

Evidence Brief: Exploring interventions to address perinatal mental health in a public health context



Key Messages

- Psychosocial and psychological interventions were effective in addressing depression symptoms
- A combination of interventions integrating different types of service providers may be most effective
- There should be a consistent approach across the province to ensure the same quality of programming and to reduce stigma around perinatal depression

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Issue and Research Question

Mental health is an integral part of health and well-being. People are affected by mental illness in its various forms throughout their lifecourse, including women during and after pregnancy.¹ The importance of women's mental and reproductive health at different stages of life, including pregnancy, childbirth, and postpartum is recognized and supported by the World Health Organization (WHO).²

The time from pregnancy to childbirth is commonly referred to as the perinatal period. There are multiple working definitions for 'perinatal period'; however, for the purpose of this Evidence Brief 'perinatal mood disorders' refer to affective disorders (e.g., depression and anxiety) experienced among women during the

'perinatal period', spanning from "conception to one year postpartum".³ This definition of the perinatal period is used by best practice guidelines in other Canadian provinces,³ which are in turn used to guide the practice of public health units in Ontario.⁴

Mental health throughout the perinatal period is an important public health concern given the potential consequences for women and their families.⁵ Mental health disorders such as depression, anxiety, and psychotic disorders can be experienced by women during this time.⁵ Poor mental health in the perinatal period has negative implications for the mother's functioning,^{6,7} the quality of mother-child interactions,⁸⁻¹⁰ and children's social and cognitive developmental outcomes.^{6,7} Mothers experiencing postpartum depression are less

likely than non-depressed mothers to breastfeed, attend well-child visits, complete immunizations, use home safety devices, put infants to sleep on their backs, or engage in enriching activities, like reading, singing, or outdoor activities.¹¹ During the first three months postpartum, as many as 19.2% of women may experience a depressive episode, with 7.1% being a major depressive episode.¹² Given insufficient awareness, understanding, and acceptance of perinatal mental health issues, it is likely the true incidence of perinatal depression is underestimated.¹³

In addition to depression, perinatal anxiety is also experienced by some women during this time. In fact, according to Fairbrother et al. anxiety disorder was more prevalent during pregnancy (15.8%) and early postpartum (17.1%) when compared to rates of depression at both time points (3.9% and 4.8 % respectively),¹⁴ highlighting the importance of addressing both disorders.

Many sectors, including public health, primary care, psychiatry, psychology, and social work, address perinatal mental health in different ways. There remains a need to clarify how public health can best address perinatal mental health. Therefore, this Evidence Brief asks: *What are the evidence-based interventions to address perinatal mental health in a public health context?*

Methods

MEDLINE, PsycINFO and CINAHL electronic databases were searched on April 21, 2016 by PHO Library Services for articles published from 2006 to 2016. Reviews in the English language were eligible if they reported on public health interventions that addressed women's mental health in the perinatal period. For the purposes of this evidence brief, public health interventions were defined as any program, initiative, or strategy which was provided by or in partnership with a public health organization.

These included education, health promotion, screening, treatment and referral activities.

Articles describing severe mental illness (e.g., psychosis, schizophrenia) were excluded. Articles were also excluded if they addressed paternal mental health,ⁱ did not report outcomes consistently, were not review-level papers (e.g., book chapters, commentaries), or were later versions reporting the same data as their original publications. Finally, any articles that solely focused on other sectors, such as social work or primary care, without mentioning public health partnerships were excluded.

Two reviewers screened all titles and abstracts, and at the full text level a 20% sample was screened by the second reviewer to ensure agreement. Consensus was reached on all disagreements through discussion. Quality appraisal was conducted using the *Health Evidence Quality Assessment Tool* for review articles.¹⁵ Articles that scored four or lower and rated as low quality were excluded. Relevant information was extracted from each included article using a standardized data extraction form. Data extraction components were validated by members of the Healthy Human Development tableⁱⁱ as knowledge users. The full search strategy, quality assessment and data extraction forms can be obtained from PHO upon request.

Language used in the literature to describe community-based public health service providers varies widely, including health professionals, home visitors, public health nurses and social workers. Within this Evidence Brief, the term 'health professionals' will be

ⁱ Although paternal mental health is also an important component of child development, it was outside the scope of this Evidence Brief.

