

Depression during pregnancy

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In recent years much more attention has been paid to postnatal mental illness and to its possible effects on the baby than to antenatal mental disorder and its effects on foetal development.¹ It is now generally accepted that most women do not conform to the stereotype of the woman who blooms with health in pregnancy.² Observers have commented on the apparent high prevalence of psychiatric symptoms in pregnancy. Studies of antenatal depression offer certain advantages. The time perimeter is limited to the pregnancy, easing comparisons between studies. Furthermore women can easily be recruited since pregnancy is a time of high medical contact.

Incidence and prevalence of antenatal depression

Studies on the incidence of antenatal depression have revealed that it is higher than previously thought. O'Hara

found that 9% of pregnant women have illnesses that fulfill the Research Diagnostic criteria for depression.³ Similarly, Scholle screened obstetric patients at random for depressive symptoms and found that 20% met criteria for a diagnosis of depression.⁴ It is now believed that pregnancy is a risk factor for a mood disorder especially in those with a history of depressive illness,⁵ and untreated antenatal depression may be associated with 50-62% of postpartum episodes and a worsening of the psychiatric condition.^{6,7}

Variables associated with antenatal depression

It is important to identify the causes of prenatal depression. Most of the studies carried out found an association with psychosocial factors. Depression during pregnancy is associated with being younger, less educated, having a greater number of children and being a home maker⁸, previous termination of pregnancy, having serious doubts about having the baby, having anxieties about the foetus², having an unwanted pregnancy and a negative psychological response to the news of the pregnancy by the woman and husband.⁹ Evidence of personal past psychiatric disturbance in the mother, premorbid neurotism, marital conflict and lack of support were also associated with antenatal depression.²

Effects of antenatal depression

Depression in the antenatal period is usually missed. Depressed women are not good antenatal attendees. Depressive symptoms were associated with poor weight gain and may have caused poor health behaviour such as cigarette smoking, alcohol and drug abuse¹⁰ Antenatal stress and smoking contributed independently and significantly to a lower gestational age, lower birth weight and smaller head circumference when corrected for birth weight.¹¹ Prenatal stress also worsened the scores on the neonatal neurological examination.

Antenatal depression may cause ill adjustment to pregnancy and is also likely to affect the course of pregnancy. The effect can also be on the physical welfare of the foetus. Behavioural responses may be developed by the foetus from quite early in gestation. Studies found that the foetus could mount its own hormonal and other stress responses from at least mid-gestation. The mechanism for transmission of maternal stress on the foetus is not known. Possible mechanisms described include constriction of the uterine artery by maternal stress hormones causing impaired blood flow to the baby, which in turn generates a foetal stress response.¹² Also certain hormones are transmitted in sufficient amount to the foetus to have a direct effect.¹³ Despite the prevalence of depression during pregnancy and the amount of literature associated with its treatment, whether pharmacological or otherwise, large numbers of women are untreated. In one study, one in five pregnant women experienced depression but few sought treatment.¹⁴ Such studies conclude that the stigma of having depression during pregnancy may prevent women from seeking active treatment – women may feel guilty for suffering during what is supposed to be a happy period.

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Management of mood disorders during pregnancy

The most important issue in the management of mood disorders during pregnancy is that they are actively managed. Recognition of depressive symptoms during pregnancy, in practice frequently means that although recognized, they are not treated. Antidepressant medication is indicated for severe depressions: these are unlikely to respond to talking therapies. Clinicians should discuss the possibility of pregnancy and parenthood with all women of reproductive years who have a history of mood disorder, regardless of whether they plan to have a family imminently or not. Most pregnancies are unplanned and such discussions may prevent abrupt discontinuation of medication.

The primary concerns regarding use of psychotropic medications during pregnancy and lactation include physical or neurobehavioral teratogenesis in the fetus, neonatal toxicity, and neonatal withdrawal. Of particular importance during pregnancy is that polypharmacy should be avoided if possible. Besides, medications should be titrated to the minimum effective dose.

It can be a difficult challenge to determine the correct therapeutic dose of medication during pregnancy. Pregnancy alters the pharmacokinetics of psychotropic medications producing effects such as decreased gastric acid and gastrointestinal emptying,¹⁵ increased extracellular fluid volume and body fat, changes in intrahepatic (P450 system) and extrahepatic activity¹⁶ and increased glomerular filtration rate and renal blood flow.¹⁷

Due to these pharmacokinetics changes, clinicians should closely monitor patients, particularly during the third trimester and the postpartum to ensure adequate dosing of medications.

Amitriptylene and imipramine are the recommended drugs of choice for the treatment of depression during pregnancy, based on the length of time that they have been in use and the cumulative data on their lack of foetotoxicity. However in reality, SSRIs are frequently prescribed during pregnancy as they are the drugs of choice for most psychiatrists and

family doctors outside of pregnancy and there is cumulative positive evidence about safety to the foetus. Fluoxetine has been extensively studied in pregnancy and data showed no increase in either the incidence of malformations or spontaneous abortions.¹⁸ Although there are less reprotoxicology data available on citalopram, fluvoxamine and sertraline there is no clear evidence of an increased risk of foetal toxicity or other pregnancy complications so far.^{18,19} Neonatal withdrawal symptoms may occur following chronic use of any antidepressant or their use near the time of delivery. Therefore if clinically appropriate, the dose of the antidepressant should be tapered 3-4 weeks prior to the expected date of delivery to minimize withdrawal symptoms. ☐

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