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Research

Tobacco use among urban Aboriginal Australian young people: a qualitative study of reasons for smoking, barriers to cessation and motivators for smoking cessation

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Abstract. Smoking prevalence among Aboriginal Australian young people greatly exceeds the prevalence in the broader population of Australian young people, yet limited research has explored the social context in which young Aboriginal Australians smoke. Four focus groups were conducted in 2009 with South Australian Aboriginal smokers aged 15–29 years residing in urban areas ($n = 32$) to examine attitudes and experiences surrounding smoking and quitting. The primary reasons for smoking initiation and maintenance among Aboriginal Australian young people were identified as stress, social influence and boredom. Motivators for quitting were identified as pregnancy and/or children, sporting performance (males only), cost issues and, to a lesser extent, health reasons. The barriers to cessation were identified as social influence, the perception of quitting as a distant event and reluctance to access cessation support. However, it appears that social influences and stress were particularly salient contributors to smoking maintenance among Aboriginal Australian young people. Smoking cessation interventions targeted at young urban Aboriginal Australian smokers should aim to build motivation to quit by utilising the motivators of pregnancy and/or children, sporting performance (males only), cost issues and, to a lesser extent, health reasons, while acknowledging the pertinent role of social influence and stress in the lives of young urban Aboriginal Australian smokers.

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Introduction

Tobacco consumption among Aboriginal and Torres Strait Islander peoples (whom for brevity's sake will be referred to henceforth as Aboriginal Australians) is a major public health concern. Smoking is estimated to be responsible for one in five Aboriginal Australian deaths and is the single greatest contributor to the burden of disease among Aboriginal Australians (Vos *et al*. 2007). Yet the prevalence of smoking in the Aboriginal Australian population (41.6%; Australian Bureau of Statistics 2014) is more than double the prevalence in the broader Australian population (17.4%; Australian Bureau of Statistics 2013*a*). Smoking prevalence among Aboriginal Australian people aged 18–24 years (44.7%; Australian Bureau of Statistics 2014) also exceeds the prevalence in the broader Australian population of the same age (19.6%; Australian Bureau of Statistics 2013*a*). Thus, addressing tobacco use among Aboriginal Australian young people is particularly crucial.

The high smoking rate among Aboriginal Australian young people suggests that tobacco control strategies aimed at a population level alone may be less effective at encouraging cessation among Aboriginal Australian young people than the general population of young people in Australia. The development of evidence-based interventions to encourage cessation in this group is crucial, but the determinants of smoking cessation among Aboriginal Australian young people are not well understood (Johnston and Thomas 2008). Recent research by Johnston *et al*. (2012) identified family and peer influences as the key factors in smoking initiation (or abstinence) for young Aboriginal Australians; however, the study focussed on initiation of smoking and therefore did not examine barriers and motivators to cessation. Thus, a greater understanding of smoking and cessation among Aboriginal Australian young people is required to inform tailored interventions for this group.

What is known about the topic?

- Previous research has found that smoking is perceived as normative behaviour among Aboriginal Australian young people, and family and peer influences contribute to smoking uptake among Aboriginal Australian young people.

What does this paper add?

- Social influences, perceiving cessation as a distant event and reluctance to access cessation support are cessation barriers; pregnancy and/or children, sport, cigarette cost and health motivate cessation among Aboriginal Australian young people.

Although there is a body of literature exploring determinants of smoking and barriers to smoking cessation in non-Aboriginal populations, limited research has explored the social context in which Aboriginal Australians smoke and the meanings of such behaviour within Aboriginal Australian communities (Johnston and Thomas 2008). While there may be similarities with the non-Aboriginal population in reasons for smoking uptake, there are several additional factors that have been reported to influence smoking uptake specifically in the Aboriginal Australian population. While higher levels of income, higher levels of education, being employed and owning a home have been shown to be predictive of non-smoking among Aboriginal Australian people (Thomas *et al*. 2008), low educational achievement, high rates of unemployment, overcrowded housing conditions and overall low socioeconomic status have been associated with higher smoking prevalence among Aboriginal Australian people (Ivers 2001; Briggs *et al*. 2003). Furthermore, research suggests that smoking is largely perceived as a normative behaviour among Aboriginal Australian people because of high rates of smoking among family and peers, which encourages smoking initiation and discourages cessation (Lindorff 2002; Briggs *et al*. 2003; Johnston and Thomas 2008; Johnston *et al*. 2012).

