Self-determination in programmes of perinatal health for Aboriginal Communities: A systematic review

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Abstract

Objective: The importance of self-determination in restoring the wellbeing of Australian First Nations peoples is becoming understood. For thousands of years, Aboriginal women gave birth on Country and Grandmothers' Lore and Women's Business facilitated the survival of the oldest living civilisations on earth. Following colonisation, however, Aboriginal and Torres Strait Islander practices of maternal and perinatal care were actively dismantled, and self-determination by Aboriginal people was destroyed. This had significant implications for the wellbeing of Aboriginal and Torres Strait Islander people and their Cultures and practices.

Methods: A Preferred Reporting Items for Systematic Reviews and Meta-Analyses–based systematic review of research about programmes of birthing and perinatal health care for Australian Aboriginal and Torres Strait Islander women and their children was undertaken. The review's primary aim was to assess the Cultural context of programme development and delivery, its secondary aim was to assess the Cultural appropriateness of programme components. Electronic databases SCOPUS, PsycINFO, Medline, and CINAHL were searched for peer-reviewed studies published in English in Australia between 2000 and 2023.

Results: Twenty-eight publications met inclusion criteria. Included studies were assessed for their methodological characteristics, birthing-support characteristics, perinatal care and continuity of care characteristics. Overall, programmes were limited in meeting the Cultural needs of women, children, and individual Communities. The role of Aboriginal Communities in identifying, delivering, and reviewing programmes was also limited.

Conclusions: Findings articulate the importance of self-determination in maintaining strong Indigenous Cultures and informing the Culturally appropriate development and delivery of Culturally safe programmes of perinatal care for Aboriginal women, children, and Communities.

Implications for Public Health: Programmes and services for use by Aboriginal and Torres Strait Islander people must involve Aboriginal and Torres Strait Islander people and their Communities in processes of programme planning, delivery, and review. The evaluation of a programme or service as "Culturally safe" represents a determination that is most appropriately made by service users based on their experience of that programme or service.

Key words: Aboriginal, Torres Strait Islander, First Nations, Indigenous Australian, perinatal

The authors of this review recognise that Aboriginal and Torres Strait Islander Communities each have their own separate Cultures, beliefs, histories, and values. In this review, the term 'Aboriginal' will be used when referring generally to the Aboriginal population, and the terms 'Aboriginal and Torres Strait Islander' or 'Indigenous Australians' will be used when referring specifically to research involving both Aboriginal and Torres Strait Islander people. In addition, when writing within Australian contexts, it is becoming increasingly important to note the Cultural positioning of the researchers and identify Indigenous-led research (Phillips et al., 2007). Three of the authors of this paper identify as Aboriginal and bring Cultural knowledge and lived experience to the research topic. Beadman is Wonnarua Wodi Wodi; Gray & Sherwood are both Wiradjuri. The fourth author, McAloon, is Pakeha from Aotearoa New Zealand.

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For over 60,000 years, Aboriginal women gave birth on Country.[1] This practice was governed by Cultural knowledges, particularly adherence to Grandmothers' Lore and Women's Business that developed in response to the unique characteristics of Aboriginal nations and people.[2] Historically, Cultural knowledges, Aboriginal ways of knowing, doing, and being, and self-determination have been undermined by colonisation.[3] The imposition of Western knowledge has been characterised by Culturally unsafe and discriminatory models of care.[3–5] This has had devastating effects on language, Cultural knowledges, and connection to Country by significantly disrupting the social and emotional health and wellbeing of Aboriginal peoples.[6]

Cultural knowledge has not been lost, however. In particular, Birthing on Country (BOC) and the care of children are central to the wellbeing of Aboriginal and Torres Strait Islander Australians.[7] It is critical now, more than ever, to develop services in these areas based on self-determination, driven by Community, and characterised by Cultural knowledge and processes.[8,9] This study will extend current knowledge by identifying and evaluating current models of Community-delivered Aboriginal perinatal health care in Australia published in the 21st century. The review will examine the Cultural context in which programmes of perinatal care for Aboriginal mothers and their children are developed and delivered. The review will also assess content characteristics of those programmes to evaluate their Cultural appropriateness for the Community for whom they are intended.

Birthing support and Birthing on Country

For millennia, BOC was central in birthing practices and was therefore integral in maintaining Aboriginal and Torres Strait Islander existence.[9] Determined and maintained by Grandmothers' Lore (sometimes referred to as Grandmothers' Law) and Women's Business,[2] BOC was an essential and central practice expressed in distinctive ways across different Communities. Aboriginal women gave birth on the Country they were born on, on the Country of their people, and within the lore of their Community.[1,10] The transference of knowledge and practices related to BOC would typically be passed on through the experience of the birthing process and support provided through yarning, weaving, and other Cultural practices.[9,11]

"Our Elders teach us "We are this Country", Country is us, we are Country. We breathe Country, we drink Country, we eat Country, we live Country. Country is everything; without Country, there is not life. So we sing Country, we dance Country, we care for Country, we re-energise Country. In so doing, through giving "thanks" we also re-energise ourselves and everything in existence" ([12], p 384).

Colonisation devastated Aboriginal Communities.[13] BOC practices and the transference of Aboriginal knowledge associated with perinatal health care were actively dismantled through policies that devastated family relationships, severed the relationship between children, Country, and Community, and established assimilation of race.[6] Aboriginal and Torres Strait Islander people previously maintained their peoples' Cultures, relationships to Country, familial and social structures, and responsibilities. However, these were profoundly affected by inhibiting BOC.

Despite this, Cultural knowledge about birthing has remained, and Aboriginal Communities are reasserting their Cultures and knowledges.[10] In 2012, a National BOC workshop in Alice Springs fostered the development of the "Birthing on Noongar Boojar Project", in which current birthing knowledge and experiences of Noongar women were documented. In addition, the implications of Aboriginal women's experience for the development of Culturally safe models of maternity care were documented.[10] In 2019, the Council of Australian Governments Health Council endorsed the development of models of maternity care, in partnership with Aboriginal Communities and characterised by Culturally safe, evidence-based BOC principles.[14] BOC, as other Cultural practices, is characterised by Aboriginal ways of knowing, being, and doing, and these will be maintained to the extent that their practice is supported.[3] Unfortunately, there is little evidence about the extent to which birthing support is driven by Aboriginal or Community knowledge as distinct from western-based to professional knowledge.

The imposition of Western models of perinatal health

Birthing and perinatal health outcomes are far poorer for Aboriginal women than for non-Aboriginal women in Australia.[15,16] Aboriginal women are three times more likely to die in childbirth than non-Aboriginal women, and Aboriginal children are twice as likely to die in the first year of their lives.[17] Aboriginal women are 10 times less likely to attend antenatal and perinatal care clinics and three times more likely to attend their initial antenatal booking much later than recommended in pregnancy.[4] Furthermore, Aboriginal mothers are more likely to be adolescents than non-Aboriginal Australians.[18] These characteristics of health outcomes continue to raise significant concerns about the appropriateness of Western perinatal health approaches in engaging Aboriginal women in perinatal services and in their ensuring the social and emotional well-being and that of their children.[19]

For Aboriginal mothers who live in rural or remote areas, access to perinatal health services is often limited.[9] This is especially so when complications occur in pregnancy, women living in remote places may require travel over considerable distances, taking them away from their Community, family, and support networks. The loss of autonomy for an Aboriginal woman within a Western model of perinatal care can represent 'another' traumatic experience.[20] Significant reductions in the provision of rural and remote maternity services[21] and the centralisation of existing services[22] expose Aboriginal women to perinatal services that are geographically removed from their Communities and offer Culturally unsafe and therefore discriminatory care.[7] Western models of perinatal care have not been developed to provide wrap-around care for Aboriginal birthing mothers who require additional support from midwives.[10] Despite many state and federal government initiatives to improve birth and health outcomes for Aboriginal women, evidence to date suggests that most are not Community-informed or Community-led.[23] This review will assist in better understanding the extent to which current programmes and services, provided for Aboriginal and Torres Strait Islander women and their children in Australia in the twenty-first

century, align with Community needs and evidence Culturally appropriate practices.

