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**AUSTRALIAN MIDWIVES' AWARENESS AND MANAGEMENT OF ANTENATAL AND
POSTPARTUM DEPRESSION**

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Abstract

Background: The detection of maternal depression can be improved with routine screening. This practice is expected to be integrated into midwifery practice under the Australia National Perinatal Depression Initiative.

Research Objective: To describe midwives' self-reported practice in caring for women suffering from antenatal and postpartum depressive symptoms; and (b) assess midwives' ability to detect depression and their knowledge of therapeutic interventions for depressive symptoms in childbearing women.

Method: Using a descriptive cohort study design, a postal survey was sent to all members of the Australian College of Midwives (n = 3000). The survey consisted of items drawn from *beyondblue's* "National Baseline Survey – Screening Evaluation Questionnaire" and questions relating to a hypothetical case study of a depressed woman "Mary" developed by Buist et al. (2005).

Findings: A total of 815 completed surveys were received. 69.1% of midwives reported screening for antenatal and postpartum depression using instruments such as the Edinburgh Postnatal Depression Scale. Time constraints were perceived as the major barrier to effective emotional care. 63.3% of midwives correctly recognised depression in the case study and 82.4% reported that "Mary" required assistance. Antidepressants were more likely to be recommended postnatally (93.2%) than antenatally (61.5%) by midwives.

Conclusions: Further training is required to ensure midwives' competency in psychosocial assessment and management of women experiencing antenatal and postpartum depression. Systemic issues (e.g. time constraints) encountered by midwives need to be addressed to support the delivery of effective emotional care to childbearing women.

Keywords: *midwives; antenatal; postpartum; depression; management; awareness*

Total Word Count: 3319 words

Introduction

Around one in five women will experience antenatal depression (1). Moreover, antenatally depressed women have a six-fold increased risk of developing postpartum depression (PPD) (2). A comprehensive review of the literature by Halbreich and Karkun (3) indicated that prevalence rates of PPD across countries range from 0.5% to 60.8% and this broad variation is attributed to factors such as ethnicity, culture, socioeconomic status and style of reporting. In Australia, a recent study of women in urban and rural regions revealed

a respective prevalence rate of 8.5% and 3.4% for antenatal depression along with 6.6% and 8.5% for PPD (4).

Maternal depression can contribute to extensive immediate and long-term insidious effects for women, children and their families (5). Disturbingly, many antenatally and postnatally depressed women remain undetected and under-treated, possibly due to a lack of screening (6-8). Not only have studies demonstrated that the detection of antenatal depression and PPD can be improved with routine screening (9-10), women and health professionals do accept routine screening as part of antenatal and postpartum mental healthcare (6, 11). Importantly, early detection of antenatal depression and PPD through routine screening of women during the perinatal period provides an opportunity for early intervention. Early and accurate identification and effective intervention may be able to prevent long-term consequences for childbearing women, their children and families and reduces the burden antenatal depression and PPD for the individual, health system and community (12).

Under the Australia National Perinatal Depression Initiative (2008-2009 to 2012-2013), midwives are expected to be involved in routine psychosocial risk assessment and screening of women for perinatal depression (13). Furthermore, the Clinical Practice Guidelines for Depression and Related Disorders in the Perinatal Period, which were released in mid 2010 for consultation by *beyondblue* (14), include a national screening guideline for perinatal depression (the final document is expected to be released in 2011). The draft guidelines recommend the 10-item self-reporting Edinburgh Postnatal Depression Scale (EPDS) in the routine screening of women for perinatal depression. A widely accepted screening instrument for depression during antenatal and postpartum periods, the EPDS is designed to assist health professionals to detect depression symptoms in community samples of women following childbirth (15). Consistent psychometric validation (i.e. high levels of sensitivity and specificity) for the EPDS in detecting antenatal depression and PPD has been established (16-20).

Nevertheless, a systematic review of validation studies of the EPDS in antepartum and postpartum women (21) indicated that the EPDS can potentially generate a significant share of false positive results that is costly to service providers in terms of further assessment. Moreover, the accuracy of EPDS is also influenced by the clinical setting, country and language of administration. The EPDS is most effective only when using a higher

cut-off point (13 and over) and with women who are fluent in expressing their distress in English. Strategies to appropriately assess women thought to be at risk for depression should include (a) reassessment of women with high initial EDPS scores using a different instrument (e.g. Beck Depression Inventory) to differentiate between enduring and transient distress; and (b) conservative application of the 'at-risk' concept in the identification of women as the abundance of factors associated with PPD means many women would be considered 'at risk' (22).

