

Quality improvement in action

Antenatal services for Aboriginal women: the relevance of cultural competence

Tracy Reibel BA Hons PhD

Senior Researcher, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research, Subiaco, Australia

Roz Walker BA Hons PhD

Associate Professor, Indigenous Projects Lead, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research, Subiaco, Australia

ABSTRACT

Background Due to persistent significantly poorer Aboriginal perinatal outcomes, the Women's and Newborns' Health Network, Western Australian Department of Health, required a comprehensive appraisal of antenatal services available to Aboriginal women as a starting point for future service delivery modelling. A services audit was conducted to ascertain the usage frequency and characteristics of antenatal services used by Aboriginal women in Western Australia (WA).

Methods Telephone interviews were undertaken with eligible antenatal services utilising a purpose specific service audit tool comprising questions in five categories: 1) general characteristics; 2) risk assessment; 3) treatment, risk reduction and education; 4) access; and 5) quality of care. Data were analysed according to routine antenatal care (e.g. risk assessment, treatment and risk reduction), service status (Aboriginal specific or non-specific) and application of cultural responsiveness.

Results Significant gaps in appropriate antenatal services for Aboriginal women in metropolitan, rural and remote regions in WA were evident. Approximately 75% of antenatal services used by Aboriginal women have not achieved a model of

service delivery consistent with the principles of culturally responsive care, with few services incorporating Aboriginal specific antenatal protocols/programme, maintaining access or employing Aboriginal Health Workers (AHWs). Of 42 audited services, 18 Aboriginal specific and 24 general antenatal services reported utilisation by Aboriginal women. Of these, nine were identified as providing culturally responsive service delivery, incorporating key indicators of cultural security combined with highly consistent delivery of routine antenatal care. One service was located in the metropolitan area and eight in rural or remote locations.

Conclusion The audit of antenatal services in WA represents a significant step towards a detailed understanding of which services are most highly utilised and their defining characteristics. The cultural responsiveness indicators used in the audit establish benchmarks for planning culturally appropriate antenatal services that may encourage Aboriginal women to more frequently attend antenatal visits.

Keywords: Aboriginal health, access, antenatal services, cultural competence, Indigenous health

The indigenous population of WA predominantly comprises Aboriginal people, although small numbers of Torres Strait Islanders also reside and use Aboriginal health services in the state. In this paper the term 'Aboriginal', preferred by all language groups, is taken to include Aboriginal and Torres Strait Islander people in WA.

How this fits in with quality in primary care

What do we know?

It is well established that many Aboriginal women either do not access, or have too few, antenatal visits which contributes to poorer perinatal outcomes when compared with non-Aboriginal women. Low birth weight, preterm birth and perinatal mortality are all unacceptably high even in comparison with other indigenous populations in Canada and New Zealand.

In WA, and arguably throughout Australia, little is known about the use of antenatal services by Aboriginal and Torres Strait Islander women and the factors that may improve antenatal attendance by this population sub-group.

What does the paper add?

The paper explores the use of services from the perspective of cultural responsiveness and considers the significant gap in knowledge of how Aboriginal women use antenatal services. Using the current (though limited) research and other evidence, the paper presents some outcomes of an audit of antenatal services conducted in WA and discusses the relevance of cultural competence to improving the capacity of services to respond to the needs of Aboriginal women during pregnancy, with an anticipated benefit of improving perinatal outcomes, service delivery and workforce capacity.

Introduction

The literature suggests that policy and service delivery strategies are required to address the complex array of social and environmental determinants that contribute to major disparities in health status and outcomes for Aboriginal people. Poor cross-cultural interactions and communication and a lack of cultural understanding by service providers contribute to this disparity.^{1–3} Cultural safety and cultural security (both of which incorporate respectful recognition and integration of cultural beliefs, values and practices) are regarded as being as important as clinical safety in enabling Aboriginal patients to benefit from the care they are receiving. Recent studies, as well as emerging Aboriginal maternal health policies, highlight the importance of achieving culturally responsive service delivery if perinatal outcomes are to improve.^{4–6} All these factors, cultural safety, cultural security and cultural responsiveness, are encapsulated in a cultural competence assessment process for individuals and organisations. This paper reflects on how a cultural competence assessment tool brings focus to the capacity of a health system to be culturally responsive – that is, to integrate cultural security and safety into service delivery. This is best achieved with a culturally competent workforce and organisational structures to improve the health and wellbeing of Aboriginal people.⁷

