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First Nations women's experiences of out-of-hospital childbirth: Insights for enhancing paramedic practice – A scoping review

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ABSTRACT

Background: Birthing on Country principles in Australia have seen a revitalisation in midwifery care over the last decade with it being seen as a metaphor for the best start to life for First Nations peoples. This scoping review aimed to explore the extent of evidence of Australian First Nations women's experiences of out-of-hospital childbirth and the alignment with Birthing on Country principles to inform paramedic practice.
Methods: Four databases were searched including MEDLINE, CINAHL, EBSCOhost Health and Scopus utilising the Joanna Briggs Institute (JBI) methodology for Scoping Reviews. Inclusion and exclusion criteria were identified. All articles were reviewed in a two stage process.
Results: Fifty two papers were yielded with 6 meeting the inclusion criteria. Using reflective thematic analysis four key themes were generated; Birthing on Country and identity, inequitable access to healthcare, trusting relationships and medicalisation of birth.
Conclusions: There is a large gap in the literature surrounding delivery of care by paramedics to First Nations women birthing out-of-hospital in Australia. This review proposes supports and actions required to implement Birthing on Country principles into paramedicine. Further, standard maternity care has been found to be insufficient for First Nations women due to a lack of culturally safe care.

Introduction

Paramedics attend a wide range of clinical presentations, ranging in severity from low to high acuity. One such presentation includes out-of-hospital childbirth. There is limited research into the experiences of women birthing out-of-hospital in paramedic care [2]. Furthermore, research into First Nations women's experiences of birthing in the care of paramedics is minimal across Australia. As a consequence of this, there is little known in the literature about the Cultural Safety aspects required for First Nations women in paramedic care. Additionally, there has been an increased effort to revitalise Birthing on Country principles in Australia over the last decade [3]. These principles provide a deeper connection to culture and sense of cultural identity for all involved in the birth [4] however, the application of these principles within paramedicine is unknown.

Birthing on Country is a traditional First Nations peoples cultural practice that has been performed for over 60,000 years [5]. Birthing on Country has become an international social justice movement [5,6] to return birthing services to First Nations communities across the world and shift the power dynamic back to First Nations peoples. It revolves around the concept of 'Country'. Country is a complex ideology denoting the physical land one stands on, as well as having cultural and spiritual significance relating to family, identity, language, and law [7]. Birthing on Country has been described as the best start in life for First Nations peoples as it provides a connection to Country and helps develop a deep sense of cultural identity [8]. Within a midwifery setting, Birthing on

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Country is developed and governed by First Nations peoples and involves the integration of traditional practices such as inclusion of family, intergenerational knowledge sharing, creating and strengthening a connection with Country and includes representation of First Nations peoples in healthcare and promotes continuity of care models [9]. The integration of Birthing on Country principles into standard healthcare has shown improved maternal and neonatal outcomes. This includes a reduction in preterm births [10–12], an increase in the likelihood of mothers attending five or more antenatal care appointments [11], a reduction in instrumental births [12], and a reduction in neonatal death [12]. However, these outcomes depend on healthcare staff demonstrating culturally safe practices which involve including Birthing on Country principles into standard care. These standards encompass providing care to all aspects of a women's needs beyond the physical requirements and actively works towards reducing power imbalances present in healthcare [11]. Additionally, a continuity of care model is considered highly desirable to aid in implementing these principles into standard healthcare [13,14]. Continuity of care provides culturally safe and consistent support throughout pregnancy, birth, and the postnatal period, significantly improving maternal and neonatal outcomes. The model enhances accessibility to care, promotes trust, and respects cultural practices, leading to better engagement and satisfaction with maternity services [15].

There is a significant health disparity between First Nations peoples and non-First Nation peoples due to various factors, including colonialism and multigenerational trauma [16]. This is reflected in data when comparing First Nations women and non-First Nations women birthing in Australia. In 2021, First Nations mothers accounted for 5.0 % of all women who gave birth and 6.1 % of all births in Australia were First Nations babies [17]. However, the mortality rate for First Nations infants (aged < 1 year) was 1.9 times higher than non-First Nations infants [18]. The maternal mortality rate for First Nations women was also 16.4 per 100,000 compared to 5.3 per 100,000 for non-First Nations women [19]. In 2020, there were 11.9 per 1000 stillbirths to First Nations mothers compared to 7.4 per 1000 to non-First Nations mothers [20]. This demonstrates a significant disparity for both maternal and infant outcomes and the potential failings of the current healthcare system requiring reform. A key focus area being brought to recognition in recent years is the potential positive impact of integrating Birthing on Country principles into standardised healthcare [11].