ⁱⁱ The Healthy Human Development (HHD) Table is comprised of representatives from provincial ministries, Public Health Ontario (PHO), Ontario public health units (PHUs), as well as academic and community leaders in early child development, child mental health, and related fields. The HHD Table was convened in 2013 in response to *Make No Little Plans*, Ontario's public health sector strategic plan. PHO provides support and secretariat assistance for the HHD Table.

used to describe public health service providers addressing perinatal mental health.

Main Findings

The search identified 1056 articles, from which 22 systematic reviews of strong or moderate quality were included that reported on public health-relevant interventions addressing women's mental health in the perinatal period. Study participants included first time mothers and mothers with more than one child who were recruited or followed during pregnancy and up to 12 months postpartum. The minimum age for mothers included was 16 years, without an upper age given. For the most part, ages of mothers involved in interventions were not reported. Some interventions focused specifically on young mothers, mothers who had lower income levels, and mothers who were visible minorities.

Most reviews reported interventions provided by health professionals such as, public health nurses, registered nurses, nurse practitioners, pediatricians, psychologists, midwives, lay persons, social workers, health visitors, and childbirth educators. However, most of the published literature did not report separate results according to provider. Public health intervention settings included clinics of various types (e.g., public health, community, primary care), other care settings (e.g., hospital bedside), and client homes (i.e., in-person or via telephone).

The following describe the array of individual and group intervention types reported in the literature identified for this Evidence Brief.

Psychosocial and psychological interventions were reported most often and included a wide range of strategies (i.e., cognitive behavioural therapy (CBT), interpersonal behavioural therapy (IPT), psychodynamic behavioural therapy (PDT), non-directive counselling, debriefing sessions, and various social support building sessions) in the included papers.

Educational interventions were the second most commonly reported intervention type, including programming (i.e., classes on family planning and health, infant care), provision of materials (i.e., self-help book, booklet about postnatal depression, information on community resources), and screening and referral services.

Home visits and telephone support services were also common, with home visits involving check-ups and discussion of maternal related topics such as maternal health, nutrition, child health, and antenatal health care. Telephone support included individualized peer support, general support and information sharing, and guidance around specific medical and social inquiries.

Pharmacological and nutritional interventions were the least frequently reported from the included literature. These included administration of antidepressants (i.e., venlafaxine, sertraline, nefazodone, paroxetine), dietary supplements (i.e., omega-3-fatty acids, omega-6-fatty acids, yeast, selenium, calcium), and hormonal treatments (i.e., progestestogens, enanthate, thyroxine).

In terms of screening and assessment tools, multiple types were reported. These included: Edinburgh Postnatal Depression Scale (EPDS), Hamilton Depression Rating Scale (HAM-D), Beck Depression Inventory (BDI), Montgomery-Asberg Depression Rating Scale (MADRS), Goldberg's Standardized Psychiatric Interview, Home Observation for Measurement of the Environment (HOME), Parenting Stress Index, and Antenatal Psychosocial Health Assessment (ALPHA).

For the most part, comparison groups were used within studies. Where used, the comparison group either received a less intense version of the same intervention, or provision of materials, or comparison interventions were only described as usual care or standard care as opposed to being outlined in detail.

Occasionally women on a wait list for services were used as a comparison group.

Specific outcomes measured included the following: antepartum and postpartum depression, depressive symptomatology, anxiety, stress, maternal knowledge, attitudes and skills related to maternal mental health, and maternal health service utilization. In this evidence brief, we report statistical significance of the intervention effect(s) relative to the outcome(s) specified. Clinical significance, i.e., the relevance and meaningfulness of treatments in clinical practice,^{16,17} was seldom explored or analyzed by review authors. Furthermore, statistical significance does not directly translate to clinical significance.¹⁶⁻¹⁸ Therefore, interventions with small effect sizes may still be meaningful and have practical implications for health service and delivery; and those with large effect sizes may possibly be clinically insignificant. We did not assess cost-effectiveness of interventions.