In early 2002, Buist et al. (23) conducted a study that evaluated Australian general practitioners' (GPs), maternal child health nurses' (MCHNs) and midwives' knowledge and awareness of perinatal depression. Although perinatal knowledge levels were relatively similar across professional groups, GPs and MCHNs were more likely to detect depression in childbearing women and recognise their need for assistance in comparison to midwives. Furthermore, unlike GPs who were more inclined to suggest the use of antidepressants, midwives were predisposed towards recommending non-specific treatments such as the provision of support and counselling to treat childbearing-related depression. Review of the literature has since found no other similar midwifery research conducted in Australia or overseas. In light of recent national mental health awareness initiatives in Australia such as *beyondblue* and the recent National Perinatal Depression Initiative (2008-2009 to 2012-2013), the present study sought to describe midwives' self-reported practice in caring for women suffering from antenatal and postpartum depressive symptoms; and (b) assess midwives' ability to detect depression and their knowledge of therapeutic interventions for depressive symptoms in childbearing women.

Methods

A descriptive, cohort study using an anonymous survey of Australian practicing midwives was conducted.

Sample

A national sample of midwives was obtained via the Australian College of Midwives (ACM). The ACM is an organisation with an estimated 3000 members (at the time of data collection) that aims to attain professional excellence in midwifery through shaping and enhancing the quality of midwifery and maternity care (24). As indicated by the Executive Officer of the ACM, approximately one-third of the ACM members are current practicing midwives. The remaining members are not currently in the paid workforce (e.g. retired, on

maternity leave, undertaking further studies); student midwives; or consumers who support the objectives of the College. The target participants for the survey were current practicing midwives who are members of the ACM (≈ 1000 in 2006).

Survey

Demographic data of respondents relating to age, gender, education level, employment, years and type of midwifery practice were collected. Drawn from the *beyondblue* "National Baseline Survey – Screening Evaluation Questionnaire", the survey asked respondents questions relating to (a) an estimated proportion of childbearing women suffering from antenatal depression and/or PPD in their workplace; (b) perceived barriers and impact associated with the care of these women; and (c) the use and perceived efficacy of the EPDS. A Depression Vignette, developed by Buist et al. (25) and based on the work of Jorm et al. (26) was also included. It described a hypothetical woman named Mary who was suffering depression. A series of questions in relation to antenatal depression followed by PPD were asked. Participants rated their responses on a five-point Likert scale (i.e. 1 = not useful at all, to 4 = more than useful; and 5 = unsure). Respondents answered questions about the nature of Mary's health concerns and whether it might be useful to (1) engage in activities to address her feelings (e.g. practice relaxation, yoga and/or mediation), (2) recommend assistance from a range of individuals (e.g. psychologist/counsellor), and (3) recommend various types of pharmacological treatments (e.g. antidepressant medication). Additionally, respondents were asked the extent to which they were confident in applying or recommending various management approaches in assisting Mary (e.g. counselling / medications).

Procedure

The survey form and a reply-paid envelope were appended to the ACM's quarterly newsletter (i.e. the Spring (September) 2006 issue of the Australian Midwifery News) which was received by all members of the ACM. However, the survey only invited participation from current practicing midwives who are members of the ACM. A reminder notice was placed in the following issue. Completed surveys, which indicated respondents' informed consent, received prior to June 2007 were included for data analysis. Ethics approval for the study was obtained from Griffith University Human Research Ethics Committee.

Scoring & Data analysis

Data entry and analysis were performed using the Statistical Package for Social Science (SPSS) Version 13.0 as well as checking for completeness and consistency. A 10% random comparison between the computerised data and the original data was conducted to ensure the accuracy of data coding and entry. Depression awareness was assessed based on the methodology outlined by Jorm et al. (26-27) and adapted by Buist et al. (23, 25). Positive and negative depression awareness scores with a respective maximum score of 10 and -10 were computed for each respondent followed by an average value across all respondents. High positive awareness ratings indicated recognition of depression, need for help and appropriate treatments by respondents while low positive awareness ratings (i.e. high negative awareness rating) suggested respondents as being less likely to recognise depression, need for help and appropriate treatments. Lastly, multiple analysis of covariance (MANCOVA) were undertaken to assess the impact of education level, years and type of midwifery practice on management responses.