There are various reasons why paramedics are called to out-of-hospital labour and birth, including the mother being unable to reach her intended destination in time or paramedics being requested to attend a planned home birth where emergency assistance is required [21,22]. Intrapartum care makes up a small percentage of paramedic's workload. In the Queensland Ambulance service during 2010 - 2011, intrapartum care only made up 0.5 % of all ambulance callouts, with only 10 % involving a birth [23]. Flanagan et al. [2] conducted a study looking into the experiences of Australian women who gave birth in paramedic care and found significant gaps in paramedic's clinical and non-clinical care. The study found that some women felt unsafe, lacked privacy and consent, felt judged and experienced poor communication [2]. These findings demonstrate significant gaps regarding paramedic practice and the requirement to adhere to, and provide, basic principles of care, such as acknowledging the right to consent and withhold consent, to women during childbirth.

Objective

This scoping review aimed to explore the extent of evidence of Australian First Nations women's experiences of out-of-hospital childbirth and the alignment with Birthing on Country principles to identify how these insights can inform paramedic practice. A scoping review methodology was chosen as the most appropriate approach as it allows for the identification of available evidence to demonstrate gaps in the literature [24].

Methods

This study was conducted using the Joanna Briggs Institute (JBI) methodology for scoping reviews [25]. The protocol was registered with Open Science Framework (http://www.osf.io/n398g) [26]. No ethics approval was required as no human participants were involved. The research question was developed using the Population, Concept, Context framework (PCC framework) [25]. The review focused on First Nations women in Australia with the concept of out-of-hospital birth. The context revolved around paramedic attendance during out-of-hospital birth utilising Birthing on Country principles.

Identification of relevant studies

The search strategy aimed to locate peer-reviewed published studies in English with relevance to the research aims. Initial searches were conducted through CINAHL (EBSCOHost) and MEDLINE (Ovid) to develop index terms. Key terms were derived from the inclusion and exclusion criteria as well as the study objective to inform and broaden the search strategy. EBSCOHost (Health) and Scopus were later included to expand the search capacity. Further development of the search strategy was developed and adapted to each database searched as summarised in Table 1.

Databases searched included MEDLINE, CINAHL and EBSCOHost (Health). Additional citation searching was undertaken using Scopus due to limited initial search results. The initial search selection had a range of 10 years, however, due to the limited yield of results, this was broadened to 20 years.

Study selection

Peer-reviewed studies of any methodology were included if they had relevance to application of Birthing on Country principles to paramedic practice. Due to limited yield of search results when limited to 10 years, the search strategy was broadened to 20 years to reach a wider range of articles. Therefore, inclusion of studies were limited to publication since 2003, written in English and based in Australia as seen in Table 2. This allowed a specific insight into First Nation Australian experiences and cultural needs in the out-of-hospital setting. Childbirth out-of-hospital had to be a primary focus. There were no articles that had direct relevance to the paramedic profession however articles were included if the outcomes would be relevant to paramedic practice.

Studies were reviewed twice in all stages of data collection by the primary author in the first instance and reviewed by at least one other co-author. Duplicates in the data were first removed. Data screening occurred in two phases: title and abstract screening; and full text screening. Phase one of data collection was conducted against the

Table 1
Key concepts.

Concept	Key words
Paramedic	"Prehospital Care" OR "Allied Health Personnel" OR "Emergency Medical Technicians" OR paramedic* OR ambulance OR EMT OR "emergency medical technician" OR prehospital OR pre-hospital OR "out of hospital" OR "RISE Framework"
Australia	Australia OR Austral* OR Victoria* OR "New South Wales" OR NSW OR Tasmania* OR Queensland* OR "Northern Territory" OR ACT OR "Western Australia" OR "South Australia"
First Nations peoples in Australia	"First Nations of Australia" OR "Aboriginal Australians" OR "Torres Strait Islanders" OR "Indigenous Peoples" OR aborigin* OR indigenous OR "torres strait island*" OR "first nation*"
Childbirth	childbirth OR labour OR labour OR pregnancy OR maternity OR birth OR "Birthing on Country" OR "RISE Framework"

Table 2
Inclusion and exclusion criteria.