Health is the most frequently cited motivator for wanting to quit among non-Aboriginal young people internationally (Aung *et al*. 2003; Turner and Mermelstein 2004), with stress (Amos and Bostock 2007) and boredom (Johnson *et al*. 2003) also shown to contribute to smoking maintenance among non-Aboriginal young people. Boredom is frequently cited as a barrier to smoking cessation among Aboriginal Australian people, especially given the highly intertwined nature of smoking and social interaction (Ivers 2001; Wood *et al*. 2008). Moreover, difficult life circumstances and stress are often cited as barriers to smoking cessation among Aboriginal Australian people (Lindorff 2002; DiGiacomo *et al*. 2007; Johnston and Thomas 2008; Wood *et al*. 2008; Dawson *et al*. 2012). However, it is not known whether these barriers to cessation are common to Aboriginal Australian young people.

The cost of tobacco has also been reported to motivate quit attempts among Aboriginal smokers (Australian Bureau of Statistics 2010) and is a key determinant of smoking among disadvantaged youth in low- and middle-income countries (Kostova *et al*. 2011). However, it is not known whether these same factors influence Aboriginal Australian young people in the same way. Research exploring motivators for smoking cessation among Aboriginal Australian people remains scant (Ivers 2001). It has been suggested that, as with non-Aboriginal populations, health, illness (Ivers 2001; Lindorff 2002) and pregnancy (Ivers 2001) are likely to be key motivators for young Aboriginal Australian smokers to quit. However, the majority of research around smoking cessation among youth has focussed on youth as a whole and the applicability of these findings specifically to Aboriginal Australian young people is unknown.

The South Australian Tobacco Control Strategy 2005–10 (Ministerial Reference Group on Tobacco 2005) identified reducing smoking prevalence among people aged 15–29 years and Aboriginal Australian people as specific priority areas for action. As part of the strategy to encourage cessation in these groups, Quit SA and Cancer Council SA were tasked with providing an evidence base upon which recommendations for the development and implementation of a smoking cessation program for young people could be based, with a particular focus on improving equity for disadvantaged groups. Given the importance of understanding specific motivators and barriers to smoking and quitting for the delivery of cessation support services, a series of focus groups were conducted to explore the experiences of young Aboriginal Australian smokers, including: (1) why they begin, and continue, to smoke; (2) barriers to quitting smoking; and (3) motivators for quitting.

Methods

During the study design phase, consultation was undertaken with representatives from Kumangka Aboriginal Youth Service and the Aboriginal Health Division of SA Health, as well as a recognised Elder of the Kaurna and Peramangk Nations of South Australia (author DC). Ethical clearance for the study was obtained from the Aboriginal Health Research Ethics Committee (of the Aboriginal Health Council of South Australia) and the Cancer Council SA Human Research Ethics Committee.

Four focus groups were conducted with 32 Aboriginal Australian young people living in metropolitan Adelaide between June and September 2009 at Metropolitan Aboriginal Youth and Family Services, Neporendi and Marion Youth. Participants were recruited through a social research company database of people who had indicated an interest in participating in focus groups. Participants who identified themselves as being of Aboriginal descent, were aged between 15 and 29 years, had smoked in the past week and had not participated in a focus group in the past 6 months (or in any tobacco-use cessation focus group in the past 18 months) were invited to participate. Participants were given a verbal explanation of the format and length of the focus group and were also given a detailed information sheet outlining the project to retain, assurance of confidentiality and the opportunity to withdraw from the study at any time, and avenues for further information about the study or feedback and/or complaints about the ethical conduct of the study. Participants then provided informed consent and were reimbursed A$50 for their time.

The focus groups consisted of: (1) males aged 15–17 years ($n = 3$); (2) males aged 18–29 years ($n = 9$); (3) females aged

15–17 years ($n = 10$); and (4) females aged 18–29 years ($n = 10$). The focus groups lasted 60–90 min and were moderated by a trained focus group facilitator. Each focus group was asked a semi-structured series of questions surrounding their attitudes towards and experiences of smoking and quitting, as well as their views on what could be done to make quitting easier for young people. At the conclusion of the research study a summary of results was sent to participants who had indicated that they wanted to receive a summary, as well as the Aboriginal Health Council of South Australia and the community organisations at which the focus groups were conducted (Metropolitan Aboriginal Youth and Family Services, Neporendi and Marion Youth).

