

"Got to build that trust": Aboriginal Health Workers' perspectives and experiences of maternal oral health

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Abstract

Background: In Australia, models of care have been developed to train antenatal care providers to promote oral health among pregnant women. However, these models are underpinned by Western values of maternity care that do not consider the need to ensure cultural safety for Aboriginal and Torres Strait Islander women. This study aimed to explore the perceptions and experiences of Aboriginal Health Workers and Family Partnership Workers towards oral health care during pregnancy. It is part of a larger program of research to develop a new, culturally appropriate model of oral health care for Aboriginal pregnant women and new mothers.

Methods: A participatory action research methodology informed the study. Focus groups were convened to yarn with Aboriginal Health Workers, Family Partnership Workers and Aboriginal management staff at two antenatal health services in Sydney, Australia.

Results: A total of 14 people participated in the focus groups. There were four themes that were constructed. These focussed on the importance of trust to build relationships with clients, and the need to receive training to better address the oral health needs of Aboriginal pregnant women and new mothers. Further, the staff work in a system fundamentally driven by the legacy of colonisation and its subsequent effects of integenerational trauma on Aboriginal people and communities. This has significantly contributed to the systemic barriers Aboriginal continue to face in accessing health services, including dental care. The participants recommended that a priority dental referral pathway, that supported continuity of care, could provide increased accessibility to dental care for Aboriginal pregnant women and new mothers.

Conclusions: There is the need for an individual and systems approach to promote oral health among Aboriginal pregnant women and new mothers. This approach should cultivate trust between Aboriginal women and both care providers and healthcare systems. A new model of care is needed that provides oral health training to Aboriginal Health Workers and addresses the systemic factors that create barriers to accessing dental care for Aboriginal women.

Background

Oral health is an important aspect of maternal care during pregnancy as oral health problems are prevalent during this period. Some studies estimate that 50-74% of women have periodontitis (gum disease) during the antenatal period,[1, 2] which has been associated with periodontitis during pregnancy, an increased risk of pre-eclampsia,[3] pre-term birth and low birth weight.[4] Moreover, the mother's oral health and dental practices have been associated with early childhood caries and dental decay in later life.[5] Pain or functional limitations resulting from oral health problems can have a considerable impact on the mother's quality of life during pregnancy,[6] and if left untreated, oral health problems can be extremely costly.[7]

Improving the maternal and infant health outcomes of Aboriginal and Torres Strait Islander Australian (hereafter referred to as Aboriginal Australian, see Appendix 1) women continues to be a focus of the Australian government's national strategy to close the gap.[8] Among Aboriginal mothers, oral health behaviours such as accessing the dentist are linked to self-efficacy.[9, 10] However, accessing dental services can be both traumatic and stressful for some women during pregnancy.[11] Feelings of stress or trauma may be intensified due to a distrust with mainstream health care services.[12] Aboriginal mothers' oral health perspectives and practices could also influence children's behaviours,[5] highlighting an area that can result in significant inequity for Aboriginal children across the lifespan.

Despite recommendations around oral health for both Australian Aboriginal women and other women during pregnancy,[13, 14] oral health tends to be neglected by many antenatal care providers such as general practitioners (GPs), obstetricians/gynaecologists and midwives.[15] A model of care that includes training for midwives has been developed and implemented in Australia to promote oral care for women during pregnancy.[16] While this model is effective in improving the oral health of expectant mothers, it was developed within the context of health care services that uphold Western values of health care. Consequently, the approach of current antenatal oral health models of care may not be culturally safe for many Aboriginal and Torres Strait Islander women.

The ongoing effects of colonisation, intergenerational trauma (Appendix 1) and systemic racism within Australian health care services drive many Aboriginal women to access maternity services that demonstrate cultural safety. Successful maternity care models among Aboriginal Australian women have included antenatal care providers who identify as Aboriginal, are connected to the Aboriginal community, and can provide culturally safe care with an Indigenous worldview (Appendix 1).[17] These maternity care models involve a partnership or team comprising of midwives, Child and Family Health Nurses, Aboriginal 'senior women', Aboriginal Health Workers (AHWs), Aboriginal Maternal and Infant Care workers or Family Partnership Workers (FPWs).[17-19] Thus, to meet the cultural needs of Aboriginal communities, existing oral health programs for antenatal care providers need to be adapted for services that already provide culturally safe care within their services. This would offer expectant Aboriginal mothers with further knowledge, support and the opportunity for improved health outcomes for the child.

Aboriginal antenatal care providers, such as Aboriginal Health Workers, have the potential to promote oral health care during pregnancy. [20] Within Australia, Aboriginal Health Workers already promote oral health among other populations including children. [20] For any Aboriginal health program to be sustainable and successful, it is imperative that the program is developed in consultation with the community, rather than for the community, to avoid perpetuating the effect of colonisation. [21] This involves adopting an approach that is culturally safe and focuses on developing relationships to ensure that the outcomes are relevant and useful to the Aboriginal community. [21] The aim of this study, therefore, was to understand the experiences and perceptions of Aboriginal antenatal care providers, specifically AHWs and FPWs, towards oral health care for women during pregnancy. This study is part of a larger program of research to develop a new model of care to meet the oral health needs of Aboriginal pregnant women and new mothers.

Methods

Methodology

Participatory action research (PAR) was used as an overarching framework for the larger program of research to explore how best to address the oral health needs of Aboriginal pregnant women and new Aboriginal mothers. In PAR, local people participate in the research process to identify and reflect on existing issues to develop appropriate solutions.[22] In the context of Aboriginal Australians, who have traditionally been researched "on" instead of "with",[21, 23, 24] PAR methodology ensured the research involved collaboration with AHWs and FPWs, and identified changes that would be culturally appropriate within antenatal services. As part of the PAR methodology, findings from the current study formed the recommendations and actions to address these needs.

Conceptualisation of study design

One of the main principles of PAR is to equalise the power relationship between the "researcher" and the "participant".[22] Through yarning with the AHWs and FPWs we collectively identified that oral health among Aboriginal pregnant women and mothers was an area of need for the community. The AHWs and FPWs also expressed desired outcomes for the study (that is, a culturally safe model of care) and identified how they wanted to be involved in the study (through a focus group and periodic informal meetings for brainstorming and decision making). The staff specified yarning in focus groups with the AHWs and FPWs was the most appropriate method of data collection for this study, followed by interviews with Aboriginal pregnant women. The interviews with the Aboriginal pregnant women will be published elsewhere.

Reflexivity

The initial yarns were important to cultivate trust between the AHWs, FPWs and the lead author (AK), who identifies as a non-Indigenous woman raised in Australia, and who convened the focus groups. In addition to the AHWs and FPWs, the study team included non-Indigenous (LR, MSS, AG, KG) and Aboriginal researchers (MD, JG, FT) who were involved in the analysis and interpretation of the findings. Both Aboriginal (NJ, BR) and non-Indigenous people (RS) with experience in delivering health services, assisted with decision making throughout the study.

