University of Wollongong Research Online

Australian Health Services Research Institute

Faculty of Business and Law

2012

The need to evaluate public health reforms: Australian perinatal mental health initiatives

Marie-Paule Austin University of New South Wales

Nicole M. Reilly University of Wollongong, nreilly@uow.edu.au

Elizabeth Sullivan University of New South Wales

Follow this and additional works at: https://ro.uow.edu.au/ahsri

Recommended Citation

Austin, Marie-Paule; Reilly, Nicole M.; and Sullivan, Elizabeth, "The need to evaluate public health reforms: Australian perinatal mental health initiatives" (2012). *Australian Health Services Research Institute*. 1122. https://ro.uow.edu.au/ahsri/1122

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au

The need to evaluate public health reforms: Australian perinatal mental health initiatives

Abstract

Objective: To describe the Australian perinatal mental health reforms and explore ways of improving surveillance of maternal mental health morbidity and mortality in this context. **Approaches**: We reviewed the Australian perinatal (defined as conception to one year postpartum) mental health reforms, in association with an appraisal of the population health methods that could be used for their evaluation. **Conclusion**: Despite the increasing focus of public health reforms on maternal mental health in the perinatal period, there is currently no national data available to evaluate these reforms or to provide an evidence base for improved health outcomes. National data development and linkage of relevant datasets would go a long way towards enabling such an endeavour. **Implications**: Inclusion of key mental health items in the Perinatal National Minimum Dataset and use of data linkage techniques will allow for monitoring of trends in maternal mental health morbidity and mortality in response to the Australian reforms. Once this is implemented, cost-benefit analyses can be undertaken.

Keywords

mental, perinatal, australian, reforms:, health, public, initiatives, evaluate, need

Publication Details

M. Austin, N. Reilly & E. Sullivan, "The need to evaluate public health reforms: Australian perinatal mental health initiatives", Australian and New Zealand Journal of Public Health 36 3 (2012) 208-211.

The need to evaluate public health reforms: Australian perinatal mental health initiatives

Abstract

Objective: To describe the Australian perinatal mental health reforms and explore ways of improving surveillance of maternal mental health morbidity and mortality in this context.

Approaches: We reviewed the Australian perinatal (defined as conception to one year postpartum) mental health reforms, in association with an appraisal of the population health methods that could be used for their evaluation.

Conclusion: Despite the increasing focus of public health reforms on maternal mental health in the perinatal period, there is currently no national data available to evaluate these reforms or to provide an evidence base for improved health outcomes. National data development and linkage of relevant datasets would go a long way towards enabling such an endeavour.

Implications: Inclusion of key mental health items in the Perinatal National Minimum Dataset and use of data linkage techniques will allow for monitoring of trends in maternal mental health morbidity and mortality in response to the Australian reforms. Once this is implemented, costbenefit analyses can be undertaken. *Key words:* mental health, monitoring, pregnancy, postnatal

> Aust NZ J Public Health. 2012; 36:208-11 doi: 10.1111/j.1753-6405.2012.00851.x

Marie-Paule Austin, Nicole Reilly

Perinatal and Women's Mental Health Unit, St John of God Health Care; School of Psychiatry; University of New South Wales; and Black Dog Institute, New South Wales

Elizabeth Sullivan

Perinatal and Reproductive Epidemiology Research Unit, School of Women's and Children's Health, University of New South Wales

espite the increasing focus of public health reforms on maternal mental health in the perinatal period, there is currently no national data available to evaluate the reforms or to provide an evidence base for improved health outcomes. This paper briefly outlines the reforms and methods that might be used to build an evidence base on which to evaluate the public health impact of these national initiatives.