Focus groups were deemed to be the most suitable methodology for the study because of the benefits of focus groups being generally less intimidating than one-on-one interviews, and they allow for insight from participants' interactions with each other, rather than only gleaning information from an individual response to questions (Liamputtong 2011). Furthermore, focus groups allow for the inclusion of participants who may have low written literacy skills that would otherwise be excluded from a written survey methodology.

A potential weakness of focus group research is that more outspoken individuals may dominate group discussion, resulting in underrepresentation of the views of other group members (Smithson 2000); however, the risk of this occurring was deemed to be minimal given that the focus groups were moderated by an experienced focus group facilitator trained in techniques for ensuring the inclusion of all participants in discussions. Several strategies were implemented to minimise the risk of potential bias in the focus groups: groups were not moderated by the researchers to prevent the researchers own preconceptions from driving discussions; the discussion format was flexible and not designed to elicit desirable or specific answers; and the focus groups were conducted at a range of convenient, culturally appropriate locations with food and refreshments provided to encourage relaxed interactions.

The focus groups were audio-recorded and transcribed verbatim and were then analysed following the protocol for thematic analysis, as outlined by Braun and Clarke (2006). Analysis was conducted by the lead author and second author and focussed on exploring the data for recurrent patterns surrounding smoking and quitting, as well as barriers to successful quitting. An inductive approach to thematic analysis was used, that is, themes were generated on the basis of the data rather than coding data into a pre-existing theoretical paradigm. According to the procedure outlined by Braun and Clarke (2006), all transcripts were thoroughly read through before coding data and all data items received equal attention for coding. All extracts relevant to each theme were then collated and checked for internal consistency within the theme and each theme was checked for conceptual distinctiveness from other themes.

Items were coded into themes if they were identified by three or more people across at least two of the focus groups. Any discrepancies in the coding between the two researchers were addressed by discussion following re-reading items in context until agreement was reached. Some themes contained more coded responses than others and, hence, are viewed as being more representative of the experiences of young Aboriginal Australian smokers. All coded responses within each theme were included in the analysis. However, the quotations presented in this paper reflect a selection of extracts that best represent and articulate the themes identified.

Results

An overview of the reasons for smoking, barriers to cessation and motivators for cessation identified from the focus groups is presented in Table 1.

Reasons for smoking

The majority of participant responses were deemed to be reflective of three main reasons for smoking: stress, social influences and boredom (excerpts in Box 1). However, three of the females in the 15–17-year-old group did not appear to have previously considered why they might have initiated smoking or continued to smoke.

Stress was the primary reason identified from each focus group for why the young people smoked. While participants did not always elaborate on specific sources of stress, the most commonly stated source of stress was family issues ($n = 8$). Other specific sources of stress that were mentioned were death of a family member ($n = 1$) and workplace-related stress ($n = 1$). Smoking was viewed as a means of relaxing and calming down, or coping in response to stressful events. Stressful events were also cited as a cause for relapse during quit attempts, thus contributing to the maintenance of smoking behaviour.

A central theme was that the influence of peers played a role in the initiation and maintenance of smoking. Peer pressure, as well as the desire to appear 'cool' or like one's peers, were cited as reasons for initiating smoking. Additionally, it was frequently reported that the majority of the young people's family and friends smoked and that the young people typically smoked when around family and friends, contributing to smoking maintenance.

Boredom was identified in the male and female 18–29 years groups as both a reason for smoking and a barrier to smoking cessation. Participants specified boredom as a reason why they smoke, but also as an explanation for relapse following quit attempts, thereby contributing to the maintenance of smoking.