It is known that Aboriginal women have poorer perinatal outcomes than non-Aboriginal women nationally and by comparison with other indigenous populations internationally.^{8–10} In 2006 Aboriginal perinatal mortality in WA was 24.9 per 1000 compared with 8.5 per 1000 for non-Aboriginal.¹¹ In WA an estimated 14.9% of Aboriginal women give birth to babies below optimal birth weight (< 2500 gms) compared with 6.4% of non-Aboriginal women. In addition, Aboriginal mothers giving birth tend to be much younger and their children have a poorer start to life than their non-Aboriginal counterparts.¹² As birth outcomes influence whole of life health and develop-

mental outcomes, Aboriginal babies are being affected in both the short and long term.^{13–15}

The provision of culturally appropriate antenatal care is considered to be an important step towards improving Aboriginal women's birth outcomes. Providing targeted and responsive antenatal care together with screening and treatment for specific conditions of concern (e.g. nutritional supplementation, risk reduction and education on smoking and alcohol) improves perinatal outcomes for Aboriginal and Torres Strait Islander women.¹⁶ Evaluated models of antenatal care incorporating these factors show a range of improvements in birth weight, delivery term and perinatal morality.^{17,18}

As part of a research programme to improve antenatal outcomes among Aboriginal women, an audit of publically funded antenatal services was undertaken on behalf of the Women's and Newborns' Health Network, Western Australian Department of Health. The Audit of Antenatal Services in WA was designed to determine the frequency with which Aboriginal women use existing antenatal services, the extent of routine care provided and how culturally appropriate antenatal services are. Categories of investigation included questions relating to: risk assessment, treatment, risk reduction and education, access and quality of care. The audit was undertaken to inform service redevelopment that would be culturally responsive to the needs of Aboriginal women in WA. Key findings of the audit as discussed here highlight the importance of implementing a cultural competence process, which has been shown to improve perinatal outcomes and attendance at health services.

The literature identifies a suite of elements, based on a growing body of evidence in this area, which are required to underpin quality antenatal care for Aboriginal women. Many of the models of care shown to be effective are currently being documented to inform policy and practice at state and national levels.¹⁹ Despite this work there remains a significant gap in the knowledge and practice of antenatal service delivery for Aboriginal women including patterns and frequency of use.

It was hypothesised that where key elements of culturally responsive antenatal care were clearly established in individual services, as assessed through a set of key indicators, these could potentially constitute suitable models of service delivery for future replication and evaluation in other locations.

Methods

The antenatal services audit tool was designed to document the characteristics of currently available publically funded health services (scope, catchment, funding sources, history, setting, linkages and frequency) across WA. The purpose specific services audit tool comprised 60 questions in five categories: 1) general characteristics; 2) risk assessment; 3) treatment, risk reduction and education; 4) access; and 5) quality (service and client) of care based on a review of the literature.

Apart from the general characteristics questions (11), all other questions required a Yes/Mostly/Sometimes/No response and concluded with a final qualitative question. After exclusion of ineligible services (no reported service use by Aboriginal women) telephone interviews with eligible antenatal services (42/55) were undertaken with nominated service representatives. Data were analysed attributing each 'Yes' response with a value of one (Yes = always = 1) which then created maximum values (equal to the number of questions across all categories of enquiry) against which all services could be measured.

The specific cultural responsiveness audit measure comprised four key indicators unique to 'culturally appropriate, acceptable' antenatal care for Aboriginal women.^{20–22} These are:

- 1 the presence of an Aboriginal specific antenatal protocol
- 2 confirmation of an Aboriginal specific programme of antenatal care
- 3 access optimised by location of service and availability of unbooked antenatal appointments and transport and
- 4 inclusion of AHWs as members of multidisciplinary antenatal care teams.

A response of 'Yes' to all four indicators, in addition to highly consistent application of routine antenatal care across all assessment categories, would identify those services which would form the basis for future further investigation and whose service model could potentially be applied in other locations.

The services audit tool was tested with six eligible antenatal services to assess how readily service representatives were able to respond to the questions; this

resulted in some minor adjustments before application of the audit tool to the remaining 36 eligible services ($n = 42$). This resulted in some minor data loss.