Inclusion	Exclusion
Written within the last 20 years (2013–2023)	Written over 20 years ago (< 2003)
Written in English	Not written in English
Based in Australia	Not based in Australia
Includes First Nation Australian women	Does not include First Nation Australian women
Includes childbirth out-of-hospital	Does not include childbirth out-of-hospital
Peer reviewed	Not peer-reviewed
Has relevance to paramedic profession	No relevance to paramedic profession

inclusion and exclusion criteria using JBI System for the Unified Management, Assessment and Review of Information (JBI SUMARI) [27]. In both stages of data collection all articles were reviewed by the primary author and reviewed by one of the three co-authors. Conflicts were resolved via discussion reaching consensus or by a third reviewer.

Identification of potential studies

Four databases were searched, yielding 103 results (EBSCOhost (Health): 55, CINAHL: 29, MEDLINE: 19, SCOPUS: 6). After removal of duplicates 58 records were screened by title and abstract. Thirty-six articles were removed during this process and 9 articles were retrieved for full text screening. Additionally, 6 articles were sourced via citation searching with 3 included in the study after their full texts were screened. This method led to 6 articles included in the study as seen in Fig. 1.

Data analysis and extraction

Data analysis was conducted through a thematic analysis of the literature. This study utilised the 6 phases of reflexive thematic analysis as detailed by Braun and Clarke [28]. Firstly, all authors familiarised themselves with the texts and initial codes were created from the commonalities seen in the data using open coding. These codes were then grouped into overarching themes that represented the findings in the data. These themes were reviewed and revised by all authors with supporting model examples and were given titles. Data was extracted from the articles using a characteristics table (Table 3). Data extracted included authors, publication year, aim and method of study, main findings, and relevant themes. Reflexive thematic analysis was chosen as an appropriate method as it offers a flexible, systematic, and reflexive approach to synthesising complex data, enabling interpretation and identification of key themes and gaps in the literature [28].

Positionality and reflexivity

The positionality and reflexivity of all authors is an important consideration in qualitative research utilising reflexive thematic analysis [28,29]. This review demonstrates a feminist approach to healthcare delivery through listening to women's voices within the current literature and interpreting results with a feminist mindset [30]. First Nations Australian research ethics are also utilised within the constraints of a scoping review methodology by having First Nations Australian women's voices within literature at the forefront of the review [31].

The positionality of all authors are as follows; AW is a non-first nations woman born in Australia and is at the start of their career with a background in an undergraduate degree in Paramedicine (Honours) and minimal experience in the field. AW recognises the unearned privilege their background affords and aims to strive for Cultural Safety throughout the development of their career. HF is a non-First Nations woman born in Australia with a professional background as an academic, registered paramedic, nurse and midwife and is a mother of three children. She acknowledges her position of unearned privilege and is committed to listening to and learning from the voices of First Nations people. It was important that she was involved in research that included researchers and participants who identified as First Nations people. JL is an experienced midwife who identifies as a Wiradjuri woman, midwifery academic, researcher and it was crucial for me that our research allowed First Nations Australian voices to be heard. LD is a registered nurse, academic and researcher who identifies as a Wiradjuri woman. Her experience in rural and remote health shapes her perspective in the interpretation of the data.

