distract the mind from thoughts of smoking. Such activities included exercising or being physically active and spending time doing something creative and entertaining. Keeping physically active such as walking, was seen as a healthy behaviour that would prevent the urge to smoke. Incorporating arts and crafts, watching movies and listening to music was found to be useful to avoid the thought of smoking.

Every time I wanted a smoke, I'd sit down to start colouring in (P7)

Some participants spent more time with their children, played with them or did something creative together. Also, those who were busy because of having multiple young children appreciated not having the time to think about or actually to smoke a cigarette.

I was always doing something or making the kids something or we were doing something together, so I didn't really have time. (P12)

The physical act of smoking rather than the actual nicotine dependence was reported to be an important part of smoking behaviour, particularly keeping one's mouth busy even with using straws as a fake cigarette.

Not putting self around it and eliciting support from the environment. Avoiding social situations that were associated with smoking was found to be a useful strategy to circumvent cues that might trigger smoking again. *Forward thinking and being strategic (P2)* to avoid such an environment until one is *strong enough to deal with it (P2)* helped some participants to remain abstinent. For some of the participants, avoiding socialising with people who smoked was helpful as it also prevented exposure to alcohol, which can be another trigger for the resumption of smoking. *Drinking alcohol with friends* was identified as a trigger of *social smoking (P7)* and *starting to drink alcohol brought back smoking (P8)*. However, this strategy might be difficult to implement in situations that were unavoidable, such as a workplace setting where co-workers smoked. Smoking was a shared activity when socially interacting during break times.

After I had the twins, I didn't smoke until I went back to work. So, I didn't smoke for a year. (P5)

Drawing support from others was often helpful in creating a favourable atmosphere for staying smoke-free. For instance, having conversations with family members and friends who smoked about one's quitting plans and creating *boundaries (P2)* while communicating one's own expectations from family members and friends. This was particularly important for those who had previously allowed family members and friends to smoke indoors but now had decided to make their houses smoke-free as part of their quit plan. Participants appreciated smoking bans in public places and reported that these helped them stay smoke-free. For example, one participant mentioned.

When I was at university, it made it a lot easier, because you wouldn't have time between classes to go to that specific area, and then get back to where your classroom was. (P1)

Supports received

Family and friends

Family and friends were recognised as important sources of support in making a quit attempt and staying abstinent. Quitting together with family members and friends was mentioned by many. Even when family members were smokers themselves, they actively supported and encouraged quitting attempts.

Dad ... quits more than mum does... he'll be the first one to say, you know you can do this. ... he's really motivating. (P2)

For some of those who received support from their family, partner and friends, the level of support was predominantly verbal support, while they would continue to smoke around the person trying to give up smoking. Types of support that were highly valued included when family members, partners and friends appreciated and respected the choices that Aboriginal women made regarding smoking or tried to give up smoking together: *it was really good when we were all doing it together because you had that support (P1)*. However, some of the participants reported that quitting in a group, be it family or friends, might not work when there were people with different levels of nicotine addiction and

the strength of motivation to quit smoking. Thus, the level of support for and encouragement to each other might not be the same even when a quitting group was helpful.

I felt like I did stay off the smokes longer when I was in groups. But yeah, if one person just gives up, it's just, goes downhill from there ... and then everyone was like, one after another, it didn't take (long)... Oh well, just give me a smoke, 'cause you lit up a smoke. (P4)

This is of particular importance as one lapse could lead to relapsing to smoking at a previous level: *That one slip up, when you're trying to quit, could be the difference between you actually quitting and not quitting at all (P1)*. Yet, the benefits of giving up smoking in a group were appreciated: *having someone else when you're having a moment of weakness ... It's like someone else going, no, it's fine, you've got this (P2)*.

Partners appeared to be major sources of strength in maintaining smoking abstinence when they offered active support and tried to give up smoking together. However, when a partner was not supportive, Aboriginal women's quitting attempts may be disrupted by actions that might trigger a lapse or relapse.

