EFFECTS OF POSTNATAL DEPRESSION ON INFANT DEVELOPMENT

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ABSTRACT
Depression has a profound impact on parameters of interpersonal behavior. This review was undertaken to examine the current evidence for the Postnatal depression is associated with disturbances in the mother-infant relationship, which in turn have an adverse impact on the course of child cognitive and emotional development. Studies of healthy mother-infant dyads have demonstrated that infants are highly sensitive to their interpersonal environment. It is therefore, likely that postpartum depression, by virtue of its impact on maternal interpersonal functioning, will disrupt normal infant engagements with the mother and, as a consequence, impair infant developmental progress.

KEYWORDS: Postpartum depression, Low mood, Psychotherapy.

INTRODUCTION
Postpartum depression (PPD), also called postnatal depression, is a type of clinical depression which can affect both sexes after childbirth. Symptoms may include sadness, low energy, changes in sleeping and eating patterns, reduced desire for sex, crying episodes, anxiety and irritability. While many women experience self-limited, mild symptoms postpartum, postpartum depression should be suspected when symptoms are severe and have lasted over two weeks.

Although a number of risk factors have been identified, the causes of PPD are not well understood. Hormonal change is hypothesized to contribute as one cause of postpartum depression. The emotional effects of postpartum depression can include sleep deprivation,
anxiety about parenthood and caring for an infant, identity crisis, a feeling of loss of control over life, and anxiety.

Due to lack of support from a romantic or sexual partner. Many women recover with treatment such as a support group, counseling, or medication.

Between 0.5% to 61% of women will experience depression after delivery. Postpartum psychosis occurs in about 1–2 per thousand women following childbirth. Among men, in particular new fathers, the incidence of postpartum depression has been estimated to be between 1% and 25.5%. Postpartum depression is one of the leading causes of the murder of children less than one year of age which occurs in about 8 per 100,000 births.

**Symptoms of Postnatal Depression**

Many women feel a bit down, tearful or anxious in the first week after giving birth. This is often called the "baby blues" and is so common that it’s considered normal. The "baby blues" don’t last for more than two weeks after giving birth. If symptoms last longer or start later, person could have postnatal depression. Postnatal depression can start any time in the first year after giving birth.

Signs that you or someone you know might be depressed include:
- A persistent feeling of sadness and low mood.
- Lack of enjoyment and loss of interest in the wider world.
- Lack of energy and feeling tired all the time.
- Trouble sleeping at night and feeling sleepy during the day.
- Difficulty bonding with your baby.
- Withdrawing from contact with other people.
- Problems concentrating and making decisions.
- Frightening thoughts – for example, about hurting your baby.

**Aetiology and Pathophysiology of Postpartum Depression**

The cause of postnatal depression isn't completely clear. Some of the factors it has been associated with include:
- A history of mental health problems, particularly depression, earlier in life.
- A history of mental health problems during pregnancy.
- Having no close family or friends to support you.
• A poor relationship with your partner.
• Recent stressful life events.
• Experiencing the "baby blues".

Even if don't have any of these symptoms, having a baby is a life-changing event that can sometimes trigger depression. It often takes time to adapt to becoming a new parent. Looking after a small baby can be stressful and exhausting.

• **Physical changes:** After childbirth, a dramatic drop in hormones (estrogen and progesterone) in body may contribute to postpartum depression. Other hormones produced by thyroid gland also may drop sharply - which can lead feeling tired, sluggish and depressed.

• **Emotional issues:** When you sleep deprived and overwhelmed, you may have trouble handling even minor problems. You may be anxious about your ability to care for a newborn. You may feel less attractive, struggle with your sense of identity or feel that you've lost control over your life. Any of these issues can contribute to postpartum depression.

There is good evidence that parental psychiatric disorder has a deleterious effect on child development. Depression arising in the postnatal period could have an impact on infant development. A number of studies have examined the 1 to 2 year old infants of mothers who have had a postnatal depression.

These studies have generally found an association between early maternal depression and adverse cognitive and emotional infant development. These studies have reported on the cognitive outcome of 12 to 18 month old infants of mothers who had had a postnatal depression.

**Diagnostic Criteria for Postnatal Depression**

At Least Two of The Following features must be present for at least two weeks:

• A depressed mood for most of the day.
• Loss of interest or pleasure in activities that are normally pleasurable, such as playing with the baby.
• Tiredness, decreased energy, and fatigue additionally, any four of the following should be present.
• Loss of confidence and self-esteem.
• Feelings of guilt and blaming oneself.
• Recurrent thoughts of suicide or death, including that of the child.
• Difficulty in concentration.
• Agitation or lethargy.
• Sleep disturbance.
• Appetite disturbance.