Table 1. Reasons for uptake and maintenance of smoking, barriers to cessation and motivators for cessation among participants ($n = 32$)

Reasons for smoking (uptake and maintenance)
Stress and/or to relax
Social influence (peer pressure and others smoking nearby)
Boredom
Barriers to cessation
Social influence (lack of support from peers and others smoking nearby)
Reluctance to access cessation support
Perception of quitting as a distant event
Motivators for cessation
Pregnancy and/or children
Sport (males only)
Cost issues (prospect of future increases, 'excess' money leads to smoking)
Health reasons (other than sport-related health)

Box 1. Reasons for uptake and maintenance of smoking, excerpts from focus groups

Had not previously considered why they smoke

Female (F): I don't know why I smoke. I just smoke, like.
F: Just because you feel like it.
Interviewer (I): Yes.
F: Or because you've got – you don't think about 'I need a smoke', you just feel like you need one and because it is there you want it.
(Females, 15–17-year-old group)

Stress

I: Why do you think is the big reason that you smoke?
F: Sometimes it is just stress and –
I: Yes. Anyone else? Stress, is that sort of a thing? What have you written down?
F: Family stress.
I: Yes.
F: When you get emotional sometimes.
(Females, 15–17-year-old group)
F: If I'm stressed out, I'll get two packets a day
(Female, 18–29-year-old group)

Social influence

F: I think I started smoking – like, I started smoking when I was 19 probably because I wanted to feel like a big fella, you know what I mean? I was thinking 'Oh yeah, all these fellas smoke when they got older' so I thought 'Oh well, I might as well start' and now it's just like, just habit now, just natural.
(Female, 18–29-year-old group)
I: How do you think you are different to other smokers? Are you different or the same or about the same?
Male (M): It is like they [non-Aboriginal smokers] never seen smoking. Like they have never been around smoking. All the [Aboriginal] young, they have seen it.
(Male, 15–17-year-old group)

Boredom

M: I went like 3 weeks without a cigarette and I was trying to give it up and I just – yes, it just felt like a Sunday for like 3 weeks straight, hey, you know, bored every day.
(Male, 18–29-year-old group)

Barriers to cessation

In addition to stress and boredom contributing to smoking relapse, three specific barriers to successful quitting were identified: social influence, the perception of quitting as a distant event, and reluctance to access cessation support (excerpts in Box 2). Moreover, although there were participants who reported having attempted to quit (except in the 15–17-year-old male group), participants expressed varying motivation to quit.

For those who had attempted or had thought about quitting, social influence was the most commonly cited barrier to quitting. Being around others who were smoking and being able to smell cigarettes were presented as something that was difficult and that triggered cravings. Moreover, there were 16 responses given across the groups that indicated an anticipated lack of support from friends about giving up smoking. However, participants anticipated a greater level of support from family members.

Among participants that had thought about quitting, eight participants described quitting as something that would happen at an ill-defined future point in time. This was deemed to be reflective of low motivation to quit immediately; a further barrier to smoking cessation among young people.

Focus group participants were asked if they had or would be likely to access cessation support services, such as Quitline and nicotine replacement therapy. Three participants indicated that they had called Quitline, with two of these participants indicating that it was a positive experience and one participant indicating that they did not find it overly helpful. The majority of participants' responses were reflective of being reluctant to access Quitline, primarily for the reasons of not knowing what would be involved, not feeling ready to quit or perceiving the service as something for more addicted smokers. Four participants across the 18–29-year-old groups indicated that they had tried nicotine replacement therapy (patches) before and participant experiences had been positive except for one participant who had experienced migraines while on patches. One participant in the 18–29-year-old male group was concerned about the cost of obtaining nicotine replacement therapy, but two other participants in the group indicated that they had

Box 2. Barriers to cessation; excerpts from focus groups ($n = 32$)

Social influence

Female (F): Yes, I've quit but it didn't work. Because I suppose it is people you hang out with. If they have a smoke, like you just –
F: Yes –
F: You think 'Yes, I'm not going to have a smoke', but really, at the end of the day you are going to end up having a smoke anyway.
(Females, 15–17-year-old group)
Male (M): It is like when people are smoking around you, like you get that smell when you are trying to quit.
(Male, 18–29-year-old group)
Interviewer (I): What do you think your friends would do if you wanted to quit?
F: They'd probably laugh.
F: 'Do you wanna smoke?'
F: I'll believe you when I see the day (laughter).
(Females, 18–29-year-old group)
I: So they [peers] might sort of help you but sort of –
F: Yeah. But in a nasty teasing way, sort of like when they say 'Pregnant', you know, and they tease you too, you know?
(Female, 18–29-year-old group)

Perception of quitting as a distant event

F: Nah, I reckon the only reason I'll quit if in 10 years time when I have kids, husband, man and a little house, I'll stop drinking, smoking and swearing.
(Female, 18–29-year-old group)
I: So is it [quitting] when something happens or is it in 2 years or 1 month, or 6 years or when you turn a certain age? What's the sort of thing that?
F: I can't give you that answer, I'm sorry.
I: It's too hard, no?
F: (Continuing) You've just got to wait till the day.
(Female, 18–29-year-old group)

