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Understanding post partum depression: A stigma, causes, symptoms and treatment options: A review

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ABSTRACT:
Postpartum depression affects up to 15% of mothers. Postpartum depression is a debilitating mental disorder with a high prevalence. The aim of this study was review of the related studies. The search strategy included a combination of keywords include postpartum depression, symptoms, barriers and risk factors or obstetrical history, social factors, or biological factors. Literature review showed that risk factors for postpartum depression in the area of economic and social factors and biological factors, lifestyle and history of mental illness detected. The stigma associated with ppd. Risk factors such as obesity, inactive lifestyle and hormonal changes etc. Recent research has identified several pharmacological, non pharmacological, psychosocial and psychological treatment options .

Keywords- postpartum depression, postnatal depression, psychotherapy; treatment, antidepressants, obesity

I. INTRODUCTION-

Postpartum depression affects 10–15% of women worldwide. Postpartum depression refers to the diverse forms of mental distress experienced by women following childbirth, including postpartum blues, postpartum depression, and postpartum psychosis. The most severe disturbance reported by women between 6 to 12 weeks after childbirth is postpartum psychosis, which typically consists of hallucinations or delusions. Failure to complete the postpartum psychological adaption process can lead to a variety of mental disorders, including postpartum depression. This study sought to determine how prenatal risk factors affected the prevalence of postpartum depression(1). Depression is a primary mental difficulty suffered by pregnant women(2). According to a national survey, up to one in every eight, or 13%, of postpartum women in the United States are not routinely evaluated for depression during postpartum follow-up appointments. In the practice environment for this investigation, 45% of patients were not routinely evaluated for PPD at 6-week postpartum visits. Currently, there is no further training available for physicians in the practice where this initiative was conducted for recognizing, screening, and managing postpartum depression symptoms(3). Most women will experience mood swings, commonly called the baby blues, in the weeks following the birth of a child. This condition is usually mild and transitory, resolving in the first 10 days of an infant's life, and is not accompanied by suicidal(15).

Postpartum psychosis has a rapid onset, generally occurring within the first 4 weeks after childbirth but in some cases as early as 2 days postpartum. Patients may develop paranoid, grandiose, or bizarre delusions; mood swings; confused thinking; and disorganized behavior, all of which vary from their normal state. In many cases, postpartum psychosis is a manifestation of bipolar disorder. The disorder is a psychiatric emergency in which the safety of the new mother and her child or children may be jeopardized; for example, a mother may hear voices telling her she should kill her infant. Immediate treatment, including hospitalization, must be considered for this population.(16-17).

Different definition and distinction-

The baby blues:

The “baby blues” are the most prevalent mood disturbances in new moms (50-80%), peaking at day five and lasting 10-14 days postpartum. Symptoms include emotional instability, frequent crying nervousness, fatigue, insomnia, anger, sorrow, and irritability. The blues are a self-limiting disease that does not require treatment because to its brief duration and absence of interference with maternal role functioning, distinguishing it from PPD(55.)56).

Postpartum Panic Disorder

Occurs when a mother experiences panic episodes for the first time in her life. Symptoms of panic attacks include palpitations, sweating,

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shortness of breath, chest pain, dizziness, lightheadedness, numbness, fear of death, and a sense of loss of control. Symptoms often peak within 10 minutes of commencement.56)

Post partum compulsive disorder

Habitual, unpleasant ideas and behaviors. It is vital to underline that women acknowledge their obsessions as their own thoughts and feelings, and they understand that following through would be inappropriate. They may even create intricate plans to prevent circumstances in which ideas could become acts.57)56).

Postpartum Post Traumatic Stress Disorder (PPPTSD)

Affects 5.6% of postpartum women. It is caused by birth trauma that involves serious injury or death to the mother or her infant, as well as feelings of powerlessness or unfulfilled emotional needs during hospitalization. Symptoms may include nightmares, flashback increased startle reaction, anger, and difficulty sleeping or focusing (56).

Postpartum Psychosis (PPP)

The most serious, but least common, of all postpartum mood disorders. Representing one to two per thousand deliveries and occurring within three months of delivery, it is associated with delusions, loss of touch with reality, auditory and visual hallucinations, extremeagitation,confusion,inabilitytoeatorsleep, exhilaration, racing thoughts, rapid speech, rapid mood swings, paranoia, and suicidal and/or infanticide (55)(56).PPP warrants immediate hospitalization and treatment. PPP is strongly associated with bipolar disease (58).

