Treatment of Perinatal Mood and Anxiety Disorders: A Review

Shaila Misri, MD, FRCPC[1], Kristin Kendrick, BA[2]

Objectives: To review the nonpharmacologic and pharmacologic treatment modalities for perinatal mood and anxiety disorders and to discuss the importance of weighing the risks and the benefits of exposing the fetus or baby to maternal mental illness as opposed to exposure to antidepressant medications.

Methods: We conducted a literature search of the PubMed and MEDLINE databases. Key words included the following: perinatal, pregnancy, postpartum, depression, anxiety, pharmacologic, nonpharmacologic, psychotherapy, and treatment.

Results: Recent literature reflects that both pharmacologic and nonpharmacologic treatments for perinatal women are associated with positive and negative outcomes. No treatment decision was found to be risk-free. The detrimental effects of untreated mental illness on the mother, as well as on the baby, highlight the need for treatment intervention. The long-term effects of exposure to either medications or maternal mental illness are unknown, as yet.

Conclusion: Women with perinatal depression and anxiety disorders require timely and efficient management with a goal of providing symptom relief for the suffering mother while simultaneously ensuring the baby's safety. Although knowledge in the area of appropriate intervention is constantly evolving, rigorous and scientifically sound research in the future is critical.

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Highlights

- Leaving maternal mental illness untreated has consequences, not only for the mother but also for the developing fetus, the infant, and the child or adolescent.
- Pharmacologic treatment of perinatal mood and anxiety disorders needs careful risk–benefit analysis.
- Psychotherapy should be considered for less severe maternal mental illnesses.
- No treatment decision is risk-free: the baby is exposed, either to the medication or to the effects of maternal illness itself.
- Medication use in pregnancy and postpartum is controversial at the present time.
- Nonpharmacologic treatments in the perinatal population, although promising, require further research in regard to their efficacy and sustainability.

Key Words: *perinatal, pregnancy, postpartum, depression, anxiety, pharmacologic, nonpharmacologic, treatment*

Mental illness is one of the most commonly encountered complications of the perinatal period and is fraught with controversy and uncertainty in regard to treatment.[1,2] Many women refuse medication for mental illness during pregnancy because of the possible risk of teratogenicity and concern over adverse neonatal effects at birth and potential negative infant development in the short and long term. In this population, treatment success with psychotherapy is limited. Nonetheless, failure to effectively treat pregnant women suffering from depression or anxiety can lead to compromised prenatal care, increased risk of obstetrical complications, postpartum exacerbation, self-medication and (or) substance abuse, impaired bonding, and fetal exposure to the detrimental effects of the illness itself.[3–8] Postnatally, the foremost apprehension is the possible risk to infants of exposure to medications through breast milk together with the effect of medications on infants' development. However, untreated postpartum mood and anxiety disorders negatively affect mother–infant interaction and bonding and have short- and long-term detrimental effects on children.[9] It is critical to weigh the risks and benefits of exposing the fetus or baby to maternal mental illness against the risks and benefits of exposure to psychotropic medications in the perinatal period. Although alternative, nonpharmacologic treatments are available, relatively little data exist on their efficacy during pregnancy and postpartum. With the current concerns surrounding antidepressant use and the lack of easy accessibility to, or affordability of, nonpharmacologic treatments, advising women on appropriate treatment options in the perinatal period poses a particular challenge to clinicians.

Untreated Perinatal Mood and Anxiety Disorders

Untreated mood and anxiety disorders during pregnancy have been shown to have detrimental effects on the mother as well as on her unborn child. In a recent study, Diego and colleagues[3] showed that maternal psychological distress during pregnancy resulted in elevated cortisol levels that, in turn,were related to lower fetal weight. Leader and Correira[10] showed that, when pregnant women watched an emotionally charged film, fetal heart rates increased, compared with those in a control group of women who watched a neutral film. Another study showed that fetuses of anxious mothers were found to spend more time in quiet sleep and to exhibit fewer movements in active sleep, compared with fetuses of healthy mothers.[11] Maternal anxiety in pregnancy has been shown to be associated with uterine artery resistance, leading to smaller babies with low birth weight.[12] Van den Bergh[13] followed 70 mother–infant dyads from the first trimester of pregnancy through to children up to age 9 years and found that fetuses of women with high levels of anxiety were hyperactive. At age 7 months, these children tended to be difficult, to be irritable, and to cry excessively. At age 9 years, the boys in particular continued to be hyperactive, to show signs of attention deficit, and to engage in aggressive behaviours.[13]