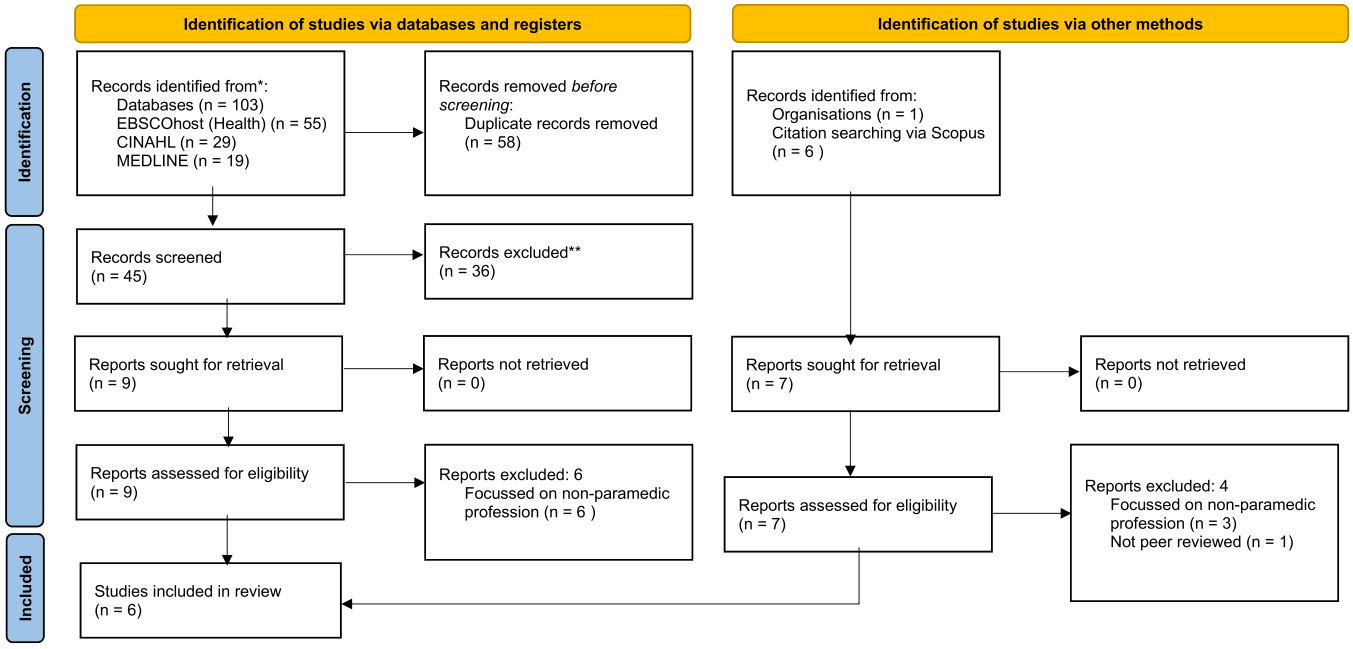

Fig. 1. PRISMA diagram outlining article selection.

Table 3
Characteristics of included studies.

Authors, publication year	Title of article	Aim and method of study	Findings	Theme/s
Marriott R, Reibel T, Coffin J, Janinne Gliddon J, Griffin D, Robinson M, Eades AM, Maddox J, 2019	"Our culture, how it is to be us" — Listening to Aboriginal women about on Country urban birthing	Aim: To provide insight into the perspectives of First Nations women pregnancy and birthing experiences and understand how midwives currently support First Nations women cultural practices Methods: qualitative study using 'Indigenous theoretical concepts' through yarning interviews.	Birthing on Country services are needed in urbanised settings as well as rural/remote.	Birthing on Country and Identity Inequitable access to healthcare Trusting relationships
Kildea S, Hickey S, Nelson C, Currie J, Carson A, Reynolds M, Wilson K, Kruske S, Passey M, Roe Y, West R, Clifford A, Kosiak M, Watego S, Tracey S, 2018	Birthing on Country (in Our Community): a case study of engaging stakeholders and developing a best-practice Indigenous maternity service in an urban setting	Aim: To determine if Birthing on Country services can be implemented in an urban setting Methods: Case study	Birthing on Country services can be implemented in the urban setting	Birthing on Country and Identity Trusting relationships
Ireland S, Belton S, Saggers S, 2015	The logics of planned birthplace for remote Australian Aboriginal women in the northern territory: A discourse and content analysis of clinical practice manual	Aim: To determine how and why planned birthplaces for First Nations women have changed over time Methods: a discourse and content analysis of clinical practice manual	Planned birthplaces have reduced over time with hospitals being the only option as a 'planned' birthplace	Birthing on Country and Identity Medicalisation of birth
Ireland S, Narjic Wulili C, Belton S, Kildea S, 2011	Nniyith Nniyith Watmam (the quiet story): Exploring the experiences of Aboriginal women who give birth in their remote community	Aim: To understand the choices surrounding First Nations women declining transport to urban hospitals in favour of birthing in their remote community. Methods: ethnographic research approach?	Evidence of the breakdown of traditional birthing practices was seen as well as high non-compliance with standard healthcare recommendations	Birthing on Country and identity Inequitable access to healthcare Trusting relationships Medicalisation of birth
Meurk C, Roberts S, Lam M, Wittenhagen L, Callaway L, Moss K, Lucke J, Barker R, Waterson E, Rawlinson C, Malmstrom N, Weaver E, Hoehn E, Bosley E, Watson S, Heffernan E, 2023	Suicide crises among women and mothers during and around the time of pregnancy: Prevalence and timing of initial contact with first responders and health services	Aim: to determine the prevalence, demographic characteristics and timing of contact with first responders for a cohort of woman who experienced suicidality during and around the time of pregnancy. Method: quantitative	Women who experienced suicidality during or around the time of pregnancy were more likely to be younger and of a First Nations background	Inequitable access to healthcare
Kildea S, Hickey S, Barclay L, Kruske S, Nelson C, Sherwood J, Allen J, Gao Y, Blackman R, Roe YL, 2019	Implementing Birthing on Country services for Aboriginal and Torres Strait Islander families: RISE Framework	Aim: to develop a framework to implement Birthing on Country services across Australia Methods: literature review and retrospective synthesis of two empirical studies	The development and implementation of the RISE framework is likely to result in long-term and short-term advantages to First Nations families	Birthing on Country and Identity Inequitable access to healthcare Trusting relationships Medicalisation of birth