Self-determination

"Self-determination is the right of all peoples to 'freely determine their political status and freely pursue their economic, social, and cultural development'.[24] The capacity for self-determination by Aboriginal people has been systematically dismantled since colonisation[3,5]; however, when returned, "Each Aboriginal Community will define its own problems and solutions" ([25], p15). Policies of assimilation legislated the removal of Aboriginal children.[2] Aboriginal girls were removed from exposure to Culture, Women's Business, access to Grandmothers' Lore, and BOC practices, which took away their opportunity to learn Aboriginal ways and disrupted their connection to their Culture. Removing connection to Culture provides an impediment to self-determination.[26] In 1972, the Commonwealth Government of Australia ended practices of assimilation and formally enacted policies of self-determination. Doubt must remain that this change in policy was shared consistently across Commonwealth Government Departments, and recent history suggests it was not shared across Australian society.[27]

Reclaiming Cultural identity, Community empowerment, and truth-telling about colonisation are integral to consolidating social and emotional well-being and facilitating Aboriginal people's self-determination.[28] The historical, political, Cultural, and social determinants of health need to be conceded to decrease the existing health inequities between Aboriginal and non-Aboriginal Australians. Western health frameworks differ considerably from Aboriginal understandings[29]: to an Aboriginal person, the concept of health may encompass the expressions of self in Culture, Community, family and kinship, Country and land, spirituality and ancestors, body and behaviours, mind, and emotions. Dissonance in any of these internal connections will result in persistent ill-health for an Aboriginal person (Dudgeon et al., 2019).

Historically, health-related services have been provided to Aboriginal and Torres Strait Islander people consistent with western models of care and practices of colonisation.[11] Thus, culturally unequal relationships between service user and service provider have been maintained, and Aboriginal disadvantage is therefore endorsed within those systems.[28] To be appropriate and effective, health services must recognise the diversity of Aboriginal Cultures. Furthermore, locating the development and delivery of those services within First Nations Communities is key to upholding the right to self-determination and Cultural safety that can result (Dudgeon et al., 2019). Where the nature of specific health services allows, and where established within Culture, the need to return control of Aboriginal and Torres Strait Islander's well-being to Community is a necessity. True investment in Community-initiated frameworks and programmes is necessary in eliminating notions of protectionism and systemic racism and in increasing help-seeking behaviour from Aboriginal peoples.[28] Despite this knowledge, we currently know little about processes of self-determination in the development and delivery of birthing and perinatal care for First Nations Australians.

Grandmothers' Lore

For Aboriginal and Torres Strait Islander people, reproduction-related matters are Women's Business,[30] and Women's Business and Grandmothers' Lore reinforce BOC principles and practices.[31] Grandmothers' Lore articulates Culturally specific ways to care for Aboriginal women through pregnancy and birth.[32] Aboriginal Grandmothers, Aunties, and senior females assume significant social standing in Communities, given their knowledges and experiences and their importance to the lives of pregnant women in Aboriginal Communities.[33] Collectively, this knowledge equips senior women in the Community to assist younger women during pregnancy, childbirth, and throughout perinatal care.

Western models of perinatal care infringed on Aboriginal Women's Business and Grandmothers' Lore because they disturbed the relationship between women and their Cultural positions as caretakers.[34] This severely and detrimentally affected Aboriginal woman's emotional well-being because it resulted in violations of Culturally determined care. The imposition of Western models of perinatal care on Aboriginal women results in Cultural 'shame'.[4,28,32,35] Cultural knowledge, status, and lore were rendered inconsequential, as were Culturally determined practices that had maintained health and wellbeing over time. Clarity about the role of Culturally based practices such as Women's Business and Grandmothers' Lore in current programmes and services is essential in informing the future development of programmes and services of perinatal care for Aboriginal and Torres Strait Islander women.

The current review

The current review is undertaken at an important time in Australian history. The failure to support constitutional change to provide Aboriginal and Torres Strait Islander people with a voice to parliament has significant implications for the potential for self-determination for First Nations Australians. In turn, the potential for the country and its policy makers to allow individual Communities to manage their own opportunities and challenges, and especially establish programmes of Culturally safe care for Aboriginal mothers and their children, is unclear. This study undertook a systematic review of programmes of perinatal care for Aboriginal and Torres Strait Islander women and their children in an effort to identify and evaluate current models of Community-delivered Aboriginal perinatal health care in Australia. The review's primary aim was to assess the Cultural context of programme development and delivery. The review's secondary aim was to assess characteristics of programmes to evaluate the Cultural appropriateness of their content.

Methodology

Protocol and registration

This systematic review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines for reporting reviews[36]. The protocol was registered with the International Prospective Register of Systematic Reviews (CRD42022381546) and subsequently refined to focus exclusively on perinatal health programmes developed for Aboriginal women per the procedures defined in the Cochrane Handbook for systematic reviews.[37]

Inclusion/eligibility criteria

Included studies documented the engagement of Australian Aboriginal women and their children (antenatal to five years old) in

perinatal health care that evaluated or assessed pregnancy care, birthing, maternal, and/or postnatal care for mother or child. Included studies provided an account of an Aboriginal Community–developed/–delivered model, programme or service of perinatal health care, or have contributed to knowledge in this area in a substantive way. This may include information about programme/service development or delivery, identification of programme/service enablers and barriers, funding and support, or an understanding of participant needs and Cultural characteristics of a programme or service. The review identified studies published in English or Aboriginal languages during the twenty-first century. Studies were excluded if they did not evaluate care for an Aboriginal Community or population, included models of care that were developed in countries other than Australia, undertook reviews of existing or proposed research, or included models of care that did not address the perinatal health care of Aboriginal women and their children.

Outcomes

Assessed outcomes included source of programme funding; the role of Community in programme approval, development, delivery, and review; the provision of birthing support from Community, Aboriginal and professional sources; care and continuity of care; the contribution for Grandmothers' Lore and Women's Business; and the model of care provided.

Study design

Peer-reviewed studies evaluating programmes of perinatal care for Aboriginal and Torres Strait Islander women published in English or in Aboriginal languages in Australia between 2000 and 2023 were eligible for inclusion in the review. Reports, outcome studies, service reviews, and service evaluations were not included in the review.

Search strategy

An electronic search of the databases SCOPUS, PsycINFO, Medline, and CINAHL was completed on 23 November 2023. The search was limited to studies published between 2000 and 2023. Databases were searched using title and abstract searches adjusted for the requirements of specific journals. The search terms used in the current study are presented in Table 1, construct keywords were included with construct terms in multifield searches.

Table 1: Construct keyword and construct terms used in the current review.

Search terms	
Construct keyword	**Construct terms**
Aboriginal	Aboriginal OR "Torres Strait Islander" OR Indigenous Australians
AND	
Perinatal mental health	Perinatal OR Antenatal OR Antepartum OR Pregnant OR Pregnancy OR Childbearing OR Pre-Natal
AND	
Australia	Australia OR Australian OR Australians

Assessment of methodological quality

To assess the quality of included studies, we undertook separate analyses for quantitative and qualitative studies. We utilised the Effective Public Health Practice Project (EPHPP[38]) to assess the quality of quantitative studies and the Critical Appraisal Skills Program[39] to assess qualitative studies. For quantitative studies, ratings of weak, moderate, or strong were applied in response to components analysis involving selection bias, study design, confounders, blinding, data collection methods, and attrition. Evaluation of intervention integrity and analyses were guided by the EPHPP dictionary. For qualitative studies, ratings of yes, no, or unclear preceded total-score ratings of moderate, strong, or weak.[39] These tools have been used in previous research in the area of perinatal health.[40] Where quantitative and qualitative methods were utilised in the same study, the predominant methodology determined whether the study was assessed as qualitative or quantitative.

Results

Data extraction

Relevant data from the included studies were recorded in a data extraction table developed for this review. Extraction was undertaken by author KB. The following information was extracted from the included studies: key study details (author, year), study characteristics (funding, location, Community role in assessment, Community role in development, Community approval, Community role in programme administration, Community review of programme), birthing-support characteristics (Aboriginal, Community, Professional), care and continuity of care, Women's/Grandmothers' Lore), and model of care characteristics.