In a similar study, Zuckerman[14] examined babies born to mothers suffering from depression 3 days after birth and found that they cried excessively and were difficult to soothe. Another study reported that, similar to their mothers, babies of mothers with depression had increased levels of cortisol and norepinephrine and decreased levels of dopamine and serotonin.[15] These babies were also shown to have poor motor ability and to be less active, more lethargic, and more withdrawn than is typical for their age. Additionally, electroencephalographic data showed impaired brain activity in these infants. Thus these studies clearly demonstrate the negative impact of unattended maternal mental illness on the unborn fetus, the newborn infant, and the child.

As in pregnancy, untreated mood and anxiety disorders in the postpartum period can also negatively affect the newborn and the mother–infant dyad. Additionally, postpartum depression has been related to compromised physiological development, fewer interests, and restricted facial expression in the babies.[16] A strong relation has been demonstrated between postnatal depression in mothers and diminished interaction with their children. Exposure to chronic maternal depression in the early postpartum period has been shown to have lasting consequences on the children's behaviours. For instance, one study found that, although the current depressive episode most strongly influenced maternal–child interaction, the residual effects of prior depressions were apparent in the children's behaviours.[17] Further, it was found that mother–infant interactions were only affected among women who suffered from protracted depression (that is, lasting 6 months), compared with women who experienced more short-lived depressions.[18] Recently, Weissman and colleagues[19] showed that the remission of maternal depression after 3 months of medication treatment was significantly associated with reductions in children's depressive, anxiety, and disruptive behaviour

Abbreviations used in this article

CBT	cognitive-behavioural therapy
IPT	interpersonal therapy
MAOI	monoamine oxidase inhibitor
PPHN	persistent pulmonary hypertension
SNRI	selective norepinephrine reuptake inhibitor
SSRI	selective serotonin reuptake inhibitor
TCA	tricyclic antidepressant

disorders, whereas continued depression in mothers was associated with increased rates of these disorders in children.[19]

These studies suggest that identifying symptoms and instituting treatment early on may reduce the negative consequences of the illness for both mother and child. Therefore, it is important to examine available treatments for mood and anxiety disorders during this sensitive period, to evaluate their efficacy, and to examine their effects on mothers and developing children.

Nonpharmacologic Treatments for Perinatal Mood and Anxiety Disorders

Psychotherapy

Cognitive-Behavioural Therapy. CBT focuses on the interrelations between thoughts, affect, behaviour, physical reactions, and the environment; provides education about the interrelations between each of these domains; and includes strategies that target positive change in each. CBT has been applied to treat various psychiatric disorders, including depression, anxiety, and eating disorders, with a reported success rate of 52% to 97%.[20] Several studies report that CBT is as effective as medication for treating mild-to-moderate depression; however, no studies to date have been published examining its efficacy in treating depression during pregnancy.[21]

Most research investigating psychotherapy for treating postpartum depression has focused on CBT. One study[22] randomly assigned 48 mothers suffering from postpartum depression to 3 groups: one received 5 weeks of CBT, the second received 8 weeks of CBT, and the third was an untreated control group. The findings of this study demonstrated that those receiving either 5 or 8 weeks of therapy recovered significantly faster than their untreated counterparts. Another study[23] compared 4 different types of treatment for postpartum depression: primary care, general counselling, CBT, and psychodynamic therapy. Initially, women receiving either CBT or psychotherapy did considerably better than the other 2 groups; after 9 months, however, there were no differences noted between the different types of treatment. A study that examined group CBT in early motherhood did find that this therapy decreased depressive symptomatology and improved mother–child interaction.[24]

Interpersonal Therapy. IPT is ideal for pregnant and postpartum women suffering from depression or anxiety for whom role transition is a significant issue. A pilot study of 13 pregnant women found that IPT significantly reduced depressive symptoms with no postpartum relapse.[25] A larger study that compared IPT with 16 weekly sessions of parenting education to treat depression in pregnancy showed that those who received IPT experienced a significantly greater improvement in mood symptoms than did their counterparts.[26]

One study to date has examined the use of IPT for treating postpartum depression.[27] Researchers provided 12 weekly session of IPT to postpartum women (at 5 months) and found that this treatment reduced depressive symptoms and increased social adjustment; it should be noted that the study did not use a control group. Further study of this treatment intervention for women with perinatal depression is necessary.