Results

In the final stage of data analysis, all authors reviewed the data again to identify key themes in relation to First Nations peoples experiences of Birthing on Country and its potential to inform paramedic practice in Australia. The key themes that were found were: Birthing on Country and identity, inequitable access to healthcare, trusting relationships and medicalisation of birth. These themes all played a role in First Nations peoples experiences of birth.

Birthing on Country and identity

A key theme derived from the articles was the connection between Birthing on Country and identity. Birthing on Country is a child's first ceremony that provides a connection to Country that is inherently one's own and forms an aspect of one's identity [32,33]. Key components of Birthing on Country reported in the studies included services being community based and governed, involving a connection with land and Country, incorporated continuity of care, importance of First Nations peoples represented in healthcare, involvement of family and role of intergenerational knowledge sharing [4,32–35]. It was demonstrated that involvement of these aspects of Birthing on Country empowered women, with First Nations women reporting no connotations of fear or hesitation surrounding labour and birth [35]. It also provided a component of linkage to culture [33] through healing of intergenerational trauma from historical injustices [4] and promoted ongoing cultural learning for not only the mother but all family involved in the birthing experience [32].

Negative experiences were reported when Birthing on Country principles were not utilised during the birthing process within health care facilities. Women described a sense of shame when birthing in the presence of male doctors and felt watched [4,35]. Women also experienced institutionalised racism, isolation and confinement, and fragmented, poor quality of care [4,33]. Fear, lack of autonomy and consent were common in the experiences described by First Nations women with standard healthcare [4,33–35]. This was linked to a lack of identity with some children bullied for not being born on Country [33] and a sense of loss later in life when not born on Country [32].

Inequitable access to healthcare

Rural and remote areas of Australia statistically have a high proportion of First Nations peoples compared to urbanised areas [36]. These areas generally have inadequate access to primary health services

due to their geographical location [37]. The literature raised transportation-related challenges, with some isolated settlements seeing a six-month gap of road access. This meant that travelling by plane was the only way to receive healthcare. However, during cyclone season, many women felt too frightened to travel by plane [35]. Additional concerns reported, included leaving young children at home who were sometimes still breastfeeding, and travelling to give birth which would result in being removed from Country and community [4].

Further, the literature demonstrated instances in which inequitable access to healthcare was present independently from the geographical location of the First Nations women. Marriott et al. [33] reported that First Nations women historically had to birth on verandas while waiting for a doctor to finish attending to all the 'white patients'. In current standard healthcare, racism is still present [4] with some women finding midwives stereotyping and making inappropriate comments regarding First Nations mothers [33]. Further, First Nations women were reportedly more likely to experience suicidality during or around the time of pregnancy compared to non-First Nations women [38]. Mothers experiencing suicidality were less likely to present to an ED within 24 h compared to women outside the time of pregnancy and/or birth [38].

