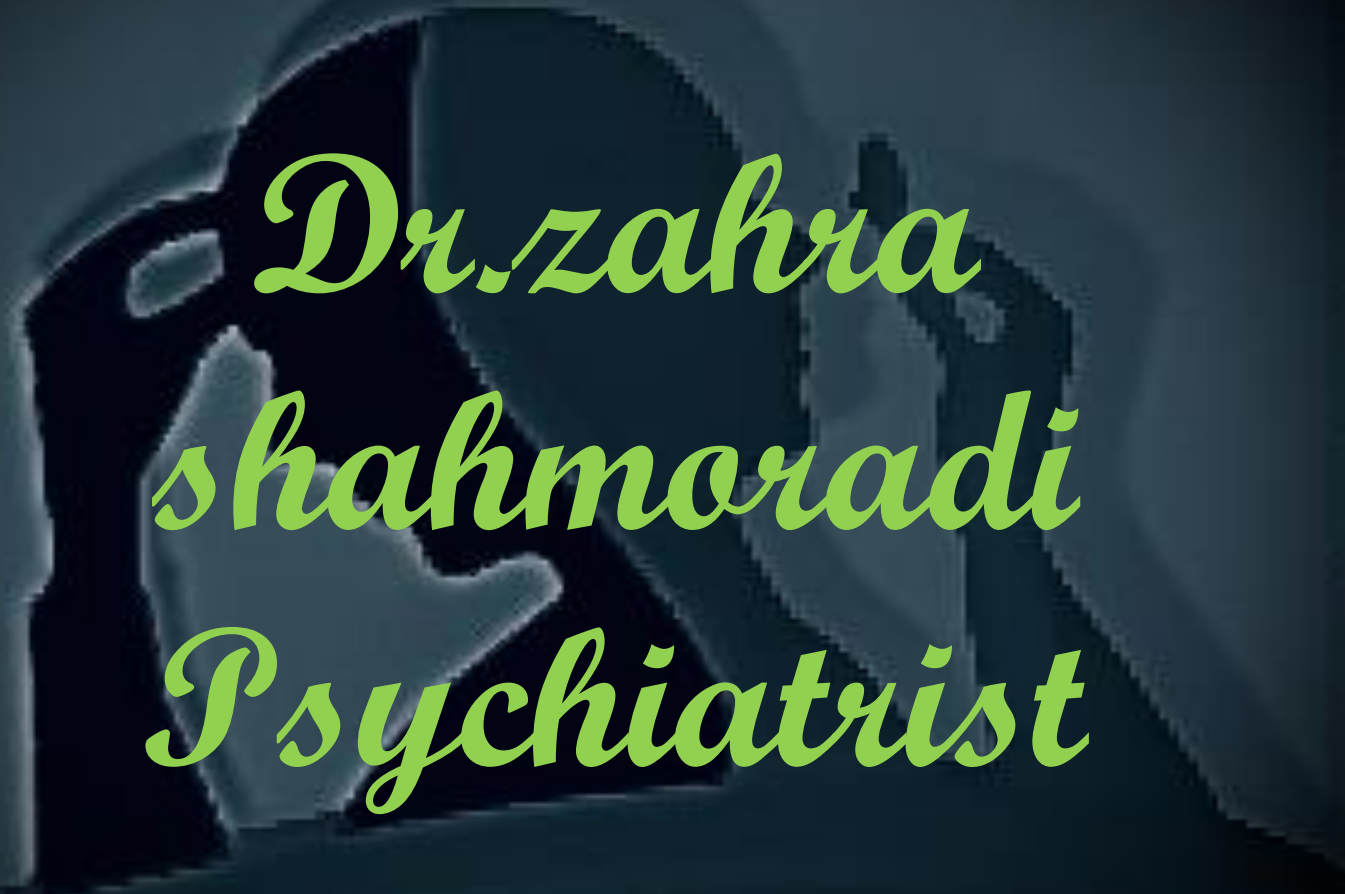


دانشگاه علوم پزشکی و خدمات بهداشتی درمانی اراک



*Dr. Zahra  
Shahmoradi  
Psychiatrist*



دانشگاه علوم پزشکی و خدمات بهداشتی درمانی ایران

- **Postpartum blue**
- **Postpartum depression**
- **Postpartum psychosis**
- **Maternal suicide**
- **Neonatal homicide**





دانشگاه علوم پزشکی و خدمات بهداشتی درمانی ایران

**P.P.blue**

- **Mild depression**
- **Self limited**
- **Risk factors of major depression or severe syndrome**



Dr.Shahmoradi . Psychiatrist





شکوه علوم پزشکی و خدمات بهداشتی درمانی ایران

## Etiology

- Postpartum depression
- Premenstrual mood changes
- Oral contraceptives use that is associated with mood change
- Depression syndrome predating pregnancy

40%

With in  
a week  
of  
delivery

P.P.blue





**Etiology**

**p.p.blue**

- Antepartum depression
- C/S
- Not breastfeeding
- Stress around child care
- Psychosocial impairment
- Family history depression



# Pathogenesis

Hormonal changes

Neurotransmitter

Level activity

- Decrease estrogen
- increase monoamino oxidase A(43%)
- Metabolizes :Dopamine, NEP,serotonin
- Dysphoria
- Increase MAO-A in prefrontal and ant.cingulate cortex
- In person sad crying

P.P.blue





دانشگاه علوم پزشکی و خدمات بهداشتی درمانی شیراز

**P.P.blue**

**Maternity  
blue**

**Baby  
blue**



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دانشگاه علوم پزشکی و خدمات بهداشتی درمانی ایران