Reluctance to access cessation support

I: Is there a reason you haven't called it [the Quitline]?
M: Couldn't be stuffed.
(Male, 18–29-year-old group)
M: The Quitline is for people that are addicted and stuff, been smoking for like 10 years, 20 years.
(Male, 15–17-year-old group)
F: See, like one day you want to quit and the next minute you've got a text [from Quitline] coming in for a whole week, and then you ring them up cursing, stop texting me and then another week you want to stop. See.
(Female, 18–29-year-old group)
F: They've [nicotine patches] done all right for me – for 3 weeks (laughter)
(Female, 18–29-year-old group)
M: Because it costs you money to give up, does it? Like you need patches and that.
(Male, 18–29-year-old group)

previously been able to access prescriptions for free nicotine replacement therapy and thought this was available to all Aboriginal Australian people.

Motivators for quitting

Despite not all participants having a desire to quit, when prompted, focus group participants discussed motivators for quitting. These responses were coded into four themes: cost issues; pregnancy and/or children; sport; and health reasons (excerpts in Box 3). However, the focus group participants continued to suggest that these motivators were primarily relevant at a future point in time.

The current cost of cigarettes and the prospect of future price increases were reported as motivators for quitting among both males and females in the 18–29-year-old groups. Four participants also mentioned that having 'excess' money made them more likely to purchase cigarettes.

Female participants in the 15–17-year-old group commonly reported that they believed smoking was harmful to unborn babies, and one female participant in the 18–29-year-old group reported that she did not smoke when she was pregnant. Moreover, smoking was presented as something done while they are young; however, when they are older and have children then quitting would be important and necessary. One

Box 3. Motivators for cessation; excerpts from focus groups ($n = 32$)

Cost issues

Interviewer (I): Anything they should do then, to make you sort of want to quit. Maybe more to help you to quit?
Female (F): Raise the price of cigarettes, $20 a packet of 30s.
I: If they raised the price of cigarettes, would you stop?
F: Yeah.
I: So even if you were really stressed and your life wasn't easier, would you still keep on smoking?
F: Not if they cost $26.
F: Yeah.
F: I have to smoke so I'd buy.
F: It'd just make you want to slow down though.
F: Yeah.
F: That'd make you slow down heaps.
F: It'd be like oh yeah, a packet of smokes lasts me a fortnight now.
(Females, 18–29-year-old group)

Pregnancy and/or children

I: Why has sort of unborn babies come up sort of quite a bit?
F: The future, I suppose.
F: And you just worry about, like, if you have like family or friends that think they are pregnant or something (inaudible) really bad.
I: So you think when you are pregnant, that's the issue. Yes. So (inaudible) it is okay to smoke but when you are pregnant you shouldn't be smoking. Is that right?
F: Yes.
(Females, 15–17-year-old group)

Sport

Male (M): I want to get into basketball when I'm older and I'm not going to be able to do that if my lungs are all f***** up
(Male, 15–17-year-old group)
M: that one year I had, played my excellent footy and the other boys wanted me to get out there and do the same. Now I've actually proved that I'm really valuable without smoking.
(Male, 18–29-year-old group)

Health

M: I seen a lot of older Aboriginal people have problems with their lungs as they get older and that.
(Male, 18–29-year-old group)
F: The health, like you can get cancer and stuff like that, you kind of do it [quit] for your own health.
(Female, 15–17-year-old group)

male also reported his partner's pregnancy as motivation for himself to quit.

Sport was identified as a motivator for quitting among male participants. Male participants in the 15–17-year-old group and the 18–29-year-old group talked about quitting in order to improve their sporting ability by improved lung function and overall health. Health reasons (other than sport-related health) were reported as a reason to quit primarily by males in the 18–29-year-old age group, and health reasons (excluding pregnancy) were mentioned twice among females. However, health did not appear to be a strong motivator for many participants.