Trusting relationships

The relationship between birthing women and healthcare providers must have foundational trust at the core of their relationship [39]. This theme related to a breakdown of this trust. First Nations women felt an "absence of companionship or warm human interaction" when exposed to birth technology [35]. Feelings of loneliness, isolation and fear were also present [4,33,35]. The articles reported poor communication by standard healthcare providers in regard to birth plans and interventions performed [4]. It was found healthcare professionals made plans to evacuate First Nations women from their communities without consultation [35]. As such, First Nations women would reduce antenatal appointments or 'hide' their pregnancies to avoid being removed from Country and community for the birth [4,35]. In attempts to repair this lack of trusting relationships, continuity of care was explored, and it was demonstrated that its implementation can create more trusting relationships between the clinician and woman to provide early detection and management of concerns during pregnancy [4].

Medicalisation of birth

Medicalisation is the process by which medical interventions are used in non-medical problems [40]. Pregnancy and childbirth over the past several decades has been medicalised [34], with the literature detailing First Nations women having limited choices in their choices of birthplace with the hospital seen as the only option [4,34,35]. Ireland, Belton and Saggers [34] detailed how clinical practice manuals have reverted from culturally safe practices with women now seen as 'unable to co-operate' if they wish to have a home birth with "no allowance for discussion with the woman regarding her birthplace plan" [34] as hospital is seen as the only feasible option. This led to women reducing antenatal appointments and 'hiding' pregnancies to avoid being evacuated from their community for birth [4,35].

Discussion

This scoping review highlights the absolute need for Birthing on Country services to be available to First Nations women who wish to utilise them. Birthing on Country is found to empower women and provide a sense of identity for the child born through connection to Country and culture and continued cultural learning for all involved [32,33,35]. When Birthing on Country principles are not utilised, a sense of loss is described later in life [32]. The integration of these services is found to improve maternal and neonatal outcomes [10–12] demonstrating the profound impact of Birthing on Country and the need for its implementation into standard healthcare, including paramedicine.

Out-of-hospital childbirth makes up a small proportion of cases paramedics attend [23]. As such, the quality of care and confidence of paramedics attending these jobs is low [41]. Despite the increasing awareness of Birthing on Country principles and its revitalisation within the midwifery discipline [3], this has not been translated into paramedicine. This leaves a large gap within the literature and current practice of paramedics when attending out-of-hospital childbirth, potentially resulting in poor care being provided to First Nations women and their families. As such, the implementation of Birthing on Country principles into the provision of care for First Nations women birthing in paramedic care must be explored. Given the paucity of research of Birthing on Country principles in paramedic practice, it is necessary to look at other healthcare professions to see how First Nations women have experienced care in these environments and how feasible it would be to apply the ideas of Birthing on Country. This may help create a framework that will help paramedics apply the concepts of Birthing on Country to their practice.

Negative birth experiences of First Nations women is not just isolated to the out-of-hospital context, but has been reported within a standard healthcare framework throughout the literature. Shame, isolation, racism, confinement, and fear were all present in the experiences of First Nations women birthing in hospital [4,33–35]. This demonstrates a potential area for development for paramedic practice. A key component of Birthing on Country is the inclusion of family and geographically birthing on one's Country [33,35]. By practising as out-of-hospital clinicians, paramedics are uniquely situated to provide care in ways hospital clinicians are unable. Paramedics' primary workplace is the community, often supporting women in their own home, and consequentially, they are able to work in line with the principles of Birthing on Country without the constraints of hospital regulations, such as only having two visitors allowed at one time [42] resulting in limited family involvement.

Inequitable access to healthcare is reported throughout this study due to geographical location. Women can find difficulty accessing healthcare within their community as rural and remote maternity centres either don't exist or have closed due to a variety of reasons such as issues with staff retention [43]. Mental health services in regional, rural and remote Australia is also limited despite a higher burden of mental health disorders in rural Australia [44]. This may lead to difficulty in accessing healthcare due to transportation issues or women being removed from their family and community to do so [4,35]. Paramedics are required to provide emergency treatment to even the most remote places across Australia. Ambulance stations may be more sparse in these areas, however, are still expected to respond to emergencies in a timely manner. Ninety percent of emergency cases across Australia are attended to between 16.5 min to 58.3 min in 2021–22 [45]. This illustrates the potential for paramedics to provide healthcare within areas where maternity services are not available due to their ability to respond to rural and remote callouts. This provides further traction to the utilisation of paramedics to overcome barriers to accessing healthcare in areas where no other community maternity care options are available.