**P.P.blue**

**Transient  
condition**





**P.P.blue**

**Sadness  
Crying  
Irritability  
Anxiety  
Insomnia  
Exhaustion  
Concentration  
Lability**

**2-3day**

**Several mild  
depression  
symptoms**

**2week**





**Common**

**Remit  
spontaneously**

**P.P.blue**

**Non  
pathological**

**Risk of postpartum MDD  
(4-11)**

**Postpartum anxiety  
disorder**





**P.P.blue**

**There is no  
standardized  
definition for  
diagnostic  
3-4symptom of  
depression**





ICD10

Postpartum  
depression  
NOS

Adjustment  
disorder with  
depressive mood  
Unspecified  
depressive  
disorder

P.P.blue

DSM-  
5





نگاه علوم پزشکی و خدمات بهداشتی درمانی ایران

**P.P.blue**

**DD**

**Postpartum  
MDD**

**Insomnia  
Dysphoria  
Concentration  
Fatigue**

**Self limited  
Resolved in  
2w**

**5symptoms=<**

**Somatic symptoms in P.P  
blue:changes in sleep and  
energy overlap NL W.oP.P blue**







Clinicians can determine problems with sleep and energy are due to postpartum blues or to normal puerperal-related changes by evaluating these symptoms in the context of normal expectations for the puerperium. As an example, although postpartum insomnia is common, patients who are unable to sleep even when their babies sleep may have postpartum blues.

**P.P.BLUE**



# Management



**P.P.blue**

- Spontaneously resolved
- Doesn't require treatment
- Reassurance
- Support
- Adequate time for sleep and rest

**Pharmacotherapy**

**Psychotherapy**

**Persistent insomnia  
Symptoms persist(2w)  
Suicidal idea**





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# Postpartum unipolar depression



Dr. Shahmoradi . Psychiatrist



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**12m. After  
birth**

**9%**

**Prevalence  
12M**

**P.P.up.  
dep**

**DSM-5  
occur prior to  
or after  
parturition**

**ICD10  
onset of the  
episode within  
six weeks of  
delivery**

**DSM-5 specifier “with  
peripartum onset” is  
used when onset of  
major depression  
occurs either during  
pregnancy or in the  
four weeks following  
delivery.**





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**In women with postpartum depression that begins after delivery, onset appears to occur most often within the first few months of parturition**

**P.P.up.de  
p**

**Month 1  
54%**

**Month 2-4  
40%**

**Month 5-12  
6%**







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**P.P.up.de  
p**

**95% in 4 months  
after delivery**



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**P.P.up.  
dep**

- **hospitalization for postpartum depression occurred roughly three times more often during the first five postnatal months, compared with the last seven postnatal months**



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96%  
infirst  
4 M

P.P.up.  
dep



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دانشگاه علوم پزشکی و خدمات بهداشتی درمانی اراک

# Hospitalization

**5 month**

**7 month**

**3  
times**

**P.P.up.dep**



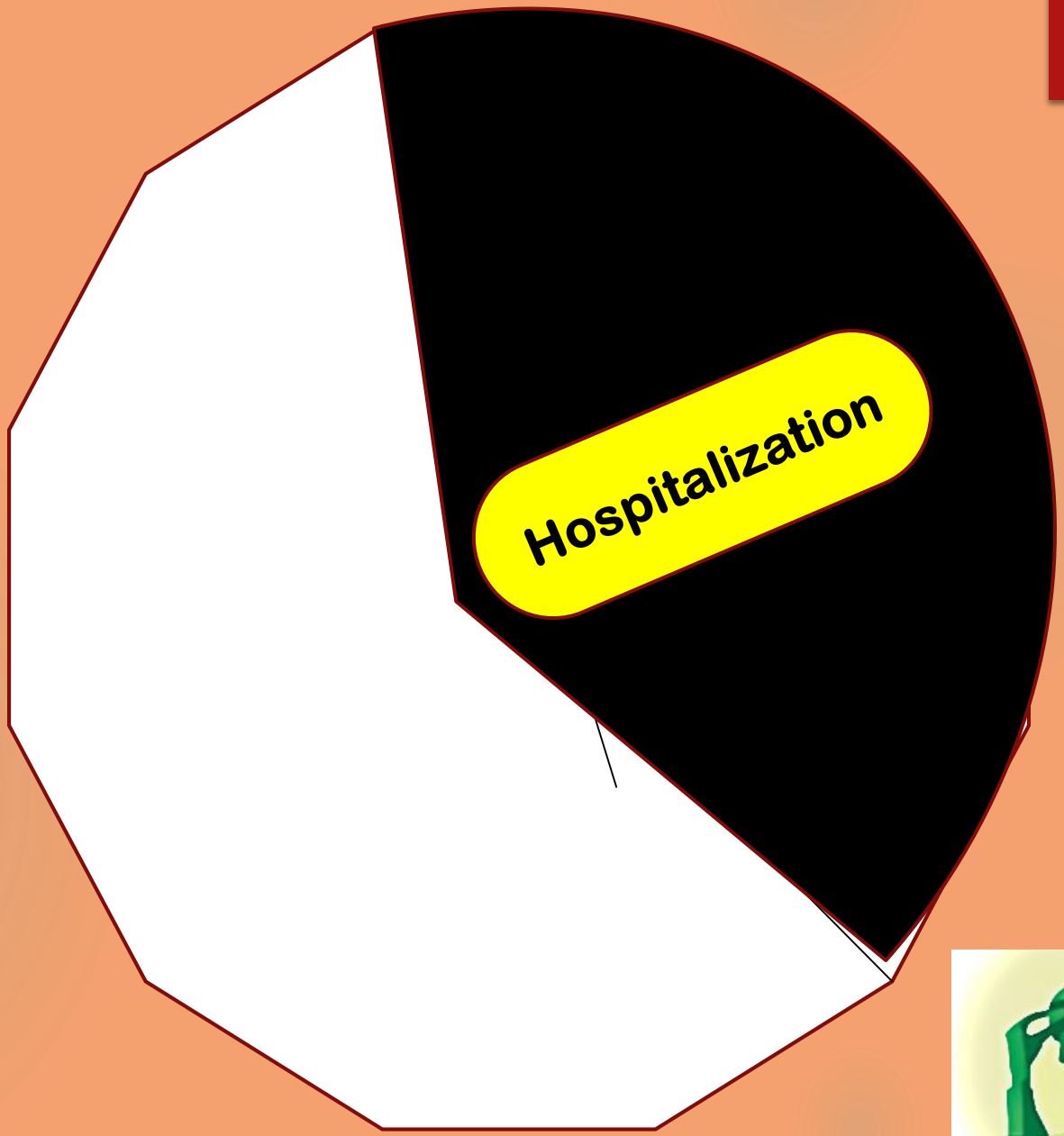
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**P.P.up.  
dep**