Results

The audit was focused on publically funded services where all antenatal care is available from early pregnancy to birth. This included antenatal clinics which are government funded/community based, Aboriginal Community Controlled Health Services (ACCHS), non-government and hospital-based services. Specialist obstetricians and general practitioners in private practice were excluded, except for one general practice which is the only antenatal care provider in a rural locality. It is widely acknowledged that access to general practice services by Aboriginal people is very limited.^{23,24} Similarly, Aboriginal people are far less likely to have private health insurance than their non-Aboriginal counterparts.

Of the 42 audited services, 18 were specifically for Aboriginal women and 24 general (non-specific) antenatal services reported utilisation by Aboriginal women. It is of concern that a further 13 service representatives reported no use of antenatal services by Aboriginal women, even though Aboriginal women live in the area. However, of the 42 services reporting use by Aboriginal women, only nine were identified as providing culturally responsive service delivery, that is, combining all four key culturally responsive indicators with highly consistent delivery of other routine aspects of antenatal care (see Table 1). One of the nine culturally responsive services is located in the metropolitan area (where about one-third of Aboriginal people reside). Eight services in rural or remote locations assist between five and 40 women per annum. Overall it is estimated from the audit data that the nine culturally responsive services assist about 220 of approximately 1800 Aboriginal women who give birth in WA each year. It is further estimated that the 42 audited services assist about 55% of all pregnant Aboriginal women with antenatal care each year. The map in Figure 1 shows the distribution of services outside the metropolitan area and the reported average number of women using the services each year. Services within the metropolitan area are not shown, but these are located in both the north and south Metropolitan Area Health Services (NMAHS and SMAHS).

With access to health services persistently identified as a barrier for Aboriginal people, we considered how many services reported: 1) being close to home; 2) offering unbooked or walk-in antenatal clinics and 3) providing transport, as key elements of access suitability.

Table 1 Services providing culturally responsive service delivery

Health regions of service location	Specific service	Average no. of A/N visits	Approx. no. of births p/a	Culturally responsive indicators										Nutritional supplements	Childbirth education	Risk reduction	A/N care capacity
				Specific Aboriginal programme	Specific Aboriginal protocol	Access AHW	Home visiting	Routine risk assessment	Brief interventions								
Maximum value				1	1	3	1	1	10	7	2	1	2	2			
Health services reporting maximum values against the four key indicators of culturally responsive antenatal care, together with maximum values in routine antenatal care																	
Goldfields	Yes	n/k	40	1	1	3	1	0	9	7	0	1	1	2			
Kimberley	No	10	10	1	1	3	1	1	8	7	2	1	2	2			
Wheatbelt	Yes	5	18	1	1	3	1	1	7	5	2	1	2	2			
Great Southern	Yes	6	20	1	1	3	1	1	10	7	2	1	2	1			
Great Southern	Yes	5	10	1	1	3	1	1	9	6	2	1	2	2			
Health services reporting maximum values against access and AHW indicators of culturally responsive antenatal care and with either a specific protocol or specific programme, combined with maximum values in routine antenatal care																	
SMAHS*	Yes	5	26	1	0	3	1	1	10	7	1	1	1	2			
Pilbara	No	6	18	0	0	3	1	1	9	6	0	1	2	2			
Kimberley	No	5	50	0	1	3	1	1	10	7	2	1	1	1			
Kimberley	Yes	10	30	0	1	3	1	0	8	7	2	1	1	2			