Results

A total of 815 ACM members (804 females and 11 males) completed the survey. Of these surveyed respondents, 743 were engaged in direct client care (i.e. current practicing midwives). Taking into account the Australian College of Midwives' estimated membership figure of 1000 in 2006/2007 meeting the inclusion criteria, a response rate of 74.3% was achieved. The sample characteristics of respondents' in terms of gender, age ($M = 44.38$) and mean weekly work hours ($M = 30.42$) were comparable to available national midwifery workforce data (28). Although the proportion of respondents working in either the private or public sectors was similar to national data, the percentage of respondents working in hospitals was 14.7% lower than the national average. It should be noted that the national data may not be fully reflective of the midwifery workforce in Australia. While respondents in the study included current practising registered midwives in Australia, the national midwifery workforce data includes registered nurse clinicians with midwifery qualifications who indicated midwifery as her/his principal area of activity but did not account for registered midwives who are neither a registered nurse nor practising midwifery as their principal area of activity. Nonetheless, this is the only current available national data of the Australian midwifery workforce.

Around three quarters of midwives reported working with women with antenatal (70.8%) and postpartum (76.6%) mood disturbance in the last 12 months. Time constraints

(54.7%), perceived reluctance by women to seek help (46.1%) and lack of support services (37.1%) were reported as the three main barriers to quality care for women with depression. Nearly half (47.5%) the respondents noted a substantial increase in the number of women identified with antenatal depression and/or PPD. Nearly two-thirds of respondents (65.5%) indicated that they had been involved in screening for antenatal depression and/or PPD. The identification of women with depression, or any other mood disturbance, impacted on respondents in terms of workload (75.1%) and cost of care (52.7%).

Many respondents (69.1%) had screened women for depressive symptoms during the antenatal and/or postpartum. Of these, 54.0% of midwives used the EPDS while the rest conducted a clinical interview or health assessment and used other instruments such as the Beck Depression Inventory, Hamilton Depression Scale, Antenatal Risk Questionnaire, Postnatal Depression Risk Index and Postpartum Depression Predictors Inventory. Midwives (75.4%) perceived that childbearing women find the EPDS easy to complete. The majority (97.3%) of respondents reported the EPDS to be a useful tool for screening antenatal depression and/or PPD and 95.7% of respondents reported feeling comfortable explaining results of the EPDS to women. Nearly all respondents (94.9%) who had used the EPDS intended to keep using this scale in their practice.

The mean positive and negative depression awareness scores were 5.0 (standard deviation 1.8) and 1.8 (standard deviation 1.4) respectively. Analysis of responses to the case study revealed that 63.3% of respondents provided an adequate diagnosis of depression (i.e. depression, perinatal depression, antenatal depression or PPD) and 82.4% reported that Mary required assistance. Furthermore, respondents were less likely to suggest the use of antidepressant (61.5% vs. 93.2%) or other medications (5.4% vs. 30.6%) during pregnancy compared to the postpartum.

Perceived usefulness of therapeutic interventions for depressive symptoms

Respondents believed Mary should engage in specific activities to address negative feelings during the antenatal period such as talking to her husband/partner (65.4%) followed by seeking support from family and friends (52.0%) and practicing relaxation, yoga and/or meditation (41.3%). They also considered activities such as attending individual or couple counselling (60.0%), discussions with a health worker (55.0%) and attending self-help groups with other women during the postpartum (48.3%) as being very useful for Mary.

In addition, respondents believed it would be very useful for Mary to seek assistance from her husband/partner (52.4%), followed by family and/or friends (51.8%) and a counsellor (49.0%) during pregnancy. During the postpartum, respondents believed that it would be very useful for Mary to seek help from a psychologist (68.2%), followed by a counsellor (67.0%), psychiatrist (58.6%) and GP/family doctor (58.2%). The majority of respondents reported that seeking assistance from a midwife would be useful during the antenatal (85.4%) and postpartum (71.3%) periods.

In situations where respondents had encountered women with similar emotional problems to Mary, they reported confidence in liaising with the woman's maternal child health nurse (92.7%), followed by referral to a specialised mental health service (85.9%) as well as recommending counselling (92.5%). MANCOVA indicated that education level, years and type of midwifery practice on the responses to the vignette did not significantly affect management responses.