**Previous depression**

**Risk factors**

**Antenatal depression**

**P.P.up.dep**

**High level stress postnatal**

**past history of perinatal or non perinatal depression**

**Event**

**Support**

**<25y**





په علوم پزشکی و خدمات بهداشتی درمانی ایران

**P.P.up.dep**

**Risk factors**

**Unwanted pregnancy  
Negative attitude  
Fear of child birth**

**Single**

**Physical  
and sexual  
abuse**

**Family  
history**

**Violence  
inPartner**

**Multiparity**





**Poor perinatal physical health**

**Risk factors**

**Obesity**

**Gestational diabetic**

**Hyper tension**

**Infection**

**P.P.up.dep**





# Personality traits

Risk factors

## Neuroticism

Enduring and tendence to worry and feel anxious angry sad guilty

P.P.up.dep

PMMD

Anxiety

Insomnia





**Child care stress**

**Adverse pregnancy and neonatal**

**Season**

**Breast feeding difficulty**

**Postpartum unipolar depression**

**Postpartum blue**



## Genetic

- One sibling had an episode  
P.P MDD risk of an episode  
in the other 4fold
- Women with FH  
P.P.MDD:42%
- One with no FH:15%

P.P.up.dep







# Etiology

- **Hormonal**

- **Decrease estrogen and progesterone**
- **unusually sensitive to abrupt decreases in gonadal steroids.**

P.P.up.dep



**Etiology**

**monoamine oxidase-A  
in the prefrontal and  
anterior cingulate  
cortex was elevated in  
women with  
postpartum  
depression**

**P.P.up.dep**





*Etiology*

**neurotrophic factor  
were lower in  
women who  
subsequently  
screened positive  
for depression  
three months  
postpartum**

**P.P.up.dep**





**DSM5**

**5 or more (2w)**

**Function  
impairment**

**1) depressed mood  
or**

**2) loss of interest  
or pleasure**

**P.P.up.dep**





**DSM5**

**3)not include symptoms that are clearly attributable to another medical condition.**

**P.P.up.dep**





**DSM5**

**1) Depressed mood most of the day, nearly every day, as indicated by either subjective report ( feels sad, empty, hopeless) or observations made by others (appears tearful).**

**P.P.up.dep**







DSM5

- **2) Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation).**

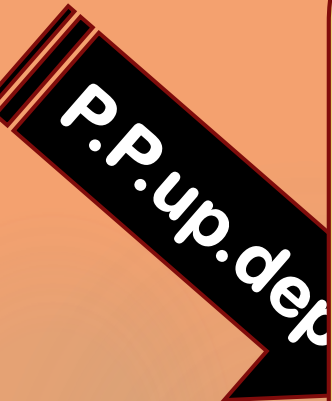
P.P.up.dep





DSME

- **3) Significant weight loss when not dieting or weight gain (a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day.**



P.P.up.dep



DSM5

- 4) Insomnia  
or  
hypersomnia  
nearly every  
day.

P.P.up.dep





**DSM5**

- **5) Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down).**

**P.P.up.dep**





DSM5

- **6) Fatigue or loss of energy nearly every day.**

P.P.up.dep





**DSM5**

- **7) Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).**

**P.P.up.dep**





**DSM5**

- **8) Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by their subjective account or as observed by others).**

**P.P.up.dep**







**DSM5**

- **9) Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.**

**P.P.up.dep**





DSM5

- **B. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.**

P.P.up.dep





DSM5

- **C. The episode is not attributable to the direct physiological effects of a substance or to another medical condition**

P.P.up.dep





**DSM5**

- **D. The occurrence of the major depressive episode is not better explained by schizoaffective disorder, schizophrenia, schizophreniform disorder, delusional disorder, or other specified and unspecified schizophrenia spectrum and other psychotic disorders.**

**P.P.up.dep**



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**DSM5**

**P.P.up.dep**

- **E. There has never been a manic or hypomanic episode.**





**DSM5**

**P.P.up.dep**

- **With anxious distress**
- **With mixed features**
- **With melancholic features**
- **With atypical features**
- **With psychotic features**
- **With catatonia**
- **With peripartum onset**
- **With seasonal pattern**