Discussion

As discussed previously, there is a dearth of research on smoking cessation among Aboriginal Australian people, and especially young Aboriginal Australian people. This paper aimed to examine the reasons for smoking, barriers to quitting and motivating factors for quitting among young Aboriginal Australian smokers. The reasons that were identified for the uptake and maintenance of smoking by Aboriginal Australian young people were similar to the reasons previously identified for smoking among the population of Aboriginal Australian smokers: social influence (e.g. Lindorff 2002; Briggs *et al.* 2003; Johnston and Thomas 2008), stress (e.g. Lindorff 2002; Johnston and Thomas 2008) and boredom (Ivers 2001; Wood *et al.* 2008). The role of stress in smoking maintenance appeared to be particularly salient among Aboriginal Australian young people, especially with regard to family stress. Indeed, Aboriginal Australian young people experience more than twice the rate of high or very high psychological distress compared with non-Aboriginal Australian young people (Australian Institute of Health and Welfare 2011*b*), which may contribute to embedding the use of cigarettes as a coping mechanism among young Aboriginal Australian smokers. It is crucial then that intervention strategies acknowledge the high level of stress faced by many Aboriginal Australian young people and provide tools for coping with stress without smoking.

Family and peer influences served as both a reason for smoking and a barrier to cessation for Aboriginal Australian young people, which is consistent with the findings by Johnston *et al*. (2012) that family and peer influences are key factors in smoking initiation. While the role of social influence on the uptake and maintenance of smoking is not unique to the Aboriginal Australian population, it is certainly enhanced by the high prevalence of smoking within the Aboriginal Australian population. Indeed, Aboriginal Australian young people in the focus groups frequently cited that the majority of their friends smoked and that the influence of people smoking around them was a major factor in relapsing following cessation attempts. Therefore, it is important that cessation interventions targeting Aboriginal Australian young people consider community approaches that aim to de-normalise smoking as a requirement for social interaction and encourage community support for young people who want to quit.

Another barrier to cessation among Aboriginal Australian young people was their reluctance to access cessation support, which may hinder cessation attempts. While there was a generally positive attitude towards nicotine replacement therapy, there was minor concern about the cost of obtaining this. However, this study was conducted before the introduction of nicotine replacement therapy was included on the Pharmaceutical Benefits Scheme and therefore cost concerns may no longer be evident now that nicotine replacement therapy is available at a reduced cost or free for health-care card holders. Attitudes towards Quitline were mixed. It is unclear whether this is a function of low motivation to quit or related to perceptions of Quitline as a service for older smokers.

The level of motivation to quit smoking varied greatly among Aboriginal Australian young people; however, some factors were identified as motivators for cessation. It has already been established that increases in the cost of cigarettes lead to decreases in smoking prevalence (Wakefield *et al*. 2008) and that non-Aboriginal young smokers are particularly sensitive to price increases (Kostova *et al*. 2011), and indeed the Aboriginal Australian young people interviewed indicated that a future increase in the price of cigarettes would motivate them to quit or cut down. This finding further emphasises the importance of policy to raise the cost of cigarettes to discourage smoking, particularly within demographic groups that have few other motivators to quit. Given that the present study took place before the 25% tobacco tax increase in April 2010, it would be useful to examine what effect the tax increase has had on the smoking behaviours of young Aboriginal Australians.

Pregnancy was a motivator for quitting among female Aboriginal Australian young people, and this is consistent with findings among young female non-Aboriginal smokers in Australia (Australian Institute of Health and Welfare 2011*a*). However, despite the belief among female Aboriginal Australian young people that they would quit when they became pregnant, 52.8% of South Australian Aboriginal pregnant women are still smoking at their first antenatal visit (Scheil *et al*. 2012). Therefore, while any motivator to quit should be encouraged, it is also important to build motivation to quit in youth before pregnancy so as to counter the belief that quitting is something that does not need to be considered until pregnancy.

A motivating factor for quitting among male Aboriginal young people was improved sporting ability. This has also been shown to be a motivating factor for smoking cessation among non-Aboriginal adolescent males internationally (Aung *et al*. 2003; Turner and Mermelstein 2004). Encouragingly, this was a motivating factor that was viewed to be a somewhat immediate benefit of quitting, as opposed to concern for future health. Because of this motivation and the high cultural value placed on sport among Aboriginal males (Thompson *et al*. 2000), it would be beneficial for interventions targeted at young male Aboriginal Australian smokers to emphasise the benefits of quitting with regard to sporting performance.