Approaches Review of Australian Perinatal mental Health Reforms

Mental health is increasingly recognised as an integral part of healthcare in pregnancy and the postnatal period. Mental health morbidity associated with the perinatal period - defined as the beginning of pregnancy to the end of the first postnatal year - is a major public health issue with clinical depression affecting up to 15 % of women^{1,2} and almost 40% of depressed women suffering from a comorbid anxiety disorder.³ Approximately 3% of perinatal women will experience severe depression and 0.2% a puerperal psychosis.4-7 There is mounting evidence of the negative impact of poor mental health outcomes not only for the mother, but also to her child and thus, potentially, the health of the next generation.8-13

In 2008, 292,156 women gave birth in Australia.¹⁴ Assuming a 15% rate of depression,¹⁵ about 44,000 of these women would have suffered from depressive symptomatology or other mental health conditions. In response to a growing awareness of the extent of the problem, there have been significant developments in prevention and early intervention approaches to perinatal mental health.

In the past decade, Australia has become a world leader in the development of national policy and clinical practice for perinatal mental health (see Figure 1). The National Action Plan for Perinatal Mental Health^{16,17} recommended the implementation of universal perinatal psychosocial assessment, training for primary care staff undertaking the assessments, and establishment of structures that would optimise coordination of, and access to, appropriate services. Its release in 2008 led to a commitment of \$85 million by the Federal government for the establishment of the National Perinatal Depression Initiative (NPDI; 2008-2013). The NPDI¹⁸ - with the assistance of beyondblue: the national depression initiative - has facilitated the implementation of the National Action Plan with the introduction of a dedicated Medicare perinatal mental health rebate, the creation of local perinatal mental health coordinator positions, and mental health training for

Submitted: June 2011 Revision requested: August 2011 Accepted: September 2011 **Correspondence to:** Professor Marie-Paule Austin, Perinatal and Women's Mental Health Unit, St John of God Hospital, PO Box 261, Burwood, NSW 1805; e-mail: m.austin@unsw.edu.au

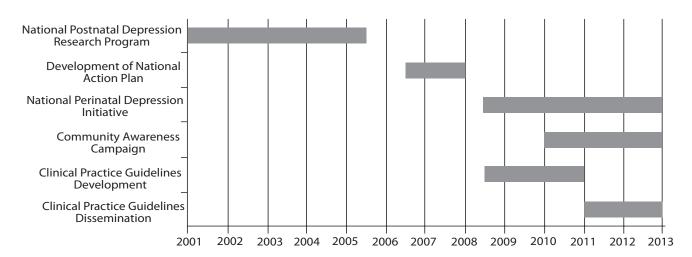


Figure 1: Australian Perinatal Mental Health Reforms, 2001-2013.

primary health care staff. More recently we have seen the release of the NHMRC-endorsed *beyondblue* Clinical Practice Guidelines for Depression and Related Disorders – Anxiety, Bipolar Disorder and Puerperal Psychosis – in the Perinatal Period (the '2011 Guidelines').¹⁹These recommend the routine, universal use of the Edinburgh Postnatal Depression Scale²⁰ to screen for symptoms of depression both antenatally and postnatally, also endorse as a good practice point routine enquiry about psychosocial risk factors at least once during pregnancy and after the birth.¹⁹ Both the NPDI and 2011 Guidelines provide a clear framework for identifying and managing maternal mental health morbidity in this setting.

A number of state-based initiatives have also been established in tandem with the national reforms. In New South Wales, the SAFE START perinatal mental health policy and guidelines²¹⁻²³ were designed to give guidance to primary health care professionals around routine psychosocial assessment and pathways to care. In Western Australia, the State Perinatal Reference Group was established to ensure the participation of key stakeholders in overseeing the development of Perinatal Mental Health clinical guidelines and policy,24,25 while the Perinatal Mental Health Unit ensures these are implemented evaluated in a timely fashion. The rollout of routine, universal psychosocial assessment in South Australia and Queensland, based on the recommendations and good practice points made in the National 'Guidelines' is currently well under way. In addition there a number of perinatal mental health initiatives - closely linked to the NPDI - now being undertaken in Victoria, the Australian Capital Territory, Northern Territory and Tasmania.

Evaluation of such initiatives is essential in order to gauge their impact on maternal outcomes and clinical practice and management.

Appraisal of the population health methods that could be used for the evaluation of our Perinatal mental Health reforms.