RISK FACTORS

Post partum depression is a bipolar disorder which associated with mood disorder that affects women as well as men after childbirth. Some of the common risk factors are-

- history of a depressive episode
- gestational diabetes;
- multiple gestation
- poor marital and social support; and
- stressful life events, including the stress associated with child care.
- Hormonal changes
- Breastfeeding difficulties
- Infant related factor (15)(19)(21)(22)(23)

Stigma of post partum depression:

Postpartum depression (PPD) is a serious mental health condition that affects many women after childbirth. Unfortunately, it is also heavily stigmatized, which can prevent women from seeking help and getting the support they need(4).

Stigma associated with postpartum depression has following stems-

- **Societal expectations:** There's a strong societal expectation that motherhood should be a joyful and fulfilling experience.When a mother experiences depression instead, it can feel like a personal failure, leading to shame and guilt.
- **Misunderstanding of PPD:** PPD is often misunderstood as simply "baby blues" or a normal part of adjusting to motherhood.
- **Fear of judgment:** Many women fear being judged as "bad mothers" or being seen as incapable of caring for their children if they admit to struggling with PPD.This fear can prevent them from seeking help or even talking about their feelings.
- **Cultural and familial beliefs:** In some cultures or families, mental health issues may be stigmatized in general, making it even harder for women to seek help for PPD. (4i).

Consequences of postpartum depression stigma –

The stigma surrounding postpartum depression (PPD) has far-reaching and detrimental consequences for mothers, their children, and their families. Here are some of the key consequences: (5).

For the Mother

- Delayed or no treatment
- Increased severity and duration of PPD
- Increased risk of suicidal thoughts and behavior
- Development of other mental health conditions
- Feelings of isolation and loneliness
- Negative self-perception and low self-esteem
- physiological health
- Anxiety
- Depression
- Quality of life
- Relationship
- Social relationship
- Partner relationship and sexuality

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For the Child:
- Impaired mother-infant bonding
- Developmental delays
- Behavioral problems
- Increased risk of mental health issues later in life
- Weight
- Infant health
- Infant sleep
- Motor development
- Cognitive development
- Language development Behavioral development

For mother child interaction-
- Bonding and attachment
- Breastfeeding
- Maternal role
- Maternal care for infant
- Risk of malnutrition

For the Family:
- Strain on family relationships
- Disrupted family dynamics
- Economic burden

Barriers of post partum depression :
- Stigma and shame
- Lack of awareness
- Fear of being labelled as a bad mother
- Limited access to to mental health care
- Cultural factors
- Partner or dynamics
- Previous negative experience with healthcare
- Financial constraints (6).

How to challenge the stigma associated with Postpartum depression-

Challenging the stigma associated with postpartum depression (PPD) requires a multi-faceted approach that involves-

1. Promote Education and Awareness:
- Educate yourself and others
- Dispel myths and misconceptions
- Use accurate and sensitive language

2. Encourage Open Conversations:
- Share personal stories
- Create safe spaces for discussion
- Listen with empathy and without judgment
- Providing support and resources.
- Challenging negative stereotypes

3. Support and Empower Women:
- Offer practical support
- Encourage seeking professional help
- Validate their feelings and experiences

4. Involve Healthcare Professionals:
- Routine screening
- Provide empathetic and non-judgmental care
- Educate families

5. Advocate for Policy Changes:
- Increase access to mental health services
- Promote paid family leave
- Support research

6. Utilize Media and Social Media:
- Share positive messages
- Challenge negative stereotypes
- Support awareness campaigns(7i).

An quantitative analysis of stigma associated with awareness and involvement of health care workers:

Create design

Because the research was purely qualitative, in-depth interviews were conducted using a semi-structured guide in order to gain an interpretive understanding of the stigma associated with postpartum depression and the role of culture in treatment seeking behavior in Pakistan's rural and peri-urban areas. The data was collected and then evaluated using thematic analysis.

