Policy Brief #4

IMPROVING THE HEALTH OF ABORIGINAL BABIES

Translating evidence from the Aboriginal Families Study to inform policy and practice

This policy brief summarises findings from the Aboriginal Families Study. It highlights the potential for stressful events and social health issues to affect the health of newborn babies, and discusses implications for health policy and health services.

While the World Health Organisation has succeeded in putting a spotlight on the importance of tackling the marked disparities in maternal and child health outcomes in low and middle income countries,[1,2] this has not been matched by equivalent attention to the disparities affecting Indigenous populations in high income countries. In the Australian context, Aboriginal and Torres Strait Islander families continue to experience rates of stillbirth, preterm birth, low birthweight and neonatal death that are 2-3 times higher than other Australian women.[3] Understanding why and how this is happening and using this information to inform strategies for overcoming health inequalities is an urgent priority for health policy and health services.

The Aboriginal families STUDY

The Aboriginal Families Study (AFS) is a population-based study investigating the views and experiences of mothers having an Aboriginal baby in South Australia between July 2011 and June 2013. The study was designed and conducted in partnership with the Aboriginal Health Council of South Australia.

A small team of Aboriginal interviewers invited women living in urban, regional and remote areas of South Australia to take part in the study when their baby was approximately 4-12 months old.

One of the aims of the study was to build a picture of what was happening in women's lives while they were pregnant, and how this might be influencing the health of their baby. We also asked women about smoking and cannabis use.

Social health issues during pregnancy

Most women experienced at least one stressful event (such as the death of a family member) or social health issue (e.g. housing problems, family violence, drug and alcohol problems) during pregnancy.

Some of the issues women experienced were:

- Being upset by family arguments (55%)
- Housing problems/having to move house (43%)
- Family member/friend passed away (41%)
- Being scared by other people's behavior (31%)
- Partner having problems with drugs or alcohol (22%)
- Being pushed, shoved or assaulted (16%)
- Problems with police/going to court (13%).

More than half of the women in the study (56%) experienced three or more of these issues, and one in five women (20%) experienced 5-12 of these issues while they were pregnant.

1 in 4 women experienced 5-12 social health issues during pregnancy

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Implications of social health issues for birth outcomes

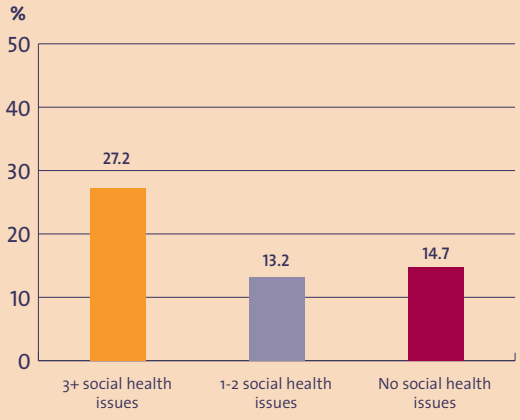
Overall, women in the study experienced considerably poorer birth outcomes compared to the general Australian population:

- 11.7% had a preterm birth (<37 weeks gestation), compared to 8.5% for the general population
- 13.7% had an infant with a low birthweight (<2500 grams) compared to 6.2% for the general population, and
- 21.6% had an infant that was small for gestational age (below the 10th centile), compared to 10% for the general population.[4]

Compared to women experiencing no stressful events or social health issues, women experiencing three or more issues during pregnancy more commonly had babies born small for gestational age (i.e. below the tenth centile for gestation at time of birth) and/or babies with a low birthweight (<2500 grams).

As shown in Figure 1, more than one in four women (28%) who experienced multiple stressful events or social health issues during pregnancy had babies that were born small for gestational age, compared with one in seven (15%) of those reporting no stressful events or social health issues during pregnancy.

Fig 1: Proportion of babies born small for gestational age by social health issues



Babies born small for gestational age and/or with a low birthweight are at higher risk of developing a range of chronic conditions such as diabetes and hypertension earlier in their life span, than babies born in the normal weight range (2500-3999 grams).