Psychosocial and Psychological Interventions

Overall, psychosocial and psychological interventions had a positive impact on improving depressive symptomatology and postpartum depression. This was supported by multiple meta-analyses.¹⁹

Positive results were reported for psychological interventions versus usual or routine care. Pooled data from multiple studies reported that psychological interventions had a greater effect size (ES) than usual care (ES -0.46, 95% CI -0.58 to -0.33) in reducing perinatal common mental disorders (PCMDs).²⁰ Cognitive behavioural therapy and IPT interventions reduced postpartum depressive symptomatology at final assessment (RR 0.75, 95% CI 0.63 to 0.88) and immediately (CBT, IPT and PDT) post-treatment.²¹ Final assessment timings varied greatly and ranged from immediately following the intervention to 36 weeks post-intervention, while others were long-term interventions lasting from 18 months to five years.²¹

Similarly, psychosocial interventions when compared to usual care had an overall beneficial effect.^{21,22} At final assessment in the first year postpartum, a reduced risk for depressive symptomatology was reported (RR 0.61, 95% CI 0.39 to 0.94).²¹ At post-intervention, interventions were effective in decreasing depressive symptomatology (RR 0.49, 95% CI 0.28 to 0.85).²¹ Improved postpartum stress was also reported (Standard Mean Difference [SMD] -1.66, 95% CI -2.74 to -0.57).²³

The impact of psychosocial and psychological interventions on maternal stress was assessed in two reviews. Mixed results were reported for reduction in maternal anxiety and perceived stress.^{19,21}

Psychosocial and psychological interventions were also compared to each other in reducing depressive symptomatology at final assessment first year postpartum. No difference was found between the two interventions (non-directive counselling vs. CBT) (RR 1.13, 95% CI 0.84 to 1.52).²¹

Health promotion initiatives for perinatal common mental disorders (PCMDs) in comparison to usual care was beneficial in reducing PCMDs (ES -0.15, 95% CI -0.27 to -0.02).²⁰ These initiatives included approaches that were not structured, and also not identified as a psychological intervention and included at minimum one of the following: components of communication techniques, social support and education, and community development.²⁰ Although these interventions do not directly focus on mental illness, the mechanisms by which PCMDs are addressed is through these disorders' determinants, including social support and mental health.²⁰

Therapy

One review including a single trial comparing interpersonal psychotherapy to a parenting education program. This review reported a significant reduction in risk for depressive

symptomatology following the intervention using the Clinical Global Impression Scale (RR 0.46, 95% CI 0.26 to 0.83), but no difference was observed when using the HAM-D (RR 0.82, 95% CI 0.65 to 1.03).²⁴

Interventions applying only cognitive behavioural therapy were reported qualitatively. Overall, CBT was reported to be an effective method for reducing symptoms of depression and allowing women to make positive gains.²⁵⁻²⁷

One review reported the benefits of adding case management services to CBT sessions. Case management is a client-driven process in which the coordination of support services is managed for clients to ensure their individual needs are met and that service is of high quality.²⁸ Women who received CBT and ongoing case management were more engaged and attended the majority of sessions.²⁹ Data reported for the effectiveness of psychoeducation-only treatment were inconclusive. Although some positive findings were reported for reduction in experiencing anxiety symptoms, impact on depressive symptoms is less promising.^{29,30} Regarding low-income mothers, Levy and Hara state that psychoeducation alone is not adequate for motivating these women to seek treatment for their depression.²⁹

Counselling and debriefing

Mixed results were found for home-based non-directive counselling only. One review reported two interventions; the first showed effectiveness for treatment of postpartum depression while another reported no effect following the intervention and at six months follow-up.²⁶

Social support building

There were mixed results for the effectiveness of social support interventions. While some women experienced more positive feelings and

reduced depressive symptoms, others experienced no benefits.^{27,30-32}

Education, resource provision and screening and referral

Education and provision of resources

Couple-focused interventions included educational classes and information. Overall, these intervention types showed mixed results. There were some reports of improved depression and anxiety levels and other reports of no changes or diminished effect post-intervention for the same outcomes.³⁰ Education was also a component of many other interventions. One review reported that the combination of a self-help workbook and telephone support was associated with reduced likelihood of women experiencing depression and anxiety at 12 weeks postpartum, compared to those who received routine care.³⁰