Monitoring of maternal psychiatric morbidity

One option for monitoring the extent of implementation of

the NPDI or the 2011 Guidelines is to develop a small number of nationally agreed items relating to depression screening and psychosocial assessment during pregnancy for inclusion in the Perinatal National Minimum Dataset. This would provide high quality, nationally consistent data which could assist stakeholders in measuring the extent of implementation of the screening and assessment aspects of the NPDI, with potential to use this information to help assess the impact of routine mental health assessment during pregnancy on maternal and perinatal outcomes. This would require high-level consultation with stakeholders as well as rigorous pilot testing to ensure the minimum depression screening and/or psychosocial assessment data items were both feasible and clinically useful.

The ascertainment of maternal psychiatric morbidity would be greatly enhanced by routine notification of perinatal status and/ or data linkage studies. Options for documenting more accurate rates of maternal mental health morbidity requiring health service provision across the full 'perinatal' period include the establishment of a notification system for all psychiatric and general hospital admissions (both public and private), accident and emergency department presentations, mental health ambulatory care, and presentations to general practice, to flag women who are pregnant or who gave birth within the previous 365 days. Collection of such data draws parallels with the audit criteria of the British National Institute of Clinical Excellence (NICE) Guidelines for Antenatal and Postnatal Mental Health.26 In addition, linkage of national and State/Territory perinatal/midwives data collections and key health administrative data collections (e.g. admitted patients / hospital morbidity, emergency department, mental health ambulatory care, and mental-health related Medicare items [including the Better Access to Mental Health Care items]) would provide a more complete picture of the full spectrum of mental health morbidity in the perinatal period.

Monitoring of maternal mortality associated with mental health morbidity

Given maternal deaths are rare in Australia, it is reasonable to ask whether a further reduction in deaths is possible. However, the inequalities remaining in the rates of maternal mortality experienced by socially disadvantaged women, including Indigenous mothers and those with mental health conditions, suggest an opportunity to reduce maternal mortality in these high risk groups. To this end, routine monitoring of maternal deaths due to psychiatric causes should be considered a national reporting priority. In Australia, maternal deaths due to psychiatric causes and substance misuse were reclassified from incidental (where pregnancy is unlikely to have contributed significantly to the death) to indirect (where a pre existing or new condition is aggravated by the physiological effects of pregnancy) in the 1997-1999 triennium report.²⁷ Using data from three maternal deaths reports,²⁷⁻²⁹ Austin et al. went on to report that mental health morbidity is one of the leading causes of *indirect* maternal mortality in Australia.³⁰ This is in keeping with the more recent British Confidential Enquiries into Maternal Death^{31,32} and the New Zealand (NZ) data for 2006-08 showing that 20% of maternal deaths were suicides.³³ The importance of severe mental illness as a cause of maternal death is further reflected by the recent recommendation of the WHO Working Group on Maternal Mortality and Morbidity Classifications to classify suicide in pregnancy and death related to postpartum depression or psychosis from the *indirect* to *direct* category.³⁴ This recommendation is aimed at improving the quality and utility of maternal mortality data, with the working group suggesting its implementation for both death certificates and confidential enquiries into maternal deaths.³⁴ While there has been no national maternal mortality report in Australia since the 2003-05 Maternal Deaths report,³⁵ significant progress has been made in NZ where a specific data collection tool for maternal deaths now underpins the annual confidential review and reporting of maternal mortality. The most recent NZ report concluded with the need for integration of maternal mental health services into mainstream maternity services and the need for 'accurate antenatal screening and documentation of mental health history' to identify vulnerable women at elevated risk of mental illness.33

Research has demonstrated that record linkage, inclusive of *late* (43-365 days post partum or termination of pregnancy) deaths, is critical for accurate ascertainment of the impact of pregnancy and the puerperium on maternal health. Late maternal deaths are not routinely reviewed or uniformly flagged in current death reporting systems. Thus linking data from the NSW Midwives Data Collection with the AIHW National Death Index and the National Mortality Database, Cliffe et al identified an additional 33 maternal suicides (over the 26 suicides initially identified) during the period 1994-2001, comprising 32% of all additional maternal and late maternal indirect deaths identified.³⁶ Of these, 23 (70%) were classified as *late* maternal deaths. These findings draw strong parallels with similar UK linkage studies^{37,38} and support the argument for, and feasibility of, a national linkage study in Australia to ascertain the extent of maternal mortality related to mental health morbidity.