Ethical Considerations

Ethical approval for this study was granted from the South Western Sydney Local Health District (2019/ETH09963) and the Aboriginal Health & Medical Research Council (1438/18). Reciprocal approval was also granted from Western Sydney University (RH13086).

Context

This study was conducted in the Greater Western Sydney region in New South Wales (NSW), Australia. The study focused on two public health programs that are designed to provide culturally competent antenatal care and support to Aboriginal pregnant women and new mothers. The public health programs are outreach programs (typically this involves visits to the client's house instead of having visits at the clinic) where the AHW or FPW establishes the relationship and builds trust with Aboriginal women during the antenatal period. These visits are conducted alongside nurses who provide clinical antenatal support.

Sampling

Purposive sampling was used to recruit AHWs and FPWs involved in two different antenatal outreach programs for Aboriginal and Torres Strait Islander women in Sydney. There were no exclusion criteria for eligibility to participate in the focus groups.

Data collection

The focus groups were conducted through yarning. Yarning is a culturally safe, credible and rigorous method of research with Aboriginal peoples. [25, 26] Yarning focuses on sharing and exchanging Aboriginal knowledge yet simultaneously establishes and builds respect, reciprocity and trust. [25] It is different from traditional focus groups as Aboriginal peoples are privileged and are positioned as the custodians of knowledge. Yarning also ensures that Aboriginal and Torres Strait Islander ontology, epistemology and axiology are prioritised by creating a safe space. [26] Although non-Indigenous researchers convened 'focus group' discussions (the term 'focus group' will be used for consistency), they became yarning circles where AHWs and FPWs exchanged knowledge and shared stories in an Aboriginal way, through yarning. These focus groups changed from a one-sided researcher-participant to a more dynamic exchange where the non-Indigenous researchers could learn from the Aboriginal staff, building trust and reciprocity.

A total of three focus groups were conducted in a private room at the community health centre where the AHWs or FPWs were based. Prior to providing consent, the study author (AK) reiterated verbally (supported by the participant information sheet) that the participants were in a safe, confidential space to share their experiences; the participants were not obligated to participate, nor were there consequences for non-participation, and they could withdraw their consent at any time. A semi-structured approach to the focus groups was adopted, using five key issues to guide the focus group yarning:

- Previous experiences (struggles/successes) caring for Aboriginal and/or Torres Strait Islander pregnant women (tease out the nature of their relationship)
- Knowledge about antenatal oral health (problems faced, priorities, practices, trends)
- Potential education, assessment and referral (challenges and facilitators)
- Education and training (their needs/how they envision it, video resource?)
- Other comments/questions

Two focus groups were conducted at the first service to allow all AHWs to attend. A third focus group with the FPWs was conducted at the second service. The first focus group was convened by two of the study authors (AK and LR), where LR also wrote field notes. LR is a qualitative researcher with experience working with vulnerable populations. The subsequent two focus groups were facilitated only by AK, who also wrote field notes after the focus groups. All of the focus groups were audio recorded with consent from all participants. The recordings were transcribed by a professional service and checked for accuracy by AK, who wrote additional memos while listening to the transcripts.

Participant demographics

A total of 14 people participated in the three focus groups, including 7 AHWs, 2 Aboriginal management staff (who were not AHWs), and 5 FPWs. The FPWs' position descriptions were similar to AHWs, in that they raised cultural awareness within their teams to ensure culturally competent service delivery but did not necessarily require the same qualification. All of the participants were female, and the age of the participants ranged from 22 to 50 years. The highest educational qualification attained by staff included Year 12 (n=1), vocational education (n=8) or a university qualification (n=3). Three staff, who already had vocational education, were also working towards a university qualification. Two people chose not to disclose this information. Years of experience working as an AHW ranged from three to ten years, whereas the FPWs' years of experience were between two weeks to eight years.

Analysis and Interpretation

An inductive thematic analysis based on the work of Braun et al. [27] was employed. All participants were assigned pseudonyms to ensure confidentiality. AK read and re-read the transcripts and listened to the audio recordings and accompanying field notes and wrote additional memos to ensure adequate immersion in the data. AK initially coded the transcripts inductively using NVivo Software. The initial codes were generated verbatim or in summary about an issue relating to the research aim. AK then clustered similar codes together, generating initial categories. AK revisited these categories a second and third time to better understand the themes from each focus group, and then combined the categories into themes across all focus groups. These themes were reviewed by another non-Indigenous researcher with experience in qualitative research (MSS) and by an Aboriginal researcher (FT). After agreement between AK, MSS and FT, AK convened with the AHWs and FPWs separately to yarn about the themes. This allowed for participants to check, engage and further contribute to the interpretation of the data, and ensure rigour of the findings.[28] The participants Aboriginal staff also yarned with AK about the recommendations for action. All participants were invited for a follow-up discussion to yarn about the analysis, however only half of the participants (n=7) were available due to unforeseen changes with client scheduling. This discussion refined the concepts underlying each theme and the language used to define the themes.

Results

Theme 1: Trust builds empowered relationships

The AHWs and FPWs from all the focus groups identified the need to build trust with their clients to ensure that they could give appropriate support to Aboriginal pregnant women and mothers during the antenatal period.

Building trust

Trust was discussed as an imperative to understand their clients' needs and priorities. Trust was something that required both time and empathy to build through the practice of yarning. Some FPWs and AHWs drew on their personal experiences to cultivate this trust.

Trust. Got to build that trust. (Melissa, FPW)

It's totally up to them and what they want. We tend to find that if we just sit there and have a yarn with them rather than push them. We find a lot of services do try and push, you known like, to tell the girls what to do. We don't do that: and we find we get better outcomes when we don't do that. (Karina, FPW)

But it's also too with that rapport building is that those yarns that you're having with your clients aren't about this is what you're doing, it's about you giving them your experience as well. So, you know, it's like, I've done this too. (Tess, AHW)

Reflecting on the importance of trust, both groups found that Aboriginal pregnant women and mothers tended to be more receptive to contact from AHWs or FPWs compared to nurses.

Often, at times, when they're in crisis and they don't answer the phone calls to the nurses, all it takes is one phone call from us and then we're back on board with them...when we contact them they're usually pretty honest with us about what's going on with them. (Sarah, AHW)

We basically just support the nurses. Already questions that the client might have. Sometimes they ... direct the questions at us rather than the nurse. We just bounce off one and another and just support, you know, what we're delivering (Karina, FPW)

Supporting women to make healthy choices

Following the discussion about the importance of building trust, the AHWs spoke about offering options and providing support by ensuring that the clients' needs were addressed. Regardless of whether this support was psychosocial, practical or both, the participants spoke about how this approach addressed some of the barriers that affected women's access to services.