Screening and Referral services

Screening and referrals as an intervention using mainly EPDS, as well as other tools, yielded mixed results for decreasing symptoms of depression.^{29,33-35}

Home visitation and telephone support

Overall, home visitation interventions were not effective in reducing depression or anxiety^{30,36} with the exception of one intervention that targeted women at high risk for family dysfunction and child abuse.³² Improvements in parenting stress, home environment quality, and reduction in EPDS scores (for first time mothers) were reported for this high risk group.³²

Telephone support provided by peer volunteers and health care professionals (e.g., nurses, midwives, nurses) on the other hand was effective in reducing depressive symptomatology and stress,^{30,37,38} but mixed

results were reported on its effectiveness in reducing maternal anxiety.^{30,38}

Pharmacological and nutritional interventions

Two reviews analyzed a range of interventions that included pharmacological and nutritional interventions, psychosocial and psychological interventions, as well as a combination of both, and reported significant improvements in reducing risk for both postpartum depression³⁹ and perinatal depressive symptoms.⁴⁰ When analyzed separately, pharmacological and nutritional interventions were less promising, with only positive effects found for calcium, steraline, selenium, and fluoxetine in a limited number of trials reported in two separate reviews.^{22,26}

The combination of pharmacological and nutritional interventions with psychosocial and psychological interventions showed significant improvements in reducing risk for both postpartum depression³⁹ and perinatal depressive symptoms.⁴⁰ On their own, these interventions were less promising, with the only positive effects found for calcium, steraline, selenium, and fluoxetine in a limited number of trials reported in two separate reviews.^{22,26}

Barriers and facilitators to service access and uptake

Barriers to service utilization

A small number of the included review articles discussed factors which influence the uptake of perinatal mental health services.^{38,41} In a qualitative analysis, women identified the following barriers and influencers which affected their continuity of care: poor post-treatment follow-up, inadequate number of sessions for non-directive counselling, and gaps in information provided.⁴¹ Concerns over a one-size-fits-all approach were highlighted, with women identifying the need for their input into treatment decisions and preferences.⁴¹ Incentives were noted as an important part of

some of the interventions (e.g., free bus passes and child care services).

Stigma and continuity of care

Within the health service utilization literature, stigma and perceptions of care acted as barriers to women seeking help. For example, women reported fear of disclosing their depression as it may have led to loss of custody of their child.⁴¹ Some felt health care professionals only focused on newborns' needs and were sometimes dismissive of mothers' needs, and others experienced difficulty getting physician appointments.⁴¹ The stigma associated with having depression was also mentioned,⁴¹ a commonly reported issue.

Delivery, Setting and Culture

Individual and group sessions

Very few reviews commented on the impact of individual versus group-based sessions or sessions delivered in combination. One review commented that individual sessions for PCMDs were effective in comparison to usual care (ES -0.18, 95% CI -0.34 to -0.01).²⁰ Group interventions also showed positive results. One review reported that group interventions for PCMDs were effective in comparison to usual care (ES -0.48, 95% CI -0.85 to -0.11),²⁰ and another stated that group-based CBT and supportive group counselling were equally effective in reducing depressive symptoms.³¹ Group settings were described as providing supportive environments and a sense of community, as well as helping to improve knowledge of postnatal depression among women.²⁷ Negative impacts of group settings were also identified, such as difficulty in fully participating, feelings of becoming dependent on the group, and worry of the group failing.²⁷

Mixed results were reported on whether group-based sessions were more effective than individual sessions and vice versa.^{27,31,40} One review reported that interventions with

combined individual and group components did not lead to a reduction in PCMD symptomatology when compared to usual care (ES -0.33, 95% CI -0.83 to 0.17).²⁰

Health Professionals

Two reviews assessed health professional influence on interventions. One review reported a reduction in PCMD symptoms when the interventions were delivered by non-mental health specialists compared to usual care (ES -0.34 95% CI -0.53, -0.16), but found no impact on caseness (the presence or absence of PCMD) (OR 0.62, 95% CI 0.35, 1.08).²⁰ This was supported by another review that reported at post-intervention and 9 months follow-up, those who were treated by a non-specialist experienced greater reduction in EPDS scores.²⁶