* SMAHS – South Metropolitan Area Health Service region

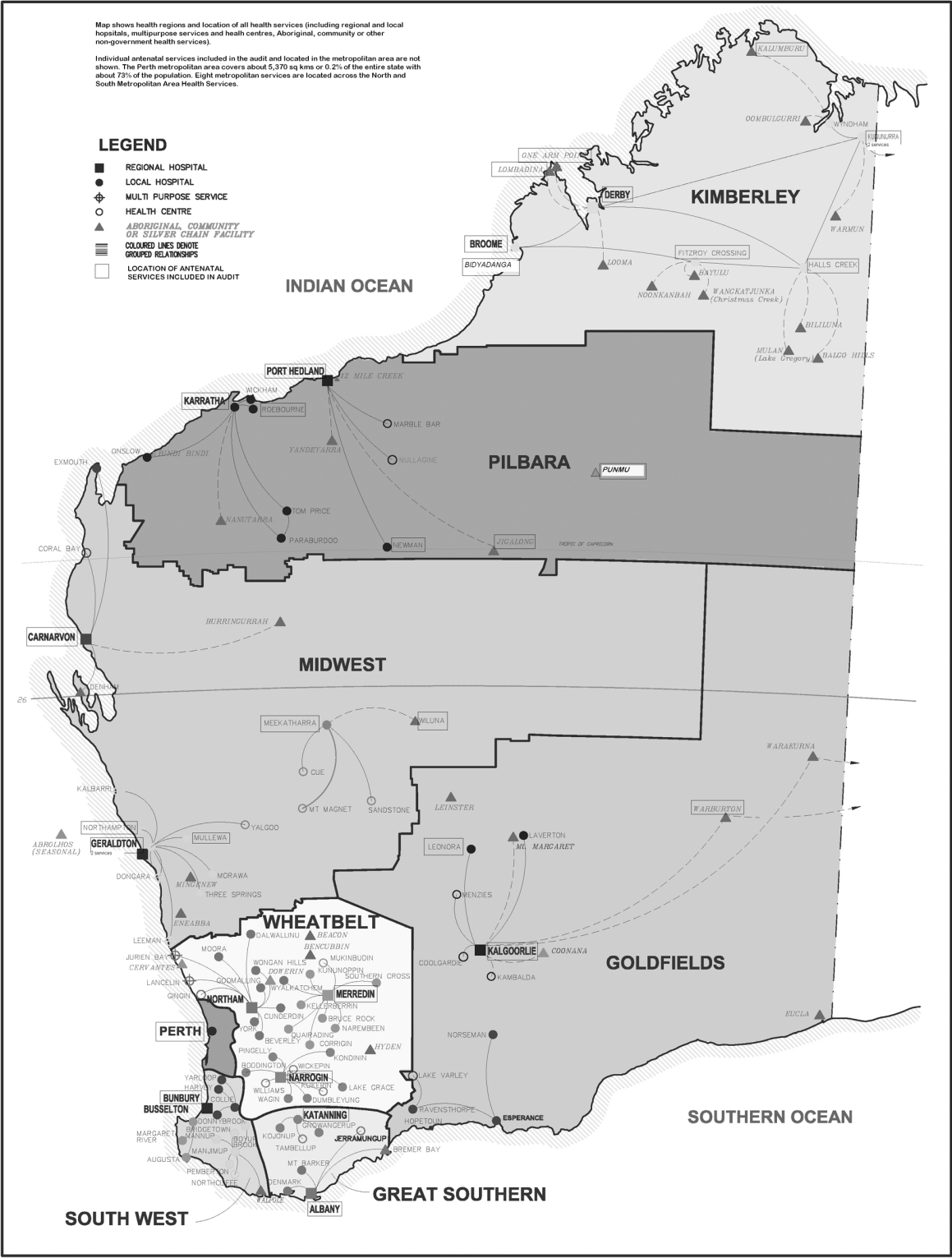


Figure 1 The distribution of services outside the metropolitan area and the reported average number of women using the services each year.

Overall, it was reported that 19 out of 42 services were always close to home, 26 out of 42 services always provided a walk-in/unbooked antenatal clinic and 30 out of 42 services always provided a transport service,

with 12 out of 42 always including all three access elements (Table 2). The capacity to access clinics in areas where public transport is limited or unavailable (particularly in rural and remote regions) is known to

Table 2 Accessibility of health services

Health regions of Western Australia	Number of services (n=42)	Number of services close to home			Number of services with walk-in/ unbooked appointments			Number of services with transport available			Number of services with all three elements	
		Number of services close to home		Spec	Number of services with walk-in/ unbooked appointments		Spec	Number of services with transport available		Spec	Non-spec	
		Non-spec	Total		Non-spec	Total		Non-spec	Total			
Goldfields	3	1	0	1	1	1	2	1	0	1	1	0
Midwest	7	0	1	1	2	2	4	2	4	6	0	0
Pilbara	6	0	1	1	2	2	4	0	2	2	0	1
Kimberley	10	2	4	6	3	6	9	4	6	10	2	4
Wheatbelt	3	1	1	2	2	0	2	2	1	3	1	0
South West	3	2	0	2	2	0	2	3	0	3	0	0
GT Southern	2	2	0	2	2	0	2	2	0	2	2	0
SMAHS*	5	3	0	3	1	0	1	3	1	4	1	0
NMAHS**	5	0	3	3	1	1	2	1	0	1	0	0
	42	9	10	19	14	12	26	16	14	30	7	5
Percentage of services		50	42		78	50		89	58		39	21