Data synthesis

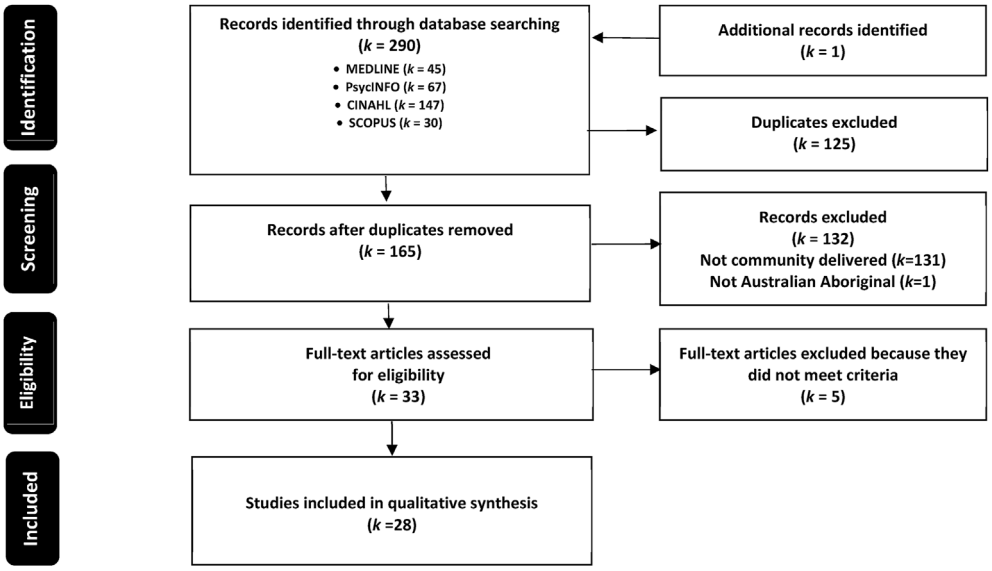
The current review extracted narrative data and synthesised it in narrative terms and tabular form. Meta-analytic approaches were judged as being of limited use, given the largely qualitative nature of the data presented in the included studies. Thus, quantitative analysis was not undertaken.

Results

Study selection

Two of the authors (KB and JM) were involved in study selection. A total of $k = 290$ records were identified through database searches and additional means; however, $k = 125$ of these were removed as duplicates, and a further $k = 165$ studies were reviewed by title and abstract. Of these, $k = 132$ were removed because they fell outside criteria, and $k = 35$ studies remained for review at full text. Of these, $k = 28$ studies were assessed as meeting inclusion criteria. Inter-rater reliability was estimated at 91% (Cohen's Kappa $k = 82$[41]). Any disagreements in the final study selection were resolved through discussion. Figure 1 presents a Preferred Reporting Items for Systematic Reviews and Meta-Analyses flow chart of the study selection process. Included studies utilised qualitative, quantitative, or mixed-methods designs. The studies varied in significant ways, however, and these differences are synthesised in narrative terms in Table 2.

Figure 1: Preferred Reporting Items for Systematic Reviews and Meta-Analyses flow chart of the study selection process



The Cultural context of programme development and delivery

Source of funding

Of the $k = 28$ retained studies, $k = 22$ (79%) had funding from a single source, $k = 4$ (15%) had funding from two or more sources, and $k = 2$ studies (7%) did not report a funding source. The NHMRC was involved in funding $k = 10$ (36%) studies, and universities were involved in funding k=4 (15%) studies. Aboriginal bodies, branches, and organisations, including the AHMRC, were involved in funding $k = 5$ (18.5%) studies, and hospitals, health services, and departments of nursing were involved in funding $k = 8$ (30%) studies.

Location of programme development

Of the included studies, $k = 28$ (100%) were undertaken in Australia. Of those, $k = 7$ (26%) were undertaken in Queensland, $k = 4$ (14%) were undertaken in Victoria, $k = 4$ (15%) were undertaken in New South Wales, $k = 5$ (19%) were undertaken in Western Australia, $k = 2$ (7%) were undertaken in the Australian Capital Territory (ACT), $k = 3$ (11%) were undertaken in the Northern Territory, $k = 1$ (3%) were undertaken in South Australia, and $k = 1$ (3%) was undertaken in remote areas of Australia that were not identified. One study (3%) was undertaken across Australia, New Zealand, and Canada.

Community

Programmes were evaluated on the basis of Community assessment, development, approval, administration, and review. Of the included programmes, $k = 10$ (36%) reported utilising Community-informed assessment of the programme, and $k = 1$ (3%) did not report on this. Community involvement in programme development was reported on by $k = 27$ studies, $k = 2$ (7%) reported Community involvement in programme development, and $k = 1$ did not report on this. Community involvement in a process of approval for the use of the programme was reported on by $k = 27$ studies, $k = 6$ (21%) of which reported involvement, and $k = 1$ (3%) did not report on it. Community administration of programme assessment was reported on by $k = 2$ (7%) of included studies, with $k = 1$ (3%) reporting on qualitative assessment only and $k = 1$ (3%) study not reporting on it. Community involvement in programme review was reported on by $k = 13$ (46%) of programmes, with $k = 3$ (11%) studies reporting partial or qualified involvement, and $k = 2$ (7%) did not report on review processes.

The Cultural appropriateness of programme content

Birthing Support

Birthing Support was evaluated on the basis of the forms of support offered to women and their children. This included support offered by Aboriginal, Community, or professional people or services. Birthing supports provided by Aboriginal people were documented in $k = 22$ (78%) of the included studies. Of these, $k = 8$ (28%) reported the inclusion of Aboriginal health workers, $k = 6$ (22%) reported the inclusion of Aboriginal Liaison Officers, and $k = 4$ (15%) reported the inclusion of Grandmother/other female family members, or researchers. Community-driven birthing supports were documented in $k = 14$ (50%) of the included studies. Aboriginal Health Organisations or services were documented in $k = 10$ (36%) of studies, and $k = 4$ (15%) documented Grandmother- or family-based supports. Remaining studies reported midwifery services ($k = 4$, 14%), medical services ($k = 2$, 7%), and $k = 1$ (4%) a research-based support. Birthing support services provided by professionals were reported in $k = 22$ (79%) of the included studies. The provision of midwifery services was reported in $k = 19$ (68%) of the studies, nursing services were provided in $k = 6$ (22%) of studies, and $k = 5$ (18%) reported research or administrative services. Four studies (14%) each reported contributions from doctors, Aboriginal Health Workers, or allied health workers, and one study (4%) reported contributions form child protection services, obstetricians, or social workers.

Continuity of care

The assessment of continuity of care was undertaken in three ways. Included studies were evaluated based on the time at which care was reported as having been initiated for women; the time over which Aboriginal women could develop relationships with the same

Table 2: Characteristics of the included studies.

Author/ date	Source of funding	Development location	Assessment informed by Community	Community-developed	Community-approved	Assessment administered by Community	Community-reviewed	Birthing support: Aboriginal Community Profession	Care and continuity of care	Grandmother's Lore or Women's Business	Model of care
42	NR	Yurralumla ACT	Yes	No	No	No	No	A: Researcher C: ACCHS, AMSW, CM, CPS, HR P: CPS	C: NR CC: NR TI: RAS	NR	HR, SER
43	Federal Govt.	Perth WA	Steering Committee	No	Steering Committee	No	Yes	A: AHW, Grandmothers C: Grandmothers P: Midwifery	C: NR CC: RAS TI: NR	Yes	HR, SER
44	Royal Darwin Hospital	Darwin NT	No	No	No	No	No	A: ALO's C: ACCHO, Grandmothers P: Midwifery, AHW	C: RAS CC: NR TI: NR	RAS	HR and SER RAS
45	NHMRC	SA	No	No	No	No	No	A: MIH, Research Interviewers C: NR P: NR	C:First trimester CC: 5+ weeks TI: NR	NR	No
46	Mildura Aboriginal Health Service & La Trobe University	Victoria	No	No	No	Yes Aboriginal Researcher	NR	A: Researcher C: NR P: NR	C: Pre-natal WBS CC: Hospital/ Community first few days at home. Unknown if the same midwife TI: NR	NR	HR
12	Western Sydney University	Orange NSW	Yes	Yes	Yes	Yes	Yes	A: Mother C: NR P: Midwifery	C: Presentation CC: Birth TI: RAS	Yes	TI, SER
47	James Cook University	Mt. Isa QLD	No	No	No	No	No	A: NR C: NR P: NR	C: NR CC: NR TI: NR	NR	HR
48	NHMRC	Victoria	No	No	No	No	No	A: AHW C: Community Controlled Services P: Nurses, Managers, Doctors, Midwifery	C: NR CC: RAS TI: RAS	NR	HR
49	The Poche Centre for Indigenous Health, The University of Sydney	Sydney NSW	No	No	No	No	No	A: AHW, Admin. Officer. C: La Perouse CHC, Midwifery, Paediatrician P: Midwifery, SW, FHN, OBs.	C: Pre-postnatal CC: Wrap around care, 4 Midwives CC maintained if possible. TI: RAS	NR	TI, HR
50	Beyond Blue	Townsville QLD	Community Focus Group	No	Community Focus Group	No	Community Focus Group	A: NR C: NR P: NR	C: NR CC: NR TI: NR	NR	NR
51	NHMRC	Brisbane QLD	No	No	No	No	No it was partnership staff	A: Maternal and Infant workers, ALO's, C:ACCHO P: Midwifery	C: First presentation of pregnancy CC: NR TI: NR	NR	HR