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Substance Use  
Eating Disorder  
OCD  
PTSD

Comorbidity

66%  
GAD

P.P.up.dep



Dr. Shahmoradi - Psychiatrist





دانشگاه علوم پزشکی و خدمات بهداشتی درمانی ایران

## Course

resolve  
spontaneously or  
with treatment

P.P.up.dep

episodes of postpartum  
major depression last at  
least one year in 30 to 50  
percent of patients



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**Course**

**develop into a  
persistent (chronic)  
depressive**

**P.P.up.dep**

**recurrence of  
postpartum and/or  
non-postpartum  
depression occurs in  
approximately 40 to 50  
percent**





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**NOT**

**Suicide**

**Obvious impairment function**

**Psychosis**

**Catatonia**

**5 or  
6  
Crite  
ria**

**Mild-  
moderate**

**Psychoth  
erapy  
(CBT)  
IPT  
+  
Pharmac  
otherapy**

**P.P.up.dep**

**Out paitiont  
Partial  
hospitalization**

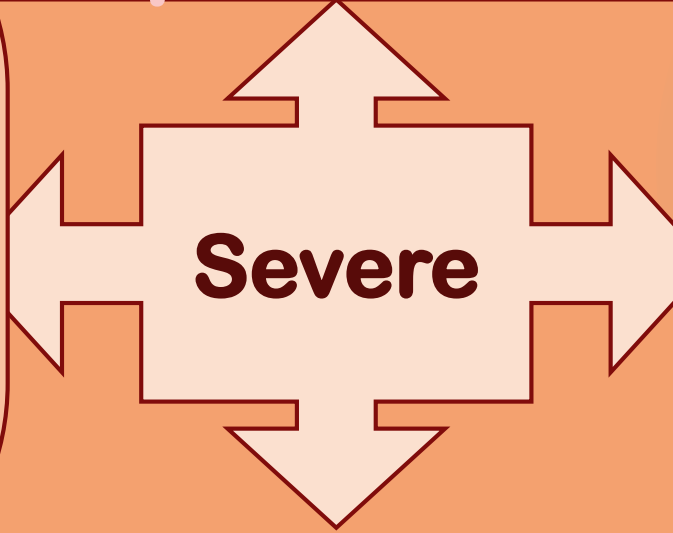


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**Poor judgment  
Suicide  
Functional  
improvement**

- **psychotic features and catatonic have a history of severe or recurrent**



**7-9  
Criteria**

**P.P.up.dep**

**Hospitalization**





**Onset of depressive symptoms during pregnancy**

**Severity**

**Average score of 20 on the Edinburgh Postnatal Depression**

**P.P.up.dep**

**anxiety and suicidal**

**Obstetric complication( fetal stress, postpartum hemorrhage, and low birth weight)**





The primary treatments are psychotherapy ( CBT, or IPT). However, many patients receive antidepressant medications.

P.P.up.dep





**Continuation treatment is generally indicated for patients who respond to acute treatment of unipolar major depression, and additional maintenance treatment is indicated for patients with an increased risk of recurrence.**

**P.P.up.dep**







**SSRIs pass into breast milk at a dose that is less than 10 percent of the maternal level and are generally considered compatible with breastfeeding of healthy, full-term infants**

**P.P.up.dep**





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.P.up.dep

# Psychotherapy ECT



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**For postpartum patients who were treated with antidepressants during pregnancy up until delivery and are maintained on their medication, we continue to prescribe the same dose that was prescribed before delivery**

**P.P.up.dep**





**Patients are monitored for adverse effects that may occur due to increased serum drug concentrations after delivery. Medication levels can rise because of postpartum pharmacokinetic changes that stem from decreased plasma volume and decreased hepatic enzyme activity.**

**P.P.up.dep**





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**For patients who initiate pharmacotherapy after delivery, drug doses are similar to those used in the general population of patients with depression**

**P.P.up.dep**





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**Monotherapy at  
higher doses is  
preferred over  
medication  
combinations at  
lower doses**

**P.P.up.dep**



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- Exercise
- Social/peersupport  
doula or night-  
nurses to protect  
maternal sleep
- Parenting  
education
- Couples/family  
therapy

P.P.up.dep







# Non response

**Verify that the patient has unipolar major depression rather than a different condition such as bipolar major depression.**

**nonadherence is common**





# Non response

**significant life stressors  
(nonsupportive partner)**

**comorbid  
psychopathology  
(anxiety disorder,  
personality disorder, or  
substance use disorder)**





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P.P.up.dep

**impairs maternal functioning, is associated with poor nutrition and health in the offspring**

**increased risk of not breast feeding**



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P.P.up.dep

**breastfeeding, maternal-infant bonding, care of the infant and other children, and the woman's relationship with her partner.**

**abnormal development, cognitive impairment, and psychopathology in the children**



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**poorer health  
care of  
children**

**P.P.up.dep**

**Infant  
sleep**

**Child  
vaccinations**





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P.P.up.dep

# Cognitive impairment and psychopathology in the child

## Abnormal infant and child development



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# Maternal postpartum depression

**interfere  
with  
maternal-  
infant  
bonding**

**less likely to  
tell their child  
stories every  
day, and  
depressed  
mothers were  
also less  
likely to play**

**depressed  
mothers  
read to  
their  
children  
less  
frequently**

**P.P.up.dep**







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# Assessment

P.P.up.dep

**Postnatal depression  
may be present in  
women who manifest  
the following  
symptoms**



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**Anxiety about the health of the infant**

ep.dep

**Concern about one's ability to care for the infant**

**Negative perception of infant temperament and behavior**





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**Despondency for  
at least two  
weeks**