Treatment

1. Educational programs and support groups
Treatment of postpartum depression in men and women is similar. Both mothers and fathers with this condition have been found to greatly benefit from being educated about the illness, as well as from the support of other parents who have been in this position.

2. Psychotherapies
Psychotherapy ("talk therapy") involves working with a trained therapist to determine methods to solve problems and cope with all forms of depression, including postpartum depression. It can be a powerful intervention and may produce positive biochemical changes in the brain. This is a particularly important alternative to treatment with medication in women who are breastfeeding. In general, these therapies take weeks to months to complete. More intense counseling may be needed for longer when treating very severe depression or other psychiatric symptoms.

Interpersonal therapy (IPT): This helps to alleviate depressive symptoms and helps the person with PPD develop more effective skills for coping with social and interpersonal relationships. IPT employs two strategies to achieve these goals. The first is education about the nature of depression. The therapist will emphasize that depression is a common illness and that most people can expect to get better with treatment. The second is defining specific problems. After the problems are defined, the therapist is able to help set realistic goals for solving these problems. Together, the individual with PPD and his or her therapist will use various treatment techniques to reach these goals.
Cognitive behavioral therapy (CBT): This helps to alleviate depression and reduce the likelihood it will return by helping the PPD sufferer change his or her way of thinking. In CBT, the therapist uses three techniques to accomplish these goals.

Didactic component: This phase helps to set up positive expectations for therapy and promote cooperation.

Cognitive component: This helps to identify the thoughts and assumptions that influence behaviors, particularly those that may predispose the person with PPD to being depressed.

Behavioral component: This employs behavior-modification techniques to teach the individual with PPD more effective strategies for dealing with problems.

Medications
Medication therapy for postpartum depression usually involves the use of an antidepressant medication. The major types of antidepressant medication are the selective serotonin reuptake inhibitors (SSRIs), serotonin/norepinephrine/dopamine reuptake inhibitors (NSRIs), the tricyclic antidepressants (TCAs), and the monoamine oxidase inhibitors (MAOIs) Examples of antidepressants are listed here.

- **SSRIs**- Fluoxetine, Sertraline, Paroxetine, Fluvoxamine, Citalopram, Escitalopram, Vilazodone, Vortioxetine.
- **SNRIs**- Bupropion, Mirtazapine, Venlafaxine, Duloxetine, Desvenlafaxine, Levomilnacipran.
- **TCAs**- Amitriptyline, clomipramine, desipramine, doxepin, imipramine, nortriptyline.
- **MAOIs**- phenelzine and tranylcypromine.

SSRIs medications affect levels of serotonin in the brain, most of the cases, these medications are the first choice because of the high level of effectiveness and general safety of this group. TCAs are sometimes prescribed in severe cases of depression or when SSRIs or SNRIs are ineffective. These medications affect a number of brain chemicals especially epinephrine and norepinephrine. About two-thirds of people who take antidepressant medications improve. It may take anywhere from one to six weeks of taking medication at its effective dose to notice mood improvement. It is, therefore, important not to stop taking the medication because benefits may not be seen immediately. The MAOIs are not often used.
since the introduction of the SSRIs. Because of the possibility of interactions, the MAOIs may not be taken with many other types of medication, and some types of foods that are high in Tyramine (like aged cheeses, wines and cured meats) must be avoided as well. Other category medications include:

- **Atypical antipsychotic**
  Aripiprazole, olanzapine, paliperidone, quetiapine, Risperidone, ziprasidone, asenapine, iloperidone, lurasidone.

- **Non-neuroleptic mood stabilizers**
  Lithium, divalproex, sodium carbamazepine, lamotrigine.

Atypical neuroleptic medications are often prescribed in addition to a mood-stabilizer medication in people with postpartum psychosis. Non-neuroleptic mood-stabilizer medications are also sometimes used with a neuroleptic medication to treat people with postpartum psychosis because bipolar disorder may also be present in some patients.

**CONCLUSION**

It is evident that postnatal depression poses a risk for the mother-infant relationship and infant developmental outcome. The adverse effects of postnatal depression appear to be mediated through its association with maternal cognitions and parenting. Postnatal depression has an adverse impact on the course of child cognitive and emotional development. The impact is likely to be more pernicious where the depressive episode is severe and prolonged.

**REFERENCES**