Setting, Timing, and Cultural Dimensions

Interventions that took place in the home were generally well received and associated with higher participation and satisfaction.^{29,32,40} Culturally appropriate adaptations of treatment had a positive impact on participation and engagement by women.²⁹

Interventions that were delivered during pregnancy and postpartum had a significant positive effect on reducing PCMDs in comparison to usual care (ES -0.26, 95% CI -0.42 to -0.10), however, those delivered only during pregnancy did not have a significant effect (ES -0.46, 95% CI -0.94 to 0.01).²⁰

Discussion

A wide range of interventions relevant to public health were identified that addressed women's mental health in the perinatal period. These involved various trained health professionals and lay persons as providers. Psychosocial and psychological interventions were the most commonly-reported interventions and included therapy sessions, counselling and debriefing, as examples of several initiatives within this type of intervention. These interventions overall

helped improve depressive symptomatology and postpartum depression, but were less definitive in terms of their impact on improving maternal anxiety and stress.

Educational classes and provision of materials as intervention types were less promising, with mixed results reported for improving depression and anxiety levels.³⁰ Education was also embedded within other types of interventions and may have contributed to their success; however its impact was not independently assessed. Screening and referrals showed inconsistent findings for improving depressive symptoms,^{29,33-35} and similar to education, was included in other interventions, without being the sole focus or intervention being studied.

Other interventions with mixed results were: home visitation and telephone support.^{30,32,36-38} Pharmacological and nutritional interventions were relatively less effective in isolation, but when psychosocial and psychological interventions were combined in the analysis, improvements in depressive symptoms and depression were reported.^{22,26,38,39}

Additionally, there is a need to address barriers to service utilization and continuity of care (e.g., stigma and fear, insufficient treatment and follow-up).⁴¹ These factors can be systematically considered in program planning to help mitigate participation in future programs. Although there was mention of delivery, setting and cultural influences on perinatal mental health outcomes, the evidence was limited.

Multiple perinatal mental health interventions identified in this brief showed relevance to the public health context. Given that public health works through partnerships and collaborations with other sectors within the healthcare system, the interventions described include functions that can be carried out by public health professionals (e.g., counselling, home visits, providing educational materials) as well as those that can be coordinated by public

health (e.g., referral services). The identified barriers to service uptake also highlights the need for greater awareness of perinatal mental health disorders and improvements made to access of care; both of which public health can champion and support. Public health's role spans across a range of delivery methods, providers, and settings. Thus public health professionals have multiple opportunities to impact perinatal mental health outcomes, in partnership with others.

Although clinical significance was not assessed in the included reviews, the literature demonstrates multiple methods for calculating clinical significance; though there is no standard or consistent method used throughout disciplines^{42,43,16} including those specific to the field of mental health.⁴⁴ Guidance is available with respect to interpreting findings for the EPDS and HAM-D tools where a combination of reliable change index (RCI) and cut-off scales are recommended.^{45,46} Regardless, it is necessary to consider what constitutes an important difference for the local context.

Implications for Practice

The literature identified multiple effective interventions to address perinatal mental health in a public health context. Psychosocial and psychological interventions were overall effective with respect to depressive symptomatology. As such, public health organizations may consider reviewing current strategies and providing ongoing support for staff development in areas such as counselling and debriefing, among others. Enhancing telephone support interventions may also be considered, as these were found to be effective in reducing depressive symptomatology. Home visits for mothers at high risk for family dysfunction and child abuse were effective, suggesting a focus on the specific skills needed to ensure home visiting staff maximize their time with families experiencing depression in combination with other stressors. An integration of both single and combined

interventions such as CBT, case management and pharmacological interventions with psychosocial and psychological interventions may be valuable. This highlights the importance of a comprehensive approach and speaks to the need of forming meaningful partnerships with practitioners in other fields, such as primary care. A consistent pattern of response across all public health organizations within the province would ensure all perinatal and postpartum women in Ontario receive similar high quality services. Equity and access to services must also be considered when planning and implementing initiatives, system wide.