**P.P.up.dep**

**Lack of interest in the  
infant's activities**

**Lack of response to  
support and  
reassurance**



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**Using alcohol,  
illicit drugs, or  
tobacco**

# **Nonadherence to postnatal care**

**Frequent nonroutine  
visits with or telephone  
calls to the obstetrician  
or pediatrician**





**We suggest that primary care clinicians (including obstetricians, gynecologists, or pediatricians) screen all postpartum women for depression, and that screening be implemented with services in place to ensure follow-up for diagnosis and treatment.**





**ask :**

- **about their attitude toward the pregnancy and infant, functioning (ability to care for the infant)**
- **alcohol and drug abuse, and stressors and supports, as well as intimate partner violence**





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**focus  
upon  
the five  
mood  
and  
cogniti  
ve  
sympto  
ms**

**Dysphoria**

**1**

**Anhedonia**

**2**

**Worthlessness or  
excessive guilt**

**3**

**Impaired concentration  
and decision making**

**4**

**Suicidal ideation  
and behavior**

**5**



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**The somatic symptoms of major depression – changes in sleep, energy level, and appetite – overlap with changes observed in postpartum women who are not depressed**





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**symptoms  
of  
depression  
overlap  
with some  
of the usual  
discomforts  
of the  
acute  
puerperium**

**low  
libido  
difficulty  
sleeping  
poor  
appetite  
fatigue**





**lack of energy to the point that patients cannot get out of bed for hours is abnormal and should be distinguished from the normal lack of energy that results from sleep deprivation and caring for an infant.**





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**Although postpartum insomnia is common, patients who are unable to sleep even when their babies sleep may have postpartum depression**



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**Decreased appetite that is accompanied by the inability to enjoy the taste of food, having to force oneself to eat, and rapid weight loss probably represents a depressive syndrome.**



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# Postpartum Bipolar Disorder







# DSM-5

defines the  
postpartum period as  
the first four weeks  
following childbirth


**P.P.BMD**

onset of the episode within  
six weeks of delivery

# ICD-10







**Postpartum bipolar mood episodes are referred to as “postpartum psychosis” or “puerperal psychosis,” although neither term is a formal diagnosis in DSM-5 or ICD-10**

**P.P.BMD**

**recurrence occurred significantly more postpartum patients than nongravid**

**risk of acute bipolar mood episode greater in the puerperium than at other times.**



**P.P.BMD**

**Onset of postpartum bipolar mood episodes occurs within a limited time period following birth of a live child. However, there is no established cutoff that separates postpartum-onset mood episodes from subsequent nonpostpartum episodes**





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**Risk factors**

**P.P.BMD**

- **Lack of maintenance pharmacotherapy preceding or following delivery**
- **Prenatal mood symptoms and episodes**
- **Younger age at delivery**
- **Unplanned pregnancy**



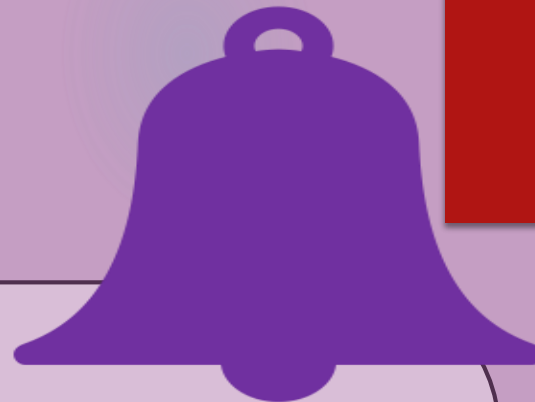


# Risk factors

- Primiparity
- History of previous postpartum mood episodes
- Family history of mood disorder or postpartum psychosis

P.P.BMD





**Onset of the first lifetime  
bipolar mood episode  
may occur during the  
puerperium**

**P.P.BMD**





**genetic effects**

**P.P.BMD**

**decreased or erratic sleep, increased stress associated with caring for the newborn, and social issues**

**Etiology**

**decreases in estrogen and progesterone**





**P.P.BMD**

**genome-  
wide  
linkage  
study  
found an  
area on  
chromos  
ome 16**

**postpartum  
relapse  
occurred in  
significantly  
more patients  
with a positive  
family history  
of postpartum  
mania or  
psychosis**







# Bipolar disorder is characterized by episodes of major depression mania and hypomania

A retrospective study of 1120 pregnancies in bipolar patients found the following rates of postpartum mood episodes

**P.P.BMD**

- Major depression – 25 %
- Mixed 4%
- Mania 3%
- Hypomania 2%



**P.P.BMD**

- **A. A distinct period of abnormally and persistently elevated, expansive, or irritable mood and abnormally and persistently increased activity or energy, lasting at least 1 week and present most of the day, nearly every day (or any duration if hospitalization is necessary).**

**DSM-5  
diagnostic  
criteria  
for  
manic  
episode**





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**P.P.BMD**

- **B. During the period of mood disturbance and increased energy or activity, 3 (or more) of the following symptoms (4 if the mood is only irritable) are present to a significant degree and represent a noticeable change from usual behavior:**

**DSM-5  
diagnostic  
criteria  
for  
manic  
episode**





**P.P.BMD**

**1) Inflated self-esteem or grandiosity.**

**2) Decreased need for sleep (feels rested after only 3 hours of sleep).**

**3) More talkative than usual or pressure to keep talking.**





**4) Flight of ideas or subjective experience that thoughts are racing.**

**P.P.BMD**

**5) Distractibility (attention too easily drawn to unimportant or irrelevant external stimuli), as reported or observed.**





6) Increase in goal-directed activity (either socially, at work or school, or sexually) or psychomotor agitation (purposeless non-goal-directed activity).