This review also elucidates the importance of trusting relationships. Trusting relationships are at the heart of effective healthcare, with evidence of increased health outcomes when trusting relationships are employed [46]. Healthcare practitioners, specifically paramedics, are anecdotally ranked among the most trusted professions in Australia [47]. It is up to the healthcare practitioner to uphold this trust. However, this review demonstrates a breakdown of this trust between healthcare practitioners and First Nations women. Lack of communication, absence of warm personal interactions, and loneliness are all reported within the literature [4,33,35] demonstrating the need for critical reflection of practice of individual clinicians to humanise the healthcare profession and provide quality woman-centred care [48].

Furthermore, trusting relationships are required in an inter-organisational context. Care for First Nations mothers involves the

collaboration between multiple agencies to develop the best practice care [4,32]. Community consultation by the local district hospitals with First Nations communities is essential to developing a more culturally safe model of care [4,32]. Additionally, the collaboration between different medical disciplines such as psychologists, midwives and social workers can assist in providing more holistic care [4]. Due to the limited cases of out-of-hospital birth paramedics attend, specific guidelines may be developed in conjunction with First Nations people's communities to assist paramedics when called to a First Nations woman birthing out-of-hospital. This would include an overview of Birthing on Country principles and include considerations on how best to provide care for the First Nations woman including asking the woman what is culturally safe to her. Additionally, referral pathways may be developed to allow for First Nations women to have a community midwife provide care in their home after birth if appropriate. This would aid in actively shifting the power dynamic back to First Nations peoples to determine what sort of care they require and how it should be delivered.

An important consideration when contemplating the potential involvement of paramedics in the provision of care for First Nations women birthing out-of-hospital is the limited training and exposure paramedics receive in this field of care. A study by Hill et al. [41] demonstrated that Australian paramedics reported low confidence and high anxiety when attending out-of-hospital childbirth. Further, the limited number of out-of-hospital births paramedics attend [23] may lead to a degradation of clinical and non-clinical skills due to disuse. This suggests a requirement of maintaining and improving these skills through further practical and theoretical training and education. This regular maintenance of skills would then allow for Birthing on Country principles to be taught and updated throughout time as further research and understanding comes to light. Additionally, the cognitive load on paramedics may be reduced through the implementation of clinical practice guidelines to references to allow for quality women-centred care.

Limitations

Despite the authors best efforts, articles may have been missed during the search with potential key words not identified in the search strategy. Additionally, there is limited literature available on the subject to analyse and no literature directly relating to paramedic care and Birthing on Country, as such true representations may not be made.

Conclusion

It is clear there is limited evidence surrounding paramedic practice when caring for First Nations women birthing out-of-hospital. Due to this limited evidence, it is unclear how best to implement Birthing on Country principles into paramedic practice, however, the creation of clinical practice guidelines and referral pathways have been considered. Further, due to the nature of a paramedic's workplace, there is an opportunity to implement Birthing on Country principles into paramedic practice due to the natural inclusion of Birthing on Country principles such as the inclusion of family and community in the birthing process. Ultimately, this scoping review has found that the current standard of healthcare fails First Nation women birthing in and out-of-hospital with reform required in both settings.

CRediT authorship contribution statement

AW developed the concept of the scoping review. AW conducted the initial and subsequent searches. All authors participated in the screening of suitable articles. AW performed analysis authored first draft. All authors assisted in synthesising results into themes. AW was the primary author and all authors assisted in the editorial process of the review. Two of the authors (JL, LD) identify as First Nations peoples and provided cultural guidance in the development of the paper.

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Provenance

The authors declare this manuscript as an original review article and has not been published nor is being considered for publication elsewhere.

Declaration of Competing Interest

The authors declare that there are no conflicts of interest. The authors affiliations with Charles Sturt University and University of Southern Queensland have had no impact on the article as to influence the outcome. All authors meet the authorship criteria, and the manuscript has been read and approved for submission to *Australian Emergency Care* by all named authors.

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Language

The authors recognise the need for inclusive and respectful terminology when referring to First Nations peoples in the literature. This study will use the terminology 'First Nations peoples' in line with the currently accepted terminology and will be consistently applied to ensure culturally appropriate and respectful language is utilised [1].

Further, the term 'woman' or 'women' will be used to represent those who give birth and does not mean to exclude those who do not identify as female.

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