Yes, and I actually just tend to ask, do you have somebody you can go with or do you feel okay doing this, um, or are you all right to make the call? Or if you haven't got credit, do you need to use my work phone or do you want to wait until you've got credit? So always giving options or if they've got ideas, well what do you think? So they'll let us know if they can't do that. (Louise, AHW)

it depends on where the mum is at, I guess. I'll say it that way... Yeah, their ability to access, whether they're comfortable calling, because I'll call for some clients... We do provide transport if we need to as well. (Emily, AHW)

When asked a question about the nature of the relationships the AHWs and FPWs had with their clients, some of the participants described themselves as being the connectors, interpreters and the first point of contact for many clients.

I guess we're that connector, we're the connecter with a system that is different traditionally to what some of our systems would be or would look like. So we help break down the barriers of, um, an institution which has historically been, um, one that's had a negative attachment to it from past policies and history. (Louise, AHW)

So it's kind of like - I think of us as...friendly – not a friend. Um, we look after their cultural stuff, you know, to help support them with culture? Um, we're the link between mainstream and Aboriginal people and Aboriginal culture stuff. We're kind of like interpreters as well? Because a lot of clinical stuff is a lot of jargon, so we, um, will explain it in a different way. We advocate – [emphasised] a lot. (Emily, AHW)

Theme 2: Colonisation & intergenerational trauma: systemic barriers

The long-term effects of colonisation and intergenerational trauma, which affected clients' desire and ability to engage with services and institutions, were discussed in all focus groups. The Aboriginal staff spoke about the barriers for clients to access dental services. These barriers include the cost of private dental appointments, transport, dentists refusing to treat pregnant women, long-waiting time for an appointment in public and ACCHS dental services, ineligibility to access ACCHS (Aboriginal community controlled health service) dental services, and systemic racism. The participants also identified that 'shame' (see glossary, Appendix 1) which accompanied feelings of fear, anxiety and being judged during a dental appointment, were factors that could affect an Aboriginal woman's desire to visit the dentist.

External barriers to accessing dental services

The Aboriginal staff also estimated how many of their clients (out of ten) would have dental problems during pregnancy. One participant said "I've had two" (Melissa, FPW), whereas others agreed that the number was closer to "six to eight" (Rachel, AHW) out of ten. However, another two participants agreed that about only "one to two" (Melody, AHW) actually end up attending a dental appointment.

Cost, transport, and dentists who refused to treat pregnant women were cited as some reasons for poor uptake of dental services.

They're thinking they have to go private and they don't have money. (Sarah, AHW)

It's quite hard - especially if you don't drive and you have to catch public transport. (Tess, AHW)

Oh, I'll share a story. When I was pregnant with my last one, my tooth was actually bad up the back, and I went to the dentist and they refused to touch it because I was pregnant (Rachel, AHW)

Some staff also shared personal experiences or knowledge of the long waiting lists to access public and ACCHS dental services.

I went privately. I was like I need to get this out. It was killing me. I've had a wait list over at [ACCHS dental service], because I went to [ACCHS dental service] ...but then the wait list to get my tooth removed was like a year? (Ellie, FPW)

If you don't want to pay, like the waiting list for the one at [public dental service], for example. [exasperated sigh] (Teigan, FPW)

The participants spoke about the need for a Health Care Card (concession card) to access public dental services; however, not all Aboriginal women qualified for this card if they were on a higher income. Furthermore, for Aboriginal pregnant women and mothers who were on a higher income, money was prioritised elsewhere.

Because I earn over the threshold, you don't get the free dental. (Emily, AHW)

the Health Care card is the biggest issue. If they're still working while they're antenatal - they can't go and access [the public dental service] because they're still getting paid...They just can't financially afford to go to a dentist, but then on a higher income - because of choices of buying a home which is what we want to do... (Louise, AHW)

The participants also spoke about clients avoiding contact with government institutions. One person spoke about how negative experiences create fear and become a deterrent for families to access government services. This staff member explained that even if these experiences were with one institution, the fear creates a spill-over effect in engaging with any government institution.

That [institutions] goes hand in hand. [with racism] (Sally, AHW)

There are so many complexities sometimes that it's really difficult for families to engage with Centrelink to chase that. They might have previous debt. They might have a child that's come, that's left their care, and they're backwards and forwards and it's all too hard to go into Centrelink and negotiate in that space. So that whole fear of institutional contact is...So it's the fear of going in and having to deal with that entity, that institution, that's why Aboriginal families prefer that outreach contact. (Jennifer, management staff)

However, five participants explained that since ACCHSs provide free dental services for Aboriginal Australians, some non-Aboriginal peoples identify as being Aboriginal to access these services.

Dental's one of them. That's why they're [people who didn't identify previously as Aboriginal] identifying, so they can get free access to it. (Karina, FPW)

Due to this, some ACCHS require 'confirmation papers' (Confirmation of Aboriginality) (see glossary, Appendix 1). Participants identified confirmation papers as a barrier for many clients, especially if the client was disconnected with their family because of policies leading to the Stolen Generations.

That's why it's harder to get the confirmation now, because people were just going and using names and getting their confirmation, where now you need to go to these meetings and it is harder... But then it's harder for people that are from Stolen Generations and don't have - and are disconnected with their family. It's just so - it's just all a big mess. (Ellie, FPW)

The participants described the process of acquiring Confirmation of Aboriginality to be a long process. After applying for the Confirmation, some Aboriginal applicants would be interviewed in front of a community board which could comprise members of the Aboriginal Land Council or another Aboriginal organisation responsible for issuing the confirmation paperwork.

That is pretty much - there's nearly a 12-month waiting list. So you fill in your application form, hand that in, then ... once it's your turn they'll send you a letter and say this is the day and time that you need to present in front of the board – um, the board will ask you a couple of questions, and then it goes from there. So whether they accept it or not... More information, exactly. Come back or go back to where your family is known. (Melody, AHW)

Feelings of 'shame': fear, anxiety and judgement

The AHWs extensively discussed the shame (see glossary, Appendix 1), anxiety and fear associated with oral health and accessing dental services within the community. The participants spoke about anxiety and fear arising from personal experiences or from experiencing discomfort within the dental environment. They also spoke about the stories their clients had heard within the community, from past dental care experiences of older Aboriginal Australians.