Conclusion

There is a clear need for an integrated, national approach to reporting of psychiatric maternal morbidity and mortality. This imperative is reflected in Recommendation 1 of the 2009 Australian Maternity Services Review to implement arrangements for "...consistent, comprehensive national data collection, monitoring and review, for maternal and perinatal mortality and morbidity".39 In line with this, the 'future research' section of the recently released Australian perinatal mental health clinical practice guidelines propose data development and monitoring of perinatal mental health reforms as key activities for the next phase of the NPDI.¹⁹ Such monitoring would enable quantification of the burden of psychiatric morbidity and mortality associated with childbearing, with emotional health and wellbeing being increasingly recognised as of equal importance to physical health, not only for mother, but also for her infant and family. National data development and data linkage methods would underpin this process and allow for more robust monitoring of the implementation and impact of key perinatal mental health initiatives in Australia.

Implications

In the UK there has been a decline in suicide as the leading cause of maternal death across the three most recent Confidential Enquiries into Maternal and Child Health (CEMACH) 'Saving Mothers' Lives' reports.32 The post-project review of the seventh 'Saving Mothers' Lives' report⁴⁰ suggest that the CEMACH recommendations were associated with an increase in specialised perinatal mental health services. This reform was further supported by the NICE clinical guidelines for antenatal and postnatal mental health,⁴¹ released following the seventh CEMACH report. The NICE guidelines recommended training of midwives in the routine detection of past history of mental illness and current maternal depression, with a view to achieving improved mental health management over the perinatal period. The potential impact of these combined policy and practice changes in the UK perinatal sector on ongoing reductions in suicide related maternal mortality rates seem to be confirmed in the eighth CEMACH Maternal Deaths Report³² which reports a further such reduction. It is hoped that maternal mental health outcomes as they relate to changes in public health policy, can also be monitored in Australia.

Inclusion of key mental health items in the Perinatal National Minimum Dataset and use of data linkage techniques will allow for such monitoring. Once this is implemented, cost-benefit analyses can be undertaken both in the context of the perinatal mental health reforms, both at the level of universal psychosocial assessment and also in terms of the recent Medicare mental health item reforms.

Acknowledgements

MPA and NR gratefully acknowledge infrastructure funding of St John of God Health Care and support from the Black Dog Institute.