Discussion

This national sample of practicing midwives in Australia reported relatively widespread screening for antenatal depression and PPD using the Edinburgh Postnatal Depression Scale (EPDS). However, there remains a sizeable group of midwives who indicated they use a broad range of alternative instruments and methods which are not recommended in the draft Clinical Practice Guidelines for Depression and Related Disorders in the Perinatal Period. Around two-thirds of midwives correctly recognised depression in the case study and over eighty percent reported that the woman required assistance. Antidepressants were more likely to be recommended for postpartum depression than antenatal depression by midwives. Findings of this study need be considered in light of study limitations such as adequacy of data instruments and potential sampling bias. In self-administered surveys, there are risks relating to poor recall and inaccurate reporting and it could be that reported practices may not be congruent with actual practice. Although a good response rate was achieved, non-responders may have differed in their practices from midwives who responded, thereby contributing to sampling bias where findings of this study may not accurately represent the general population of midwives. Nevertheless, these limiting effects may be in part compensated by the large representative sample obtained and comparability of findings with prior research.

Midwives in our study reported the EPDS to be a simple and useful tool for childbearing women to complete; they were comfortable explaining the EPDS to women; and intended to continue using the EPDS in practice. These outcomes are similar to earlier findings where health professionals indicated their acceptability of screening as part of perinatal mental health management (6). It is also encouraging that midwives reported working collaboratively with MCHNs in caring for women experiencing postpartum emotional distress. However, in order for midwives to be effective and supportive of these women, mental health assessment and provision of emotional care need to be an integral part of midwifery practice, and maternity services need to be adequately resourced to ensure midwives have the necessary time to provide such care.

Responses to the vignette revealed that around two-thirds of midwives (63.3%) correctly identified depression in the case study. This is a decrease from the 79.3% of midwives found by Buist et al. (23) in her study of different health professionals working in maternity care services. It is important to note that of those midwives in our study who did not identify depression, the majority did not provide any response whatsoever. This lack of response may not necessarily be an indication of midwives' inability to detect depression in childbearing women but perhaps a lack of confidence in making a diagnostic judgement. Nonetheless, the majority of midwives reported that Mary did require assistance which was comparable to earlier findings by Buist et al. (23). While these results are encouraging, midwifery practice could be enhanced by further training in detecting probable depression and offering counselling assistance to childbearing women.

Although there has been an increase in the overall proportion of midwives who advocate the use of antidepressant medication and perceive it as being useful to women in both the antenatal and postpartum periods when compared to a previous finding by Buist et al. (23), recommending antidepressant medication by midwives continues to be more prominent in the postpartum than antenatal period. Our findings suggest that pregnancy remains a time when midwives are more concerned and cautious about recommending pharmacological treatments for depressed women. Midwives were more inclined to recommend pregnant women to discuss their feelings with their husband/partner, family and friends as well as a counsellor. This finding may also be a reflection of women's reluctance to use medication during pregnancy for fear of harming the unborn baby (29) and preference to seek psychosocial support. Presently, there is inadequate evidence to

demonstrate the efficacy of antidepressant medication in preventing or treating depressed women in the antenatal and postpartum periods. However, there is limited evidence to suggest that continuation rather than cessation of antidepressant medication during pregnancy reduces relapse during this period of time (30). Midwives can assist depressed women to make informed choices with regards to their treatment options by providing information about the potential risks of pharmacological treatment for the fetus and the breastfed infant and expected benefits to both mother and fetus/infant.

One in five midwives recommended the use of antipsychotic medication during the postpartum. Buist et al. (23) suggested that, beside a lack of understanding of antipsychotic medication, this may also be explained by the likelihood of midwives to focus on puerperal psychosis in ensuring detection of all cases. Perhaps, this may also be a reflection of midwives' erroneous belief that the EPDS was able to fully assess symptoms of psychotic depression. In view of the pervasive use of EPDS in practice and the possibility that midwives may not possess a good understanding of the functions and limitations of EPDS, further education on the use of EPDS in clinical practice is warranted.