My dad's tooth just fell out...like the whole thing. He put it in the bin. I said, why did you do that? [Unclear]. I said, why didn't you take it to the dentist, and they can put it back in? He's like, nup. My nan yells at him every day, like rips him up. She says, you can't get jobs with teeth like that you need to go and fix your teeth. (Ellie, FPW)

There's also just dental in general, the horror stories...and shame (Rachel, AHW)

Sometimes it's the elders, they instil the fear, I've got to say, because my grandmother wouldn't go into hospital. Never went to a hospital. Some of my immediate relatives could be in there dying, she won't go to a hospital. She wouldn't go and see a doctor. She wouldn't go to a dentist. God, no, she never went to a dentist. Even though my nan had false teeth, she never went to a dentist in her life. (Jennifer, management staff)

The staff also discussed that feelings of shame in the community arose from being embarrassed about their oral health or the fear of being judged.

Some people that we spoke to did this. [covers mouth with hand] Covered their mouth when they were talking to us. (Jennifer, management staff)

But also, I wouldn't initiate this story about how my parents didn't give me a toothbrush or do that, because I wouldn't want people to judge my parents. I'm sharing because it's safe. (Sharon, management staff)

I've got false teeth. Mine are through domestic violence. You know I mean? You've got to be careful on 'em lines too. Like, I don't mind talking about it. I'm strong enough to talk about it. But there's some that don't - you know what I mean, admit to that. (Karina, FPW)

The staff discussed the effect of past government policies of assimilation that allowed for the removal of children, enforced English as the only language that could be spoken, and policed cultural practices and activities. Some participants mentioned that as a result, knowledge, language and culture were not passed down to younger generations, including the passing down of traditional dietary and dental health knowledge and practices.

Back in the day you weren't allowed to [talk to anyone]... Doesn't matter if you were Stolen or not. Yeah, you just weren't allowed to. It was part of the white law at the moment. You know what I mean? (Karina, FPW)

There's certain stuff, yeah, that they chew on and stuff like that, but no ones ever really passed that down. (Karina, FPW)

Just living on bush tucker and nothing out there to hurt your teeth. (Melody, AHW)

Yeah, and this is how it went off-track and the introduction of a Western diet, and when you think about why people choose the bottle over the breast and, you know, what they put in, it's because of what's going on...and you need to capture that from Aboriginal people. Um, some of that you can see how some people do know here, and how it's okay to regain that knowledge, because the same way why other knowledge hasn't been passed down, this is, you know, the same reason. So that, I think, is really important. (Sharon, management staff)

Theme 3: Systems that provide continuity of care

Working in two worlds

The participants discussed how they found themselves balancing their professional roles while also maintaining their cultural responsibilities within the community. The staff spoke about having a role in both 'worlds', suggesting that the services' policies were not always culturally safe.

Like, um, we obviously work under policies and guidelines, um - we're always competing with - what is culturally safe and appropriate versus policies that we've got [to] work under. So we're always adapting

to make it work in regards to what we're allowed and what we know within ourselves as Aboriginal people what is actually appropriate to do within the homes. (Louise, AHW)

One AHW shared an example where the existing workplace policies meant that Aboriginal clients had no option to access culturally competent and affordable dental services:

Well, I have a client that's just relocated from Melbourne. She's Aboriginal, no confirmation papers, she's not on the pension card, Health Care card, and her teeth are pretty much not there. What access does she have? Any kind of money that she has - she's got five - six children now. Very young mum, 23.... It's a brick wall. That's just an example. (Sally, AHW)

Need for a priority dental referral pathway

All focus groups stressed the need for a priority dental referral pathway that would provide a free dental check-up for all Aboriginal pregnant women and for women who were pregnant with an Aboriginal child. This was considered an important preventative initiative for the community.

...in an ideal scenario we can get them in and get them streamlined to have that check-up then as a preventative measure for when, as you just said, pregnancy and everything. (Sarah, AHW)

Maybe that could be something, an escalated pathway so people in the program can make sure that within that - we get them checked within a... (Sharon, management staff)...Certain timeframe, like a KPI [key performance indicator] (Jennifer, management staff)

But if we offered it as something that was offered to everyone across the board, it wouldn't be so confronting... You know, so if it was something that was offered to everyone [all pregnant women with Aboriginal babies] (Sally, AHW)

Some participants suggested that there should be an initial dental appointment available to clients to raise awareness about existing oral health problems and subsequently discuss their potential risk.

Because then you go to a dentist and you find out. Because I wouldn't go unless I had an issue; then I would go (Ellie, FPW)

So I don't know how that would fit but in my ideal world once she's pregnant I think she should be able to receive some treatment, whether that be an examination and fillings or what not, what they can do during the pregnancy (Sharon, management staff)

One of the management staff recommended that Aboriginal pregnant women, mothers, and women with Aboriginal babies needed pathways to a range of public and private services, including ACCHSs.

So I think if you attach the model to your program, that could have several pathways. One into the AMS [Aboriginal medical service], because we do outreach there and we do different pathways and, you know, there's no wait for any Aboriginal child, so why can't we have that for our unborn child and mothers? And

then you've got the voucher system, where if you're needing services [the AMS] can't provide, you can get a voucher...into private dental. (Sharon, management staff)

It was important that non-Aboriginal mothers of Aboriginal babies could also access culturally competent services because they were still considered part of the community.

So when we look at a holistic thing so that non-Aboriginal mum that's pregnant within our Aboriginal community, even though she's not seen as Aboriginal she's still seen as a part of our community... everyone has a place in their community, in their family structures (Louise, AHW)

Another suggestion was issuing all women with a concession card during their pregnancy to ensure that dental services were accessible to all women regardless of culture. Some participants were cautious about the potential for further discrimination if only Aboriginal women received a priority referral.

It could work from once - like from my perspective then all - well not just Aboriginal women, all women who are pregnant, there's a guideline that they have to book in before 20 weeks gestation. So, everyone is under that umbrella, who knows whether they've been booked in or not, and that's including Centrelink and everyone else...so every antenatal mum who has booked in why can't they be issued with a healthcare card for the duration for when she's pregnant? Why can't that be an open healthcare card that's given to all regardless of how much you earn and things like that? (Tess, AHW)

But how that's rolled out, there needs to be some sort of consultation around it to be mindful about stigma that's already attached, you know, prejudice that's already attached...my worry would be how it's done, done in the best way (Louise, AHW)

Theme 4: More knowledge and training to meet the local community's needs

The AHWs and FPW recognised the importance of oral health during pregnancy for the future of healthy families and agreed that they could provide oral health education to pregnant Aboriginal women and mothers as part of their role. The participants discussed appropriate Aboriginal ways of doing in health services and highlighted the need for training in antenatal oral health. The participants also commented on their own existing oral health knowledge, practices and training received.

Understanding Aboriginal ways of doing health service provision

Participants identified that any oral health training should be integrated into an existing antenatal program. Two of the staff identified a potential role for Elders (see glossary, Appendix 1) to be involved to pass on knowledge about healthy oral health practices in families.

