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Indian Journal of Obstetrics and Gynecology Research

Journal homepage: www.ijogr.org

Review Article

Perinatal depression – An update

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ARTICLE INFO

Article history:
Received 09-10-2020
Accepted 25-01-2021
Available online 11-06-2021

Keywords:
Depression
Perinatal
Bonding
Child abuse
Cognitive behavioral therapy

ABSTRACT

Motherhood is challenging both physically and emotionally. Depression and anxiety are common women. Perinatal depression is a major depressive episode happening during or after the pregnancy. It is very often ignored leading to a negative impact on the quality of life of the woman, child and the partner. Obstetricians need to be alert and be aware of the associated risk factors and how to screen for perinatal depression. Undiagnosed or untreated perinatal depression can lead to devastating complications both in the mother and the child. Cognitive behavioural therapy and medications are to be prescribed considering the risks to the mother and the unborn child.

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1. Introduction

Pregnancy and Labour are very overwhelming times for women. They go through various bodily and mental changes over a very short period of time. Most women are able to accept these changes and cope. However, a small percentage are unable to quickly adapt to these changes especially the ones with pre existing mental illnesses. Generally one in ten persons suffers from anxiety and depression in India. Twenty percent of these are either pregnant women or new mothers.[1] The incidence of perinatal depression varies from 5 – 20 percent. Around 1 in 5 women experience perinatal depressive symptoms. Perinatal depression is defined as an episode of major depressive disorder (MDD) occurring either during pregnancy or within the first 12 months postpartum.[2] The numbers are alarming and that is why it is important we screen all antenatal women at least once in pregnancy and once in the postpartum period for depressive symptoms. It is very important to screen early as perinatal depression is prone for lot of adverse outcomes for both the mother and baby. Also, suicide and infanticide are closely associated with psychiatric illness especially depression.[3,4] So early identification & intervention can prevent such debilitating effects.

About 50% of women with depression never get diagnosed. It is very important that we screen them and remove the stigma around mental illness, so more women will come forward and report symptoms.

2. Risk Factors for Perinatal Depression

The risk factors for depression need to be understood. Obstetricians need to be aware and pick up these risk factors in the history. Most of these mothers also have co-morbid anxiety. So, on identifying risk factors for depression, obstetrician needs to evaluate these women further, because only screening helps in picking up these women and helping them with some form of intervention.

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https://doi.org/10.18231/j.ijogr.2021.031
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3. Psychological Factors

Women with anxiety during pregnancy are more prone to develop antenatal and post-partum depression.[5–9] They are three times more likely to develop depression during pregnancy. Women with previous history of treatment for anxiety or depression and previous history of post-partum depression form well established risk factors for developing perinatal depression.

A history of childhood abuse is also a strong factor for developing anxiety and depression in pregnancy. Childhood abuse actually increases the lifetime chance of developing psychiatric illness. It is also said that, the patients poor quality of relationship with her parents has a role in developing perinatal depression. Also substance abuse, smoking and alcohol dependence worsen the symptoms.

4. Social Factors

Social support is multidimensional. It not only includes family support, it also includes support from various services, like hospitals, self help groups, informational support etc. However the woman's perception of a lack of partner support plays an important role in the development of anxiety and depression.[5–9] Poor relationship with partner, problematic partner and lack of partner are all known risk factors for depression in pregnancy and postpartum. Intimate partner violence is yet another undisputed factor in the development of depression.[10,11]

5. Socio-demographic Factors

Young age, unemployment, low socioeconomic background and poor educational status all predispose to perinatal depression.[5–9] Poor working conditions and discrimination at work place have also contributed to depressive symptoms. Research results among minority ethnic women have been contradictory. Belonging to some minor ethnic groups has been protective like among the Black Caribbean women.

6. Adverse Life Events

Adverse life events like losing a close one, loss of employment, an assault or rape etc can trigger an episode of depression or anxiety during pregnancy.[5–9]

7. Obstetric Factors

Having an unintended or an unplanned pregnancy can be stressful. Women having pregnancy complication past or present can develop perinatal depression.[12] A negative birth experience like delivering a still birth, ending up with a bad perineal laceration all can predispose to anxiety and depression in the current pregnancy. Also, women carrying pregnancies conceived by assisted reproductive methods suffer from low self-esteem, severe anxiety and depression.[13]

8. Personality and Lifestyle Factors

Personality factors such as pessimism, nervousness, low self-esteem, poor efficiency are factors associated with the development of anxiety and depression in pregnancy. Poor eating habits, lack of regular exercise, sedentary life style also predispose to perinatal depression.[5–9]

9. Pathophysiology

The pathophysiology is not well understood. The role of reproductive hormones on behaviour suggests a neuroendocrine pathophysiology.[14] The female hormones estrogen and progesterone, apart from their reproductive functions, also exhibit neuroregulatory effects on mood and cognition. Abnormality in the functioning of hypothalamo-pituitary-adrenal (HPA) axis has been proposed as a major etiological factor in the development of major depressive disorder and perinatal depression.[15] Among susceptible women, estrogen and progesterone have profound interactions with HPA axis and trigger abnormal behaviour. The trigger for HPA is genetically determined however, life events can also contribute to the abnormal behaviour.

Animal research has shown that anxiety and depression during pregnancy and postpartum increases the vulnerability among the off springs to develop mental illness in their lifetime.[16] Perinatal depression impairs maternal and child bonding and this happens at crucial time of brain development. This impairs the morphology and the physiology of the child's brain leading to behavioural and neurocognitive abnormalities extending into adult life.

