



Kimberley Mum's Mood Scale: a narrative overview

The Kimberley Mum's Mood Scale (KMMS) project emerged from the concerns of Kimberley healthcare professionals that the mainstream perinatal depression and anxiety screening tool, the Edinburgh Postnatal Depression Scale (EPDS), was inappropriate for Aboriginal women.

The first phase of the project involved a community based, participatory research action project with over 100 Kimberley Aboriginal women and 72 healthcare professionals to determine appropriate ways to screen for common perinatal mental health disorders. The resulting KMMS is a two-part screening tool; Part 1 is a modified version of the EPDS, and Part 2 is a yarning template for exploring psycho-social areas of stress and resilience in a women's life.

We validated the KMMS in 2016 through a clinical trial involving 91 Kimberley Aboriginal women. Participants reported that "it was good", "helpful", and that they "liked the questions", which were clear and 'easy' to answer and understand. They also said that they liked telling their life story: "I talked about my childhood, family, personal life". We also found that almost all of these women had protective factors and these appeared to contribute to them not having anxiety or depression, even if they had significant risk factors. The most prominent/important protective factor was positive relationships with family members.

Healthcare providers reported that through KMMS Part 2's guided enquiry, women opened up to them at far deeper levels than they had done before. We found that for Aboriginal women, it is important that the health professional explores a woman's whole context. That is, the way she experiences stress and risk, and how her protective factors support her in order to best understand and support mental health. Assessing Aboriginal women's perinatal mental health by only looking at risk is not enough.

In 2017 we received funds from the National Health and Medical Research Council and WA Department of Health to progress the transferability of the KMMS in other geographic areas and implement the KMMS into routine clinical practice across the Kimberley. During 2017-2022 we supported KMMS implementation in the Kimberley through this investment in resources and our relationships with stakeholders.

We consulted with Aboriginal women and healthcare providers to understand what would enable successful implementation. We also explored the transferability of the KMMS with Aboriginal women in the Pilbara region and found the KMMS to be acceptable to this group of women.

Our recent audit of KMMS implementation demonstrated that it is the primary perinatal depression and anxiety screening tool across Kimberley Aboriginal Community Controlled Health Services (see attached paper). We also found that perinatal mental health concerns were high: 24% of Kimberley Aboriginal women who were screened in 2021 were recorded as being at risk of depression and anxiety. The national average was 10%.

Central to all phases of this project has been Aboriginal voice, participation, and leadership. This has included ongoing consultation with Aboriginal women (end users); a strong team of Aboriginal Investigators; and robust partnerships with Aboriginal Community Controlled Health Services.



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What does this all mean?

This study demonstrates that innovation in perinatal depression and anxiety screening for Aboriginal women is possible and can be implemented into routine clinical care. The KMMS is broadly acceptable to other geographical groups of Aboriginal women.

Changes to clinical practice

The KMMS is recognised and endorsed in the Kimberley Aboriginal Health Planning Perinatal depression and anxiety protocol.

- KMMS training is available for free online at <https://www.amsed.com.au/kmms-module>
- The KMMS is fully integrated with several Electronic Medical Systems (MMEEx, CHIS, Communicare).

We would like to thank all Aboriginal women and health service staff who assisted with the KMMS project, and health services who took part in this project.

The KMMS project is a collaboration between the Rural Clinical School of WA (RCSWA), Kimberley Aboriginal Medical Services and WA Country Health Services.

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KMMS Publications

1. Kotz J, Munns A, Marriott R, Marley JV. Perinatal depression and screening among Aboriginal Australians in the Kimberley. *Contemp Nurse* 2016; 52:42-58.
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3. Carlin E, Atkinson D, Marley JV. 'Having a quiet word': yarning with Aboriginal women in the Pilbara region of Western Australia about mental health and mental health screening during the perinatal period. *Int J Environ Res Public Health* 2019; 16: 4253.
4. Carlin E, Blondell S, Cadet-James Y, Campbell S, Williams M, Engelke C, Taverner D, Marriott R, Edmonds K, Atkinson D, Marley JV. Study protocol: Improving mental health screening for Aboriginal and Torres Strait Islander pregnant women and mothers of young children. *BMC Public Health* 2019; 9: 1521.
5. Carlin E, Spry E, Atkinson D, Marley JV. Why validation is not enough: setting the scene for the implementation of the Kimberley Mum's Mood Scale. *PloS ONE* 2020;15(6):e0234346.
6. Carlin E, Seear KH, Ferrari K, Spry E, Atkinson D, Marley JV. Risk and resilience: a mixed methods investigation of Aboriginal Australian women's perinatal mental health screening assessments, *Soc Psychiatry Psychiatr Epidemiol* 2020.
7. Carlin E, Ferrari K, Spry EP, Williams M, Atkinson D, Marley JV. Implementation of the 'Kimberley Mum's Mood Scale' across Primary Health Care Services in the Kimberley region of Western Australia: a mixed methods assessment. *Plos One* 2022; 17:e0273689.