Setting

Women were screened for postpartum depression as part of the Punjab Health Sector Reform Project's Mother and Newborn Child Health (MNCH) Programme in rural and peri-urban regions. The program included two public health institutions, one primary and one tertiary, located in peri-urban areas of Rawalpindi district. With both health facilities' ethical agreement, respective registered patients were contacted for interviews via Lady Health Visitors (LHVs) and Lady Health Workers (LHWs).

Participants

Two LHVs and two LHWs who participated in the MNCH Program were among the 26 respondents who were purposefully chosen. Additionally, there were 22 patients who were registered at the medical institution and had

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moderate to severe depression according to the PHQ-9, Q-3, and GAD-7.

Interviews

Two interviews guided were drafted ; one for the healthcare providers (i.e., LHVs and LHWs) and one for the healthcare seekers(i.e., patients), verbal consent was obtained by the respondents prior to the interviews. since the study was conducted in peri- urban areas where people were not highly educated. Each interview has lasted for half an hour.

II. RESULT

The findings have been divided into two primary themes: (1) Healthcare Barriers and (2) The LHWs' Contribution to Enhancing Access to Healthcare.(8).

Barriers to healthcare

- Avoidance of the treatment
- Lack of awareness
- Concealment
- Rejection
- Avoidance of medical treatment
- Financial dependency (10).

Role of(lady health workers)LHWs in improving access to the healthcare

Mediator

Since the respondents are well-known and respected women in the community, the LHWs typically have direct contact with them and their families. They served as a mediator in situations where the ladies were unable to communicate their health issues to their families.

Awareness raising and diagnosis

In addition, by educating the respondents about the ongoing mother and child health program, they were able to engage those who had not even discussed their health issues with them. All of them underwent screening using the PHQ-9, GAD-7, and Q3 for depression, anxiety, and psychosis after arriving at the medical facility. The women were brought along when the LHWs were successful in winning the family members' trust. In this manner, their transportation expenses were also reduced.

Referral and follow up

The responses from the LHVs and LHWs revealed that in certain situations, the respondents lacked any direct way of connection, thus the LHWs had to contact them through their spouses. LHWs provide us reference slips and visit our houses to speak with our family in order to convince them.

III. DISCUSSION

This quantitative analysis demonstrates that the stigma associated with postpartum depression is a major factor in both non-adherence to therapy and non-acceptance of the label. Religious and cultural alternatives were used to avoid medical care in situations where the label was accepted. The Lady Health Workers assisted women and their families in getting medical attention in addition to raising awareness and providing health education (8)

Conclusion

The authors of this study shed light on the stigma associated with postpartum depression and other issues that lead to patients in peri-urban areas not complying with medical care. The authors also examine the function and limits of Lady Health Workers (LHWs) in relation to women's primary healthcare-seeking behavior. Postpartum depression and mental health in general should be better understood in order to improve patients' behavior when seeking medical attention.

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CAUSES OF POST PARTUM DEPRESSION:

1.hormonal changes and neurochemical level changes

Women are twice more probable to evolve depression than men. At least for every five women, one will suffer from one depressive event in her life, which deem as greatest risk during the reproductive period. Throughout a woman's life changes occur in hormones level which may be contribute to increased chance of depression especially during puberty, pregnancy, and menopause, as well as after giving birth or experiencing a miscarriage where the hormonal changes are more pronounced (Kessler 2003). In pregnancy period, addition to estrogen and progesterone increments, elevations intestosterone, cortisol and corticotrophin releasing hormone are noted and the response of immune may alter . However, the postpartum is exceedingly intricate, distinguished by shortage sex hormones, as well as hypothalamus–pituitary–adrenal (HPA) axis hormones. Neuro active steroids (NASs) increased throughout pregnancy and subsequently sharply decreased during the postpartum phase, which is comparable to the obvious normal fluctuations in ovarian hormones during pregnancy and the postnatal period .

Nowadays, it is completely recognized that several steroidal hormones (e.g., estrogen, progesterone, testosterone, and dehydroepiandrosterone (DHEA) are active neurologically. Actually, the brain includes a lot of receptors for estrogen, progesterone and DHEA. Several functions in the brain involving regulation of mood are affected by these hormones.