As culturally appropriate adaptations had a positive impact on participation and engagement by women, organizations could benefit from reviewing their current practices to ensure cultural uniqueness is considered and adaptations made in their programming to respond to diverse cultures.

Sharing personal concerns around one's mental health continues to carry with it a stigma which prevents women from coming forward. In addition, concerns around custody of their children continue to inhibit open discussion with health care providers. Public health must continue to strive to change public opinion and perception of those with mental health issues. Public awareness initiatives around the issues of perinatal mental health must continue to be an important component of public health work. Provincially, continued support for province wide campaigns to raise awareness of and de-stigmatization of this health issue will shift population perspective and over time ease the way for families who experience these issues.

Limitations

Reviews included in this Evidence Brief consistently reported similar limitations in the primary study literature, including wide variation with limited potential for combining results statistically and poor methodological

rigour. A small number of trials were included in some reviews, with three reviews finding only a single randomized control trial in response to their research question. While some reviews provided detailed descriptions of the population of women included, others gave only vague details, making it difficult to report results or draw conclusions that apply to different sub-populations. Together these limitations made it challenging to combine and compare results across some reviews.

Interventions were carried out in several countries such as the United States, Canada, England, Norway, South Africa, Australia and some middle-income Asian countries. Given the differences in public health structure across these countries, an applicability and transferability assessment is needed to apply findings to the local context.

References

1. Health Canada. A report on mental illnesses in Canada. Ottawa, ON: Health Canada Editorial Board Mental Illnesses in Canada; 2002. Available from: http://www.phac-aspc.gc.ca/publicat/miic-mmacc/pdf/men_ill_e.pdf
2. World Health Organization. Mental health aspects of women's reproductive health: a global review of the literature. Geneva: World Health Organization; 2009. Available from: http://apps.who.int/iris/bitstream/10665/43846/1/9789241563567_eng.pdf
3. BC Reproductive Mental Health Program, Perinatal Services BC. Best practice guidelines for mental health disorders in the perinatal period [Internet]. Victoria, BC: Provincial Health Services Authority; 2014 [cited 2016 Nov 16]. Available from: <http://www.perinatalservicesbc.ca/Documents/Guidelines-Standards/Maternal/MentalHealthDisordersGuideline.pdf>
4. Vanderlaan A. The Healthy Human Development Table interactive discussion about the status of perinatal mental health programs, activities and supports in Ontario. Workshop presented at: Collaborate. Innovate. Transform: The Ontario Public Health Convention (TOPHC) 2016. 2016 Apr 4-6; Toronto, ON.
5. Hogg S. Prevention in mind: all babies count: spotlight on perinatal mental health [Internet]. London, UK: National Society for the Prevention of Cruelty to Children (NSPCC); 2013 [cited 16 Nov 2016]. Available from: <https://www.nspcc.org.uk/globalassets/documents/research-reports/all-babies-count-spotlight-perinatal-mental-health.pdf>
6. Letourneau NL, Dennis C, Benzies K, Duffett-Leger L, Stewart M, Tryphonopoulos PD, et al. Postpartum depression is a family affair: addressing the impact on mothers, fathers, and children. *Issues Ment Health Nurs*. 2012;33(7):445-57.
7. Murray L, Cooper PJ, Wilson A, Romaniuk H. Controlled trial of the short- and long-term effect of psychological treatment of postpartum depression: 2. Impact on the mother-child relationship and child outcome. *Br J Psychiatry*. 2003;182:420-7. Available from: <http://bjp.rcpsych.org/content/182/5/420.long>
8. Rishel CW. Pathways to prevention for children of depressed mothers: a review of the literature and recommendations for practice. *Depress Res Treat*. 2012;2012:313689. Available from: <https://www.hindawi.com/journals/drt/2012/313689/>
9. Poobalan AS, Aucott LS, Ross L, Smith WCS, Helms PJ, Williams JHG. Effects of treating postnatal depression on mother-infant interaction and child development: systematic review. *Br J Psychiatry*. 2007;191:378-86. Available from: <http://bjp.rcpsych.org/content/191/5/378.long>
10. Logsdon MC, Wisner KL, Pinto-Foltz MD. The impact of postpartum depression on mothering.