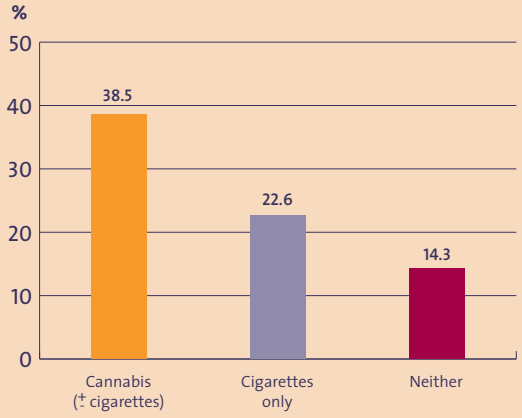
Cannabis and birth outcomes

Overall, one in five mothers (20%) reported that they used cannabis during pregnancy, and 52% smoked cigarettes.

Compared to women not using cannabis or cigarettes, women who used cannabis during pregnancy were more likely to have a baby with a low birthweight (<2500 grams) and/or or baby that was small for gestational age (See figure 2).

On average, babies born to mothers using cannabis were 565 grams lighter than babies born to mothers who did not use cannabis or cigarettes.

Fig 2: Cannabis and babies born small for gestational age



Women using cannabis when they were pregnant were more likely to have experienced multiple stressful events and social health issues during their pregnancy.

They were also more likely to have been teenagers (under 20 years) when they had their first child, and more likely not to be employed during their recent pregnancy and not to have completed year 12.

Taking these characteristics of mothers into account did not alter the conclusion that mothers using cannabis in pregnancy were more likely to have babies that were born small for gestational age.

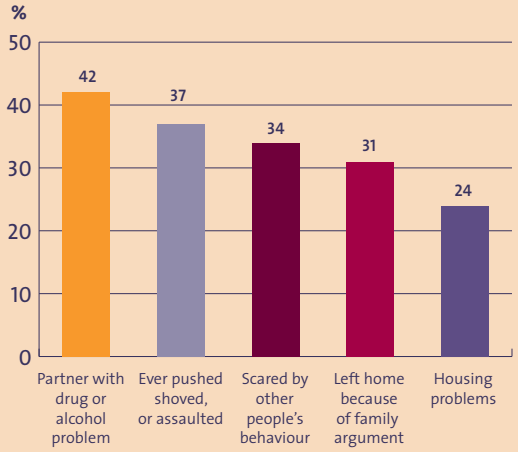
Implications for antenatal care

The study provides clear evidence that women experiencing social health issues during pregnancy are more likely to use cannabis while pregnant. This suggests that strategies to support women to reduce use of cannabis during pregnancy need to be situated within a broader context of the clustering of risk factors for poor outcomes.

For example, 37% of the women who reported that they had been pushed, shoved or assaulted during pregnancy reported using cannabis. Similarly, around a third of women who said that they were scared by other people's behavior during pregnancy, or had to leave home because of a family argument while they were pregnant, reported using cannabis. (See Figure 3)

The common clustering of social health issues with cannabis use means it is important for health professionals to take a holistic approach that combines high quality clinical care, including advice about potential risks of cannabis use (and other drugs and alcohol), with strategies to support women dealing with trauma associated with stressful events and social health issues.

Fig 3: Proportion of women experiencing social health issues during pregnancy that reported using cannabis



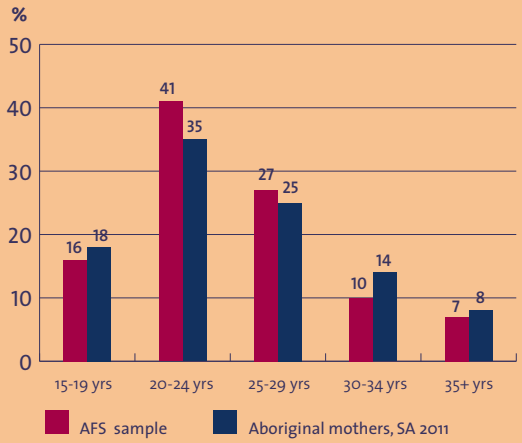
Women who smoked cigarettes and/or used cannabis during pregnancy were less likely to receive antenatal care in the first trimester or to attend the recommended number of visits. Other studies have reported similar findings[5], reinforcing the need for different approaches to engaging Aboriginal women and families in antenatal care, especially when there are multiple risk factors for adverse maternal and child health outcomes.