* SMAHS – South Metropolitan Area Health Service region
** NMAHS – North Metropolitan Area Health Service region

impact on Aboriginal people’s access to health care in general. The high reporting of transport provision therefore indicated that services were aware of the requirement to provide transport to improve access.

However, on its own, transport or being close to home or the availability of unbooked visits was not enough to improve attendance at antenatal services, as demonstrated by the frequency of antenatal visits (Table 3). For example, some specific and general services where Aboriginal women represented more than 50% or the majority of the client base reported an average of five antenatal visits per woman. By comparison, when Aboriginal women comprised less than 25% of clients in a non-specific service the average was three antenatal visits, and where they comprised less than 10% of clients there was an average of two visits. It can be further extrapolated from the data that the perception of cultural security experienced by individual service users is indicated by their frequency of visits.

Discussion

Overall, the results demonstrated significant gaps in publically funded antenatal services for Aboriginal women in metropolitan, rural and remote regions in

WA. About 75% of antenatal services used by Aboriginal women have not achieved a model of service delivery consistent with the principles of culturally responsive care. We identified few services that incorporated Aboriginal specific antenatal protocols or a specific programme of antenatal care for Aboriginal women, indicating a lack of awareness of the need for culturally secure/safe services at which Aboriginal women feel welcome. The key findings were that while some attention to the detail of attaining cultural responsiveness was being achieved in some services, to varying degrees, more consistent application is required, as discussed below.

The capacity to access health services is acknowledged as a significant barrier for many Aboriginal women.^{25,26} In a state the size of WA, with vast distances between major centres and access to tertiary services only available in the Perth metropolitan area up to 2000 kilometres away, access to local, culturally responsive antenatal services is a significant component towards improved perinatal outcomes. Even within the metropolitan area, distance, and therefore access, remains a significant barrier. Aboriginal women were found to be more likely to utilise an antenatal service that was used by significant numbers of other Aboriginal women and was located in a community setting, an outcome consistent with other studies.^{27,28}

Table 3 Attendance at antenatal services

Health regions of Western Australia (n = 42)	Number of audited antenatal services in health regions	Range of individual antenatal contacts reported in health regions	Regional averages rounded to whole numbers
Goldfields	3	3	3
Midwest	7	2–8	5
Pilbara	5	2–9	5
Kimberley	11	3–20	7
Wheatbelt	3	2–5	4
South West	1	2	2
Great Southern	2	5–6	5
SMAHS*	5	3–5	5
NMAHS**	4	2–3	3
MTWH†	1	<3	2
Total	42		

* SMAHS – South Metropolitan Area Health Service region
** NMAHS – North Metropolitan Area Health Service region
† Metropolitan tertiary women’s hospital

The patterns of usage of services across regions therefore underline a paradox between availability and accessibility as well as confirming the need for all four cultural responsiveness indicators to be present if antenatal attendance is to improve. The audit findings show that despite the many services available throughout WA, Aboriginal women on average only accessed three antenatal visits, often late in the second trimester, with the timing and frequency of access well short of the recommended number of visits required for optimal care and outcomes.²⁹ The exception was where services were culturally responsive, when the average number of visits rose to five.

The findings confirm that while the provision of services such as transport and flexible appointments go some way to encouraging access these are not sufficient in themselves to achieve the optimal number of seven to ten visits. Rather, antenatal services which reported all four culturally responsive indicators as always available, also reported consistently higher antenatal attendance outcomes regardless of whether services were specifically for Aboriginal women or the general population. So while cultural diversity across Aboriginal communities and the complexity of family and kinship relationships are factors that also affect whether and how services are used, the provision of culturally responsive antenatal services appears to address socio-cultural factors that influence how and when Aboriginal women negotiate their interaction with available services in their locality.