My husband and I went on holidays. He quit at the same time (when I did) ... and he bought a packet of smokes, and I said, no, no, don't do that. We don't need that. We haven't smoked for months. He bought them anyways, and I went, oh, I'll just have one. And then, one turned into, okay, well, ... when we go home, we won't smoke any more. And after our holidays, we continued smoking. (P1)

Social surroundings could also be supportive or unsupportive to remaining smoke-free. As one participant put it, *worry (sic) about the judgement helped the most(P5)*. To another participant, relapsing to smoking was not viewed negatively in the family and as it seemed to be *well accepted in the society (P4)*. One participant said that consistent messaging and support from her family and community to be smoke-free would have helped her.

(Y)ou look for approval off certain people in your life, like, if someone asks you enough to stop...Then I feel like I'd stop. If I got asked enough. (P12)

Support around smoking cessation was deemed insufficient in comparison to the cessation of drug and alcohol dependence in the communities.

There's more emphasis on other drugs ... and alcohol. Like that's where I think we fail ... smoking is just as bad I reckon. (P4)

Health professionals

Very little support appeared to be received from participants' health professionals in staying smoke free during pregnancy and the post-partum period. While participants received advice to stop smoking, following up at subsequent antenatal visits was rare as the health professionals were *really busy*, and women were only asked about smoking and quitting *once or twice (P4)*.

Half of the participants were offered nicotine replacement therapy. However, participants did not receive enough education about the way nicotine replacement therapy works or *on how to use it (P4)*. From the data, nicotine replacement therapy did not appear to be the desired method for smoking cessation among the participants. The women's preference for quitting unaided (*cold turkey*) appeared to be very strong and was often mixed with the fear of getting addicted to nicotine replacement therapy, if used. Participants also took pride on quitting smoking unaided.

If you want to quit something you quit it ... you don't turn to something else. Then you're gonna get addicted to another thing ... You've got to do things cold turkey. (P7)

More than half of all participants used some form of nicotine

replacement therapy to remain smoke-free after making a quit attempt at some point in their life. Of those who were offered nicotine replacement therapy by health professionals, one of them used nicotine replacement therapy during pregnancy for a short while before stopping use due to a reaction. Most participants reported having unpleasant experiences using nicotine replacement therapy, with some not liking the taste of nicotine replacement therapy, others having a physical reaction to nicotine replacement therapy, and some having both types of experiences.

Service and policy recommendations

Recommendations were made by the women to reduce the availability of cigarettes, particularly the sale of tobacco products at convenience stores that are perpetually open. Such a level of availability made tobacco products accessible at any hours of the day. The participant below found availability and accessibility to be a barrier for her to maintain abstinence:

You can go and buy a packet of smokes from service stations that are open 24 h ... most of the time when I've started smoking again, it's been at around 11, 12 o'clock at night. So, the availability of them, is probably, the hardest thing. The fact that you can, you can buy them just about anywhere. (P1)

An Aboriginal women's group with a focus on Aboriginal culture was recommended, where those who were trying to give up smoking could share coping strategies.

We all know when each other's down, you know, but we all know how to lift each other spiritually too ... we talk about our healing, it's talking... you never look down on anyone unless you help them up, you know...I think if I was around more, more Aboriginal women that were in the same boat as me, it would have been good. (P7)

Participants highlighted the need for *services run by Aboriginal people and Aboriginal teachers (P7)*. This was perceived to be important as it would help Aboriginal women to get more information on smoking cessation and the available options for them. This would also help them discuss their smoking behaviour and past quitting experiences without being worried about being judged and choose smoking cessation options according to their needs.

Discussion

This qualitative study conducted with 12 Aboriginal women revealed their experience of smoke-free periods in the context of pregnancy and beyond. The data offers important insight into Aboriginal women's aspirations in relation to giving up smoking; their views on the importance of ones' mindset; strategies they applied to stay abstinent; the supports they received while giving up smoking in averting relapse; and further service and policy initiatives they recommended for Aboriginal women who want to give up smoking. The thematic analysis revealed Aboriginal women's high aspiration to achieve a future smoke-free life for their children and themselves, their agency in the process of quitting, and resilience when meeting challenges in the quitting process.

Aboriginal women in our study aspire for a smoke-free life in future, with many of them taking initiatives towards that. This is in line with Gould et al. [9] reporting Aboriginal women looking towards a healthier future with hopes to spend more time with their children [9]. Women's aspirations for quitting smoking in pregnancy to protect their unborn child was also reported in a qualitative study conducted with women from socially disadvantaged women in South Australia [28]. Protecting children from second-hand smoke has salience for the maintenance of abstinence [29].