(continued)

TABLE 2. Continued

Author/ date	Source of funding	Development location	Assessment informed by Community	Community-developed	Community-approved	Assessment administered by Community	Community-reviewed	Birthing support: Aboriginal Community Profession	Care and continuity of care	Grandmother's Lore or Women's Business	Model of care
52	Aust. College of Midwives	Australia New Zealand Canada	No	No	No	No	Yes	A: Researchers C: NR P: Researchers	C: RAS CC: RAS TI: NR	RAS	SER
53	AHMRC	Sydney NSW	Aboriginal Evaluation Group	No	Aboriginal Evaluation Group	No	Yes	A: ALO, AHW C: Evaluation Group P: Midwifery, AH	C: <20 weeks CC: 6 weeks likely to have same midwife TI: NR	NR	HR
33	NHMRC	Rural and remote areas of Australia	No	No	No	No	No	A: AHW C: NR P: Midwifery, Nurse	C: Year before birth CC: Year after birth TI: NR	Yes	HR, SER
34	Mater Medical Institute	Brisbane QLD	Reference Group including Aboriginal/ Non-Aboriginal	No	No	No	Yes	A: Research Assistant C: NR P: Midwifery	C: First trimester CC: 6 weeks perinatal unlikely to have the same midwife TI: NR	NR	HR
31	NHMRC, The Mater Ltd, Urban Indigenous Health ATSI CHS Brisbane	Brisbane QLD	Yes	No	No	No	Yes	A: 2 Student Midwives C: Steering Committee P: Midwifery, MH.	C: 14 weeks antenatal same midwife (if possible) CC; 6 weeks post-natal TI: NR	RAS	HR, SER
8	NHMRC	NT	No	No	No	No	Yes	A: ALO, AHW, Family. C: NR P: NR	C: NR CC: RAS TI: RAS	RAS	TI, SER
7	NHMRC	Brisbane QLD	No Steering Committee & ACCHO consulted	No Steering committee consulting	No Steering Committee & ACCHO consulted	No quantitative measures only	Steering Committee quantitative results only	A: ALO (Hospital) C: Community Hub with Allied health professionals P: Midwifery, Manager	C: From first presentation 24/7 care CC: 6 weeks post-natal 24/7 care TI: NR	NR	HR
10	NHMRC	WA	No	No	No	No	Yes	A: Birthing Mothers, Grandmothers, Mothers, Daughters, Granddaughters ALO's C: ACCHO P: Midwifery, AH	C: RAS CC: RAS TI: RAS	RAS	TI, SER
54	NHMRC	Victoria	Yes	Yes	Yes	Yes Aboriginal Researcher	No	A: AHLO C: Community Controlled Services P: Midwifery	C: From first presentation 24/7 care CC: pre- and post-natal 24/7 care TI: NR	NR	HR
5	NHMRC	Victoria	No	No	No	No	Yes	A: ALO C: Partner, family or community member P: Midwifery	C: Antenatal CC: 3 months post TI: NR	Yes	SER.

(continued)

TABLE 2. Continued

Author/ date	Source of funding	Development location	Assessment informed by Community	Community-developed	Community-approved	Assessment administered by Community	Community-reviewed	Birthing support: Aboriginal Community Profession	Care and continuity of care	Grandmother's Lore or Women's Business	Model of care
55	Council of Australian Governments National Partnership Agreement,	Perth WA	No	No	No	No	Yes	A: ALO, AMSW C: ACCHS, Curtin Centre P: Midwifery, Nurse	C: From first presentation community visits CC: RAS TI: NR	NR	SER
56	Australian College of Nursing	Goldfields WA	No	No	No	No	No	A: Maternity Support Workers C: NR P: Midwifery	C: NR CC: NR TI: NR	NR	HR
57	DCFS & NSW Health, AMIHS	NSW	No	No	Advisory Group	No	Yes	A: AHW C: NR P: Midwifery	C: Conception CC: 8 weeks perinatal TI: NR	NR	HR
58	Kingaroy Hospital	Kingaroy QLD	No	No	No	No	No	A: NR C: NR P: Doctors, Nurses	C: Antenatal later less often CC: NR TI: NR	NR	HR
18	WA Dept of Health	WA	Advisory Group	No	No	No	Yes	A:AHW C: Grandmothers, Mothers Aunties P: Midwifery, Doctors, SW, Nurses	C: Early CC: RAS TI: NR	NR	HR
59	Aust. Govt Health and Ageing	NT	No	No	No	No	No	A: NR C: NR P: Midwifery, MIH, Research	C: Presentation of Pregnancy CC: 1 year perinatal TI: NR	NR	HR
60	NR	Canberra ACT	No	No	No	No	No	A: NR C: NR P: Midwifery, MH	C: 1st trimester CC: 5 perinatal visits Unlikely same midwife TI: NR	NR	HR

ACT – Australian Capital Territory; AH – Allied Health; AHW – Aboriginal Health Worker; ACCHO – Aboriginal Community– Controlled Health Organisation; ACCHS – Aboriginal Community– Controlled Health Sservices, ALO – Aboriginal Liaison Officer; ASMS – Aboriginal Medical Services; AMSW – Aboriginal Medical Services Worker; CHC: Community Health Centre; CHN – Community Health Nurse; CM – Community Midwife; CPS – Child Protective Services: FHN – Family Health Nurse; FSW: Family Support Worker; HR – Harm Reduction; MH – Mental Health; MIH – Maternal and Infant Health; NR – not reported; NSW – New South Wales; NT– Northern Territory; OBs. – Obstetrician; QLD – Queensland; RAS – recognised as significant; SA– South Australia; SER – social emotionally responsive: SW – Social Worker; TI – Trauma- informed; WA – Western Australia; WBS – Women's Business service.

midwife, a small team of midwives, or known caregivers throughout their antenatal, labour, birth, and perinatal periods; and the extent to which care was trauma informed. The point at which care was initiated was considered by $k = 22$ (81%) of studies, and $k = 8$ (29%) did not report on it. Of those that reported on it, $k = 3$ (11%) regarded it as significant but did not report on a time of first presentation, and $k = 17$ (63%) identified a time of first presentation in some way. For instance, $k = 3$ (11%) of studies specified which trimester presentation occurred in, and $k = 6$ (22%) specified the number of weeks.

There was considerable variability in both reporting method and timeframe. Continuity of care was considered by $k = 23$ (82%) of studies, and $k = 7$ (26%) did not report on it. Of those that did report on it, $k = 7$ (26%) regarded it as significant but did not report on a period over which care should span, and $k = 13$ (46%) identified a period over which care should span. Again, there was considerable variability in both reporting method and timeframe. For instance, $k = 2$ (7%) of studies reported in terms of years, $k = 1$ (3%) reported in terms of months, and $k = 6$ (22%) of studies reported in terms of weeks.

Trauma-informed care acknowledges the historical and intergenerationally transmitted characteristics of trauma may affect individuals and their families as they access services. No programmes considered trauma-informed care alone in responding to the health needs of Aboriginal mothers. Trauma informed care was regarded as a significant target of treatment in $k = 6$ (22%) of studies; however, it was not reported in $k = 22$ (79%) of studies.