I think you could build it into the [antenatal] program, though. (Sharon, management staff)

I think, um, culturally we always go to our Elders for guidance so I think for the Elders to, um, have an opportunity to filter down ideas, guidance, support - that's an appropriate way for us. So I guess keeping in with that, um, you know, speak...and having that yarn and consultation with them. This is what we're

thinking or what ideas do you have, can you guide us as to what will work best because the two communities are different here (Louise, AHW)

If we say something, then their grandma says something, they're not going to go say what we say – they're going to listen to their [Elders] (Teigan, FPW)

Current oral health training, knowledge and practices

Only one AFPW had acquired oral health knowledge through formal training. All other participants across both services identified the need for a formal training program in antenatal oral health.

I think I've just learnt it [oral health] over the training that I've done, like Certificate III and IV in Aboriginal and Torres Strait Islander Primary Health Care...then over my lifetime...I know I've got a thing about teeth. (Melissa, FPW)

Yeah, I think informal as well. I mean, we did do little in-services. We do do in-services on dental, so it could be some formal as well...I would be up for it [formal training] (Emily, AHW)

In both services, staff already had some knowledge of the effect of pregnancy on a woman's oral health and vice-versa and understood the importance of a healthy diet for the mother's and baby's teeth. Several participants already encouraged women to see the dentist. The FPWs also handed out dental products to families.

So I know that during pregnancy, women's oral health can be exasperated from pregnancy. You know, that can cause wobbly teeth, it can cause decay to happen quicker, so it exasperates all of the symptoms, so I do know that. Um, it can cause headaches. It can cause other health concerns. It can stop them eating. It can give them anxiety. All kinds of different things (Emily, AHW)

If the client hasn't seen a dentist in a while, we usually ask them when was their last dental check-up. (Melissa, FPW)

So when we're talking about any good foods, we talk about the type of food you do that are better for your teeth rather than the sugary ones and the soft drinks and all that...About if you're having a lot of soft drinks which are high caffeine and high sugar that's going through to bub. (Louise, AHW)

I know with some of our clients, that we've gone out and some of the content we've - it's touched on the oral health, we've given, like in the gift packs, we've given out the toothpaste and toothbrush. (Melissa, FPW)

Discussion

This study sought to understand the perspectives and experiences of AHWs and FPWs related to the oral health needs of Aboriginal pregnant women and new mothers within the community. Although the two groups were distinctly different with different levels of training, many of the perspectives were shared.

The participants provided insight into the roles and relationships between Aboriginal antenatal care providers and Aboriginal pregnant women and existing issues facing Aboriginal pregnant women within their local communities. In addition to recommendations around a model of care, the staff identified the potential for AHWs and FPWs to be trained to promote oral care among Aboriginal women during the perinatal period.

Trust with antenatal care providers is an important feature of developing relationships with Aboriginal pregnant women. The findings from this study emphasised that building trust with the clients was a priority to provide support for clients to make informed decisions about their health. As discussed by Karina and Tess, trust was built through yarning and sharing experiences, a traditional method of knowledge exchange in Aboriginal cultures.[29] The priority to build trust highlights a dynamic in the health provider-client relationship that is comparable to a partnership. Similar to previous studies, the AHWs and FPWs identified themselves and their services as the link that some Aboriginal women used to access health services during the antenatal period.[20, 30, 31] The contact with the Aboriginal staff may represent for some women a physical, emotional and relational 'welcoming space' that is embodied by personal contact with Aboriginal health care providers.[32] This type of support was an important factor identified by Kong et al. [33] in determining whether Indigenous women engaged with oral hygiene. Increased trust with health providers among vulnerable populations is also associated with regular routine check-ups and improved mental and physical wellbeing.[34, 35] Yet, trust with the individual antenatal care provider has its limitations when situated within the broader healthcare system.

The long-term effects of colonisation and intergenerational trauma are two main factors that have led to an increased distrust and fear of health systems among Aboriginal peoples. This distrust for institutions was highlighted in this study by examples where people refused to access mainstream health institutions, even if a relative was hospitalised or if it potentially affected the person's prospects for employment. The violent history of European colonisation in Australia has resulted in the widespread loss of life, land and sovereignty among Aboriginal and Torres Strait Islander communities.[36] The government policy of assimilation, where Aboriginal children were forcibly removed from their families, has led to a significant loss in identity, culture and family connection, resulting in intergenerational trauma.[37, 38] The intergenerational trauma of the Stolen Generations has resulted in a collective fear and distrust when accessing and engaging with mainstream institutions and healthcare providers. In our study, participants explained that some Aboriginal women experienced shame, and feared being judged for having poor oral health. The fear of institutions and fear of judgement highlight perceptions and experiences that some health care providers and health services do not deliver culturally safe care for Aboriginal Australian peoples.[39, 40] Currently, the existing healthcare system is built upon Western values of care that are inherently colonial. Thus, there is the need for both the system and its antenatal health care providers to focus on providing culturally safe care for all women throughout Australia.

External barriers have also increased the difficulty for Aboriginal pregnant women and mothers to acquire correct documentation to access dental care in mainstream health institutions and ACCHSs. While confirmation papers are issued to ensure that only people who are of Aboriginal and or Torres Strait

Islander descent can access the service, some Aboriginal women experienced increased difficulty obtaining confirmation of Aboriginality if they had relocated from where they were known by community or could not reconnect with their community. Some ACCHSs requiring confirmation papers demonstrate the cycle created by historical colonising policies, which initially excluded Aboriginal peoples from receiving appropriate health care and inadvertently continues to exclude Aboriginal peoples from culturally-specific health care services. As some non-Aboriginal people may claim to be Aboriginal in order to access affordable dental health services, this highlights issues with the cost of dental services for women more broadly. Difficulties with affording regular private dental treatment, including prophylactic treatment, is a challenge for both Aboriginal and non-Aboriginal Australian families.[41] The paradox around confirmation papers in the context of the Stolen Generations demonstrates the need for equitable and affordable healthcare.