Having a strong mindset appears to be what Aboriginal women in our study perceived as a prerequisite to staying smoke-free, even when all other supports are available. Absence of a strong mindset was found to

be a key barrier to maintenance of abstinence during pregnancy and the postpartum period among women in the general population in the United Kingdom [30] and Australia [31]. However, behavioural change involves individuals' physiological aspects, their personal experiences and social selves, and the environmental contexts in which they function [32,33]. Therefore, individuals may sometimes overlook the role of the above factors while perceiving low levels of willpower to be the reason for relapsing to smoking. Rahman et al. [34] reported that behaviour change requires a coordinated presence of individuals' capability to change, motivation for change, and the opportunity to receive supports that enable the change, i.e. smoking cessation [34]. While pregnancy is an opportune time to intervene, it is an extrinsic motivation that may not result in long-term abstinence [2]. The urge to protect the unborn child has been reported as a key motivation for quitting smoking among the Aboriginal and non-Aboriginal pregnant population [28,35,36]. In our study, we provide further evidence that Aboriginal women were concerned over their own wellbeing as well and aspire to have a smoke-free life in the future.

Aboriginal women suggested multiple strategies to avoid starting smoking again while on their quitting journey. Bovill et al. [10] reported that Aboriginal women took ownership of their decision on methods of quitting smoking and made changes to their smoking behaviour to support themselves in the smoking cessation process [10]. Although making changes to the physical environment is a behaviour change technique for smoking cessation [29], this is the first time as far as we know that making changes in day-to-day activities has been reported as a strategy to maintain smoking abstinence by Aboriginal women. Keeping busy to avoid smoking as a cessation strategy among Aboriginal women has been previously reported by Gould et al. [9]. Wood et al. [14] reported that Aboriginal women with little children were smoking less due to not having enough time [14]. Turning to other activities to self-distract was found to be used as a coping strategy by pregnant women in the general population in France [37]. In our study, women reported that doing arts was helpful in reducing smoking consumption. Our study presents new evidence that Aboriginal women use being occupied with their children, actively spending more time with children (i.e., playing and doing creative things) and using artistic pursuits to stay away from smoking altogether.

A previous study reported eliciting support to give up smoking from friends [14]. However, engaging in conversations with family members and friends who smoke with a view of creating smoke-free surroundings and lessening social cues for smoking for self is important new evidence. The impact of key influencers such as surroundings and places on smoking and quitting in pregnancy has been highlighted by Aboriginal women [9,29,38]. Stopping socialising with peers who are smokers is a strategy that both Aboriginal and non-Aboriginal women have engaged with before [14,39]. However, planning ahead to avert a potential slip up while socialising with peers who are smokers is a new finding. This indicates two things. Firstly, Aboriginal women value having a smoke-free life and are engaging in conversations and actively choosing strategies they thought would help them to stay smoke-free. Secondly, by continuing to socialise with associates who are active smokers, Aboriginal women who are quitting and wish to transform their identity to that of a non-smoker are negotiating their place in the same social arena where smoking is a social act and norm [14]. It also allows Aboriginal women to avoid isolation and remain connected with their social network where they can negotiate social support [40]. Although not all of the strategies were entirely new [41], they have not been reported to be practised by Aboriginal women on their own initiative, even when the support from health professionals was inadequate [10].

Nicotine replacement therapy was not a preferred method for quitting by Aboriginal women in this sample. In our data, the concern over nicotine replacement therapy's effect on the unborn child was common during pregnancy. However, in most cases, women received very limited or no guidance on the correct use of nicotine replacement therapy and how it works, which was previously observed by Bovill et al. [10]. Our