References

- 1. Department of Reproductive Health and Research. *Mental Health Aspects of Women's Reproductive Health: A Global Review of the Literature.* Geneva (CHE): World Health Organization;2009.
- Gaynes BN, Gavin N, Meltzer-Brody S, Lohr KN, Swinson T, Gartlehner G, et al. Perinatal depression: prevalence, screening accuracy, and screening outcomes. *Evid Rep Technol Assess (Summ)*. 2005;(119):1-8.
- Austin M-P, Hadzi-Pavlovic D, Priest S, Reilly N, Wilhelm K, Saint K, et al. Depressive and anxiety disorders in the postpartum period: how prevalent are they and can we improve their detection? *Arch Womens Ment Health*. 2010;13(5):395-401.
- Oates MR. Perinatal psychiatric syndromes: clinical features. *Psychiatry*. 2009;8(1):1-6.
- Kendell RE, Chalmers JC, Platz C. Epidemiology of puerperal psychoses. Br J Psychiatry. 1987;150:662-73.
- Munk-Olsen T, Laursen TM, Pedersen CB, Mors O, Mortensen PB. New parents and mental disorders: a population-based register study. JAMA. 2006;296(21):2582-9.
- Cox JL, Murray D, Chapman G. A controlled study of the onset, duration and prevalence of postnatal depression. *Br J Psychiatry*. 1993;163:27-31.
- Halligan SL, Murray L, Martins C, Cooper PJ. Maternal depression and psychiatric outcomes in adolescent offspring: A 13-year longitudinal study. J Affect Disord. 2007;97(1-3):145-54.
- Caplan HL, Cogill SR, Alexandra H, Robson KM, Katz R, Kumar R. Maternal depression and the emotional development of the child. *Br J Psychiatry*. 1989;154:818-22.
- Dayan J, Creveuil C, Marks MN, Conroy S, Herlicoviez M, Dreyfus M, et al. Prenatal depression, prenatal anxiety, and spontaneous preterm birth: a prospective cohort study among women with early and regular care. *Psychosom Med.* 2006;68(6):938-46.
- Murray L, Fiori-Cowley A, Hooper R, Cooper P. The impact of postnatal depression and associated adversity on early mother-infant interactions and later infant outcome. *Child Dev.* 1996;67(5):2512-26.
- Murray L, Hipwell A, Hooper R, Stein A, Cooper P. The cognitive development of 5-year-old children of postnatally depressed mothers. *J Child Psychol Psychiatry*. 1996;37(8):927-35.
- O'Connor TG, Heron J, Glover V, The ALSPAC Study Team. Antenatal anxiety predicts child behavioral/emotional problems independently of postnatal depression. J Am Acad Child Adolesc Psychiatry. 2002;41(12):1470-7.
- Laws P, Li Z, Sullivan EA. Australia's Mothers and Babies 2008. *Perinatal Statistics Series Number:* 24. Catalogue No.: PER 50. Canberra (AUST): Australian Institute of Health and Welfare; 2010.
- Buist A, Bilszta J. Volume 1: National Screening Program. The Beyondblue National Postnatal Depression Program, Prevention and Early Intervention 2001-2005, Final Report. Melbourne (AUST): beyondblue; 2006.
- Perinatal Mental Health Consortium. Perinatal Mental Health, National Action Plan 2008-1010, Full Report. Melbourne (AUST): beyondblue; 2008 [cited 2009 Sep]. Available from: http://www.beyondblue.org.au/index.aspx?link_id =4.665&tmp=FileDownload&fid=1057
- Austin M-P, Reilly N, Milgrom J, Barnett B. A national approach to perinatal mental health in Australia: exercising caution in the roll-out of a public health initiative [letter]. *Med J Aust.* 2010;192:111.
- Department of Health and Ageing. National Perinatal Depression Initiative. Canberra (AUST): Commonwealth of Australia; 2010 [cited 2010 Oct]. Available from: http://www.health.gov.au/internet/main/publishing.nsf/content/ mental-perinat
- The Guideline Expert Advisory Committee. Beyondblue National Depression Initiative – Clinical Practice Guidelines for Depression and Related Disorders – Anxiety, Bipolar Disorder and Puerperal Psychosis – in the Perinatal Period. Melbourne (AUST): beyondblue; 2011.
- Cox J, Holden J, Sagovsky R. Detection of postnatal depression: development of the 10 item Edinburgh Postnatal Depression Scale. *Br J Psychiatry*. 1987;150:782-6.
- NSW Department of Health. NSW Health/Families NSW Supporting Families Early Package – SAFE START Guidelines: Improving Mental Health Outcomes for Parents and Infants. Sydney (AUST): State Government of New South Wales; 2010.
- NSW Department of Health. NSW Health/Families NSW Supporting Families Early Package – Maternal and Child Health Primary Health Care Policy. Sydney (AUST): State Government of New South Wales; 2010.