Importantly, midwives should not become over reliant on the EPDS as a stand alone screening instrument. Matthey (22) argued that the clinical utility of the EPDS may result in excessive screening; neglect of other aspects of emotional wellbeing; and lead to the unnecessary labelling of women as distressed even though their emotional state may only be transient or short-lived. For example, one study identified that the percentage of mothers who scored high on EPDS at six to eight weeks postpartum (17.0%) dropped significantly to 13.4 % when tested three weeks later (31). Reassessment of women with high initial EPDS scores using a different instrument (e.g. Beck Depression Inventory) or a clinical health interview to distinguish between enduring and transient distress should be considered (22). Such a strategy can avoid the over-identification of PPD in women which can potentially deplete the already limited time and resources of midwives to manage antenatally and postnatally depressed women. While the use of the EPDS, which can be scored easily and only takes approximately 5 to 10 minutes to complete, is found to be acceptable to women, midwives must be knowledgeable about (a) the use of the EPDS; (b) the interpretation of scores; and (c) be able to develop an active plan of care in response to women's scores. The screening and monitoring of perinatal distress would also need to be monitored through a clinical audit process to further inform practice.

Conclusions

Under the Australian National Perinatal Depression Initiative (2008-2009 to 2012-2013) and the release of the draft Clinical Practice Guidelines for Depression and Related Disorders in the Perinatal Period, routine psychosocial assessment of childbearing women is expected to be integrated into existing midwifery practice. In view of these developments, it is important for practicing midwives to possess the skills and abilities to detect depression and recognise the need for assistance in childbearing women. Results of this study indicated that training is required to ensure midwives' competency in psychosocial assessment including the use of screening tools (e.g. EPDS) as well as the management of women experiencing antenatal depression and PPD. Improvements in the education and training of midwives to detect and care for women experiencing antenatal depression and PPD will increase the likelihood of using EPDS to routinely screen for perinatal depression as recommended in the draft clinical practice guidelines. Furthermore, findings of the present study point to the need for service managers in maternity health care areas to address the systemic issues (e.g. time constraints) encountered by midwives so as to support the delivery of effective emotional care to childbearing women.

References

1. Marcus SM, Flynn HA, Blow FC, Barry KL. Depressive symptoms among pregnant women screened in obstetrics. *Journal of Women's Health* 2003; 12(4):373-80.
2. Heron J, O'Connor TG, Evans J, Golding J, Glover V, The ALSPAC Study Team. The course of anxiety and depression through pregnancy and the postpartum in a community sample. *Journal of Affective Disorders* 2004; 80(1):65-73.
3. Halbreich U, Karkun S. Cross-cultural and social diversity of prevalence of postpartum depression and depressive symptoms. *Journal of Affective Disorders* 2006; 91(2):97-111.
4. Bilszta JLC, Gu YZ, Meyer D, Buist AE. A geographic comparison of the prevalence and risk factors for postnatal depression in an Australian population. *Australian and New Zealand Journal of Public Health* 2008; 32(5):424-30.
5. Perinatal Mental Health Consortium. *National Action Plan for Perinatal Mental Health 2008–2010: Full Report*. *beyondblue*: National Depression Initiative; 2008.
6. Buist A, Ellwood D, Brooks J, Milgrom J, Hayes BA, Sved-Williams A, et al. National program for depression associated with childbirth: the Australian experience. *Best Practice and Research in Clinical Obstetrics and Gynaecology* 2007; 21(2):193-206.
7. Gaynes BN, Gavin N, Meltzer-Brody S, Lohr KN, Swinson T, Gartlehner G, et al. *Perinatal Depression: Prevalence, Screening, Accuracy and Screening Outcomes*. North Carolina: Agency for Healthcare Research and Quality; 2005.
8. Priest S, Barnett B. Perinatal anxiety and depression: issues, outcomes and interventions. In: Sved-Williams A, Cowling V, editors. *Infants of Parents with Mental Illness: Developmental, Clinical, Cultural and Personal Perspectives*. Bowen Hills: Australian Academic Press; 2008.
9. Carter FA, Carter JD, Luty SE, Wilson DA, Frampton CMA, Joyce PR. Screening and treatment for depression during pregnancy: A cautionary note. *Australian and New Zealand Journal of Psychiatry* 2005; 39(4):255-61.
10. Smith MV, Rosenheck RA, Cavaleri MA, Howell HB, Poschman K, Yonkers KA. Screening for and detection of depression, panic disorder and PTSD in public-sector obstetric clinics. *Psychiatric Services* 2004; 55(4):407-14.
11. Leigh B, Milgrom J. Acceptability of antenatal screening for depression in routine antenatal care. *Australian Journal of Advanced Nursing* 2007; 24(3):14-8.