results add to the evidence that smoking cessation supports are more beneficial when such supports empower Aboriginal women by prioritising their choice of smoking cessation methods and informed decision making, and build resilience [40]. Knowledge about tobacco-related harms, the way nicotine dependence works and the available support options was empowering and enabled informed decision making and actions around smoking cessation [34]. Bovill et al. [10] previously reported that there is a lack of clarity and consistency in knowledge regarding smoking cessation that Aboriginal women receive from their health professionals [10]. Despite concerns over stress management or 'self-medication' without cigarettes, Aboriginal women showed resilience in managing stressful life circumstances while staying smoke-free [10]. However, quitting attempts were not sustained in the long run, even though the motivation was high when the surrounding web of support faded away or was not strong enough. Askew et al. [42] demonstrated the necessity of all-round and intensive professional support that Aboriginal women need to embark on their quitting journey [42]. Therefore, the support that Aboriginal women need to stay smoke-free may need to be raised to a higher level, and smoking cessation interventions should take this into account. In this study, participants highlighted the need for reduced availability and accessibility of tobacco and services run by Aboriginal people as important initiatives.

Strengths and limitations

To our knowledge, this is the first study that reports detailed coping strategies that Aboriginal women employ to stay smoke-free and avert smoking relapse. This evidence offers important understandings of how Aboriginal women are planning to stay abstinent and manage the risks that could lead to relapse. Our study has some limitations. Quitting attempts that Aboriginal women made were often sustained for a short time. Some participants tended to discount such short-term quit attempts. This may have impacted the volume of the data about preventing relapse. Participant recruitment started after an extensive preparation for fieldwork was conducted, which complied with COVID-19 related health directives. Such preparations involved modifying the mode of data collection, developing a health and safety plan for the participants, and acquiring ethical approval for the modifications. Thus, long preparatory processes put constraints on the time and resources allocated for data collection within this study. It also affected the recruitment as there had been unprecedented changes in the usual ways of life and priorities for Aboriginal communities. Due to the stress of the pandemic and lockdowns, and the nature of the study, the approach to recruitment was not optimal. The authors acknowledge the impacts of the above factors on the study context and personal circumstances of eligible participants (e.g., heightened health concerns, competing priorities). The data came from one area of Australia. Therefore, the evidence may not be generalisable to all Aboriginal women due to diversity in Aboriginal communities and cultures.

Implications

Advancing understanding of how Aboriginal women prefer to abstain from smoking during pregnancy, and beyond is important; as their prominent preference is for unaided smoking cessation. Our study indicates that there is a need for more evidence to have a broader understanding of Aboriginal women's experience of smoking abstinence at a larger scale across different Aboriginal communities. Thus, embedding quitting attempts and abstinence-related queries within the broader health information system i.e., electronic medical records will generate evidence to facilitate further research. Strategies such as doing something else and distraction are part of the standard 4D's approach of cognitive behaviour therapy (i.e. Delay, Deep breathe, Drink water, and Do something else) [43]. Encouraging self-talk and having a strong mindset was also described as important. Use of such strategies by Aboriginal women on their own initiatives offers evidence of cognitive

behavioural coping strategies, which may be of interest from a research perspective. The strategies that Aboriginal women applied to stay smoke-free warrant further investigation regarding inclusion in smoking cessation care provision and patient education. If proved effective, such strategies may be included as a smoking relapse prevention strategy among pregnant and postpartum Aboriginal women. Some of the participants reported engaging in self-talk to avert urges to smoke, indicating a cognitive shift towards changing smoking behaviour. There is some evidence that while other strategies may not work in averting slip ups, self-talk could be one of the strategies that may help pregnant women [44]. There is a need for woman-centred smoking cessation services, with a focus on smoking prevention and cessation at multiple points in their life-cycle [9]. Knowledge about tobacco-related harms on the woman and child, the way nicotine dependence hinders quit attempts, and available cessation support options were important enablers to abstinence and should be essential elements of smoking cessation care. Limiting the availability of tobacco and Aboriginal run services for tobacco cessation were suggested initiatives. Clearly, smoking cessation care for pregnant and postpartum Aboriginal women needs to be empowering where they have the ownership of their smoking cessation journey and can make informed decisions to manage their smoking behaviour.