Grandmothers' Lore and Women's Business

Studies were assessed for the extent to which they reported on the inclusion of Grandmothers' Lore and/or Women's Business. There was considerable variability in the way Grandmothers' Lore and/or Women's Business were utilised in studies; however, in general terms, $k = 19$ (69%) did not report on Grandmothers' Lore and/or Women's Business, $k = 4$ (15%) did report the inclusion of Grandmothers' Lore and/or Women's Business, and $k = 5$ (19%) regarded Grandmothers' Lore and/or Women's Business as significant to programmes.

Model of Care Characteristics

Models of care were assessed on the basis of the treatment components or characteristics that they identified as warranting inclusion in programmes of perinatal care for Aboriginal women and their children. None of the included studies considered trauma-informed care as a treatment target in its own right when responding to the health needs of Aboriginal mothers. Of those that did consider it, $k = 3$ (11%) of programmes considered trauma informed care in the context of social or emotionally responsive care, and $k = 3$ (11%) considered it in the context of harm reduction. In addition, $k = 14$ (52%) of programmes considered harm reduction on its own, and $k = 3$ (11%) considered social emotional responsive care on its own as significant in responding to the health needs of Aboriginal mothers.

Quality assessment

To assess the quality of included studies, we undertook separate analyses for quantitative and qualitative studies. Table 3 presents EPHPP (2008) quality assessment of quantitative studies, and Table 4 presents the Critical Appraisal Skills Programme[39] quality assessment of qualitative studies. Ratings of weak, moderate, or strong were applied to quantitative studies in response to components analysis involving selection bias, study design, confounders, blinding, data collection methods, and attrition. Of the quantitative studies, $k = 5$ (18%) were rated as strong, $k = 5$ (19%) were rated as moderate, and $k = 1$(4%) was rated as weak. Evaluation of intervention integrity and analyses were guided by the EPHPP dictionary. In rating the quality of qualitative studies, ratings of yes, no, or unclear preceded total-score ratings of moderate, strong, or weak.[39] Of the included qualitative studies, $k = 13$ (48%) were rated as strong, and $k = 5$ (19%) were rated as moderate.

Discussion

This study undertook a systematic review of published studies to identify and evaluate models of Community-delivered Aboriginal and Torres Strait Islander perinatal health care in Australia. Qualitative and quantitative evidence indicated a range of components and characteristics were appropriate to the development and delivery of programmes and services for First Nations Australians. These may be delivered in addition to the programme components currently established for use with non-Indigenous populations, or they may be delivered instead of them. For instance, a focus on Grandmothers' Lore and Women's Business is evident in the research and treatment literature. Furthermore, a significant amount of research has been generated about the benefit that may be derived from re-establishing BOC in both rural and urban locations. This review's primary aim, therefore, was to assess the Cultural context in which perinatal programmes and service were developed and delivered to Aboriginal and Torres Strait Islander women and their children. The review's secondary aim was to assess characteristics of programmes to evaluate their appropriateness for the Community for whom they were intended.

The Cultural context of programme development and delivery

Central to the review was the Cultural context, within which programmes were developed and delivered. The included studies were spread across Australia, with almost a quarter undertaken in Queensland and the remainder undertaken in Western Australia followed by Victoria, New South Wales, NT, Australian Capital Territory, and SA. One of the included studies was undertaken internationally. These characteristics have implications for the extent to which Communities for whom the programmes were intended were involved in assessing, approving, and reviewing them. Multiple determinants of Aboriginal Health need to be addressed in responding to inequities between Aboriginal and non-Aboriginal Australians. Western health frameworks differ considerably from Aboriginal understandings of self/wellbeing by limiting their account of the influence of Culture, Community, family and kinship, Country, spirituality and ancestors, body and behaviours, mind, and emotions.[29]

It is also likely that a person's relationship to these characteristics will be unique, as will their Communities experience, traditions, strengths, and needs.[2] Discord across any of these internal dimensions may result in persistent ill-health for an Aboriginal person (Dudgeon et al., 2019). Thus, the relation between programme and Community is both important and unique, Community-by-Community. In an effort to be appropriately

Table 3: Effective Public Health Practice Project quality assessment of quantitative studies

Publication	Selection bias	Study design	Confounders	Blinding	Data collection methods	Withdrawals and dropouts	Intervention integrity*	Analyses**	Total score
44	Moderate	Strong	Strong	Weak	Strong	Moderate	(Q1) Unclear (Q2) Unclear (Q3) Unclear	(Q1) Individual (Q2) Aggregated (Q3) Yes (Q4) No	Moderate
45	Unclear	Strong	Weak	Weak	Unclear	Not applicable	(Q1) Unclear (Q2) Unclear (Q3) Unclear	(Q1) Individual (Q2) Aggregated (Q3) Yes (Q4) No	Weak
48	Weak	Strong	Unclear	Strong	Strong	Unclear	(Q1) Strong (Q2) Strong (Q3) Unclear	(Q1) Individual (Q2) Aggregated (Q3) Yes (Q4) Unclear	Moderate
49	Strong	Strong	Unclear	Unclear	Strong	Strong	(Q1) Strong (Q2) Strong (Q3) Strong	(Q1) Individual (Q2) Aggregate (Q3) Yes (Q4) Yes	Strong
50	Moderate	Strong	Unclear	Moderate	Strong	Unclear	(Q1) Strong (Q2) Unclear (Q3) Unclear	(Q1) Individual (Q2) Aggregate (Q3) Yes (Q4) No	Moderate
53	Strong	Moderate	Unclear	Unclear	Strong	Unclear	(Q1) Strong (Q2) Unclear (Q3) Unclear	(Q1) Individual (Q2) Aggregate (Q3) Yes (Q4) Yes	Moderate
7	Strong	Strong	Strong	Unclear	Strong	Strong	(Q1) Strong (Q2) Unclear (Q3) Unclear	(Q1) Individual (Q2) Aggregate (Q3) Yes (Q4) No	Strong
5	Unclear	Unclear	Unclear	Unclear	Strong	Unclear	(Q1) Unclear (Q2) Unclear (Q3) Unclear	(Q1) Individual (Q2) Aggregate (Q3) Unclear (Q4) No	Moderate
54	Strong	Strong	Unclear	Weak	Strong	Strong	(Q1) Strong (Q2) Strong (Q3) Strong	(Q1) Individual (Q2) Aggregated (Q3) Yes (Q4) Yes	Strong
58	Strong	Strong	Strong	Strong	Strong	Unclear	(Q1) Strong (Q2) Unclear (Q3) Unclear	(Q1) Individual (Q2) Aggregate (Q3) Yes (Q4) No	Strong
60	Strong	Strong	Unclear	Strong	Strong	Unclear	(Q1) Strong (Q2) Unclear (Q3) Unclear	(Q1) Individual (Q2) Aggregate (Q3) Yes (Q4) No	Strong

informed, development and delivery of programmes and services must involve members of the Community for whom the programme is intended. The capacity for self-determination by Aboriginal people was impacted detrimentally during colonisation and continues today.[3,5] Removing connections to Culture has the potential to limit cultural knowledge and, therefore, capacity for self-determination.[26] Any effort to increase programme and service effectiveness must, at least, involve self-determination.

There are also strong arguments that the administration and review of programmes should remain with Community. The delivery of programmes and services is driven by the outcomes those programmes and services achieve. Without recourse to Community knowledge and characteristics, the collection of meaningful data is limited. In the absence of meaningful outcome data, programme effectiveness cannot be determined. If programmes are to be characterised by, and sensitive to, Cultural knowledge and processes, services must be driven by Community.[8,9] Consistent with Haora et al.,[23] results of the current review indicate a broad range of financial support for programme and service initiatives, the majority were not informed by Community and were not assessed or reviewed by Community.