**P.P.BMD**





7) Excessive involvement in activities that have a high potential for painful consequences (engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments).

P.P.BMD







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P.P.BMD

- **C. The mood disturbance is sufficiently severe to cause marked impairment in social or occupational functioning or to necessitate hospitalization to prevent harm to self or others, or there are psychotic features.**





**D. The episode is not attributable to the physiological effects of a substance (eg, a drug of abuse, a medication, other treatment) or to**





**A. A distinct period of abnormally and persistently elevated, expansive, or irritable mood and abnormally and persistently increased activity or energy, lasting at least 4 consecutive days and present most of the day, nearly every day.**

**DSM-5  
diagnostic  
criteria  
for  
hypomanic  
episode**





انستیتو ملی سلامت روان و اختلالات اعتیاد در ایران

**B. During the period of mood disturbance and increased energy and activity, 3 (or more) of the following symptoms (4 if the mood is only irritable) have persisted, represent a noticeable change from usual behavior, and have been present to a significant degree:**

**P.P.BMD**





**P.P.BMD**

**C. The episode is associated with an unequivocal change in functioning that is uncharacteristic of the individual when not symptomatic.**

**D. The disturbance in mood and the change in functioning are observable by others.**





**E. The episode is not severe enough to cause marked impairment in social or occupational functioning or to necessitate hospitalization. If there are psychotic features, the episode is, by definition, manic.**

**P.P.BMD**





**F. The episode is not attributable to the physiological effects of a substance (eg, a drug of abuse, a medication, or other treatment).**

**P.P.BMD**







سازمان اسناد و کتابخانه ملی جمهوری اسلامی ایران

Anxiety

Comorbidity

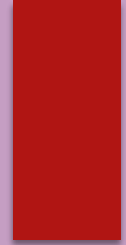
Substance use

P.P.BMD

observations that major depression is the predominant type of bipolar mood episode during pregnancy



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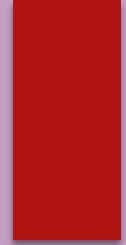
**Mood labile**