- NSW Department of Health. NSW Health/Families NSW Supporting Families Early Package – SAFE START Strategic Policy. Sydney (AUST): State Government of New South Wales; 2010.
- 24. Statewide Obstetic Support Unit. *Perinatal Depressive and Anxiety Disorders: Clinical Guidelines for Western Australia* [Internet]. Perth (AUST): King Edward Memorial Hospital, Western Australia Department of Health; 2006 [cited 2011 June 1]. Available from: http://www.kemh.health.wa.gov.au/ brochures/health_professionals/wnhs0433.pdf
- Hauck Y, Rock D, Jackiewicz T, Jablensky A. Healthy babies for mothers with serious mental illness: A case management framework for mental health clinicians. *Int J Ment Health Nurs*. 2008;17(6):383-91.
- 26. National Institute for Health and Clinical Excellence (NICE). Antenatal and Postnatal Mental Health: Audit Criteria [Internet]. London (UK): National Health Services; 2007 May [cited 2010 Oct]. Available from: http:// guidanceniceorguk/CG45/AuditSupport/doc/English
- Slaytor EK, Sullivan EA, King JF. *Maternal Deaths in Australia 1997-1999*. Catalogue Number: PER 24. Sydney (AUST): Australian Institute of Health and Welfare; 2004.
- Ford J, Sullivan E, et al. *Report on Maternal Deaths in Australia 1994–96*. Canberra (AUST): National Health and Medical Research Council; 2001.
- Sullivan EA, King JF. Maternal Deaths in Australia 2000–2002. Sydney (AUST): National Perinatal Statistics Unit, Australian Institute of Health and Welfare; 2006.
- Austin M-P, Kildea S, Sullivan E. Maternal mortality and psychiatric morbidity in the perinatal period: challenges and opportunities for prevention in the Australian setting. *Med J Aust.* 2007;186(7):364-7.
- Lewis G, editor. The Confidential Enquiry into Maternal and Child Health (CEMACH). Saving Mothers' Reviewing Maternal Deaths to Make Motherhood Safer – 2003-2005. Seventh Report on Confidential Enquiries into Maternal Deaths in the United Kingdom. London (UK): Royal College of Obstetricians and Gynaecologists; 2007.
- 32. Centre for Maternal and Child Enquiries (CMACE). Saving Mothers' Lives: Reviewing Maternal Deaths to Make Motherhood Safer – 2006–08. Eighth Report on Confidential Enquiries into Maternal Deaths in the United Kingdom. *BJOG*. 2011;118 Suppl 1:1-203.
- 33. Perinatal and Maternal Mortality Review Committee. Perinatal and Maternal Mortality in New Zealand 2008: Fourth Report to the Minister of Health July 2009 to June 2010. Wellington (NZ): New Zealand Ministry of Health; 2010. Available from: http://www.pmmrc.health.govt.nz/moh.nsf/indexcm/pmmrcresources-fourth-annual-report-200910?Open&m_id=6.1
- 34. Pattinson R, Say L, Souza JP, van den Broek N, Rooney C, on behalf of the WHO Working Group on Maternal Mortality and Morbidity Classifications. WHO Maternal Death and Near-miss Classifications. *Bull World Health Organ*. 2009;87:734.
- Sullivan E, Hall B, King JF. Maternal Deaths in Australia 2003-2005. *Maternal Deaths Series Number.* 3. Catalogue No.: PER42. Sydney (AUST): National Perinatal Statistics Unit, Australian Institute of Health and Welfare; 2007.
- Cliffe S, Black D, Bryant J, Sullivan E. Maternal deaths in New South Wales, Australia: a data linkage project. *Aust N Z J Obstet Gynaecol.* 2008;48(3): 255-60.
- 37. Lewis G, editor. Confidential Enquiries into Maternal and Child Health (CEMACH). Why Mothers Die 2000-2002 – Executive Summary and Key Findings. The Sixth Report of the Confidential Enquiries into Maternal Deaths in the United Kingdom. London (UK): Royal College of Obstetricians and Gynaecologists; 2004.
- Oates M. Suicide: the leading cause of maternal death. Br J Psychiatry. 2003;183:279-81.
- Department of Health and Ageing. *Improving Maternity Services in Australia:* Report of the Maternity Services Review. Canberra (AUST): Commonwealth of Australia; 2009.
- Centre for Maternal and Child Enquiries (CMACE). Saving Mothers' Lives: 2003-2005. Post Project Review Report. London (UK): Royal College of Obstetricians and Gynaecologists; 2010
- National Institute for Health and Clinical Excellence (NICE). Antenatal and Postnatal Mental Health: The NICE Guidelines on Clinical Management and Service Guidance CG45. London (UK): National Health Services; 2007.