Table 4: Critical Appraisal Skills Programme quality assessment of qualitative studies

Publication	Clear statement of research?	Qualitative methodology appropriate	Research design appropriate for aims	Recruitment strategy appropriate for aims	Data collection addresses research issue	Relationship between researcher and participant considered	Ethical considerations accounted for	Rigorous data analysis	Clear statement of findings	Research is valuable	Total score
42	Yes	Yes	Yes	Unclear	Yes	No	Unclear	No	No	Yes	Moderate
43	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Strong
46	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Yes	Yes	Yes	Strong
Chamberlain et al., 2019	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Strong
12	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Strong
Felton-Busch et al., 2009	Unclear	Yes	Unclear	Unclear	Yes	Yes	No	Yes	Yes	Yes	Moderate
51	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Strong
52	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Strong
33	Unclear	Yes	Unclear	Unclear	Yes	No	Yes	Unclear	Unclear	Yes	Moderate
34	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Strong
31	Yes	Yes	Unclear	Unclear	Yes	Yes	Unclear	Unclear	Yes	Yes	Moderate
8	Yes	Yes	Yes	Unclear	Yes	Unclear	Yes	Yes	Yes	Yes	Strong
10	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Yes	Yes	Yes	Strong
Munn et al., 2016	Yes	Yes	Yes	Yes	Yes	Unclear	Unclear	Yes	Yes	Yes	Strong
Munns, 2021	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Yes	Yes	Yes	Strong
57	Unclear	Yes	Unclear	Unclear	Yes	No	No	Unclear	Yes	Yes	Moderate
18	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Strong
59	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Yes	Yes	Yes	Strong

The Cultural appropriateness of programme content

Different forms of birthing support identified in the included studies were evaluated based on the extent to which they were provided by Aboriginal, Community, or professional people or services. The inappropriateness of anticipating that Western models of care alone can support Aboriginal and Torres Strait Islander wellbeing appeared evident in the included studies. Overall, included studies showed greater endorsement of Aboriginal birthing supports than non-Aboriginal supports. Aboriginal people provided a range of birthing supports in over two-thirds of included studies; one-third by Aboriginal Health Workers, half that number by Aboriginal Liaison Officers, and slightly less again by Grandmothers or other female family members. Community-driven birthing supports were documented in half of the reviewed studies; one-third by Aboriginal health services and half that number by Grandmother or family-based supports. The number of Community delivered midwifery supports was relatively small at about one in 10. Birthing support services provided by professionals were reported in over two-thirds of the included studies: midwifery services were reported in most of these, and nursing services in about one-fifth. Only three studies reported contributions from doctors, Aboriginal Health Workers, or allied health workers, and one study reported contributions form child protection services or an obstetrician. The need for Aboriginal midwives is clearly articulated in some research (Fleming et al., 2019; [61]); however, the research and caseload midwives who were identified as central to some research and treatment models of care generally worked in collaboration with an Aboriginal Health Worker and/or multidisciplinary teams (e.g. Hartz et a., 2019).

Significant importance was attached to the continuity of perinatal health care across included studies and the form that care took. Over 80% of the included studies described a point at which perinatal care should commence, one-third describing this in terms of trimester or weeks gestation. Over half the included studies reported the period over which care should span, all of which were intent on that care being provided within Community. Importantly, no studies considered trauma-informed care in its own right, either within or outside the context of continuity of care, in responding to the health needs of Aboriginal mothers. Trauma-informed care was regarded as a significant target of treatment in only one-fifth of studies and was not reported in the remainder. Of those that did consider trauma-informed care, it appeared to be considered within the broader context of wellbeing. It was considered in conjunction with harm reduction in approximately one in 10 of the included studies, and in conjunction with social, emotional care in approximately one in 10 of the included studies. On balance, the included studies, and the treatment components they utilised, appeared to acknowledge that perinatal health services must be informed and led by the Community for which they are intended.[23] Within this framework, and in particular situations, however, benefit may also be derived from western models of care. The included studies also appeared to advocate for the broader wellbeing of Community members seeking perinatal care, as opposed to responding to specific or diagnostically based characteristics or concerns.

This review indicates that much is known that can inform the context and content of future programmes perinatal health intended to benefit Aboriginal and Torres Strait Islander women and their children. This knowledge ranges from that which is Culturally specific and unique, and held at the level of Community, to that which is generated within medical and mental health research about limitations that result from providing non-Aboriginal or out-of-Community care to members of Indigenous Communities.

Results of this review demonstrate that when Aboriginal and Torres Strait Islander people are provided with the opportunity to develop services and programmes in the area of perinatal health, a considerable degree of homogeneity is evident in the programme components they prefer. This is true at a population level, where identified supports were predominantly Aboriginal Health Workers, Aboriginal Liaison Officers, and Grandmother or other female family members. At a Comminuty level, there was also strong concordance across Communities about supports that included Aboriginal health organisations and Grandmother or family-based supports. At the level of professional services, significant importance was attached to midwifery services, and this was at a level well above preferences for nursing, medical, allied health or obstetric services.

The review also provided some understanding of limitations of research in the area. For instance, of the 28 studies included in the present review, only one was reported to have been developed by Community, and one other was developed in conjunction with Community. Furthermore, only five studies had some form of Community-based approval, and only one reported having had assessment administered by Community. Together, these findings suggest that self-determination remains evident to a limited extent in Aboriginal perinatal health. This has implications for programme development and delivery and, perhaps most importantly, the process of funding that occurs early in the process of programme development and delivery.

Summary

This study systematically reviewed models of Community-delivered Aboriginal perinatal health care in Australia. Its primary aim was to assess the Cultural context in which programmes and services were developed and delivered, and its secondary aim was to assess characteristics of programmes to evaluate their appropriateness to the Community for which they were intended.

Aboriginal understandings of self and wellbeing vary across Aboriginal and Torres Strait Island Communities and extend western knowledge.[29] Thus, the development of programmes and services must involve the Community for whom the programme is intended. Self-determination by Aboriginal people was dismantled during colonisation and due to limited access to Cultural knowledge and therefore the capacity for self-determination.[26] The delivery of programmes and services is driven by the outcomes those programmes and services achieve and without recourse to Community knowledge and characteristics, the collection of meaningful outcome data is limited. As a result, programme effectiveness and Cultural safety are hard to determine. The evaluation of a programme or service as "Culturally safe" represents a determination that is most appropriately made by service users based on their experience of that programme or service. If programmes are to be characterised by, and sensitive to, Cultural knowledge and processes, services must be driven by Community.[8,9] Results of the current review indicate that despite a broad range of financial support for programme and service initiatives, the majority of programme and service were not informed by Community and were not assessed or reviewed by Community. Programmes and services for use by

Aboriginal and Torres Strait Islander people must involve Aboriginal and Torres Strait Islander people and their Communities in processes of programme planning, delivery, and review.

This review indicates that much is known that can inform the context and content of future programmes on perinatal health for Aboriginal and Torres Strait Islander women and their children. Overall, included studies showed greater endorsement of Aboriginal birthing supports than non-Aboriginal supports. Significant importance was also attached to the continuity of perinatal health care across included studies, and strong support for midwifery services was evident. The review also provided some understanding of limitations of research in the area. Together, findings indicate that self-determination is present to a limited extent in Aboriginal perinatal health. This has implications for programme development and delivery and, perhaps most importantly, the process of allocation of state and federal funding that occurs early in the process of programme development and delivery and is instrumental in facilitating self-determination in Aboriginal perinatal care. Programmes and services for use by Aboriginal and Torres Strait Islander people must involve Aboriginal and Torres Strait Islander people and their Communities in processes of programme planning, delivery, and review. The evaluation of a programme or service as "Culturally safe" represents a determination that is most appropriately made by service users based on their experience of that programme or service.

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Conflicts of interest

The authors have no conflicts of interest to declare.