**P.P.BMD**

**Preoccupation with newborn** 

**Common symptoms**

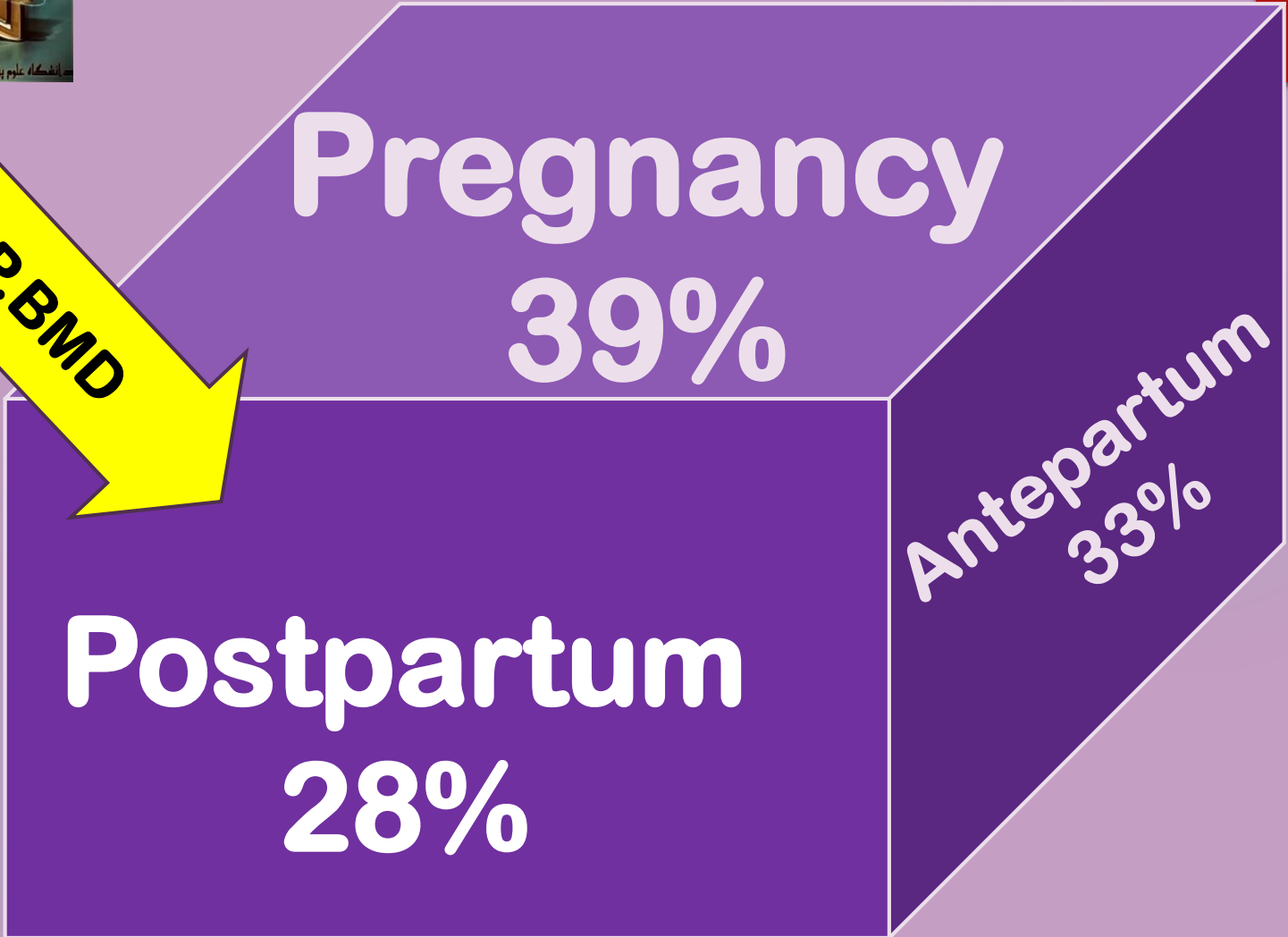




P.P.BMD

**among postpartum women, the 12-month prevalence of bipolar disorder**







**P.P.BMD**

**Postpartum bipolar mood episodes often progress rapidly the mean duration of episodes varies from approximately 1-3M**





# Hospitalization

P.P.BMD

**Psychotic features**

**Aggressive behavior**

**Impaired functioning  
(inability to care for  
oneself)**

**Suicidal or  
homicidal ideation  
or behavior**

**Substance dependence  
that is exacerbating the  
mood episode**

**Poor judgement that places  
the patient or others at  
imminent risk of being harmed  
(neglecting the infant)**

**poor social support or previous severe mood  
episodes**





**Onset of postpartum psychosis in bipolar occurs within the first two to three weeks of parturition**

- Delusions
- Hallucinations
- Disorganized or bizarre behavior
- Disorganized thinking

**BMD**

**Postpartum  
BMD with  
psychotic  
F.**

**Cognitive  
impairment  
or confusion  
judgement  
Agitation  
Sleep  
disturbance  
Mood lability  
Impulsivity**

**increased risk for  
suicide and infanticide**







**P.P.BMD**

**R.F PP.Bipolar +psychotic F.**

**Delivery complications  
breech presentation,  
fetal distress, and cord  
accidents**

- Prenatal mood episodes
- Prenatal obstetric complications : hyperemesis, preeclampsia, and premature contractions



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**P.P.BMD**

**R.F PP.Bipolar +psychotic F.**

- Primiparity
- History of prior puerperal

psychosis

- Early age of onset of bipolar disorder
- Family history of bipolar disorder or postpartum psychosis



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the risk for relapse during the postpartum period may be high, despite pharmacologic treatment.

P.P.BMD

70%





**course of illness in bipolar patients with a lifetime history of postpartum mood episodes and patients without this history does not appear to differ.**



**However, the course of bipolar disorder may be more benign if the first lifetime mood episode (onset) occurs with a postpartum mood episode, rather than a nonpostpartum episode.**





Lab test

- neuronal cell surface antibodies, including anti-N-methyl-D-aspartate receptor antibodies

P.P.BMD






**in patients with symptoms such as slurred speech, disorientation, memory deficits, dyskinesia, and/or seizures**

**Lab test**

**P.P.BMD**





Postpartum bipolar patients often present with a depressive syndrome and a prior history of hypomania or hypomanic symptoms is easy to miss