Biological Treatments

Light Therapy. Studies examining the efficacy of light therapy in treating depression in pregnant women have produced promising results. Oren and colleagues[28] found that 14 out of 16 pregnant women with depression treated with 3 to 5 weeks of bright-light therapy experienced significant improvement in their symptoms. Another study[29] compared women who received 5 weeks of bright-light therapy of 7000 lux with a control group of women receiving 500 lux. At 5 weeks, the treatment group experienced a small but nonsignificant advantage over the control group; this difference became significant at 10 weeks.

Studies have been published examining the use of light therapy for treating postpartum depression.[30] A study of 18 women with postpartum depression treated for 30 minutes daily over a 5-week period with either morning dim red light or morning bright light reported no significant differences between the 2 groups of women. Clearly, more data are warranted on this treatment modality. [31]

Other Adjunctive Therapies. Several other therapies have been investigated for treating mood and anxiety disorders in the perinatal period, including exercise, massage, herbal treatments, and acupuncture. As would be expected, women who exercised in the first and second trimesters of pregnancy reported less depression and anxiety than their counterparts who did not exercise. Interestingly, in the third trimester, exercise was related to reduced anxiety.[32] Massage has been found to benefit mood and anxiety disorders in pregnancy and postpartum, specifically, as it relates to mother–child interaction and bonding.[33–36] Although St John's wort has been shown to be efficacious in the treatment of depression,[37] to our knowledge, no data are available at present investigating its efficacy in antenatal women. One study involving 5 women determined that St John's wort is excreted into breast milk at the limit of quantification in the infants' plasma.[38] As such, this treatment requires further investigation before its use can be recommended during the perinatal period. Acupuncture has been shown to decrease depressive symptoms in pregnant women, and this effect was sustained until 10 weeks

postpartum.[39] However, there is only one study on this treatment, and more research is needed.

Pharmacologic Treatments for Perinatal Mood and Anxiety Disorders

The paucity of empirical evidence supporting the efficacy of nonpharmacologic treatments, in conjunction with reports of the negative consequences of untreated mood and anxiety disorders, makes psychotropic medications the first-line treatment for pregnant women experiencing severe, persistent, relapsing mood and anxiety disorders. A recent study emphasized the crucial role of antidepressant therapy in stabilizing moods in pregnant women suffering from depression.[40] This study found that women who stopped taking antidepressants while pregnant were 5 times more likely to relapse than those who continued medication, replicating earlier research finding a 75% relapse following antidepressant discontinuation.[41] Of note, 26% of the women who remained on their medications throughout their pregnancy suffered a relapse despite this continued regime.

Following 2 decades of widespread antidepressant use in pregnant women, serious concerns have been raised regarding the overall safety of these drugs in the antenatal period. Knowledge of the effects of prenatal psychotropic medication exposure is just beginning to evolve. It is now known that all psychotropic medications are secreted in the amniotic fluid and easily diffuse across the placenta to the developing fetus.[42] Additionally, the secretion of antidepressants in the breast milk and their presence in the baby's serum remains an ongoing concern. In the United States, about 4 million babies are born every year, and nearly one-half of all new mothers will breastfeed their infants.[43] Since postpartum depression affects 10% to 13% of all women, it can be assumed that some new mothers will be nursing while they are taking antidepressants.[44]

At present, all psychotropic medications have "off-label" indications for their use in pregnant and lactating women. Of the psychotropic medications administered perinatally, antidepressants are those for which the most data have been accumulated.[45] The most commonly prescribed medications in these populations are the SSRIs and SNRIs.[46] Previously, TCAs were shown to be quite effective, but owing to their numerous side effects, their use is now limited.[47] MAOIs are not recommended for use in the perinatal period because animal studies have shown that MAOI exposure during pregnancy is associated with fetal growth restriction.[47]

Tricyclic Antidepressants

Because TCAs were the first psychotropic medications prescribed for the treatment of depression, a fairly significant amount of data exists on their use during pregnancy. Several studies involving women exposed to TCAs during their first trimester have documented their safety. However, the data for clomipramine raise concerns.[48–50] Antenatal use of clomipramine has been associated with congenital heart disease as well as transient adverse effects in the neonates.[51] Long-term studies of children exposed to TCAs in utero have shown no differences in IQ, language, temperament, or mood when they are compared with nonexposed children.[52,53] Nortriptyline seems to be particularly effective in the treatment of postpartum depression. In a recent study,[54] symptom reduction and improvement in functioning in women with postpartum depression treated with nortriptyline as opposed to sertraline (a serotonin reuptake inhibitor) were similar: the only difference was in their side effect profile. Breast-fed infant serum levels were near or below the level of quantifiability.