About women in the study

All women who took part gave birth to an Aboriginal baby in South Australia between July 2011 and June 2013. A majority were Aboriginal women (311/344, 90%). Four women identified as both Aboriginal and Torres Strait Islander and four women as Torres Strait Islander (2%) and 25 women were non-Aboriginal mothers of Aboriginal babies (7%). The average age of the baby when mothers completed the questionnaire was 7 months. Women taking part ranged in age from 15-43 years, with over half of women aged under 25 years. We estimate that approximately a quarter of all Aboriginal women who gave birth in South Australia in the study period took part.

To assess the representativeness of the sample, we compared data on social characteristics with routinely collected South Australian perinatal data for 2011. The women in the study are largely representative in relation to maternal age (see Figure 4), gestation and infant birthweight. Women having their first baby were slightly over-represented (42% compared with 34% in routine data), and women giving birth at metropolitan hospitals under-represented (52% compared with 59% in routine data).

Fig 4: Age of mothers in the study



39% were living in Adelaide and 61% in regional areas of South Australia, including: Ceduna, Port Lincoln, Whyalla, Port Augusta, Murray Bridge and Mount Gambier. 87% of women taking part had a health care concession card.

Considerations for policy and services

Despite longstanding recognition of disparities in Aboriginal maternal and child health outcomes, progress is grindingly slow.[6-8]

The findings from the Aboriginal Families Study provide a compelling case for stronger efforts to address the clustering of risks for adverse outcomes in Aboriginal and Torres Strait Islander communities. These risks include: the high prevalence of cannabis use and cigarette smoking, and other effects of extreme social disadvantage, such as low education, low health literacy, under-nutrition, unhealthy weight gain, and health system barriers, such as lack of culturally appropriate services, or lack of availability of transport to get to services.

Antenatal and postnatal care afford a 'window of opportunity' to identify and support families, especially those that may be vulnerable to adverse outcomes due to life circumstances.[9]

It is important that women, families and health professionals are made aware of the likely adverse consequences of cannabis use during pregnancy. This will require workforce training and expansion of Aboriginal workforce to support the development of approaches to support women to stop, or reduce the use of cannabis during and after pregnancy.

In order to ensure that antenatal and postnatal care is relevant to Aboriginal women and families, there is an urgent need to re-frame care in ways that address broader social determinants of adverse birth outcomes, and for interventions to support women to reduce cannabis use to be situated within the context of women's life circumstances. This requires re-thinking existing (outdated) frameworks for providing antenatal and postnatal care, the expansion of Aboriginal workforce, and re-designing services to:

- pay attention to cultural safety and appropriate ways of engaging Aboriginal families
- ensure that initiatives to tackle smoking include information about the potential harms of cannabis
- expand the involvement of Aboriginal Maternal Infant Care (AMIC) workers and other Aboriginal health professionals in antenatal and postnatal care
- combine high quality clinical care with a stronger public health approach to addressing modifiable risk factors for poor maternal and child health outcomes.

HOW DO THE RESULTS COMPARE TO THE INTERNATIONAL LITERATURE?

- There is very limited data examining the association between cannabis use and birth outcomes among Indigenous populations. In general population studies, similar trends have been observed, although none showing such extreme differences in outcome.[10-12]
- There are a number of features of the study that add to the rigor and face validity of the findings. The conduct of the study in partnership with the Aboriginal Health Council of South Australia, the active engagement of the study's Aboriginal Advisory Group and the collection of information by Aboriginal researchers well known in their communities is likely to have resulted in more accurate and reliable data on use of cannabis.
- The cross sectional design of the study means it is not possible to draw conclusions about cause and effect. It is possible that the results reflect the clustering of risk, or heightened susceptibility to the effects of cannabis, in the context of other social and material adversities.

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REFERENCES

References used in development of this policy brief are available from: **hmhf@mcri.edu.au**

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SUBSCRIBE

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