10. History and Evaluation

A detailed history taking will give an insight into the cause or trigger of the present episode of depression. Past, personal and family history of depression and suicide should also be obtained. History of substance abuse, alcohol dependence, over the counter medications should also be obtained. The ACOG recommends that the obstetrician/gynaecologist or obstetric care provider to screen all women at-least once during their perinatal period for symptoms using a validated tool.[17] Screening alone provides an opportunity to identify and initiate care.

The commonly used tools in general are Whooley's and Edinburgh postnatal depression scale. The Edinburgh postnatal depression scale although engineered for postpartum, can be used antenatally also.[18,19] The Whooley's and the EPDS can be used in a maternity setting when these questions can be put across sensitively and also only when a referral care pathway is in place.

The Hamilton rating scale for depression (HAM-D), Beck's depression inventory (BDI) and Patient health questionnaire are used to grade the severity of depression. Most scales include a variety of physical symptoms related

to sleep, appetite etc which may be altered in pregnancy.[20]

The diagnosis of depression remains the same, presence of five depressive symptoms over two weeks. Postpartum depression is considered when a patient has a major depressive episode along with the peripartum-onset, and it is not mentioned as a separate disease. By definition, it is defined as a major depressive episode with the onset of pregnancy or within 4 weeks of delivery. The diagnosis should include either persistent low mood or loss of interest (anhedonia), in addition to the five symptoms to be diagnosed.[21] Any of the nine symptoms if present almost every day, represent a definite change from the previous routine and help in diagnosis. Depressed mood (subjective or observed) present most of the day along with loss of interest or pleasure, insomnia or hypersomnia, psychomotor retardation or agitation, feelings of worthlessness or guilt, attempt and recurrent thoughts of death, suicidal ideation, loss of energy or feeling fatigued always, poor concentration, loss of 5% weight etc.

An episode of depression can be classified as mild, moderate or severe depending on the severity and the number of symptoms.

11. Treatment

A variety of treatment options are available which can be used in combinations also. Mild to moderate symptoms can be treated with psychotherapy and antidepressant medication. Usage of medication during pregnancy and postpartum may be perceived as problem by women as it may cross the placenta or breast milk and affect the baby. The various psychotherapies available are cognitive behavioural therapy (CBT), psychodynamic therapy, interpersonal therapy and counselling. A meta-analysis had shown that, CBT is a better therapy than other psychological interventions.[22,23] The^{stu}dy showed that CBT significantly improved stress, anxiety and depressive symptoms. Also it was cost effective.

Antidepressants can be started with or without CBT in mild to moderate cases of depression. The decision to use antidepressant therapy should be done after, clearly weighing the risk benefit ratio. Treatment should be tailored according to individual patient needs. Selective serotonin receptor inhibitors (SSRIs) and selective nor-epinephrine reuptake inhibitors (SNRIs) have replaced Tricyclic antidepressants (TCAs) as first line drugs.[24] Fetus gets exposed to these drugs through the placenta. However, the concentration of the drug varies and this depends on maternal drug metabolism, serum concentration etc.

The absolute risk of congenital malformations is low.[25] Low birth weight, prematurity and low APGAR scores have been documented with SSRI usage.[25] In the new-born, neuro-behavioural syndrome or neonatal abstinence syndrome is observed in a small proportion of babies exposed to antidepressants in the third trimester.[26] There is an increased risk of developing primary pulmonary hypertension with antidepressant use after twenty weeks of pregnancy.[25]

Patients not responding to SSRIs may be shifted to SNRIs or a combination therapy can be tried and observed for improvement of symptoms. Transcranial Magnetic stimulation (TMS) is used to stimulate the nerve cells, which are usually underactive in people with severe depression.[27] It is usually attempted in patients not responding to pharmacotherapy and is well tolerated.

Some with severe depression may not respond to various drug trials. These are the women who may be given electroconvulsive therapy (ECT).[28] ECT may be an easier option in postpartum women, but antenatal depression may warrant some more drug trials. Women declining ECT may be given brexanolone infusion, the only approved drug for postpartum depression, but it is not freely available.[29]

12. Effects of Untreated Perinatal Depression

Untreated perinatal depression can have devastating consequences on the mother, her children and family. The mother child bonding will be impaired. Their parenting style may be cold and harsh. Children feel insecure and do not develop healthy childhood habits. This may extend into adulthood, forming a vicious cycle. Women who are depressed postnatally can fail to bond well with their baby and this can persist for a year.[30] Early identification and intervention for poor bonding is indicated. Literature suggests that postnatal bonding failure would be ushered by antenatal bonding failure and thus more attention should be paid to maternal bonding before childbirth.

The relationship between breastfeeding and postpartum depression was thought to be unidirectional, with postpartum depression resulting in lower rates of breastfeeding initiation and early cessation. However, recent reports suggest that, while postpartum depression may reduce rates of breastfeeding, not engaging in breastfeeding may increase the risk of postpartum depression.[31] Also, there is some evidence that breastfeeding may protect against postpartum depression or assist in a swifter recovery from symptoms.

13. Source of Funding

None.

14. Conflict of Interest

None.

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Cite this article: Coumary A S, Vimalanathane P, Raman L, John LB, Habeebullah S. Perinatal depression – An update. *Indian J Obstet Gynecol Res* 2021;8(2):142-145.