- J Obstet Gynecol Neonatal Nurs. 2006;35(5):652-8.
11. Zajicek-Farber ML. Postnatal depression and infant health practices among high-risk women. *J Child Fam Stud*. 2009;18(2):236-45.
12. Gavin NI, Gaynes BN, Lohr KN, Meltzer-Brody S, Gartlehner G, Swinson T. Perinatal depression: a systematic review of prevalence and incidence. *Obstet Gynecol*. 2005;106(5 Pt 1):1071-83.
13. Hanna B, Jarman H, Savage S. The clinical application of three screening tools for recognizing post-partum depression. *Int J Nurs Pract*. 2004;10(2):72-9.
14. Fairbrother N, Janssen P, Antony MM, Tucker E, Young AH. Perinatal anxiety disorder prevalence and incidence. *J Affect Disord*. 2016;200:148-55.
15. Health Evidence. Quality assessment tool - review articles [Internet]. Hamilton, ON: Health Evidence; 2016 [cited 2016 Aug 15]. Available from: http://www.healthevidence.org/documents/our-appraisal-tools/QATool&Dictionary_01Jun16.pdf
16. Fethney J. Statistical and clinical significance, and how to use confidence intervals to help interpret both. *Aust Crit Care*. 2010;23(2):93-7.
17. Ferrill MJ, Brown DA, Kyle JA. Review article: clinical versus statistical significance: interpreting P values and confidence intervals related to measures of association to guide decision making. *J Pharm Pract*. 2010;23(4):344-51.
18. Mariani AW, Pêgo-Fernandes PM. Statistical significance and clinical significance. *Sao Paulo Med J*. 2014;132(2):71-2. Available from: http://www.scielo.br/scielo.php?pid=S1516-31802014000200071&script=sci_arttext
19. Dennis CL, Dowswell T. Psychosocial and psychological interventions for preventing postpartum depression. *Cochrane Database Syst Rev*. 2013;(2):CD001134.
20. Clarke K, King M, Prost A. Psychosocial Interventions for perinatal common mental disorders delivered by providers who are not mental health specialists in low- and middle-income countries: a systematic review and meta-analysis. *PLoS Med*. 2013;10(10). Available from: <http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1001541>
21. Dennis C, Hodnett E. Psychosocial and psychological interventions for treating postpartum depression. *Cochrane Database Syst Rev*. 2007;(4):CD006116.
22. Werner E, Miller M, Osborne LM, Kuzava S, Monk C. Preventing postpartum depression: review and recommendations. *Arch Womens Ment Health*. 2015;18(1):41-60.
23. Song J, Kim T, Ahn J. A systematic review of psychosocial interventions for women with postpartum stress. *J Obstet Gynecol Neonatal Nurs*. 2015;44(2):183-92.
24. Dennis CL, Ross LE, Grigoriadis S. Psychosocial and psychological interventions for treating antenatal depression. *Cochrane Database Syst Rev*. 2007;(3):CD006309.
25. Ying L. Efficacy of cognitive-behavioral therapy to prevent the perinatal depressive symptoms. *Macau J Nurs*. 2013;12(1):48-57.
26. Leis JA, Mendelson T, Tandon SD, Perry DF. A systematic review of home-based interventions to prevent and treat postpartum depression. *Arch Womens Ment Health*. 2009;12(1):3-13.
27. Scope A, Booth A, Sutcliffe P. Women's perceptions and experiences of group cognitive behaviour therapy and other group interventions for postnatal depression: a

qualitative synthesis. *J Adv Nurs.* 2012;68(9):1909-19.

28. National Case Management Network of Canada. Canadian standard of practice for case management. Toronto, ON: National Case Management Network of Canada; 2009. Available from:

<http://www.ncmn.ca/resources/documents/english%20standards%20for%20web.pdf>

29. Levy LB, O'Hara MW. Psychotherapeutic interventions for depressed, low-income women: a review of the literature. *Clin Psychol Rev.* 2010;30(8):934-50.