Overall the audit data demonstrate a deficiency of cohesive service delivery and support the prevailing view that services are fragmented and lacking clear principles and guidelines to support the delivery of appropriate, effective and culturally responsive antenatal care to Aboriginal women in WA, regardless of the service location. The majority of services reported that other factors such as risk assessment, treatment, risk reduction and education about smoking, alcohol use and nutrition are routinely provided but their effectiveness and uptake are moderated by the level of engagement by Aboriginal women with the harm reduction strategies and interventions offered. The audit results and current research suggest that more culturally relevant approaches to assessment, risk reduction and education delivered by AHWs are required to improve antenatal outcomes among Aboriginal women in WA.³⁰ For this reason, the presence of AHWs as members of multidisciplinary antenatal care teams is another key indicator of cultural responsiveness. The overall results show too few AHWs as members of multidisciplinary antenatal care teams, even though their inclusion has been demonstrated in a number of programmes to improve issues related to attendance by improving the cultural safety of health service delivery.³¹

The relevance of cultural competence

The development of individual and organisational cultural competence is intended to ensure all Aboriginal people using a health service are treated in a respectful and safe manner that secures their trust in the capacity of the service to meet their needs. The rationale for developing a cultural competence assessment process for health services is documented in a raft of existing policy guidelines and frameworks (from both State and Federal Governments) that aim to address the health inequities experienced by Aboriginal people.³² The audit findings suggest that a cultural competence assessment process is required to provide culturally appropriate and effective care in order to improve service delivery for Aboriginal women. This outcome is based on recognition that most existing services and approaches to improving the health and wellbeing of Aboriginal Australians are not successful. In response, it is hypothesised that where health practitioners and those responsible for the delivery of health services participate in strategies and structures that take account of the historical, cultural and environmental experiences and contemporary circumstances of Aboriginal people this will assist with improving service delivery models. It appears that a central feature of such a process requires organisations and their personnel to have the capacity to: value diversity; conduct self-reflective self-assessment; manage the dynamics of difference; acquire and institutionalise Aboriginal cultural knowledge and adapt to the diversity and cultural contexts of the individuals and communities served.³³

In fact, many of the Audit of Antenatal Services recommendations related to the delivery of culturally appropriate care, education and information to all Aboriginal women in the antenatal period, with seven of the 15 audit recommendations directly related to issues of cultural security, safety and appropriateness. The cultural competence of both health practitioners and services is therefore highlighted in the audit as a key component in improving frequency of access by Aboriginal women at antenatal clinics and in maternal and child outcomes. However, despite the existence of policies and guidelines to highlight cultural competence as a core feature of improving, in this instance, antenatal service delivery, there are currently no mechanisms to facilitate changes and improvements to embed cultural competence in health services and increase the capacity of individual health professionals to provide appropriate care to Aboriginal women.

The cultural competence assessment process developed for the specific purpose of improving women's and newborn's services comprises two distinct components. The first is for individual health professionals and involves a critical self-reflection process. The second is for organisations and involves a review of the

cultural responsiveness and security of provided services. Two assessment tools were adapted drawing on the work of Campinha-Bacote,³⁴ Dudgeon,³⁵ Walker and Sonn,³⁶ Westerman³⁷ and the strategies outlined in the Cultural Respect Framework.³⁸ The process of cultural competence assessment will benefit practitioners by heightening awareness, influencing attitudes toward practice and motivating the development of knowledge and skills that take account of the cultural requirements of Aboriginal women. The process also benefits organisations by informing planning, policy-making, resource allocation and training and professional development activities towards this aim. Given the evidence regarding the link between culturally responsive care and improved maternal and perinatal outcomes this is arguably an essential aspect of health service provision.

Conclusion

The literature on models of antenatal care for Aboriginal women is limited and the audit outcomes provide a unique perspective of Aboriginal women's use, and the characteristics, of existing antenatal services in WA. Several studies have shown that culturally responsive care and cultural security are crucial to encouraging greater engagement by Aboriginal people with health services and the audit outcomes confirm this, in particular relation to antenatal services. The indicators used in the audit establish culturally responsive benchmarks for planning antenatal services and the findings support the need for a greater focus on integrating cultural competence across health systems.