Selective Serotonin Reuptake Inhibitors

Since the advent of "prozacs" in the 1980s, the use of SSRIs in pregnancy during the last 2 decades has been fraught with positive and negative outcomes. These contradictory findings continue to add confusion to the lives of treating clinicians and their patients. Recent US Food and Drug Administration and Health Canada warnings regarding withdrawal in neonates born to women taking SSRIs in the third trimester have caused great alarm, noncompliance, and discontinuation of pharmacotherapy.[55,56] Although several studies have investigated the impact of SSRI exposure during different stages of gestation, a recent study reported that the length of SSRI or SNRI exposure, rather than the timing of the exposure, increased the risk of respiratory distress as well as lower birth weight and gestational age.[57] Recent studies have reported the occurrence of neonatal abstinence syndrome in about 30% of neonates exposed to SSRIs in late pregnancy, whereas this syndrome occurs in 6% and 9% of neonates with no exposure or early exposure in utero, respectively.[58,59] Additionally, poor neonatal adaptation has been also associated with severity of maternal illness.[60] Recently, the association between SSRI use in early pregnancy and the risk of congenital malformations in the offspring has been examined.[61] Data indicate that there is a moderately increased risk of congenital malformations associated with prenatal exposure to SSRIs. Further studies are needed to confirm this risk and to clarify whether the risk is attributable to the drugs themselves, to underlying psychiatric disease, or to other confounding factors. Another retrospective study found increased risks of low birth weight, preterm birth, fetal death, and seizures in infants with antenatal SSRI exposure.[62] This study, however, has several methodologic limitations. Finally, one study reported an association between the maternal use of SSRIs in late pregnancy and PPHN in the newborn.[63] This study also has significant limitations, including its small sample size and retrospective

design (with the attendant risks of inaccurate recall and recall bias); nevertheless, the findings are of concern and warrant further study.

A recent metaanalysis reported that serotonin reuptake inhibitors do not increase the risk of major malformations, cardiovascular malformations, or minor malformations but that they do increase the risk of spontaneous abortions.[64]

Although there is a sizeable amount of literature showing a negative correlation between SSRI exposure during pregnancy and neonatal outcome, ceasing pharmacologic treatment in women with a history of depression is associated with potential adverse effects on both mother and infant in both the short and long term.[65] A recent study found that levels of internalizing behaviours did not differ significantly between children with prenatal psychotropic medication exposure and those without exposure.[66] Notably, researchers established a relation between maternal mood and anxiety and the internalizing behaviours of the children; as symptoms of maternal anxiety and depression increased, so did reported internalizing behaviours in the children.

Fluoxetine. Prospective studies that evaluated more than 1400 fluoxetine-exposed infants found no increase in the incidence of malformations.[50,67,68] However, neonatal toxicity and withdrawal symptoms of jitteriness, jaundice, and hypoglycemia have been reported in newborns subsequent to antenatal fluoxetine exposure.[69] A separate investigation noted an association between fluoxetine exposure and 3 minor anomalies, with PPHN occurring in 2 of 73 infants exposed to fluoxetine in late pregnancy.[70] A large case–control study was undertaken to further investigate this possible association and found that, although the absolute risk is small, exposure to SSRIs in the latter half of pregnancy increased the relative risk of PPHN.[63] Of note, this study did not account for the effect of maternal mood on the birth outcome. These results do not prove that SSRIs increase the risk of PPHN, but the findings are of concern and warrant further study.

Two important studies have examined the long-term effects of prenatal fluoxetine exposure.[52,53] The first followed 55 exposed mother–infant dyads, assessed the infants when they were between 16 and 86 months of age, and found no differences in IQ, language, or behavioural development when they were compared with mother–infant dyads exposed to TCAs and with a nonexposed group.[52] The second study examined 46 exposed infants up to 71 months of age and determined that there were no deficits in the cognitive and language abilities of these children.[53] Notably, it was found that mothers experiencing longer and more frequent episodes of postpartum depression had children with delayed cognitive and linguistic development.

