Expert Review of Obstetrics & Gynecology

ISSN: 1747-4108 (Print) 1747-4116 (Online) Journal homepage: informahealthcare.com/journals/ierb20

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To cite this article: Sophie Grigoriadis (2008) Doctor please tell me what is best for me and my baby, Expert Review of Obstetrics & Gynecology, 3:1, 5-7, DOI: 10.1586/17474108.3.1.5

To link to this article: https://doi.org/10.1586/17474108.3.1.5

Published online: 10 Jan 2014.

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Expert Rev. Obstet. Gynecol. 3(1), 5–7 (2008)

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"Although our society is more informed than it ever was, women with depression are getting mixed messages, adding to their existing distress and feelings of inadequacy and helplessness."

"Doctor, my family tells me to snap out of it…my husband will not let me take an antidepressant because he is worried about what he reads in the paper. I want my baby to be healthy…even though…I am not excited about this pregnancy – please tell me what to do." This is a statement that I hear repeatedly in my practice these days. Although our society is more informed than it ever was, women with depression are getting mixed messages, adding to their existing distress and feelings of inadequacy and helplessness. Why are women with other chronic illnesses not scrutinized so? Depression is a mental illness and remains stigmatized. The reality is that mental disorders are common but they are not benign. Major depressive disorder is the second leading cause of disability [1] in women and can be chronic and recurrent [2]. It is a serious and potentially life-threatening condition. Contrary to traditional beliefs, pregnancy does not protect women from experiencing a depressive episode for the first time or from having a recurrence of their illness. Although the prevalence rate of depression during pregnancy for a first depressive episode is similar to the rate for nonpregnant women [3], the rate of depression increases during the second and third trimesters of pregnancy, exceeding rates in the general population [4]. For women with an existing mood disorder, the risk for another depressive episode during pregnancy is high [3]. Largely thanks to sensational journalism, postpartum depression and its effects are now on the public radar, but the effects of depression during pregnancy have not yet made center stage. Untreated depression during pregnancy is associated with substantial risk to both the mother and her baby. During pregnancy, depressed women can exhibit poor self-care, poor compliance with prenatal care, lower than expected weight gain because of poor appetite, are more likely to smoke and use alcohol or illicit drugs, and are at risk for self-injurious behavior and suicide if severely depressed [4]. Maternal depression is associated with factors that predict poor neonatal outcome, including preterm birth, low birth weight, smaller head circumference and lower Apgar scores [5–7].

"Unfortunately, what has made headlines are not the studies that show the ill effects of depression but the studies that describe the potential negative effects of antidepressant use during pregnancy."

Maternal depression causes a disruption in the family as well as the mother–child bond and can affect the attachment process [8]. Offspring of depressed mothers are more likely to have behavioral problems, exhibit disruptions in cognitive and emotional development, and develop depression during childhood [9–12]. Depression during pregnancy is common and has short- and long-term consequences for the mother, the child and the family unit.

EXPERT REVIEWS

  ISSN 1747-4108

Unfortunately, what has made headlines are not the studies that show the ill effects of depression but the studies that describe the potential negative effects of antidepressant use during pregnancy.

Although treatment for depression is essential, depression during pregnancy is under treated. Both pharmacological and psychotherapeutic options exist for treating depression during pregnancy, based on evidence from the adult depression literature. There are only a handful of studies specifically evaluating treatment for depression during pregnancy. Small studies support the use of interpersonal psychotherapy [13,14] during pregnancy but there are no published trials evaluating Cognitive Behavioral Therapy. There are other potential treatments and they have been reviewed recently [15]. Often, however, antidepressant medication must be considered, especially if the woman has severe depressive symptoms. There is a lack of data from randomized, controlled trials during pregnancy, largely owing to ethical concerns regarding exposure of the fetus to the medication. Mostly, we have to rely on cohort studies, pregnancy registries and databases and we have to wait to collect enough data over time regarding effects during pregnancy. That is what is happening now. There has been an influx of articles over the last few years. Investigators are trying to make sense of data collected for other purposes, often collected since the introduction of the selective serotonin reuptake inhibitors, and trying to answer a secondary question (the data may not have been collected originally to answer the question of safety during pregnancy). Although these studies are informative, unfortunately, the results with negative outcomes make the front page of newspapers most frequently. Transient, short-term adverse neonatal effects, neonatal pulmonary hypertension associated with late third-trimester exposure to selective serotonin reuptake inhibitors, risk for neonatal cardiovascular malformations following paroxetine exposure in pregnancy and increased risk for all congenital malformations with antidepressant exposure during pregnancy have recently made headlines [16–20,101]. Equally important are the studies that did not show increased or low risk for major malformations, but they have not had the same media exposure as the studies mentioned previously [21–26]. Previous meta-analyses of data examining potential relationships between antidepressant exposure and neonatal/fetal outcomes have been largely reassuring [27,28]. Both the US FDA and Health Canada issued advisories warning about potential risks associated with the use of antidepressants during pregnancy and, in 2005, the product label for paroxetine was changed from category C to D (studies in pregnant women have showed a risk to the fetus). It is important to take note of past misconceptions: although we now know that tricyclic antidepressants do not cause limb anomalies, there was such a concern prior to the accumulation of more research. Moreover, there is also a baseline risk for major malformations (2–4%). Many women were reluctant to use medication during pregnancy and the recent results have reinforced concerns and have generated significant confusion among women and their prescribing physicians.

> "There is a lack of data from randomized controlled trials during pregnancy, largely owing to ethical concerns regarding exposure of the fetus to the medication."

Effective therapy exists for depression. It is important and reassuring to recognize that, if antidepressants are used, most infants will not develop anomalies or adverse effects from antidepressant exposure. Moreover, to date, neonatal effects have been transient and adverse long-term effects on the child do not appear to be of concern. Even though we do not understand all the factors involved in the pathway to teratogenesis with antidepressant use if it does exist, the risks are small. Despite this, however, the controversy continues with the effects of no treatment for the mother, which is equally important, being largely ignored by the media who usually also do not pay attention to the flurry of correspondence published in journals regarding reported results. It is known that depressed women who discontinue their antidepressant at conception or early in their pregnancy are at risk for relapse, and rates as high as 68% have been reported [29]. There is always a risk for suicide during a depressive episode and this can occur during pregnancy [30]; without the mother there would be no fetus. It is important to weigh the risks of untreated depression against the risks of treatment, including antidepressant exposure to the fetus, taking into account the benefits of treatment, although a precise formula with weighed variables does not exist. Given the lack of adequate well-controlled studies and the paucity of data on which to base treatment decisions, current expert consensus guidelines are urgently needed to help guide physicians with their treatment decisions and ensure that women are not denied timely treatment.

Financial & competing interests disclosure

Dr Grigoriadis is supported by the Canadian Institutes of Health Research Randomized Control Trial Mentoring Program, the Ontario Mental Health Foundation New Investigator Fellowship, and the CR Younger Foundation. Special thank you to Dr S Kennedy for reading an earlier version of this editorial and to Lana Bradley for her assistance. The authors have no other relevant affiliations or financial involvement with any organization or entity with a financial interest in or financial conflict with the subject matter or materials discussed in the manuscript apart from those disclosed.

No writing assistance was utilized in the production of this manuscript.

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