References

1. Marriott R, Chamberlain C. Change is in the air: reclaiming ancestral wisdom through Birthing on Country in Australia. *Women Birth* 2019;**32**(5):381–2. https://doi.org/10.1016/j.wombi.2019.07.005.
2. Blagg H, Tulich T, Hovane V, Raye D, Worrigal T, May S. *Understanding the role of Law and culture in aboriginal and/or Torres Strait Islander communities in responding to and preventing family violence, ngarluma/jaru/gooniyandi (hovane), kimberley and pilbara region, WA, jabirr jabirr/bardi (raye), dampier peninsula and kimberley region, WA, gooniyandi/gija (worrigal), kimberley region, WA (research report*. Sydney: ANROWS; 2020.
3. Adams K, Faulkhead S, Standfield R, Atkinson P. Challenging the colonisation of birth: koori women's birthing knowledge and practice. *Women Birth* 2018;**31**(2):81–8. https://doi.org/10.1016/j.wombi.2017.07.014.
4. Chamberlain C, Clark Y, Hokke S, Hampton A, Atkinson C, Andrews S. Healing the Past by Nurturing the Future: aboriginal parents' views of what helps support recovery from complex trauma: indigenous health and well-being: targeted primary health care across the life course. *Prim Health Care Res Dev* 2019;**22 2021**. https://doi.org/10.1017/S1463423621000463. *ArtID E47, 22*.
5. McCalman P, McLardie-Hore F, Newton M, McLachlan H, Forster D. Trust, privacy, community, and culture: important elements of maternity care for Aboriginal and Torres Strait Islander women giving birth in Victoria. *Women Birth* 2023;**36**(1):e150–60. https://doi.org/10.1016/j.wombi.2022.06.001.
6. Bringing them home: report of the National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from their Families. *[Commissioner: ronald wilson]*. Sydney: Human Rights and Equal Opportunity Commission; 1997. http://www.austlii.edu.au/au/special/rsjproject/rsjlibrary/hreoc/stolen/.
7. Kildea S, Gao Y, Hickey S, Nelson C, Kruske S, Carson A, et al. Effect of a Birthing on Country service redesign on maternal and neonatal health outcomes for First Nations Australians: a prospective, non-randomised, interventional trial. *Lancet Global Health* 2021;**9**(5):e651–9. https://doi.org/10.1016/s2214-109x(21)00061-9.
8. Kildea S, Hickey S, Barclay L, Kruske S, Nelson C, Sherwood J, et al. Implementing birthing on country services for aboriginal and Torres Strait Islander families: RISE framework. *Women Birth* 2019;**32**(5):466–75. https://doi.org/10.1016/j.wombi.2019.06.013.
9. Ireland S, Roe Y, Moore S, Maypilama EL, Bukulatjpi DY, Bukulatjpi ED, et al. Birthing on Country for the best start in life: returning childbirth services to Yolŋu mothers, babies and communities in North East Arnhem, Northern Territory. *Med J Aust* 2022;**217**:5–8. https://doi.org/10.5694/mja2.51586.
10. Marriott R, Reibel T, Coffin J, Gliddon J, Griffin D, Robinson M, et al. "Our culture, how it is to be us" - listening to Aboriginal women about on Country urban birthing. *Women Birth* 2019;**32**(5):391–403. https://doi.org/10.1016/j.wombi.2019.06.017.
11. Wright A, Gray P, Selkirk B, Hunt C, Wright R. Attachment and the (mis)apprehension of Aboriginal children: epistemic violence in child welfare interventions. *Psychiatr Psychol Law* 2024:1–25. https://doi.org/10.1080/13218719.2023.2280537.
12. Dennis MF, Keedle H. Birthing as country. *Women Birth* 2019;**32**(5):383–90. https://doi.org/10.1016/j.wombi.2019.06.005.
13. Rowley CD. *The destruction of Aboriginal society*. Australian National University Press; 1970.
14. Dahlen HG, Ormsby S, Staines A, Kirk M, Johnson L, Small K, , … Schmied V. A comparison of the Woman-centred care: strategic directions for Australian maternity services (2019) national strategy with other international maternity plans. *Women Birth* 2023;**36**(1):17–29. https://doi.org/10.1016/j.wombi.2022.04.003.
15. Adane AA, Bailey HD, Marriott R, Farrant BM, White SW, Stanley FJ, et al. Disparities between Aboriginal and non-Aboriginal perinatal mortality rates in Western Australia from 1980 to 2015. *Paediatr Perinat Epidemiol* 2019;**33**(6):412–20. https://doi.org/10.1111/ppe.12580.
16. Brown SJ, Gartland D, Weetra D, Leane C, Francis T, Mitchell A, et al. Health care experiences and birth outcomes: results of an Aboriginal birth cohort. *Women Birth* 2019;**32**(5):404–11. https://doi.org/10.1016/j.wombi.2019.05.015.
17. Cousins S. Birthing on Country: improving maternal care in Australia. *Lancet* 2023;**401**(10372):184–5. https://doi.org/10.1016/S0140-6736(23)00089-2.
18. Reibel T, Morrison L, Griffin D, Chapman L, Woods H. Young Aboriginal women's voices on pregnancy care: factors encouraging antenatal engagement. *Women Birth* 2015;**28**(1):47–53. https://doi.org/10.1016/j.wombi.2014.10.003.
19. Australian Institute of Health and Welfare. *Australia's mothers and babies 2017—in brief, Perinatal statistics series no. 35. Cat. no. PER 100. AIHW: canberra.Bambra, C. 2011, Work, worklessness, and the political economy of health*. Oxford: Oxford University Press; 2019.
20. Fiolet R, Woods C, Moana AH, Reilly R, Herrman H, McLachlan H, et al. Community perspectives on delivering trauma-aware and culturally safe perinatal care for Aboriginal and Torres Strait Islander parents. *Women Birth* 2023;**36**(2). https://doi.org/10.1016/j.wombi.2022.07.174.
21. Longman J, Kornelsen J, Pilcher J, Kildea S, Kruske S, Grzybowski S, et al. Maternity services for rural and remote Australia: barriers to operationalising national policy. *Health Pol* 2017 Nov;**121**(11):1161–8. https://doi.org/10.1016/j.healthpol.2017.09.012. 10.1016/j.healthpol.2017.09.012.
22. Rolfe MI, Donoghue DA, Longman JM, Pilcher J, Kildea S, Kruske S, et al. The distribution of maternity services across rural and remote Australia: does it reflect population need? *BMC Health Serv Res* 2017;**17**:163. https://doi.org/10.1186/s12913-017-2084-8. 2017.
23. Haora P, Roe Y, Hickey S, Gao Y, Nelson C, Allen J, et al. Developing and evaluating Birthing on Country services for First Nations Australians: the Building on Our Strengths (BOOSt) prospective mixed methods birth cohort study protocol. *BMC Pregnancy Childbirth* 2023;**23**(1). https://doi.org/10.1186/s12884-022-05277-8.
24. United Nations (General Assembly). International covenant on civil and political rights. *Treaty Series* 1966;**999**:171.
25. Northern Territory Law Reform Committee. *Background paper 1, aboriginal communities and aboriginal Law in the northern territory, Darwin, 2003*. 2003.
26. Dudgeon P, Lazaroo S, Pickett H. Aboriginal girls: self-esteem or self-determination. *Hearts and minds: Self-esteem and the schooling of girls* 1990:71–96. https://doi.org/10.4324/9780203214893.
27. Biddle N, Gray M, McAllister I, Qvortrup M. *Detailed analysis of the 2023 voice to parliament referendum and related social and political attitudes ANU Centre for social research and methods*. 2023.
28. Dudgeon P, Derry KL, Mascall C, Ryder A. *Understanding aboriginal models of selfhood: the national empowerment project's cultural, social, and emotional well-being program in western Australia*. https://doi.org/10.3390/ijerph19074078; 2022.
29. Dudgeon P, Carlin E, Derry K, Alexi J, Mitchell M, Agung-Igusti RP. Evaluating a social and emotional well-being model of service piloted in aboriginal community controlled health services in western Australia: an aboriginal participatory action research approach. *BMJ Open* 2023;**13**(10):e075260. https://doi.org/10.1136/bmjopen-2023-075260.
30. Ireland S, Wulili Narjic C, Belton S, Kildea S. Niyith Nniyith Watmam (the quiet story): exploring the experiences of Aboriginal women who give birth in their remote community. *Midwifery* 2011;**27**(5):634–41. https://doi.org/10.1016/j.midw.2010.05.009.