30. Pilkington PD, Whelan TA, Milne LC. A review of partner-inclusive interventions for preventing postnatal depression and anxiety. *Clin Psychol.* 2015;19(2):63-75.

31. Goodman JH, Santangelo G. Group treatment for postpartum depression: a systematic review. *Arch Womens Ment Health.* 2011;14(4):277-93.

32. Shaw E, Levitt C, Wong S, Kaczorowski J. Systematic review of the literature on postpartum care: effectiveness of postpartum support to improve maternal parenting, mental health, quality of life, and physical health. *Birth.* 2006;33(3):210-20.

33. Thombs BD, Arthurs E, Coronado-Montoya S, Roseman M, Delisle VC, Leavens A, et al. Depression screening and patient outcomes in pregnancy or postpartum: a systematic review. *J Psychosom Res.* 2014;76(6):433-46.

34. Hewitt CE, Gilbody SM. Is it clinically and cost effective to screen for postnatal depression: a systematic review of controlled clinical trials and economic evidence. *BJOG.* 2009;116(8):1019-27. Available from: <http://onlinelibrary.wiley.com/doi/10.1111/j.1471-0528.2009.02148.x/full>

35. Austin M, Priest SR, Sullivan EA. Antenatal psychosocial assessment for reducing perinatal mental health morbidity. *Cochrane Database*

Syst Rev. 2008;(4):CD005124. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4171384/>

36. Yonemoto N, Dowswell T, Nagai S, Mori R. Schedules for home visits in the early postpartum period. *Cochrane Database Syst Rev.* 2013;(7):CD009326.

37. Dennis C, Kingston D. A systematic review of telephone support for women during pregnancy and the early postpartum period. *J Obstet Gynecol Neonatal Nurs.* 2008;37(3):301-14.

38. Lavender T, Richens Y, Milan SJ, Smyth RM, Dowswell T. Telephone support for women during pregnancy and the first six weeks postpartum. *Cochrane Database Syst Rev.* 2013;(7):CD009338.

39. Sockol LE, Epperson CN, Barber JP. Preventing postpartum depression: a meta-analytic review. *Clin Psychol Rev.* 2013;33(8):1205-17.

40. Sockol LE, Epperson CN, Barber JP. A meta-analysis of treatments for perinatal depression. *Clin Psychol Rev.* 2011;31(5):839-49.

41. Megnin-Viggars O, Symington I, Howard LM, Pilling S. Experience of care for mental health problems in the antenatal or postnatal period for women in the UK: a systematic review and meta-synthesis of qualitative research. *Arch Womens Ment Health.* 2015;18(6):745-59.

42. McGlothlin AE, Lewis RJ. Minimal clinically important difference: defining what really matters to patients. *JAMA.* 2014;312(13):1342-3.

43. Jones PW, Beeh KM, Chapman KR, Decramer M, Mahler DA, Wedzicha JA. Minimal clinically important differences in pharmacological trials. *Am J Respir Crit Care Med.* 2014;189(3):250-5. Available from: <http://www.atsjournals.org/doi/full/10.1164/rcm.201310-1863PP>

44. Eisen SV, Ranganathan G, Seal P, Spiro III A. Measuring clinically meaningful change

following mental health treatment. *J Behav Health Serv Res.* 2007;34(3):272-89.

45. Matthey S. Calculating clinically significant change in postnatal depression studies using the Edinburgh Postnatal Depression Scale. *J Affect Disord.* 2004;78(3):269-72.

46. Grundy CT, Lambert MJ, Grundy EM. Assessing clinical significance: application to the Hamilton rating scale for depression. *J Ment Health.* 1996;5(1):25-33.

Specifications and Limitations

The purpose of this Evidence Brief is to investigate a research question in a timely manner to help inform decision making. The Evidence Brief presents key findings, based on a systematic search of the best available evidence near the time of publication, as well as systematic screening and extraction of the data from that evidence. It does not report the same level of detail as a full systematic review. Every attempt has been made to incorporate the highest level of evidence on the topic. There may be relevant individual studies that are not included; however, it is important to consider at the time of use of this brief whether individual studies would alter the conclusions drawn from the document.

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