Recommendations

- Cognitive, behavioural and social strategies Aboriginal women employed to stay smoke-free may be promoted as patient education via networks of Aboriginal women who share health information with emphasis on long-term quitting [45,46].
- An empowering, woman-centred smoking cessation approach that promotes women's health and wellbeing among pregnant and postpartum Aboriginal women could be tried. For example, a support group consisting of Aboriginal women who gave up smoking or are currently considering quitting may be formed for pregnant and postpartum Aboriginal women. They could share their quitting experiences and learn and gain support from those who are on the same journey. Peer support was previously implemented with Aboriginal women and was well accepted as a source of learning about health and wellbeing [47].
- Changes to relevant policies may be considered to make tobacco products increasingly less available and accessible at retail outlets [48].
- More health promotion activities to further enhance community awareness about the importance of smoking cessation during pregnancy and the role of the community in that, with emphasis on long-term abstinence, is required.

Conclusion

This qualitative study conducted with 12 Aboriginal women from regional New South Wales, Australia, revealed that Aboriginal women autonomously employ multiple strategies, including cognitive, behavioural and social strategies when planning to stay smoke-free. Incorporation of these strategies in smoking cessation care to inform pregnant and postpartum Aboriginal women may make smoking cessation care more empowering for them. These strategies and others warrant further exploration with Aboriginal women in different communities across Australia. Aboriginal women in this study were motivated to give up smoking and abstain from smoking for their children and for themselves. A need for more support from health professionals to achieve long-term smoking abstinence was highlighted. New initiatives may include restricting the availability and accessibility of tobacco and more Aboriginal-led smoking cessation services. Strengthening of smoking cessation care to support pregnant and postpartum Aboriginal women to successfully quit and maintain abstinence is critical to protect Aboriginal babies from second-hand smoke exposure and for overall reduction in

smoking prevalence among Aboriginal peoples.

Ethics statement

Ethics approval for this study was sought from the Human Research Ethics Committee of Aboriginal Health and Medical Research Council of New South Wales, Australia (ID: 1618/19). Subsequently, the study was registered with the University of Newcastle (H-2020–0107).

Funding

We thank the Royal Australian College of General Practitioners Foundation for funding this study through the Bank of Queensland Specialist Grant 2019 to Professor Gillian Sandra Gould.

Author contributions

TR conceived the idea of the study and developed the study in with guidance from the Aboriginal Reference Group, MK, and GSG. She led the data collection and analysis, interpretation of the findings, and drafting the manuscript. AW led participant recruitment and collected and analysed data with TR. MK provided cultural guidance throughout the study. MK, ALB and GSG together provided methodological guidance and reviewed and edited the manuscript. All authors read and approved the current version of the manuscript.

Conflict of interest

None declared.

Acknowledgements

We would like to thank all study participants who shared their smoking cessation stories with us and generously offered their time. We would also like to thank Rachel Hatfield for designing the logo for the study, and Allison Hart, who worked as an Aboriginal Research Assistant in this study. We are thankful to Awabakal Aboriginal Medical Service for their support. We thank Dr Nicole Ryan, Research Manager, for supporting Indigenous Smokers To Assist Quitting (SISTAQUIT) program for her support. We thank the Royal Australian College of General Practitioners Foundation for funding this study through the Bank of Queensland Specialist Grant 2019 to Professor Gillian Gould.

Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:[10.1016/j.wombi.2022.07.172](https://doi.org/10.1016/j.wombi.2022.07.172).

