Premature birth and Indigenous Australians: A commentary

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Indigenous Australians experience twice the rate of premature birth when compared to their non-Indigenous counterparts. The purpose of this commentary is to explore the key contributing factors and to understand the particular needs of Indigenous Australian mothers. Directions for change in order to improve outcomes for both mothers and babies are identified, including reducing smoking, increasing antenatal care and providing culturally competent care.

Keywords: premature birth, Indigenous Australians, mothers, health and wellbeing, culturally competent care

Indigenous Australians are nearly twice as likely to have a premature baby compared to their non-Indigenous counterparts, especially in rural and remote areas. In 2016, the percentage of Indigenous babies born before 37-weeks' gestation was 14% compared with 8% of non-Indigenous babies (Australian Institute of Health and Welfare, 2018a). The reasons for this are complex, multifactorial, and poorly understood. Generally, Indigenous mothers tend to be younger than non-Indigenous mothers and more likely to smoke during pregnancy. Both factors have been associated with higher rates of preterm birth (Australian Institute of Health and Welfare, 2018a; Mittiga et al., 2015; Thrift et al., 2011). Lifestyle-linked diseases such as diabetes, obesity and hypertension also contribute to higher rates of preterm birth (Ford et al., 2018), and there is high prevalence of these diseases amongst Indigenous Australians (Australian Institute of Health and Welfare, 2018a).

In this paper, preterm births are defined as births greater than 20 completed weeks of gestation (or ≥ 400g birthweight) and < 37 weeks' gestation. Low birthweight and preterm birth are significant determinants of an infant's current and future health, with higher mortality rates in infancy and childhood, and more likelihood of chronic diseases such as cardiovascular disease and diabetes in adulthood (Australian Health Ministers' Advisory Council, 2017a).

The economic cost of preterm birth is high in terms of neonatal intensive care and ongoing health-care and educational needs (Khan et al., 2015). The social cost is also high, with many families experiencing the sudden loss of a preterm baby or a stressful hospital stay, sometimes for months (Liou et al., 2015). Importantly, preterm birth correlates strongly with poverty and socio-economic status, maternal psychosocial stress, smoking in pregnancy, limited maternal education and young maternal age; all these risk factors are statistically more likely to be present among Indigenous women (Kildea et al., 2017).

Women who experience anxiety and depression during pregnancy are more likely to give birth to premature babies (Walshe et al., 2008). Maternal mental health is key to the health and well-being of the developing pre-term baby, yet mothers of premature babies have higher rates of depression, anxiety, acute and post-traumatic stress reactions, and they experience these conditions for a longer duration (Baum et al., 2012). Evidence is mounting that babies less than 1000 grams are at an increased risk of mental health problems into childhood, adolescence and now adulthood (Johnson & Marlow, 2014). These findings suggest the importance of the prevention and identification of mental health problems, including specific early culturally appropriate interventions for Indigenous mothers of premature babies.

Experiences of Indigenous mothers remain largely unreported

Despite high rates of preterm birth, the experiences of Indigenous mothers remain largely unreported. As researchers in the Faculty of Health at the University of Technology Sydney (UTS), Australia, we approached our Faculty's Aboriginal and Torres Strait Islander advisor, Ms Angela Philips, for her thoughts on the unacceptably high rates of preterm birth experienced in Indigenous communities.

KEY RISK FACTORS CONTRIBUTING TO HIGH RATES OF PREMATURE BIRTH

The key risk factors for pregnancy-related complications and adverse birth outcomes include smoking during pregnancy, poor antenatal care and low birthweight. Angela believes that to have sustainable long-term health improvements for Indigenous peoples, the underlying causes of ill health need to be addressed, rather than focusing on the symptoms. Angela is an Aboriginal Wiradjuri woman (group of Aboriginal people from New South Wales), mother, Registered Nurse and a Lecturer in Nursing at UTS. She is an active member of the Congress of Aboriginal and Torres Strait Islander Nurses and Midwives (CATSINaM) and also works as a registered nurse in an Aboriginal general practice setting. Angela's viewpoint is that the social determinants of health inequality (housing, food, income, education and racism) must be addressed at a fundamental and systemic level.