Fluoxetine is one of the most frequently studied SSRIs during lactation. Although fluoxetine and its active metabolite norfluoxetine are excreted into the breast milk, few potential side effects have been reported.[71] No adverse events were noted in 180 of 190 infants whose mothers took fluoxetine during lactation; the complications noted in the remaining 10 infants were minor.[72] Another study compared fluoxetine-treated mother–infant pairs with a control group and found that infants who had been exposed to fluoxetine weighed slightly less than the infants in the control group.[73] Examination of existing data shows a few behavioural symptoms such as colic and hyperactivity, but the vast majority of studies show no adverse outcomes at all.[74]

Although fluoxetine is the antidepressant for which we have the most data during pregnancy, as well as long-term follow-up data, switching to fluoxetine is not recommended if a woman has responded well to another antidepressant during pregnancy.

Paroxetine. At present, when antenatal paroxetine use and subsequent birth outcomes are examined, the literature has produced contradictory results in regard to congenital anomalies. Although a few studies in the past have shown no teratogenicity with paroxetine use in early pregnancy,[75] other studies have found that paroxetine is associated with increased risk of cardiac defects.[76] The new US Food and Drug Administration–Health Canada warning[77] based on the GlaxoSmithKline report[78] has moved this antidepressant to Category D, indicating that the drug has been found to be harmful in human fetuses. This report[78] of 3581 pregnant women exposed to paroxetine or other antidepressants in the first trimester showed an overall increased risk of congenital malformations—in particular ventricular septal defects (absolute risk 1.5% compared with 1%)—with paroxetine.[78] It is not clear why these findings differ from previous reports or whether a causal relation exists, but this study led to a new warning on the product label for paroxetine. The American College of Obstetrics and Gynecology has recommended that paroxetine use be avoided among pregnant women or women planning on becoming pregnant. Fetal echocardiography should be considered for women who are exposed to paroxetine in early pregnancy. Because abrupt discontinuation of paroxetine has been associated with withdrawal symptoms, this agent should be discontinued as directed in the product's prescribing information.[77]

Several studies demonstrate neonatal withdrawal with paroxetine use in pregnancy.[79,80] It is worth noting that an increased risk of withdrawal has been shown to exist when this medication is taken in combination with clonazepam.[59] The long-term neurobehavioural effects of prenatal exposure to SSRIs were examined in a study of 22 children, 14 of whom were exposed to paroxetine, 5 to fluoxetine, and 3 to

sertraline.[66] Four years after birth, no significant differences were found between the exposed and nonexposed groups in terms of the children's internalizing behaviours; however, increased severity of maternal mood and anxiety disorders was associated with more problematic behaviours in these children.

Paroxetine has been found to be effective in the treatment of postpartum depression in nursing mothers, and the results of research on 77 paroxetine-exposed babies have shown almost undetectable medication levels in infants.[81–85] Paroxetine should be considered when pharmacotherapy is instituted for postpartum depression.

Sertraline. There are currently no data indicating that sertraline is associated with either congenital malformation or impaired neurologic development. In a study of 147 women exposed to sertraline during pregnancy, none of the babies were born with malformations.[75] Prior reports of withdrawal symptoms after prenatal exposure to sertraline have not been replicated in subsequent studies.[86]

A randomized trial evaluating sertraline administration immediately after birth found that it reduced both the recurrence of postnatal depression and the time to recurrence when compared with a placebo.[87] In 5 reports, there were no adverse effects seen in 49 breast-fed infants exposed to sertraline.[72] Further, sertraline levels in infants' serum were almost undetectable, according to research on 146 babies.[88–92] Sertraline is the recommended choice in treating mood and anxiety disorders during the perinatal period because it has the advantage of a fairly good safety record in pregnant and breastfeeding women.

Citalopram and Escitalopram. Studies examining the impact on infants of in utero exposure to citalopram have generally reported positive results.[80,93] Specifically, data from a Swedish birth registry containing 375 women who had used citalopram during pregnancy showed no apparent risk to, or ill effects in, the newborn.[80] Recently, however, one case of infant withdrawal associated with prenatal citalopram use has been published.[94] Citalopram and its inactive metabolite desmethylcitalopram are excreted into human breast milk; one case of sleep disturbance in an infant breast-fed while the mother was taking citalopram has been published.[95]

There are no data available on the effects of isolated exposure to escitalopram, the s-enantiomer of citalopram. The safety data on citalopram are considered to be applicable to escitalopram. If a patient has shown response to escitalopram, it is recommended that the medication be continued in the perinatal period.