12. Hanna B, Jarman H, Savage S, Layton K. The early detection of postpartum depression: midwives and nurses trial a checklist. *Journal of Obstetric, Gynecologic, & Neonatal Nursing* 2004; 33(2): 191-197.
13. *National Perinatal Depression Initiative 2010*. Available at: <http://www.health.gov.au/internet/main/publishing.nsf/Content/mental-perinatal>. Accessed 08 January 2010.
14. *Clinical Practice Guidelines for Depression and Related Disorders (Anxiety, Bipolar and Puerperal Psychosis) in the Perinatal Period*. Available at: http://www.beyondblue.org.au/index.aspx?link_id=6.1246. Accessed 02 May 2010.
15. Cox JL, Holden JM, Sagovsky R. Detection of postnatal depression. Development of the 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry* 1987; 150:782 - 6.
16. Bunevicius A, Kusminskas L, Pop VJ, Pedersen CA, Benevicius R. Screening for antenatal depression with the Edinburgh Depression Scale. *Journal of Psychosomatic Obstetrics & Gynecology* 2009; 30(4):238-43.
17. Clarke PJ. Validation of two Postpartum Depression Screening Scales with a sample of First Nations and Metis women. *Canadian Journal of Nursing Research* 2008; 40:112-25.
18. Hanusa BH, Scholle SH, Haskett RF, Spadaro K, Wisner KL. Screening for depression in the postpartum period: A comparison of three instruments. *Journal of Women's Health* 2008; 17(4):585-96.
19. Rowel, Jayawardena P, Fernando N. Validation of the Sinhala translation of Edinburgh Postnatal Depression Scale. *Ceylon Medical Journal* 2008; 53:10-3.
20. Su KP, Chiu TH, Huang CL, Ho M, Lee CC, Wu PL, et al. Different cutoff points for different trimesters? The use of Edinburgh Postnatal Depression Scale and Beck Depression Inventory to screen for depression in pregnant Taiwanese women. *General Hospital Psychiatry* 2007; 29(5):436-41.
21. Gibson J, McKenzie-McHarg K, Shakespeare J, Price J, Gray R. A systematic review of studies validating the Edinburgh Postnatal Depression Scale in antepartum and postpartum women. *Acta Psychiatrica Scandinavica* 2009; 119(5):350-64.
22. Matthey S. Are we overpathologising motherhood? *Journal of Affective Disorders* 2009; 120(2010):263-6.

23. Buist A, Bilszta J, Milgrom J, Barnett B, Hayes B, Austin MP. Health professional's knowledge and awareness of perinatal depression: results of a national survey. *Women & Birth* 2006; 19(1):11-6.
24. *Australian College of Midwives Towards 2015: College Vision*. Available at: http://www.acmi.org.au/text/corporate_documents/position.htm. Accessed 01 October 2009.
25. Buist A, Bilszta J, Barnett B, Milgrom J, Ericksen J, Condon J, et al. Recognition and management of perinatal depression in general practice: a survey of GPs and postnatal women. *Australian Family Physician* 2005; 34(9):787-90.
26. Jorm AF, Korten AE, Jacomb PA, Christensen H, Henderson S. Attitudes towards people with a mental disorder: a survey of the Australian public and health professionals. *Australian & New Zealand Journal of Psychiatry* 1998; 33(1):77-83.
27. Jorm AF, Christensen H, Medway J, Korten AE, Jacomb PA, Rodgers B. Public belief systems about the helpfulness of interventions for depression: associations with history of depression and professional help-seeking. *Social Psychiatry and Psychiatric Epidemiology* 2000; 35(5):211-9.
28. Australian Health Workforce Advisory Committee. *The midwifery workforce in Australia 2002 - 2012*. AHWAC Report 2002.2.
29. MacQueen G, Chokka P. Special issues in the management of depression in women. *Canadian Journal of Psychiatry* 2004; 49(Suppl 1):27-40.
30. Cohen LS, Altshuler LL, Harlow BL, Nonacs R, Newport DJ, Viguera AC, et al. Relapse of major depression during pregnancy in women who maintain or discontinue antidepressant treatment. *The Journal of the American Medical Association* 2006; 295(5):499-507.
31. Ballestrem CL, Straub M, Kächele H. Contribution to the epidemiology of postnatal depression in Germany – implications for the utilization of treatment. *Archives of Women's Mental Health* 2005; 8(1):29-35.

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