Successive Australian Governments have been aware of their obligations to address these issues, including risk behaviours (such as smoking) within a strengths-based approach (Fowler et al., 2012). The Australian Governments' 'Closing the Gap' strategy was developed in 2008, with its target to significantly improve Indigenous population health outcomes, including maternal and child health, by 2030 (Council of Australian Governments, 2009). In the decade since release of 'Closing the Gap', Angela confirms that there have been some signs of improvement in these key maternal and child health risk factors.

SMOKING AND LOW BIRTHWEIGHT

Smoking during pregnancy is one of the strongest risk factors contributing to high rates of low birthweight babies born to Indigenous mothers – up to 51% (Australian Health Ministers' Advisory Council 2017a). Some reduction in the proportion of Indigenous mothers who smoked during pregnancy has been reported:- from 50% in 2009 to 45% in 2015. The proportion of low birthweight babies with Indigenous mothers who smoked has also declined, from 12% in 2005 to 10.4% in 2015 (Figure 1).

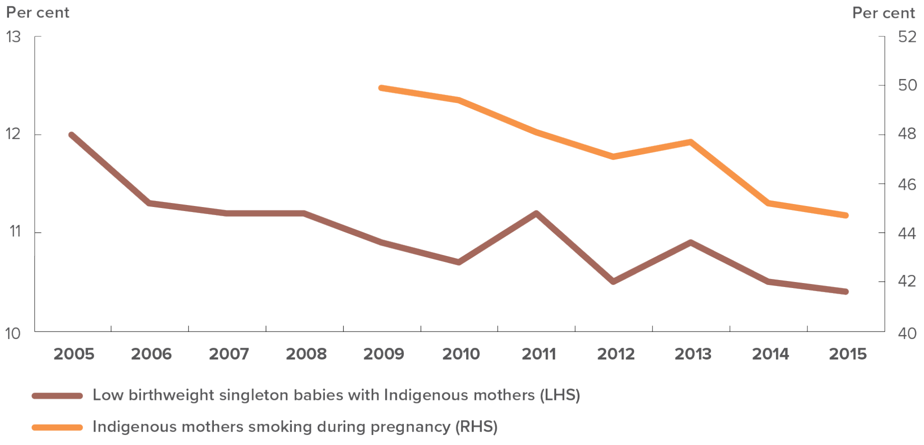
While the proportion of low birthweight singleton babies born to Indigenous mothers has also fallen from 12.4% in 2006 to 11.6% in 2016, this remains twice the rate for babies born to non-Indigenous mothers (6.2- 6.3%) (Australian Institute of Health and Welfare 2018a). Low birthweight babies of non-Indigenous mothers varies by remoteness, ranging from 6.3% in major cities to 4.6% in very remote rural areas. For babies of Indigenous mothers, these proportions are substantially higher:- it is lowest in major cities (10.7%) and highest in very remote areas (15%) (Australian Institute of Health and Welfare 2018a).

ANTENATAL CARE

Low attendance or non-attendance at antenatal care visits is associated with an increased risk of preterm birth, neonatal death, and low birthweight babies (Australian Institute of Health and Welfare, 2018b). Enhanced access to antenatal care improves the chances of having a healthy baby by providing mothers with opportunities to find and treat any prenatal conditions and physical or psychological health risks early in pregnancy. It is encouraging to see that the proportion of Indigenous mothers having five or more antenatal visits has also increased slightly from 85% in 2011 to 88% in 2016 (Australian Institute of Health and Welfare, 2018c).