31. Kildea S, Hickey S, Nelson C, Currie J, Carson A, Reynolds M, et al. Birthing on Country (in Our Community): a case study of engaging stakeholders and developing a best-practice Indigenous maternity service in an urban setting. *Aust Health Rev* 2018;**42**(2):230–8. https://doi.org/10.1071/ah16218.
32. Dudgeon P, Bray A. Indigenous relationality: women, kinship and the Law. *Genealogy* 2019;**3**(2):23. https://doi.org/10.3390/genealogy3020023.
33. Kildea S, Kruske S, Barclay L, Tracy S. ''Closing the Gap'': how maternity services can contribute to reducing poor maternal infant health outcomes for Aboriginal and Torres Strait Islander women. *Rural Rem Health* 2010;**10**(3):1–18. https://www.rrh.org.au/journal/article/1383.
34. Kildea S, Stapleton H, Murphy R, Low NB, Gibbons K. The Murri clinic: a comparative retrospective study of an antenatal clinic developed for Aboriginal and Torres Strait Islander women. *BMC Pregnancy Childbirth* 2012;**12**:159. https://doi.org/10.1186/1471-2393-12-159.
35. Chamberlain C, Gee G, Harfield S, Campbell S, Brennan S, Clark Y, et al. Parenting after a history of childhood maltreatment: a scoping review and map of evidence in the perinatal period. *PLoS ONE* 2019. https://doi.org/10.1371/journal.-pone.0213460. vol. 14, 3). Public Library of Science.
36. Page MJ, Moher D, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. PRISMA 2020 explanation and elaboration: updated guidance and exemplars for reporting systematic reviews. *BMJ* 2021;vol. 372:n160. https://doi:10.1136/bmj.n160.
37. Higgins JPT, Thomas J, Chandler J, Cumpston M, Li T, Page MJ, et al. *Cochrane Handbook for systematic reviews of interventions*. 2nd ed. Chichester (UK): John Wiley & Sons; 2019. 2019.
38. McMaster University. (2008). Effective public health practice quality assessment tool for quantitative studies. 2008, McMaster University School of Nursing, http://www.ephpp.ca/PDF/Quality20Assessment20Tool_2010_2.pdf.
39. Critical Appraisal Skills Programme (2010). Making sense of evidence about clinical effectiveness: qualitative Research studies. D/L from: http://www.caspinternational.org/mod_product/uploads/CASP_Qualitative_Studies20_Checklist_14.10.10.pdf.
40. Jongen C, McCalman J, Bainbridge R, Tsey K. Aboriginal and Torres Strait Islander maternal and child health and wellbeing: a systematic search of programs and services in Australian primary health care settings. *BMC Pregnancy Childbirth* 2014;**14**(1). https://doi.org/10.1186/1471-2393-14-251.
41. Landis JR, Koch GG. The measurement of observer agreement for categorical data. *Biometrics* 1977;**33**(1):159–74. https://doi.org/10.2307/2529310.
42. Adams E, Tongs J. Starting a perinatal and infant mental health service at Winnunga Nimmityjah. *Australas Psychiatr* 2011;**19**(Suppl 1):S20–2. https://doi.org/10.3109/10398562.2011.582751.
43. Bertilone CM, McEvoy SP, Gower D, Naylor N, Doyle J, Swift-Otero V. Elements of cultural competence in an Australian Aboriginal maternity program. *Women Birth* 2017;**30**(2):121–8. https://doi.org/10.1016/j.wombi.2016.09.007.
44. Brown K, Langston-Cox A, Unger HW. A better start to life: risk factors for, and prevention of, preterm birth in Australian First Nations women – a narrative review. *Int J Gynecol Obstet* 2021;**155**(2):260–7. https://doi.org/10.1002/ijgo.13907.
45. Buckskin M, Ah Kit J, Glover K, Mitchell A, Miller R, Weetra D, et al. Aboriginal Families Study: a population-based study keeping community and policy goals in mind right from the start. *Int J Equity Health* 2013;**12**:41. https://doi.org/10.1186/1475-9276-12-41.
46. Campbell S, Brown S. Maternity care with the women's business service at the mildura aboriginal health service. *Aust N Z J Publ Health* 2004;**28**(4):376–82. https://doi.org/10.1111/j.1467-842x.2004.tb00447.x.
47. Felton-Busch C. Birthing on country: an elusive ideal? *Contemp Nurse: A Journal for the Australian Nursing Profession* 2009;**33**(2):161–2. https://doi.org/10.5172/conu.2009.33.2.161.
48. Gibson-Helm ME, Bailie J, Matthews V, Laycock AF, Boyle JA, Bailie RS. Identifying evidence-practice gaps and strategies for improvement in Aboriginal and Torres Strait Islander maternal health care. *PLoS One* 2018;**13**(2):e0192262. https://doi.org/10.1371/journal.pone.0192262.
49. Hartz DL, Blain J, Caplice S, Allende T, Anderson S, Hall B, et al. Evaluation of an Australian aboriginal model of maternity care: the malabar community midwifery link service. *Women Birth* 2019;**32**(5):427–36. https://doi.org/10.1016/j.wombi.2019.07.002.
50. Hayes BA, Campbell A, Buckby B, Geia LK, Egan ME. The interface of mental and emotional health and pregnancy in urban indigenous women: research in progress. *Infant Ment Health J* 2010;**31**(3):277–90. https://doi.org/10.1002/imhj.20256.
51. Hickey S, Couchman K, Stapleton H, Roe Y, Kildea S. Experiences of health service providers establishing an aboriginal-mainstream partnership to improve maternity care for Aboriginal and Torres Strait Islander families in an urban setting. *Eval Progr Plann* 2019;**77**:1–11. https://doi.org/10.1016/j.wombi.2022.07.174.
52. Hickey S, Roe Y, Ireland S, Kildea S, Haora P, Gao Y, et al. A call for action that cannot go to voicemail: research activism to urgently improve Indigenous perinatal health and wellbeing. *Women Birth* 2021;**34**(4):303–5. https://doi.org/10.1016/j.wombi.2021.03.011.
53. Homer CSE, Foureur MJ, Allende T, Pekin F, Caplice S, Catling-Paull C. ''It's more than just having a baby'' women's experiences of a maternity service for Australian Aboriginal and Torres Strait Islander families. *Midwifery* 2012;**28**(4):E449–55. https://doi.org/10.1016/j.midw.2011.06.004.
54. McLachlan HL, Newton M, McLardie-Hore FE, McCalman P, Jackomos M, Bundle G, et al. Translating evidence into practice: implementing culturally safe continuity of midwifery care for First Nations women in three maternity services in Victoria, Australia. *EClinicalMedicine* 2022;**47**:101415. https://doi.org/10.1016/j.eclinm.2022.101415.
55. Munns A. Community midwifery: a primary health care approach to care during pregnancy for Aboriginal and Torres Strait Islander women. *Aust J Prim Health* 2021;**27**(1):57–61. https://doi.org/10.1071/py20105.
56. Munns A, Mahony A, Miller K, Whitehead A. The WA goldfields aboriginal community antenatal program—a community midwifery initiative. *Collegian* 2016;**23**(4):367–72. https://doi.org/10.1016/j.colegn.2016.07.001.
57. Murphy E, Best E. The Aboriginal Maternal and Infant Health Service: a decade of achievement in the health of women and babies in NSW. *New South Wales Public Health Bulletin* 2012;**23**(3/4):68–72. https://doi.org/10.1071/NB11051.
58. Powell J, Dugdale AE. Obstetric outcomes in an Aboriginal community: a comparison with the surrounding rural area. *Aust J Rural Health* 2002;**7**(1):13–7. https://doi.org/10.1046/j.1440-1584.1999.00187.x.
59. Steenkamp M, Rumbold AR, Kildea S, Bar-Zeev SJ, Kruske S, Dunbar T, et al. Measuring what matters in delivering services to remote-dwelling Indigenous mothers and infants in the Northern Territory, Australia. *Aust J Rural Health* 2012;**20**(4):228–37. https://doi.org/10.1111/j.1440-1584.2012.01279.x.
60. Wong R, Herceg A, Patterson C, Freebairn L, Baker A, Sharp P, et al. Positive impact of a long-running urban Aboriginal medical service midwifery program. *Aust N Z J Obstet Gynaecol* 2011;**51**(6):518–22. https://doi.org/10.1111/j.1479-828X.2011.01326.x.
61. Coleman R, Hartz D, Dahlen H. The experiences of aboriginal and Torres Strait Islander bachelor of midwifery students: an integrative literature review. *Women Birth : journal of the Australian College of Midwives* 2021;**34**(1):69–76. https://doi.org/10.1016/j.wombi.2020.02.008.