The difficulties acquiring correct documentation to access affordable dental care, fear of judgement and fear of institutions demonstrate the need to shift towards systems of healthcare that aim to provide continuity of care that is culturally competent, safe and inclusive. While continuity of care includes having an ongoing, trusting relationship with a health provider, it also refers to receiving accessible, care that is tailored to the person's needs across a range of services. [42, 43] Yet, some Aboriginal health care providers, like some of the staff in this study, may find difficulty providing culturally safe care within the framework and polices of a non-Indigenous organisation that may lack continuity of care.[44, 45] In Australia, healthcare services (particularly dental health services) are typically siloed, with each service having its own eligibility requirements and pathways for accessibility.[46] The FPWs, AHWs and management staff identified that a range of referral pathways into public, private and Aboriginal community controlled dental services needed to be created for all women pregnant with Aboriginal babies, irrespective of Aboriginal status. In the UK, the National Health Service offers free dental treatment to all women during pregnancy and up to 12 months after delivery. [47] The participants related the need for a freely available initial dental check-up at least to improve awareness of the importance of oral health among pregnant women. Promoting oral health and subsidising the cost of dental check-ups has demonstrated an increase in Australian women to access the dental service during pregnancy.[48] Although this may be costly to subsidise, health services that offer pregnancy dental checks promote long term preventive dental care for both the mother and the child.[49]

To provide enhanced care for communities, the staff identified the need for formal training to provide evidence-based oral care advice and referrals for Aboriginal pregnant women and new mothers. Although some people had knowledge about maternal oral health, this was learned informally and did not provide the staff a formal qualification to enhance existing skillsets. This was not surprising as a recent review published by Villarosa et al. [20] found that no antenatal oral health training programs have been developed and evaluated for Indigenous health workers globally. Furthermore, there are currently no national perinatal oral health workforce strategies in Australia. However, on a community scale, it is important that a training program is developed with community, including the Elders, to ensure that the program meet the needs of Aboriginal pregnant women and new mothers. Some studies with Australian Aboriginal communities revealed that the effectiveness of a health program is linked to how well the

program adopts the community's cultural practices, knowledge, and involves community members to participate and lead the program. [50-53] These factors highlight the importance of the community to be directly involved with the development of the training program. In the context of the broader PAR program of research, the team will need to build the training program integrating the participants' suggested content and delivery, using the insights gained through these focus groups.

Despite the strengths, there were some limitations in this study. The AHWs and FPWs involved in this study worked in an urban area therefore, the challenges and perspectives of AHWs working in regional or remote areas were not identified. Moreover, as every Aboriginal community is distinct and diverse, the perspectives of the participants from this study are not intended to be representative of other AHWs or FPWs. Although this study followed a PAR approach, AHWs or FPWs were not trained and employed to collect or analyse the data due to the heavy workload capacity of AHWs and FPWs and restrictions in funding.

Recommendations for Action

As part of the study methods, the following recommendations for action were discussed with the participants following the analysis of the study findings:

- A direct, priority referral pathway to dental services needs to be implemented for both Aboriginal and non-Aboriginal women to access the dentist during pregnancy.
- Development of an antenatal oral health training program with and for AHWs and FPWs alongside a suite of resources for them to provide to women and new mothers. The interviews with Aboriginal pregnant women and new mothers will further inform the development of the model of care.
- Dental services to be adapted to provide universally culturally safe care for all women.

Conclusions

This study has provided valuable insight into the complexities and factors that influence the oral health needs of Aboriginal pregnant women and new mothers. There is the demand for an individual and systems approach to develop a new model of oral health for this population group. There is also the need for care providers and healthcare systems to build trust with Aboriginal women to drive engagement with this model of care. The model should include formal training for AHWs and FPWs so they can to provide maternal oral health education and referrals for Aboriginal women during the antenatal period. Alongside this training program, there is also a need for a dental referral pathway that facilitates continuity of care to be implemented which would offer affordable and accessible dental care for their clients. Future research and development of this model of care should be developed with the AHWs using a PAR approach to ensure it is culturally safe and addresses the maternal oral health needs of Aboriginal women.

Abbreviations

AHWs: Aboriginal Health Workers; FPWs: Aboriginal Family Partnership Workers; ACCHSs: Aboriginal community controlled health services; AMS: Aboriginal medical service; PAR: Participatory Action Research.

Declarations

Ethics approval and consent to participate

Ethical approval was obtained from the South Western Sydney Local Health District Human Research Ethics Committee (2019/ETH09963) and the Aboriginal Health & Medical Research Council (1438/18). Reciprocal approval was also granted from Western Sydney University (RH13086). Written informed consent was obtained from all participants.

Consent for publication

Not applicable.

Availability of data and materials

The data used and/or analysed for this study are available from the corresponding author on reasonable request.

Competing interests

The authors declare no competing interests.

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Authors' contributions

AK, MSS, LR, JG, KG, NJ, RS and AG were involved in the conceptualisation of the study and the design of the study. JG supported participant recruitment. AK and LR were involved in the acquisition of the study findings whereas AK, FT and MSS were involved in the analysis of the study findings. AK, MSS, LR, MD, JG, KG, FT and AG all contributed to the interpretation of the findings. AK completed the first draft of the manuscript. MSS, LR, JG, KG, MD and AG provided substantial revisions to the manuscript. All authors have read and approved the submitted manuscript.

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Reference List

- 1. Jiang H, Su Y, Xiong X, Harville E, Wu H, Jiang Z, et al. Prevalence and risk factors of periodontal disease among pre-conception Chinese women. Reprod Health. 2016;13(1):141-.
- 2. Macones GA, Parry S, Nelson DB, Strauss JF, Ludmir J, Cohen AW, et al. Treatment of localized periodontal disease in pregnancy does not reduce the occurrence of preterm birth: results from the Periodontal Infections and Prematurity Study (PIPS). Am J Obstet Gynecol. 2010;202(2):147.e1-.e8.
- 3. Sgolastra F, Petrucci A, Severino M, Gatto R, Monaco A. Relationship between periodontitis and pre-eclampsia: a meta-analysis. PLoS One. 2013;8(8):e71387.
- 4. Corbella S, Taschieri S, Francetti L, De Siena F, Del Fabbro M. Periodontal disease as a risk factor for adverse pregnancy outcomes: a systematic review and meta-analysis of case—control studies.

 Odontology. 2012;100(2):232-40.
- 5. Shearer DM, Thomson WM, Broadbent JM, Poulton R. Maternal oral health predicts their children's caries experience in adulthood. J Dent Res. 2011;90(5):672-7.
- 6. Acharya S, Bhat PV, Acharya S. Factors affecting oral health-related quality of life among pregnant women. Int J Dent Hyg. 2009;7(2):102-7.