Interestingly, there was a relatively small emphasis placed on health by the Aboriginal Australian young people as a motivator to quit smoking. Health reasons are the most frequently cited reason for wanting to quit among non-Aboriginal young people (Aung *et al*. 2003; Turner and Mermelstein 2004), but this was only a major motivator for the 18–29-year-old Aboriginal Australian males. It would appear then that despite knowledge of the harms of smoking being generally high among Aboriginal Australian people, and that Aboriginal Australian ex-smokers report having quit primarily out of concern for future health (Lindorff 2002), the future threat of disease or illness does not necessarily motivate cessation among Aboriginal Australian young people to the same extent.

The findings from the present study have further implications for cessation interventions targeting Aboriginal Australian young people. The varied level of motivation to quit and the perception of quitting as a distant future event highlight the need for cessation interventions to focus on building motivation to quit, rather than solely on the process of quitting itself. It is important then that interventions targeting this group emphasise the short-term benefits gained from quitting in youth and not just the long-term health risks associated with smoking, especially given the relatively low importance placed on future health as a motivator in this group.

One limitation of the present study was that participants were recruited via a social research database, which may limit the extent to which the results can be generalised to the population of young urban Aboriginal Australian smokers. Furthermore, participants self-selected to participate, and it is possible that certain types of smokers may be less inclined to participate in a focus group about smoking and cessation. A further limitation of this study was the small sample size of the 15–17-year-old male group. The findings from this group are not considered to be representative of all male Aboriginal Australian smokers in this age group and further research is needed to establish key barriers and motivators for cessation in this cohort.

Another limitation of this study is that the Aboriginal Australian young people involved were only recruited from metropolitan areas. Given that ~43% of the Aboriginal Australian population is estimated to reside in outer regional, remote or very remote areas (Australian Bureau of Statistics 2013*b*) the experiences of Aboriginal Australian young people outlined in this paper may not be representative of Aboriginal Australian young people that reside outside of metropolitan areas, and therefore future research into young Aboriginal Australian smokers residing in regional/remote areas is needed. Overall though, this study has demonstrated the need for cessation

interventions targeted at Aboriginal Australian young people that acknowledge the social and personal context within which they smoke, as well as acknowledging the different motivators of cessation for male and female young smokers.

Conflicts of interest

None declared.

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References

Amos A, Bostock Y (2007) Young people, smoking and gender: a qualitative exploration. *Health Education Research* **22**, 770–781. doi:10.1093/her/cyl075

Aung AT, Hickman NJ, Moolchan ET (2003) Health and performance related reasons for wanting to quit: gender differences among teen smokers. *Substance Use & Misuse* **38**, 1095–1107. doi:10.1081/JA-120017652

Australian Bureau of Statistics (2010) National Aboriginal and Torres Strait Islander social survey, 2008. Canberra, Australia. Available at http://www.abs.gov.au/AUSSTATS/abs@.nsf/lookup/4704.0Chapter755Oct+2010 [Verified 14 November 2013]

Australian Bureau of Statistics (2013*a*) Australian health survey: updated results, 2011–12. Australian Bureau of Statistics, Canberra.

Australian Bureau of Statistics (2013*b*) Estimates of Aboriginal and Torres Strait Islander Australians, June 2011. Available at http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/3238.0.55.001Main+Features1June%202011?OpenDocument [Verified 2 November 2013]

Australian Bureau of Statistics (2014) Australian Aboriginal and Torres Strait Islander health survey: first results, 2012–2013. Australian Bureau of Statistics, Canberra. Available at http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4727.0.55.0012012-13?OpenDocument [Verified 28 April 2014]

Australian Institute of Health and Welfare (2011*a*) 2010 National Drug Strategy household survey report. Australian Institute of Health and Welfare, Canberra.

Australian Institute of Health and Welfare (2011*b*) The health and welfare of Australia's Aboriginal and Torres Strait Islander people, an overview 2011. Cat. no. IHW 42. Australian Institute of Health and Welfare, Canberra.

Braun V, Clarke V (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology* **3**, 77–101. doi:10.1191/1478088706qp063oa

Briggs VL, Lindorff KJ, Ivers RG (2003) Aboriginal and Torres Strait Islander Australians and tobacco. *Tobacco Control* **12**(2), ii5–ii8.