In summary, the Audit of Antenatal Services show most antenatal services used by Aboriginal women have not achieved a model of service delivery consistent with the principles of culturally responsive and secure care. The implementation of culturally specific guidelines and policies and the allocation of resources and strategies to support staff and organisations to assess improve cultural competence are strongly supported by the findings of the audit.

REFERENCES

- 1 Australia Indigenous Doctors Submission to the Maternal Health Review 2008. www.aida.org.au/pdf/AIDA_Maternity_Services_Review.pdf
- 2 Nguyen HT. Patient centred care: cultural safety in indigenous health. Reprinted from *Australian Family Physician* 2008;37:990–4.
- 3 Kildea S. Risky business: contested knowledge over safe birthing services for Aboriginal women. *Health Sociology Review* 2006;15:287–396.
- 4 Department of Health. *Improving Maternity Services: working together across WA. A policy framework*. Health Policy and Clinical Reform, 2007.
- 5 Kruske S, Kildea S and Barclay L. Cultural safety and maternity care for Aboriginal and Torres Strait Islander Australians. *Women and Birth* 2006;19:73–7.
- 6 Herceg A. *Improving Health in Aboriginal and Torres Strait Islander Mothers, Babies and Young Children: a literature review*. Department of Health and Ageing, Commonwealth of Australia, 2005.
- 7 Walker R and Reibel T. *Antenatal Services for Aboriginal Women in WA: the paradox of availability, cultural security and accessibility*. Presentation at the Perinatal Society of Australia and New Zealand (PSANZ) Conference, Darwin, April 2009.
- 8 Australian Institute of Health and Welfare. *International Group for Indigenous Health Measurement Canberra 2006*. Cat. No. IHW 26. Canberra: Australian Institute of Health and Welfare, 2009.
- 9 Anderson I, Crengle S, Leialoha Kamaka M, Chen T, Palafox N and Jackson-Pulver L. Indigenous health in Australia, New Zealand and the Pacific. *The Lancet* 2006; 367:1775–85.
- 10 Stephens C, Porter J, Nettleton C and Willis R. Disappearing, displaced and undervalued: a call to action for Indigenous health worldwide. *The Lancet* 2006;367: 2019–28.
- 11 Gee V, Ernstzen A and Le M. *Perinatal Statistics in WA, 2006*. Twenty-fourth Annual Report of the Western Australian Midwives' Notification System. Department of Health, Western Australia, 2008.
- 12 Gee V, Hu QM and Ernstzen AN. *Perinatal Statistics in WA, 2005*. Twenty-third Annual Report of the Western Australian Midwives' Notification System. Department of Health, Western Australia, 2006.
- 13 Fremantle E, Zurynski Y, Mahajan D, d'Antoine H and Elliott E. Indigenous child health: urgent need for improved data to underpin better health outcomes. *Medical Journal of Australia* 2008;188:588–91.
- 14 Singh GR and Hoy W. The association between birthweight and current blood pressure: a cross-sectional study in an Australian Aboriginal Community. *Medical Journal of Australia* 2003;179:532–5.
- 15 Smith R, Smith P, McKinnon M and Gracey M. Birthweights and growth of infants in five Aboriginal communities. *Australian and New Zealand Journal of Public Health* 2000;24:124–35.
- 16 Panaretto KS, Lee H, Mitchell M *et al*. Impact of a collaborative shared antenatal care programme for urban Indigenous women: prospective cohort study. *Medical Journal of Australia* 2005;182:514–19.
- 17 Prime Minister's Science, Engineering and Innovation Council (PMSEIC). *The Health of the Adult Begins in the Womb: report of the working group*. PMSIEC Working Group on Aboriginal and Torres Strait Islander Health focusing on Maternal, Fetal, and Postnatal, 2008.
- 18 ATSIH. *National Aboriginal and Torres Strait Islander Child and Maternal Health Exemplar Site Initiative: Site Reports 2005*. 2005. [www.health.gov.au/internet/h41/publishing.nsf/Content/05DD6B946FD73A59CA2571950002F32E/\\$File/Exemplar%20Report.pdf](http://www.health.gov.au/internet/h41/publishing.nsf/Content/05DD6B946FD73A59CA2571950002F32E/$File/Exemplar%20Report.pdf)