- 7. Petersen PE. The World Oral Health Report 2003: continuous improvement of oral health in the 21st century the approach of the WHO Global Oral Health Programme. Community Dent Oral Epidemiol. 2003;31(s1):3-24.
- 8. Holland C. A ten-year review: the Closing the Gap strategy and recommendations for reset [Internet]. Canberra: Australian Human Rights Commission; 2018; cited 2020 Apr 6. Available from: https://www.humanrights.gov.au/sites/default/files/document/publication/CTG%202018_FINAL-WEB.pdf.
- 9. de Silva-Sanigorski A, Ashbolt R, Green J, Calache H, Keith B, Riggs E, et al. Parental self-efficacy and oral health-related knowledge are associated with parent and child oral health behaviors and self-reported oral health status. Community Dent Oral Epidemiol. 2013;41(4):345-52.
- 10. Jamieson LM, Parker EJ, Roberts-Thomson KF, Lawrence HP, Broughton J. Self-efficacy and self-rated oral health among pregnant aboriginal Australian women. BMC Oral Health. 2014;14:29-.
- 11. Armfield JM, Stewart JF, Spencer AJ. The vicious cycle of dental fear: exploring the interplay between oral health, service utilization and dental fear. BMC Oral Health. 2007;7(1):1.
- 12. Australian Health Ministers' Advisory Council. Cultural respect framework for Aboriginal and Torres Strait Islander health 2004 2009 [Internet]. South Australia: Department of Health South Australia; 2004; cited 2020 Apr 16. Available from: http://iaha.com.au/wp-content/uploads/2013/03/000211_culturalrespectframework.pdf.
- 13. New York State Department of Health. Oral health care during pregnancy: practice guidelines [Internet]. New York: NYSDOH; 2006; cited 2020 Apr 5. Available from: https://www.health.ny.gov/publications/0824.pdf.
- 14. Australian Health Ministers' Advisory Council. Clinical practice guidelines: antenatal care module 1 [Internet]. Canberra: Australian Government; 2012; cited 2020 May 6. Available from: http://www.health.gov.au/antenatal.
- 15. George A, Dahlen HG, Reath J, Ajwani S, Bhole S, Korda A, et al. What do antenatal care providers understand and do about oral health care during pregnancy: a cross-sectional survey in New South Wales, Australia. BMC Pregnancy Childbirth. 2016;16(1):382.
- 16. George A, Lang G, Johnson M, Ridge A, de Silva AM, Ajwani S, et al. The evaluation of an oral health education program for midwives in Australia. Women Birth. 2016;29(3):208-13.
- 17. Department of Health. Clinical practice guidelines: pregnancy care. Canberra: Australian Government Department of Health; 2019.
- 18. Barclay L, Kruske S, Bar-Zeev S, Steenkamp M, Josif C, Narjic CW, et al. Improving Aboriginal maternal and infant health services in the 'Top End' of Australia; synthesis of the findings of a health services research program aimed at engaging stakeholders, developing research capacity and embedding change. BMC Health Serv Res. 2014;14(1):241.
- 19. Zarnowiecki D, Nguyen H, Catherine H, Boffa J, Segal L. The Australian Nurse-Family Partnership Program for aboriginal mothers and babies: describing client complexity and implications for program delivery. Midwifery. 2018;65:72-81.

- 20. Villarosa AC, Villarosa AR, Salamonson Y, Ramjan LM, Sousa MS, Srinivas R, et al. The role of Indigenous health workers in promoting oral health during pregnancy: a scoping review. BMC Public Health. 2018;18(381):1-15.
- 21. Penman R. Aboriginal and Torres Strait Islander views on research in their communities [Internet]. Canberra: Department of Families, Community Services and Indigenous Affairs; 2006; cited 2020 May 6. Available from: https://www.dss.gov.au/sites/default/files/documents/05_2012/op16.pdf.
- 22. Baum F, MacDougall C, Smith D. Glossary: participatory action research. J Epidemiol Community Health. 2006;60(10):854-7.
- 23. Steinhauer E. Thoughts on an indigenous research methodology. Canadian Journal of Native Education. 2002;26(2):69-81,201.
- 24. Wilson S. Progressing toward an Indigenous research paradigm in Canada and Australia. Canadian Journal of Native Education. 2003;27(2):161-78.
- 25. Bessarab D, Ng'andu B. Yarning about yarning as a legitimate method in Indigenous research. International Journal of Critical Indigenous Studies. 2010;3(1):37-50.
- 26. Leeson S, Smith C, Rynne J. Yarning and appreciative inquiry: the use of culturally appropriate and respectful research methods when working with Aboriginal and Torres Strait Islander women in Australian prisons. Method Innov. 2016;9:1-17.
- 27. Braun V, Clarke V, Hayfield N, Terry G. Thematic analysis. In: Liamputtong P, editor. Handbook of Research Methods in Health Social Sciences. Singapore: Springer Verlag; 2019. p. 843-60.
- 28. Lincoln YS, Guba EG. Naturalistic inquiry. Newberry Park, CA: Sage; 1985.
- 29. Prior D. Decolonising research: a shift toward reconciliation. Nurs Inq. 2007;14(2):162-8.
- 30. Abbott P, Gordon E, Davison J. Expanding roles of Aboriginal health workers in the primary care setting: seeking recognition. Contemp Nurse. 2008;27(2):157-64.
- 31. Taylor KP, Thompson SC, Smith JS, Dimer L, Ali M, Wood MM. Exploring the impact of an Aboriginal health worker on hospitalised Aboriginal experiences: lessons from cardiology. Aust Health Rev. 2009;33(4):549-57.
- 32. Davy C, Cass A, Brady J, DeVries J, Fewquandie B, Ingram S, et al. Facilitating engagement through strong relationships between primary healthcare and Aboriginal and Torres Strait Islander peoples. Aust N Z J Public Health. 2016;40(6):535-41.
- 33. Kong AC, Ramjan L, Sousa MS, Gwynne K, Goulding J, Jones N, et al. The oral health of Indigenous pregnant women: a mixed-methods systematic review. Women Birth. 2019.
- 34. Musa D, Schulz R, Harris R, Silverman M, Thomas SB. Trust in the health care system and the use of preventive health services by older black and white adults. Am J Public Health. 2009;99(7):1293-9.
- 35. Whetten K, Whetten R, Leserman J, Ostermann J, Thielman N, Swartz M, et al. Exploring lack of trust in care providers and the government as a barrier to health service use. Am J Public Health. 2006;96(4):716-21.
- 36. Watson I. Aboriginality and the violence of colonialism. Borderlands E-journal. 2009;8(1):1-8.