Dawson AP, Cargo M, Stewart H, Chong A, Daniel M (2012) Aboriginal health workers experience multilevel barriers to quitting smoking: a qualitative study. *International Journal for Equity in Health* **11**, 27. doi:10.1186/1475-9276-11-27

DiGiacomo M, Davidson PM, Davison J, Moore L, Abbott P (2007) Stressful life events, resources, and access: key considerations in quitting smoking at an Aboriginal Medical Service. *Australian and New Zealand Journal of Public Health* **31**, 174–176. doi:10.1111/j.1753-6405.2007.00037.x

Ivers R (2001) Indigenous Australians and Tobacco: a literature review. Menzies School of Health Research and the Cooperative Research Centre for Aboriginal and Tropical Health, Darwin.

Johnson JL, Bottorff JL, Moffat B, Ratner PA, Shoveller JA, Lovato CY (2003) Tobacco dependence: adolescents' perspectives on the need to smoke. *Social Science & Medicine* **56**, 1481–1492. doi:10.1016/S0277-9536(02)00150-8

Johnston V, Thomas DP (2008) Smoking behaviours in a remote Australian Indigenous community: the influence of family and other factors. *Social Science & Medicine* **67**, 1708–1716. doi:10.1016/j.socscimed.2008.09.016

Johnston V, Westphal DW, Earnshzaw C, Thomas DP (2012) Starting to smoke: a qualitative study of the experiences of Australian Indigenous youth. *BMC Public Health* **12**, 963. doi:10.1186/1471-2458-12-963

Kostova D, Ross H, Blecher E, Markowitz S (2011) Is youth smoking responsive to cigarette prices? Evidence from low- and middle-income countries. *Tobacco Control* **20**, 419–424. doi:10.1136/tc.2010.038786

Liamputtong P (2011) 'Focus group methodology: principle and practice.' (Sage Publications: Thousand Oaks, CA)

Lindorff KJ (2002) Tobacco – time for action. National Aboriginal and Torres Strait Islander Tobacco Control Project: Final Report. National Aboriginal Community Controlled Health Organisation. Canberra, Australia. Available at www.naccho.org.au/resources/reports.html [Verified 10 November 2013]

Ministerial Reference Group on Tobacco (2005) South Australian tobacco control strategy: 2005–2010. (Drug and Alcohol Services South Australia: Adelaide) Available at http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/458/$FILE/458%20-%20N%20-%20SA%20Health%20-%20SA%20Tobacco%20Control%20Strategy%202005-2010.pdf [Verified 13 June 2014]

Scheil W, Scott J, Catcheside B, Sage L (2012) Pregnancy outcome in South Australia 2010. Pregnancy Outcome Unit, SA Health, Government of South Australia, Adelaide, SA.

Smithson J (2000) Using and analysing focus groups: limitations and possibilities. *International Journal of Social Research Methodology* **3**, 103–119. doi:10.1080/136455700405172

Thomas DP, Briggs V, Anderson IP, Cunningham J (2008) The social determinants of being an Indigenous non-smoker. *Australian and New Zealand Journal of Public Health* **32**, 110–116. doi:10.1111/j.1753-6405.2008.00185.x

Thompson SJ, Gifford SM, Thorpe L (2000) The social and cultural context of risk and prevention: food and physical activity in an urban Aboriginal community. *Health Education & Behavior* **27**, 725–743. doi:10.1177/109019810002700608

Turner LR, Mermelstein R (2004) Motivation and reasons to quit: predictive validity among adolescent smokers. *American Journal of Health Behavior* **28**, 542–550. doi:10.5993/AJHB.28.6.7

Vos T, Barker B, Stanley L, Lopez A (2007) The burden of disease and injury in Aboriginal and Torres Strait Islander peoples 2003. School of Population Health, The University of Queensland, Brisbane, Qld.

Wakefield MA, Durkin S, Spittal MJ, Siahpush M, Scollo M, Simpson JA, Chapman S, White V, Hill D (2008) Impact of tobacco control policies and mass media campaigns on monthly adult smoking prevalence. *American Journal of Public Health* **98**, 1443–1450. doi:10.2105/AJPH.2007.128991

Wood L, France K, Hunt K, Eades S, Slack-Smith L (2008) Indigenous women and smoking during pregnancy: knowledge, cultural contexts and barriers to cessation. *Social Science & Medicine* **66**, 2378–2389. doi:10.1016/j.socscimed.2008.01.024