References

- [1] C. Meernik, A.O. Goldstein, A critical review of smoking, cessation, relapse and emerging research in pregnancy and post-partum, *Br. Med. Bull.* 114 (1) (2015), <https://doi.org/10.1093/bmb/ldv016>.
- [2] C. Notley, A. Blyth, J. Craig, et al., Postpartum smoking relapse—a thematic synthesis of qualitative studies, *Addiction* 110 (11) (2015) 1712–1723, <https://doi.org/10.1111/add.13062>.
- [3] C. Chamberlain, A. O'Mara-Eves, J. Porter, et al., Psychosocial interventions for supporting women to stop smoking in pregnancy, *Cochrane Database Syst. Rev.* 2 (2017), CD001055, <https://doi.org/10.1002/14651858.CD001055.pub5>.
- [4] J.B. Correa, V.N. Simmons, S.K. Sutton, et al., A content analysis of attributions for resuming smoking or maintaining abstinence in the post-partum period, *Matern Child Health J.* 19 (3) (2015) 664–674, <https://doi.org/10.1007/s10995-014-1556-2>.
- [5] V.N. Simmons, S.K. Sutton, G.P. Quinn, et al., Prepartum and postpartum predictors of smoking, *Nicotine Tob. Res.* 16 (4) (2013) 461–468, <https://doi.org/10.1093/ntr/ntt177>.
- [6] C.A. Patten, K.R. Koller, C.A. Flanagan, et al., Postpartum tobacco use and perceived stress among Alaska native women: MAW phase 4 study, *Int J. Environ. Res Public Health* 16 (17) (2019) 3024, <https://doi.org/10.3390/ijerph16173024>.
- [7] R. Maddox, K.A. Thurber, T. Calma, et al., Deadly news: the downward trend continues in Aboriginal and Torres Strait Islander smoking 2004–2019, *Aust. N. Z. J. Public Health* 44 (6) (2020) 449–450, <https://doi.org/10.1111/1753-6405.13049>.
- [8] 4714.0 - National Aboriginal and Torres Strait Islander Social Survey, 2014-15 [Internet]. Australian Bureau of Statistics (ABS). 2016 [cited 25 Aug 2020]. Available from: (<https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4714.0main+features142014-15>).
- [9] G.S. Gould, M. Bovill, M.J. Clarke, et al., Chronological narratives from smoking initiation through to pregnancy of Indigenous Australian women: a qualitative study, *Midwifery* 52 (2017) 27–33, <https://doi.org/10.1016/j.midw.2017.05.010>.
- [10] M. Bovill, M. Gruppetta, Y. Cadet-James, et al., Wula (Voices) of Aboriginal women on barriers to accepting smoking cessation support during pregnancy: Findings from a qualitative study, *Women Birth* 31 (1) (2018) 10–16, <https://doi.org/10.1016/j.wombi.2017.06.006>.
- [11] S. Zhou, D.G. Rosenthal, S. Sherman, et al., Physical, behavioral, and cognitive effects of prenatal tobacco and postnatal secondhand smoke exposure, *Curr. Probl. Pediatr Adolesc. Health Care* 44 (8) (2014) 219–241, <https://doi.org/10.1016/j.cppeds.2014.03.007>.
- [12] K. Zhang, X. Wang, Maternal smoking and increased risk of sudden infant death syndrome: a meta-analysis, *Leg. Med* 15 (3) (2013) 115–121, <https://doi.org/10.1016/j.legalmed.2012.10.007>.
- [13] U.S. Department of Health Human Services. The health consequences of smoking—50 years of progress: a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2014. Available from: (<https://aahb.org/Resources/Pictures/Meetings/2014-Charleston/PPT%20Presentations/Sunday%20Welcome/Abrams.AAHB.3.13.v1.o.pdf>).
- [14] L. Wood, K. France, K. Hunt, et al., Indigenous women and smoking during pregnancy: knowledge, cultural contexts and barriers to cessation, *Soc. Sci. Med* 66 (11) (2008) 2378–2389, <https://doi.org/10.1016/j.socscimed.2008.01.024>.
- [15] V. Johnston, D.P. Thomas, J. McDonnell, et al., Maternal smoking and smoking in the household during pregnancy and postpartum: findings from an Indigenous cohort in the Northern Territory, *Med J. Aust.* 194 (10) (2011) 556–559, <https://doi.org/10.5694/j.1326-5377.2011.tb03101.x>.