- 37. Atkinson J. Trauma trails, recreating song lines: The transgenerational effects of trauma in Indigenous Australia: Spinifex Press; 2002.
- 38. Herring S, Spangaro J, Lauw M, McNamara L. The intersection of trauma, racism, and cultural competence in effective work with Aboriginal people: waiting for trust. Australian Social Work. 2013;66(1):104-17.
- 39. Goodman A, Fleming K, Markwick N, Morrison T, Lagimodiere L, Kerr T, et al. "They treated me like crap and I know it was because I was Native": the healthcare experiences of Aboriginal peoples living in Vancouver's inner city. Soc Sci Med. 2017;178:87-94.
- 40. Browne AJ, Fiske J-A. First Nations women's encounters with mainstream health care services. West J Nurs Res. 2001;23(2):126-47.
- 41. Butten K, Johnson NW, Hall KK, Toombs M, King N, O'Grady K-AF. Impact of oral health on Australian urban Aboriginal and Torres Strait Islander families: a qualitative study. Int J Equity Health. 2019;18(1):34-.
- 42. Haggerty JL, Reid RJ, Freeman GK, Starfield BH, Adair CE, McKendry R. Continuity of care: a multidisciplinary review. BMJ. 2003;327(7425):1219-21.
- 43. Waibel S, Henao D, Aller M-B, Vargas I, Vázquez M-L. What do we know about patients' perceptions of continuity of care? a meta-synthesis of qualitative studies. Int J Qual Health Care. 2011;24(1):39-48.
- 44. Bennett B, Zubrzycki J. Hearing the stories of Australian Aboriginal and Torres Strait Islander social workers: challenging and educating the system. Australian Social Work. 2003;56(1):61-70.
- 45. Roche AM, Duraisingam V, Trifonoff A, Battams S, Freeman T, Tovell A, et al. Sharing stories: Indigenous alcohol and other drug workers' well-being, stress and burnout. Drug Alcohol Rev. 2013;32(5):527-35.
- 46. Department of Health. The Australian health system [Internet]. Department of Health; 2019; cited 2019 Dec 12. Available from: https://www.health.gov.au/about-us/the-australian-health-system.
- 47. National Health Service. Are pregnant women entitled to free NHS dental treatment? [Internet]. NHS; 2019; cited 2019 Dec 12. Available from: https://www.nhs.uk/common-health-questions/pregnancy/are-pregnant-women-entitled-to-free-nhs-dental-treatment/.
- 48. George A, Dahlen HG, Blinkhorn A, Ajwani S, Bhole S, Ellis S, et al. Evaluation of a midwifery initiated oral health-dental service program to improve oral health and birth outcomes for pregnant women: A multi-centre randomised controlled trial. Int J Nurs Stud. 2018;82:49-57.
- 49. George A, Sousa MS, Kong AC, Blinkhorn A, Patterson Norrie T, Foster J, et al. Effectiveness of preventive dental programs offered to mothers by non-dental professionals to control early childhood dental caries: a review. BMC Oral Health. 2019;19(1):172.
- 50. Dimitropoulos Y, Gunasekera H, Blinkhorn A, Byun R, Binge N, Gwynne K, et al. A collaboration with local Aboriginal communities in rural New South Wales, Australia to determine the oral health needs of their children and develop a community-owned oral health promotion program. Rural Remote Health. 2018;18(2):4453.

- 51. Dimitropoulos Y, Holden A, Gwynne K, Irving M, Binge N, Blinkhorn A. An assessment of strategies to control dental caries in Aboriginal children living in rural and remote communities in New South Wales, Australia. BMC Oral Health. 2018;18(1):177.
- 52. Irving M, Gwynne K, Angell B, Tennant M, Blinkhorn A. Client perspectives on an Aboriginal community led oral health service in rural Australia. Aust J Rural Health. 2017;25(3):163-8.
- 53. Barnett L, Kendall E. Culturally appropriate methods for enhancing the participation of Aboriginal Australians in health-promoting programs. Health Promot J Austr. 2011;22(1):27-32.

Appendix

Glossary: Terminology and definitions *Terminology*Indigenous peoples Definition Referring collectively to all distinctive peoples

margements peoples	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	worldwide who identify as being descendants of
·	the first peoples or custodians of a specific region.
Aboriginal and/or Torres Strait Islander	Referring specifically to the multitude of distinct
peoples/Australians	peoples and nations who were the first peoples
	and custodians to own the land in Australia.
Colonisation	During the 1700s, British government recognised
	Australia to be <i>terra nullius</i> (a Latin word
	referring to a <i>land belonging to nobody</i>), providing
	a legal basis to unilaterally dispossess the land
	from the existing landowners. Colonisation refers
	to the process in which the British government
	began to settle and occupy the land.
Elders	Elders in Aboriginal communities, not to be
Littors	confused with elderly people, are highly respected
	and recognised by the community as persons
	gifted with knowledge and wisdom to provide
	leadership, education, spiritual guidance and
	healing for the community.[43, 44]
Stolen Generations	<u> </u>
Stolen Generations	The Australian government's policy of assimilation
	(1937-1973) aimed to remove all other cultures
	and languages practised by Aboriginal and Torres
	Strait Islander peoples. This policy led to the
	forcible removal of many Aboriginal and Torres
	Strait Islander children from their parents to
	assimilate into Western society. The children who
	were removed from their families are known as the
	'Stolen Generations'.
Intergenerational trauma	Trauma refers to a person's response to an
	overwhelming event that leaves a person unable to
	cope with the experience. British colonisation and
	the subsequent Australian policies dispossessed
	many Aboriginal and Torres Strait Islander
	Australians from culture, land, language, kinship
	group and identity. For some people, the trauma
	from colonisation has been passed down from
	older to younger generations in the form of mental
	health problems, violence, parenting practices and
	behavioural problems.
Confirmation of Aboriginality	Certain organisations may request people to
	provide a 'Confirmation of Aboriginality' to access
	Aboriginal-specific services or programs. To
	acquire these documents will require the applicant
	to meet the criteria of being and identifying as
	Aboriginal or Torres Strait Islander descent and
	being accepted as such in the community in which
	a person lives or previously resided. Applications
	for the confirmation are typically reviewed by a
	registered Aboriginal community organisation,
	which will also issue the documentation.
Chama	
Shame	While the English word 'shame' is typically used to
	refer to feelings of humiliation caused by doing
	something wrong, the AHWs in this study and
	Aboriginal peoples more broadly, appropriate this

ACCHS (Aboriginal community-controlled health service) /AMS (Aboriginal medical service)	word to encompass feelings associated with a fear of disapproval or judgement, shyness, embarrassment, a lack of respect and breaches of cultural and social norms. A non-government primary health care service that is initiated by, based in, and provides health services and programs for the local Aboriginal community. Health services and programs that are delivered through ACCHSs and AMSs focus on providing holistic and culturally competent health care.
Decolonisation	Decolonisation refers to the process of undoing colonialism. While this can refer to the dismantling of colonial empires, existing cultures, practices, systems, attitudes and policies continue to perpetuate the philosophies underpinning colonialism. Decolonisation in this context is the process undertaken by systems and individuals to challenge dominant perspectives and restore Indigenous knowledges, cultures and ways.
Cultural safety	Where both healthcare providers and healthcare systems reflect on the impact of personal assumptions, biases, attitudes and prejudices on the quality of healthcare that is delivered to people. Cultural safety acknowledges that these perspectives arise from the individual's cultural or social values. However, cultural safety also involves a process of self-reflection and awareness of these perspectives so that healthcare providers and organisations can address these assumptions and biases, and progress towards equity in the healthcare setting.