2.Physical and emotional changes during ppd

Emotional, environmental, biological, hormonal, and genetic variables all contribute to PPD. A woman is more susceptible to depression during the postpartum time because of the quick hormonal changes that occur in her body. Pregnancy causes a sharp rise in reproductive hormones, which then abruptly fall after delivery, leading to an imbalance and the onset of depression symptoms. Contributing factors include low income, immigrant status, young mother age, emotional problems between partners or family, and a lack of help to care for the newborn. Some of the factors that contribute to PPD include difficulties and stressful situations during pregnancy and childbirth, a family history of depression, ignorance of PPD, belief in myths, poor mother care, and insufficient sleep.

In infants and teenagers, it causes emotional maladjustment, excessive crying, violent behavior, poor cognitive functioning, and sleep issues. Postpartum psychosis, substance misuse, negativity and negative thoughts, hallucinations, mood swings, anxiety, poor judgment, disorganized behavior, lack of appetite, and insomnia in mothers are all associated with PPD.

When PPD is present, the mother-child relationship becomes more complicated. It results in emotional maladjustment, excessive weeping, aggressive behavior, poor cognitive functioning, and sleep problems in both infants and teenagers. In women, PPD is linked to postpartum psychosis, substance abuse, negativity and negative thoughts, hallucinations, mood swings, anxiety, impaired judgment, disorganized conduct, loss of appetite, and sleeplessness.(13).

3.Social and physiological factors affecting ppd

One of the characteristics linked to an increased risk of postpartum depression is a prior history of anxiety and despair. Numerous studies have documented the connection between postpartum depression and depression that began earlier (.26).

It has reported that a history of moderate to severe premenstrual syndrome (PMS) is a factors affecting the onset of postpartum depression (27)

The serotonin transport system will alter in women with severe PMS, and serious depression is linked to the serotonin transporter polymorphism region (28).

High serotonin polymorphism may lead to tryptophan depletion and induction of postpartum major depression (29).

In addition to prior history of depression, predisposing risk factors for postpartum depression included

- a history of sexual abuse in the past (30)
- a negative attitude toward the recent pregnancy, and the number of life events
- Postpartum depression is also influenced by low self-esteem and
- the influence of parenting stress, as well as the baby's gender reluctance and low self-esteem (26)(30).

4.Social factors include

Emotional support, financial support, intellect support, and empathic relationships are all considered forms of social support(31).It has been shown that social support helps lower postpartum

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depression(32).The most significant environmental component in the development of anxiety and depression is a decline in social support(33). Increasing partner support and empowering women to make decisions at home have been deemed the most crucial ways to assist women's reproductive health at this year's International Conference on Population and Development(35).The prevalence of postpartum depression is thought to be influenced by several types of domestic abuse, including sexual assault committed by spouses during pregnancy(34).Social factors linked to a higher incidence of postpartum depression include a woman's bond with her family and community as well as behaviors like smoking during pregnancy.

5.Biological factors

Depression risk is increased in young pregnant women. Mothers between the ages of 13 and 19 have been found to have the highest rates of depression (44), whereas women between the ages of 31 and 35 have the lowest rates. Growing maternal age and mother self-efficacy are linked to a lower risk of postpartum depression, according to a study by Abdollahi et al. on 1950 women between 2 and 12 weeks after giving birth.(45).

Studies show that glucose metabolism disorders during pregnancy are also as predisposing factors for postpartum depression so that it has been observed that women with higher blood glucose levels (mean of 120 vs. 114 mg/dl) after an hour after performing the glucose challenge test with 50 g of glucose were more at risk of postpartum depression than others. (46).

6.Lifestyle

Postpartum depression may be impacted by a number of lifestyle factors, including sleep patterns, exercise, physical activity, and eating habits. Consuming enough fruits, vegetables, legumes, fish, milk and dairy products, olive oil, and other nutritional foods has been shown to prevent postpartum depression by as much as 50%.(36). postpartum depression may be influenced by the decrease of this vitamin.(37).According to a study, there is a significant correlation between postpartum depression and the amount of vitamin B2 absorbed during week 21 of pregnancy(38).Among the micronutrients, reduced intake of zinc and selenium is linked with the incidence of postpartum depression(39).It was reported in a study that zinc applies its antidepressant by influencing the serotonin reuptake(40).