Placental Transfer of SSRIs. SSRIs pass freely across the placental barrier.[65] A study conducted in 2003 examined 38 pregnant women exposed to fluoxetine, paroxetine, sertraline, or citalopram.[96] The results indicated that ratios of medication levels in the umbilical cord to those in the maternal blood were lower for sertraline and paroxetine than for fluoxetine and citalopram. Another study measured levels of fluoxetine, paroxetine, and sertraline in maternal blood during pregnancy, in umbilical cords at delivery, and in infants' blood 2 days after delivery.[42] In line with previous findings, the concentrations of fluoxetine and its metabolite norfluoxetine were higher in mothers' blood and infants' serum than either paroxetine or sertraline.[96] Although the findings suggest that placental transfer of paroxetine and sertraline is lower than that for fluoxetine, the 4-year follow up of these babies showed no difference in development with prenatal exposure to these 3 compounds.[66]

Transfer of SSRIs into Breast Milk. All SSRIs are excreted into the breast milk; however, no serious side effects have been reported in children breast-fed by mothers taking any SSRI.[71] Weissman's study[97] that involved a pooled analysis of 57 studies on antidepressant levels in nursing infants concluded that, among the SSRIs, paroxetine and sertraline may be the preferred choices for breastfeeding women because of their almost undetectable levels in the infants' blood. Researchers also noted that, of the commonly used antidepressants, fluoxetine resulted in the highest infant serum levels. These findings were replicated in a study by Kim and colleagues.[42] Research indicates that the levels of medication transferred to the infant are far lower than those in the mother's blood and, in some cases, are actually undetectable.[83] Long-term follow-up studies of babies exposed to medications through their mother's breast milk, although sparse, do attest to their safety.[98] At present, other factors that may affect the babies' levels of exposure, including the pH level of the milk and maternal blood volume, as well as the pharmacokinetics of the medications themselves, are being examined.[90]

Serotonin Norepinephrine Reuptake Inhibitors

Venlafaxine. Recently, the use of venlafaxine for the treatment of mood and anxiety disorders during the perinatal period has significantly increased. One study examining 150 women exposed to venlafaxine during the first trimester of pregnancy showed no increased incidence of birth defects.[99] Pakalapati and colleagues recently reported on 2 cases of neonatal seizures after in utero exposure to venlafaxine[100] but were unable to obtain serum levels from either the mother or baby to ascertain whether the seizures were due to withdrawal or toxicity. Neurodevelopmental outcomes appeared to be positive in these infants. Little is known about the potential short- and long-term effects of venlafaxine use in pregnancy.

Existing data published on the transfer of venlafaxine into breast milk have generally reported low levels of venlafaxine

and its metabolite in infant serum with no noted adverse events [101–104].

Mirtazapine. Nine case reports of mirtazapine use during pregnancy suggest no adverse effects with this medication.[105,106] One recent prospective study of 104 women exposed to mirtazapine during pregnancy reported no apparent increase in the baseline rate of major malformations, although the study did report higher levels of spontaneous abortions in the in utero mirtazapine-exposed group than a nonteratogen comparison group.[107] No published data are currently available on infant exposure to mirtazapine during the postpartum period.

Atypical Antidepressants

Buproprion. Buproprion is prescribed for both depression and smoking cessation. Data from the manufacturer's registry in June 2006 on 621 first trimester exposures to buproprion noted incidents of cardiac defects that were not significantly higher than in comparison groups using other antidepressant medication.[108] However, in 136 women exposed to buproprion during the first trimester of pregnancy, higher rates of spontaneous abortions were noted. Methodological limitations preclude definite conclusions.[109]

There have been no reported problems to date regarding the use of buproprion during lactation.[110] If a woman is responsive to buproprion, switching to another medication is not recommended in pregnancy or lactation.

Trazadone. Trazadone is most commonly prescribed in combination with SSRIs–SNRIs for the relief of insomnia. There have been no increases in birth defects shown in the 58 available cases involving trazadone use in pregnancy.[111] Long-term follow-up data are not yet available.