> Indigenous women need culturally competent care to reduce the stillbirth rate

Figure 1: Indigenous maternal smoking and low child birthweight rates



Source: Australian Institute of Health and Welfare, 2017a

TABLE 1: KEY CHARACTERISTICS OF CULTURALLY COMPETENT CARE

- Physical environment is culturally appropriate and acceptable
- Specific Indigenous maternal health programmes and initiatives
- Indigenous workforce inclusion and development
- Continuity of care and carer
- Collaborating with Indigenous Organisations and other agencies promoting integrated care and health networks
- Effective and privileged communication, information sharing and transfer of care between health services
- Staff attitudes are respectful and cross-culturally aware and sensitive
- Cultural education and competency programmes
- Supportive relationships with Indigenous individuals, co-workers and partnership with the community
- Informed choice and right of refusal
- Tools to measure cultural competence
- Culture specific guidelines
- Culturally appropriate and effective health promotion and behaviour change activities
- Engaging with the Indigenous community consumers and inclusion in clinical governance processes.

(Hartz & McGrath, 2017:52 adapted from Kruske, 2011)

However, Angela considers that fear of discrimination, lack of trust, and negative past experiences with health services may limit acceptance and uptake of antenatal care by Australian Indigenous women. Providing Indigenous women with culturally competent perinatal health care is critical to reducing the occurrence of premature births (Hartz & McGrath, 2017).

CULTURALLY COMPETENT CARE

Angela considers that there is a need to provide culturally-safe and responsive approaches to service delivery which are flexible and reflect the local context and diversity of Australian Indigenous communities. For these reasons, she identifies that participation of an Australian Indigenous health workforce is an essential element in all health care settings and in implementation of strategies.

This view is shared by the National Aboriginal and Torres Strait Islander Health Plan 2013-2023 vision:- an Australian health system free of racism and inequality, and where all Aboriginal and Torres Strait Islander people have access to health services that are effective, high quality, appropriate and affordable. The health system therefore requires an increasing Aboriginal and Torres Strait Islander health workforce, delivering culturally-safe and responsive health care (Australian Health Ministers' Advisory Council 2017b). Characteristics of culturally competent health care are listed in Table 1.

> The health system needs an increasing Aboriginal and Torres Strait Islander workforce

Angela, in her role as the Aboriginal and Torres Strait Islander Advisor in the Faculty of Health at the University of Technology Sydney (UTS), has been a driving force behind the establishment of support networks and entry pathways for Indigenous health students in the university. 'Only with Aboriginal and Torres Strait Islander people embedded in working in and leading Indigenous health services, can we start to meet the challenge of health inequality and the ideal that all Australians have a fundamental right to health', she says. She has also co-created and implemented Indigenous health subjects in undergraduate health degrees, and she regularly runs educational yarning sessions for students and staff to discuss issues of cultural safety and awareness.

RESEARCH AND INDIGENOUS MOTHERS' EXPERIENCES OF HAVING PREMATURE BABIES

The subsequent effects of having a baby born prematurely and the ongoing physical and psychological consequences of this on maternal health and wellbeing from Indigenous women's perspectives have been poorly researched (Mah et al., 2017; Prandl et al., 2012). A team of researchers at UTS, including Angela Phillips, applied for a Faculty research grant to investigate Australian Indigenous mothers' experiences of having premature babies in relation to their health and wellbeing. A critical outcome of this study is to gain insight into the cultural needs and nursing resources required by Indigenous mothers of premature infants (both prior to discharge and in the community setting), so that services can be better informed. This in turn may facilitate an increase in the number of Indigenous mothers engaging with the health services and subsequent improved outcomes for both mothers and babies. This research is currently underway in 2019.

Keypoints

- In Australia substantial gaps remain between outcomes for Indigenous and non-Indigenous premature babies.
- Specific, early, culturally appropriate interventions are required for Indigenous mothers of premature babies.
- Researchers at UTS are investigating the needs of

Indigenous mothers in order to improve access to culturally appropriate maternal health and pregnancy-related care.

- Research indicating that babies weighing less than 1000 grams are at increased risk of mental health problems into childhood, adolescence and adulthood (Johnson & Marlow, 2014) suggests the importance of the prevention and identification of mental health problems.

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