Sleep status is among the factors influencing the risk of depression. Evidence shows that there is a relationship between less sleep and postpartum depression (41). There is also some evidence to suggest that exercise and physical activity have significant benefits in reducing depression symptoms, which are comparable with medicinal benefits (42) Moderate physical activity in the third trimester of pregnancy has lowered the postpartum depression scale at 6 weeks after the delivery (43).

7.Obstetrics risk factors

Assessment the relationship between the number of delivery and postpartum depression has been associated with conflicting results. in a study conducted by Matsin in 2013, on 86 participants within 6 weeks after delivery, it was found that having two or more children due to higher psychological burden is more likely to be associated with the occurrence of depression (47).

Risky pregnancy is also associated with an increased risk of postpartum depression. These risks include conditions that lead to performing emergency cesarean section or hospitalization during pregnancy. Postpartum complications are also effective on the incidence of postpartum depression as much as during labor complications such as meconium passage, umbilical cord prolapse, and obstetric hemorrhages. (47)(30).

Mothers with the birth of an infant with a weight <1500 g are 4–18 times at risk for postpartum depression more than others (48).

According to reports, women who strongly desire a natural birth during the perinatal period and who have a caesarean section for delivery are more likely to experience postpartum depression than other women 49). However, in women with a history of postpartum depression, sleeplessness during pregnancy may increase the likelihood of recurring episodes of the illness (50).

Breastfeeding is linked to a lower incidence of postpartum depression, According to reports, women who breastfeed their babies exclusively for the first three months after giving birth have lower Edinburgh Postnatal Depression Scale scores (51). Breastfeeding within the first four months after delivery lowers the incidence of postpartum depression, according to a study by Hamdan and Tamim.nursing promotes the interaction between mother and infant (52)(53).

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Symptoms of post partum depression

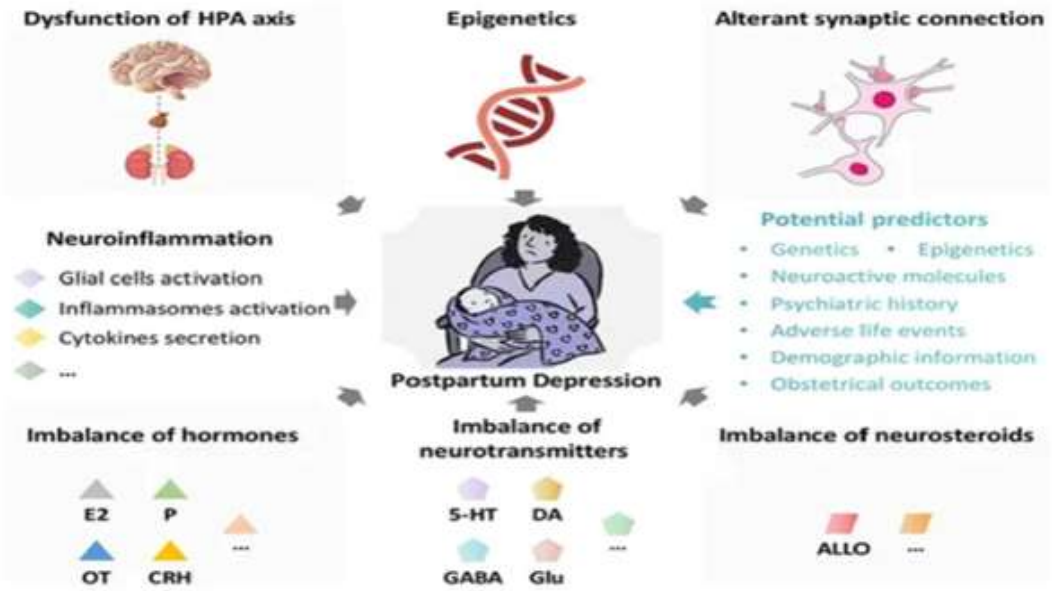
- Inability to sleep or sleeping a lot, even when baby is awake
- Fear of harming, extreme concern and worry about baby.
- Feeling of doubt, guilt and helplessness
- Loss of interest in hobbies and usual activities
- Recurrent thoughts of death or even planning Suicide
- Loss of interest in hobbies and usual activities
- Difficulty in concentrating and remembering
- Mood swings.
- Change in appetite
- Sadness and excessive crying (14).