- [16] The Royal Australian College of General Practitioners. Supporting smoking cessation: A guide for health professionals 2022 [updated 29 September 2021; cited 2022 29 January 2022]. Available from: (<https://www.racgp.org.au/clinical-resources/clinical-guidelines/key-racgp-guidelines/view-all-racgp-guidelines/supporting-smoking-cessation/introduction-to-smoking-cessation>).
- [17] The Royal Australian College of General Practitioners. Supporting smoking cessation: A guide for health professionals East Melbourne, Vic: The Royal Australian College of General Practitioners; 2019 [2nd edn:19,20]. Available from: (<https://www.racgp.org.au/getattachment/00185c4e-441b-45a6-88d1-8f05c71843cd/Supporting-smoking-cessation-A-guide-for-health-professionals.aspx>).
- [18] Y. Bar-Zeev, B. Bonevski, L. Twyman, et al., Opportunities missed: a cross-sectional survey of the provision of smoking cessation care to pregnant women by Australian general practitioners and obstetricians, *Nicotine Tob. Res.* 19 (5) (2017) 636–641, <https://doi.org/10.1093/ntr/ntw331>.
- [19] M. Bovill, What ngidhi yinaaru nhal yayi (this woman told me) about smoking during pregnancy, *Med J. Aust.* 212 (8) (2020) 358–359, <https://doi.org/10.5694/mja2.50523>.
- [20] S.B. Merriam, E.J. Tisdell, *Qualitative Research: A Guide to Design and Implementation*, John Wiley & Sons, 2015.
- [21] B. Chilisa, *Indigenous Research Methodologies*, Sage Publications, Los Angeles, 2011.
- [22] V. Braun, V. Clarke, Using thematic analysis in psychology, *Qual. Res. Psychol.* 3 (2) (2006) 77–101, <https://doi.org/10.1191/1478088706qp0630a>.
- [23] P.A. Harris, R. Taylor, B.L. Minor, et al., The REDCap consortium: building an international community of software platform partners, *J. Biomed. Inf.* 95 (2019), 103208, <https://doi.org/10.1016/j.jbi.2019.103208>.
- [24] L. Birt, S. Scott, D. Cavers, et al., Member checking: a tool to enhance trustworthiness or merely a nod to validation? *Qual. Health Res* 26 (13) (2016) 1802–1811, <https://doi.org/10.1177/1049732316654870>.
- [25] QSR International Pty Ltd. NVivo qualitative data analysis software. Version 12, QSR International Pty Ltd., 2018.
- [26] L. Finlay, A dance between the reduction and reflexivity: explicating the “phenomenological psychological attitude”, *J. Phenomenol. Psychol.* 39 (1) (2008) 1–32, <https://doi.org/10.1163/156916208X311601>.
- [27] B.C. O'Brien, I.B. Harris, T.J. Beckman, et al., Standards for reporting qualitative research: a synthesis of recommendations, *Acad. Med* 89 (9) (2014) 1245–1251, <https://doi.org/10.1097/ACM.0000000000000388>.
- [28] J. Gamble, J. Grant, G. Tsourtos, Missed opportunities: a qualitative exploration of the experiences of smoking cessation interventions among socially disadvantaged pregnant women, *Women Birth* 28 (1) (2015) 8–15, <https://doi.org/10.1016/j.wombi.2014.11.003>.
- [29] G.S. Gould, J. Munn, S. Avuri, et al., Nobody smokes in the house if there's a new baby in it: Aboriginal perspectives on tobacco smoking in pregnancy and in the household in regional NSW Australia, *Women Birth* 26 (4) (2013) 246–253, <https://doi.org/10.1016/j.wombi.2013.08.006>.
- [30] A.M. Tod, Barriers to smoking cessation in pregnancy: a qualitative study, *Br. J. Community Nurs.* 8 (2) (2003) 56–64, <https://doi.org/10.12968/bjcn.2003.8.2.11088>.
- [31] E.D. Hotham, E.R. Atkinson, A.L. Gilbert, Focus groups with pregnant smokers: barriers to cessation, attitudes to nicotine patch use and perceptions of cessation