- 19 PMSIEC *ibid*
- 20 Reibel T. *Antenatal Service Delivery Model for Aboriginal and Torres Strait Islander Women. Phase I: audit of antenatal services final report for the Women's and Newborns' Health Network and Western Australia Department of Health*. Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research, Western Australia, 2009.
- 21 Panaretto *ibid*
- 22 Panaretto KS, Mitchell MR, Anderson L, Larkins SL and Manessis V. Sustainable antenatal care services in an urban Indigenous community: the Townsville experience. *Medical Journal of Australia* 2007;187:18–22.
- 23 Australian Institute of Health and Welfare. *Health and Welfare of Australia's Aboriginal and Torres Strait Islander People*. Cat. No. 21 Canberra: Australian Institute of Health and Welfare, 2008.
- 24 OATSIH, Department of Health and Ageing. *The Link Between Primary Health Care and Health Outcomes for Aboriginal and Torres Strait Islander Australians*. 2008. www.health.gov.au/internet/main/publishing.nsf/Content/health-oatsih-pubs-linkphc~health-oatsih-pubs-linkphc-local~casestudies~case
- 25 Kruske *ibid*
- 26 Herceg *ibid*
- 27 New South Wales Health. *New South Wales Aboriginal Maternal and Infant Health Strategy Evaluation Final Report*. Sydney: New South Wales Health, 2005.
- 28 Nel P and Pashen D. Shared antenatal care for Indigenous patients in a rural and remote community. *Australian Family Physician* 2003;32:127–31.
- 29 Carroli G, Villar J, Piaggio G *et al*. World Health Organization systematic review of randomised controlled trials of routine antenatal care. *The Lancet* 2001;357: 1565–70.
- 30 Woods L, France K, Hung K, Eades S and Slack-Smith L. Indigenous women and smoking during pregnancy: knowledge, cultural contexts and barriers to cessation. *Social Science and Medicine* 2008;66:2378–89.
- 31 Stamp G, Champion S, Anderson G *et al*. Aboriginal maternal and infant care workers: partners in caring for Aboriginal mothers and babies. *Rural and Remote Health* 2008;8:883.
- 32 Walker R and Reibel T. *Antenatal Services for Aboriginal Women in Western Australia: the paradox of availability, cultural security and accessibility*. Presentation at the Perinatal Society of Australia and New Zealand (PSANZ) Conference, Darwin, April 2009.
- 33 Cross T, Bazron B, Dennis K and Isaacs M. *Towards a Culturally Competent System of Care: a monograph on effective services for minority children who are severely emotionally disturbed. Volume I*. Washington, DC: Georgetown University Child Development Center, 1989.
- 34 Campinha-Bacote J. Cultural competence in psychiatric nursing: have you 'asked' the right questions? *Journal of the American Psychiatric Nurses Association*, 2002;8:183–7.
- 35 Dudgeon P. *Cultural Competence in the Workplace*. Unpublished conference presentation, 2009.
- 36 Walker R and Sonn C. Working as a culturally competent mental health practitioner. In: Purdie N, Dudgeon P and Walker R. *Working Together: Aboriginal and Torres Strait Islander Mental Health and Wellbeing, Principles and Practice*. Australian Council for Education Research and the Kulunga Research Network, Telethon Institute for Child Health Research, 2009.
- 37 Westerman T. *The Value of Unique Service Provision for Aboriginal Australians: the benefits of starting from scratch*. Keynote address. Psychology and Indigenous Australians: Teaching Practice and Theory Conference, Adelaide, South Australia, 2007.
- 38 Western Australian Department of Health (Office of Aboriginal Health). *Western Australian Health Aboriginal Cultural Respect Implementation Framework*. 2005. www.aboriginal.health.wa.gov.au/docs/Cultural_Respect_Implementation_Framework.pdf

PEER REVIEW

Not commissioned; externally peer reviewed.

CONFLICTS OF INTEREST

None.

ADDRESS FOR CORRESPONDENCE

Tracy Reibel, Senior Researcher, Telethon Institute for Child Health Research, 100 Roberts Road, Subiaco, 6008, WA, Australia. Email: treibel@ichr.uwa.edu.au

Received 1 September 2009

Accepted 9 January 2010