- **PATHOPHYSIOLOGY OF PPD**

Although PPD is becoming more well recognized, little is understood about its precise origin. Changes in monoamine oxidase A (MAO-A), serotonin, progesterone, estrogen, and gamma-aminobutyric acid (GABA) levels are among the hypothesized processes (17)18).

Reduced levels of the omega-3 polyunsaturated fatty acid (PUFA) docosahexaenoic acid (DHA) have also been proposed, along with thyroid dysfunction and changes in the hypothalamic-pituitary axis (19)20). Additionally, encouraging epigenetic research indicates that a woman's sensitivity to environmental circumstances influencing the development of PPD may be significantly influenced by her genetic susceptibility (20).

It is well known that high levels of progesterone and estrogen during the third trimester of pregnancy rapidly decline in the early postpartum phase (21).



Although reduced hypothalamic-pituitary axis activation after childbirth has been suggested as a significant factor, the exact mechanism behind PPD development remains unclear (21)(22). Furthermore, between 6% and 9% of women experience postpartum thyroiditis, which can

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manifest as either hypothyroidism or hyperthyroidism. It has been theorized that postpartum thyroiditis and PPD are related since depressed symptoms are common in hypothyroidism.15) Another factor that may contribute to postpartum depression is the decrease of maternal brain DHA and other omega-3 PUFAs during pregnancy (20).

Pharmacological treatments for postpartum depression

1.Antidepressant medication

According to a modest but expanding body of research, postpartum depression can be viewed as a type of major depression that reacts similarly to antidepressant drugs (59).

Pharmacologic treatment of PPD raises concerns about metabolic changes during the postpartum period, the infant's exposure to medication in breast milk, the impact of depression and treatment on the depressed mother's capacity to care for a newborn, and the stigma associated with being labeled a "bad mother" for needing medication (60).

Several open studies have found sertraline (61), venlafaxine, nefazodone, fluvoxamine (63), and bupropion (62) to be effective in the treatment of postpartum depression. Sleep disturbances, gastrointestinal issues, respiratory issues, and seizures are among the probable side effects that have been documented in newborns of nursing moms using antidepressant drugs.

2.Breastfeeding considerations

Potential effects of antidepressant medication on breastfeeding are of concern to many mothers and clinicians (64) Because of their developing neurological systems, immature blood–brain barriers, and immature hepatic and renal systems, newborns and early babies are particularly susceptible to possible medication side effects (65). In contrast to fluoxetine and citalopram, which seem to have a higher passage through breast milk, sertraline and paroxetine are the SSRIs that are least likely to be detectable in infant plasma (66)(67).

The majority of reported side effects have been minor and go away when the medication is stopped or breastfeeding is resumed. Mothers taking citalopram, citalopram, fluoxetine, doxepin, and bupropion have been known to experience these side effects 68). While doxepin is regarded as generally contraindicated, nortriptyline has the most evidence supporting its safety during nursing. There is little information available on the more recent antidepressant drugs, but minimal side effects have been documented.69.

3.Hormonal therapy

It has been suggested that one of the factors contributing to the onset of PPD in certain women is the significant decrease in the mother’s levels of progesterone and estrogen at the time of delivery. Effects of estrogen in the brain include the encouragement of neuronal growth and survival, increase of neurotransmitter function, mitigation of oxidative stress and control of the hypophyseal-pituitary axis(70). Treatment with gonadal steroids can interfere with lactation, which should be discussed with women prior to initiating therapy. Although co-administration of progesterone can reduce the risk of endometrial cancer, long-term use of estrogen therapy can cause endometrial hyperplasia and slightly increase the risk of endometrial cancer. The Lawrie study found that

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progestogen increased depressive symptoms, which makes this strategy more difficult to implement.70).68)

Psychological and psychosocial treatments for postpartum depression

Many mothers with postpartum depression are hesitant to take antidepressants due to concerns about infant exposure to medication through breast milk or concerns about potential side effects (71).

1.Interpersonal therapy (IPT)

Interpersonal therapy (IPT) is a time-limited treatment for major depression based on addressing the connection between interpersonal problems and mood73).