- counselling by care providers, *Drug Alcohol Rev.* 21 (2) (2002) 163–168, <https://doi.org/10.1080/09595230220139064>.
- [32] A. McEwen, R. West, The PRIME approach to giving up smoking, *Pract. Nurs.* 21 (3) (2010) 145–153, <https://doi.org/10.12968/pnur.2010.21.3.46936>.
- [33] R. Borland, CEOS theory: a comprehensive approach to understanding hard to maintain behaviour change, *Appl. Psychol. Health Well-Being* 9 (1) (2017) 3–35, <https://doi.org/10.1111/aphw.12083>.
- [34] T. Rahman, J. Foster, G.L. Hera Fuentes, et al., Perspectives about smoking cessation during pregnancy and beyond of Aboriginal women in Australia: a qualitative analysis using the COM-B model, *Int J. Gynecol. Obstet.* (2021), <https://doi.org/10.1002/ijgo.13854>.
- [35] G.S. Gould, J. Munn, T. Watters, et al., Knowledge and views about maternal tobacco smoking and barriers for cessation in aboriginal and torres strait islanders: a systematic review and meta-ethnography, *Nicotine Tob. Res* 15 (5) (2013) 863–874, <https://doi.org/10.1093/ntr/nts211>.
- [36] M.E. Passey, J.T. Gale, R.W. Sanson-Fisher, It's almost expected": rural Australian aboriginal women's reflections on smoking initiation and maintenance: a qualitative study, *BMC Women's Health* 11 (2011) 12, <https://doi.org/10.1186/1472-6874-11-55>.
- [37] I. Varescon, S. Leignel, X. Poulain, et al., Coping strategies and perceived stress in pregnant smokers seeking help for cessation, *J. Smok. Cessat.* 6 (2) (2011) 126–132, <https://doi.org/10.1375/jsc.6.2.126>.
- [38] L. Stevenson, S. Campbell, G.S. Gould, et al., Establishing smoke-free homes in the indigenous populations of Australia, New Zealand, Canada and the United States: a systematic literature review, *Int J. Environ. Res Public Health* 14 (11) (2017) 1382, <https://doi.org/10.3390/ijerph14111382>.
- [39] Y. Hauck, F. Ronchi, B. Lourey, et al., Challenges and enablers to smoking cessation for young pregnant Australian women: a qualitative study, *Birth* 40 (3) (2013) 202–208, <https://doi.org/10.1111/birt.12057>.
- [40] C. Bond, M. Brough, G. Spurling, et al., It had to be my choice' Indigenous smoking cessation and negotiations of risk, resistance and resilience, *Health Risk Soc.* 14 (6) (2012) 565–581, <https://doi.org/10.1080/13698575.2012.701274>.
- [41] R.A. Walsh, J.B. Lowe, P.J. Hopkins, Quitting smoking in pregnancy, *Med J. Aust.* 175 (6) (2001) 320–323, doi: https://www.researchgate.net/profile/Raoul-Walsh/publication/11686475_Quitting_smoking_in_pregnancy/links/5e71fa2f299bf1571845ddd4/Quitting-smoking-in-pregnancy.pdf.
- [42] D.A. Askew, J. Guy, V. Lyall, et al., A mixed methods exploratory study tackling smoking during pregnancy in an urban Aboriginal and Torres Strait Islander primary health care service, *BMC Public Health* 19 (1) (2019) 343, <https://doi.org/10.1186/s12889-019-6660-1>.
- [43] N.A. Zwar, Smoking cessation, *Aust. J. Gen. Pr.* 49 (8) (2020), <https://doi.org/10.31128/AJGP-03-20-5287>.
- [44] F. Naughton, A. McEwen, S. Sutton, Use and effectiveness of lapse prevention strategies among pregnant smokers, *J. Health Psychol.* 20 (11) (2015) 1427–1433, doi: <https://doi.org/10.1177%2F1359105313512878>.
- [45] W.L. Fang, A.O. Goldstein, A.Y. Butzen, et al., Smoking cessation in pregnancy: a review of postpartum relapse prevention strategies, *J. Am. Board Fam. Med.* 17 (4) (2004) 264–275, <https://doi.org/10.3122/jabfm.17.4.264>.
- [46] C.M. Murphy, L. Micalizzi, A.W. Sokolovsky, et al., Motivational interviewing telephone counseling to increase postpartum maintenance of abstinence from tobacco, *J. Subst. Abus. Treat.* 132 (2022), 108419, <https://doi.org/10.1016/j.jsat.2021.108419>.
- [47] K. Clapham M., K. Longbottom, C. File, E. Manning, P. Dale, Kelly in collaboration with Waminda South Coast Aboriginal Women's Health & Welfare Aboriginal Corporation. Evaluation of Waminda's Balaang and Binjilaang – South Coast Aboriginal Women's Tobacco Intervention Program Wollongong, Centre for Health Services Development, Australian Health Services Research Institute, University of Wollongong, 2019 ([Available from], <https://scholars.uow.edu.au/display/publication142218>).
- [48] C.E. Gartner, A. Wright, M. Hefler, et al., It is time for governments to support retailers in the transition to a smoke-free Society, *Med J. Aust.* 215 (2021) 446–448, <https://doi.org/10.5694/mja2.51312>.