Combining Pharmacologic and Nonpharmacologic Treatments

Despite strong empirical support for the efficacy of antidepressants in treating mood and anxiety disorders in the perinatal period, many expectant mothers and clinicians alike hesitate to use medications during pregnancy and postpartum. Studies have examined the effectiveness of combining medications with psychotherapy in attempts to maximize benefits while minimizing potential negative consequences. Reports have indicated that the combination of CBT and antidepressants may be superior in the treatment of severe depression; however, the efficacy of this type of concurrent therapy has not been examined in a pregnant population.[21] There has been one study comparing the efficacy of fluoxetine with that of CBT in the postpartum period.[112] Participants were assigned to 1 of 4 groups: 2 groups that received fluoxetine and CBT and 2 groups that received CBT alone. All 4 groups showed improvement in their symptoms, but those who received combined treatment improved significantly more than those receiving psychotherapy alone. Another study comparing paroxetine with CBT in the treatment of postpartum depression found that paroxetine alone was as effective in reducing depressive symptomatology as it was in combination with CBT.[81]

Conclusion

Understanding of perinatal mental illness has evolved significantly since Marcé's[113] 1858 publication of the first substantial treatise on mental illness in pregnancy and the puerperium. However, clinicians continue to struggle with the issue of providing the safest, most effective treatment to patients who are afflicted with mood and anxiety disorders in the perinatal period. Clearly, the goal is to provide symptom relief for the suffering mother while simultaneously ensuring the baby's safety. Although this review attempts to bring treating clinicians up-to-date knowledge on the state of the existing literature, many treatment-related questions remain unanswered in the absence of "perfect studies." Most of the negative findings related to SSRI use in pregnancy have not taken into account important variables such as maternal mood and concurrent medication use.

Thus far, although antidepessant medications are effective, 2 decades of prescribing them for the treatment of mood and anxiety disorders have raised concerns in the perinatal population. However, data on available alternative therapies, particularly psychotherapies, are presently far from adequate to recommend them as first-line treatments, especially for severely mentally ill women with persisting and relapsing illnesses.

Given this clinical conundrum, current best practice should involve a consensual process whereby patients are presented with the current knowledge, engaged in decision making, and closely monitored regardless of their choice of treatment.

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[1]Clinical Professor, Psychiatry and Obstetrics–Gynaecology, University of British Columbia, Vancouver, British Columbia; Medical Director, Reproductive Mental Health Program, St Paul's Hospital and British Columbia Women's Hospital, Vancouver, British Columbia.
[2]Research Assistant, Reproductive Mental Health Program, St Paul's Hospital and British Columbia Women's Hospital, Vancouver, British Columbia.
Address for correspondence: Dr S Misri, Reproductive Mental Health Program, St Paul's Hospital and BC Women's Hospital, Rm 2B–185, 1081 Burrard Street, Vancouver, BC V6Z 1Y6; smisri@providencehealth.bc.ca

Résumé : Le traitement des troubles de l'humeur et anxieux périnataux : une étude

Objectifs : Examiner les modes de traitement non pharmacologiques et pharmacologiques des troubles de l'humeur et anxieux périnataux, et discuter de l'importance de soupeser les risques et les avantages d'exposer le fœtus ou le bébé à la maladie mentale maternelle par rapport à l'exposer aux antidépresseurs.

Méthodes : Nous avons mené une recherche de la documentation dans les bases de données PubMed et MEDLINE. Les mots clés comprenaient les suivants : périnatal, grossesse, post-partum, dépression, anxiété, pharmacologique, non pharmacologique, psychothérapie et traitement.

Résultats : La documentation récente reflète que les traitements tant pharmacologiques que non pharmacologiques pour les femmes périnatales sont associés à des résultats positifs et négatifs. Aucune décision de traitement ne s'est révélée sans risque. Les effets nuisibles de la maladie mentale non traitée sur la mère, ainsi que sur le bébé, font ressortir le besoin d'une intervention de traitement. Les effets à long terme de l'exposition soit aux médicaments, soit à la maladie mentale maternelle restent à découvrir.

Conclusion : Les femmes souffrant de troubles dépressifs et anxieux périnataux nécessitent une prise en charge efficace en temps opportun, dans le but d'offrir un soulagement des symptômes à la mère souffrante et simultanément, d'assurer la sécurité du bébé. Bien que les connaissances du domaine de l'intervention appropriée évoluent sans cesse, une recherche rigoureusement scientifique est essentielle à l'avenir.