Role transition, role dispute, bereavement, or interpersonal deficits are the four interpersonal problem areas that the patient and clinician choose as the focus of treatment in IPT. During the course of the therapy, which usually lasts 12 to 20 weeks, techniques are used to help patients change their problematic relationship styles and improve their social support systems.74)

2.Cognitive behavioral therapy (CBT)

A well-researched and successful treatment for major depression, cognitive behavioral therapy (CBT) is predicated on the idea that mood is closely related to both perceptions and behaviors 75) .Cognitive behavioral therapy (CBT) helps people with depression change their negative thought patterns and adopt new behaviors that improve their coping and lessen their misery(76).

Nondirective counseling- Psychosocial interventions, unlike IPT or CBT, are unstructured and nonmanualized, incorporating nondirective counseling and peer support. Nondirective counseling (also known as "person-centered") relies on sympathetic and nonjudgmental listening and support (78). In a prospective cohort of pregnant Chinese women, discovered that inadequate support in both the prenatal and postnatal periods was related with an elevated risk of postpartum depression, with postpartum women who had low objective or practical support being at the highest risk (79).

Other non pharmacologic treatments for postpartum depression

In the following we have provided an overview of a variety of evidence-based nonpharmacologic treatments for postpartum depression.

Electroconvulsive Therapy

Electroconvulsive therapy (ECT), like treatment-resistant major depression in the general population, is an option for depressed postpartum women who do not respond to antidepressant medication or have severe or psychotic symptoms. There is relatively little data available about this population. One short study of five women who received ECT for refractory postpartum depression found a 100% remission rate. Aside from anesthetic and breastfeeding issues, the use of ECT for postpartum depression is identical to that for severe depression (80).

Bright light therapy

While bright light therapy was initially introduced as a treatment for seasonal affective disorder, research has supported its effectiveness as a treatment for nonseasonal depression.Light therapy presents an attractive option for the treatment of perinatal depression, as there are no known risks to the fetus or nursing infant(81).

Omega-3 fatty acid-

Omega-3 fatty acids have received specific attention in the treatment of perinatal depression, because of the known health benefits of these compounds for pregnant and postpartum women as well as some data showing positive effects on mood in the general population. Omega-3 fatty acids such as the eicosapentaenoic acid (EPA) and docosa-hexaenoic acid (DHA) found in fish oils, are the key building blocks for the development of a baby's central nervous system while in utero, and depletion of maternal omega-3 fatty acids occurs during pregnancy to facilitate this process(82).

Acupuncture and massage

Acupuncture is the ancient Chinese tradition of the inserting and manipulating needles into various points on the body to treat pathologic processes and relieve pain

A massage intervention in terms of reduction of depressive symptom rating scales in depressed pregnant women(83).

Exercise

Several studies have investigated the role that exercise can play in alleviating postpartum depressive symptoms.

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IV. CONCLUSION

Postpartum depression is a major international public health issue, affecting at least one in every eight mothers and their children in the year following childbirth. PPD may be more common and associated with higher morbidity rates for both mothers and children in resource-poor nations. PPD has been linked to major detrimental consequences on not only sad moms, but also their children's physical, cognitive, and emotional development. Early detection and action are critical in reducing these hazards. There are proven and simple screening instruments for PPD available in many languages, such as the Edinburgh Postnatal Depression Scale; most doctors advocate evaluating women for PPD 4-6 weeks after birth.

Psychopharmacologic treatment of PPD is complicated by both known and unknown risks of medication in breast milk. There have been few medication trials specifically evaluating the effectiveness of antidepressant medication or ECT for postpartum depression, but the available evidence suggests that medications typically used to treat major depression in the general population are equally effective in postpartum depression

Psychological treatments for PPD are often the treatment of choice for women, as they are effective for the treatment of depressive symptoms and do not involve the risks of exposure to medications. Research supports both psychotherapy and other psychosocial interventions as effective in mitigating symptoms of PPD. Interpersonal psychotherapy, cognitive behavioral therapy, psychodynamic psychotherapy and other supportive interventions such as telephone-based peer support, counseling by a health visitor, and partner support have also shown benefit over wait-list or usual care controls.

Other non pharmacologic interventions that have been studied in the treatment of PPD include bright light therapy, acupuncture, massage, omega-3 fatty acid supplementation, and exercise. Data on the effectiveness of these modalities in decreasing maternal depressive symptoms is limited, but these interventions have minimal risks and may have health benefits for both mother and infant.

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