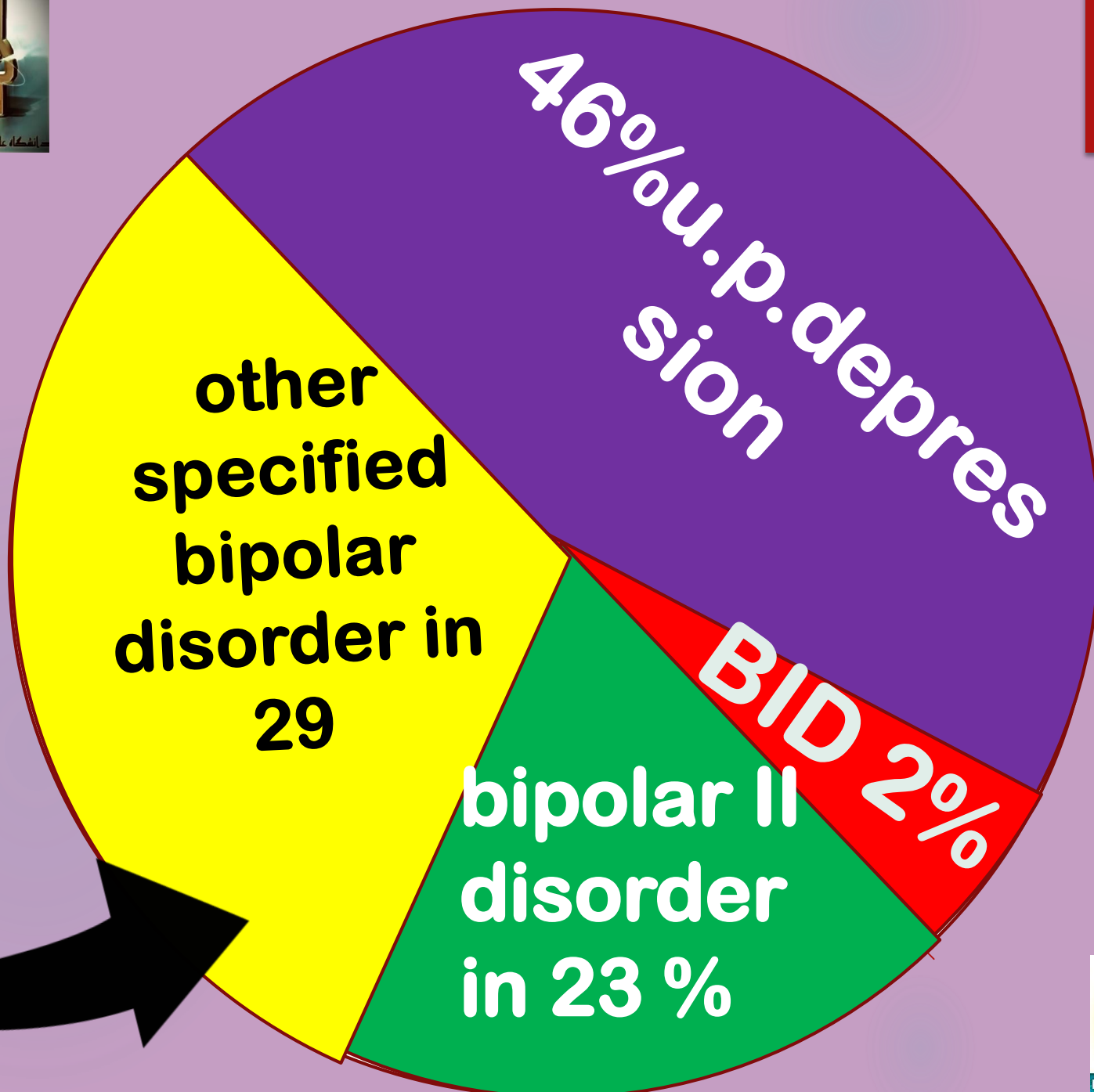
patients referred by nurses

family physicians, psychiatrists, and obstetricians to a perinatal psychiatric clinic for treatment of postpartum unipolar major

P.P.BMD









**Decreased need  
for sleep as  
impaired or  
disrupted sleep**

**P.P.BMD**

**Clinician**

**Excessive mood  
elevation as the  
normal elation of  
childbirth**

**The patient's lack  
of awareness of  
symptoms or poor  
insight**





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**schizophrenia,  
schizoaffective**

**The  
diagnostic  
approach  
to autoimmune  
encephalitis  
is discussed  
separately**

**unipolar major  
depression,**

**substance  
use**

**autoimmune  
encephalitis, including  
anti-N-methyl-D-  
aspartate receptor  
encephalitis**

**P.P.BMD**






**We attempt to use drugs compatible with breastfeeding and doses at the low end of the therapeutic range, especially for infants less than three months of age, because their capacity to metabolize and clear medications is less than that of older infants**

**P.P.BM**






**avoid medications  
associated with weight  
gain and sedation  
( olanzapine) in  
postpartum bipolar  
patients.**

**P.P.BMD**





**For patients with mania  
(without psychotic  
features) or hypomania**

**ECT**

**Haloperidol**

**Risperidone**

**Olanzapine**

**carbamazepine  
or valproate,**

**P.P.BMD**

**refractory patients  
who do not respond**





**P.P.BMD**

For patients with bipolar major depression who are breastfeeding and are not psychotic

# valproate

major depression with psychotic features who are breastfeeding, we suggest the antipsychotics quetiapine or olanzapine, rather than the anticonvulsant valproate

efficacy of quetiapine and olanzapine, valproate is generally regarded as compatible with lactation and there is more experience with valproate during breastfeeding than quetiapine and olanzapine

monotherapy is preferred over medication combinations (fluoxetine plus olanzapine) to minimize infant exposure





**For refractory patients  
who do not respond,  
we suggest  
adding fluoxetine**

**ECT**

**ECT is generally safe and there are  
no absolute contraindications, even  
in patients whose general medical  
status is compromised**

**P.P.BMD**



Postpartum patients with psychotic mania

P.P.BMD

Lactation

**Hospitalized**

**Patients can breastfeed their babies provided that nursing staff are present; however, many patients are too disorganized and impulsive to breastfeed.**

# Benzodiazepine monotherapy

clonazepam or lorazepam

P.P.BMD

For patients who remit with benzodiazepine monotherapy, a different drug (lithium) for maintenance treatment is started and titrated up. After the dose of the second drug is in the therapeutic range, the benzodiazepine is tapered and discontinued

sleep  
anxiety  
agitation





**P.P.BMD**

## Step 2: Antipsychotic + BZD 2-3w

monotherapy is a reasonable alternative to combination treatment, especially for patients who do not tolerate benzodiazepines, are breastfeeding and concerned about the risks to their infants, and patients with substance use

moderate to severe agitation, or patients with grossly disorganized behavior,



**P.P.BMD**

**first-generation  
antipsychotics  
(haloperidol) or second-  
generation  
antipsychotics  
(olanzapine, quetiapine,  
or risperidone)**





For patients who remit with a benzodiazepine plus an antipsychotic, the benzodiazepine is tapered and discontinued, and the antipsychotic is maintained. If patients do not respond to step 2, treatment advances to step

**P.P.BMD**





- **Step 3 – Combination treatment with a benzodiazepine, antipsychotic, and lithium.**

**After two to three weeks, unresponsive patients receive a third round of step 3 treatment, either by switching lithium to valproate or switching antipsychotics. If patients do not respond to step 3 within 6 to 10 weeks, treatment advances to step**

**Valproate may be preferred by breastfeeding patients.**







## Step 4 – Electroconvulsive therapy (ECT).

**pharmacotherapy was  
discontinued**

**the cumulative rate of  
remission at each step  
was 6, 25, and 98 percent  
of patients; none of the  
patients received step 4  
(ECT).**

**P.P.BMD**





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**P.P.BMD**

low doses of drugs  
that have a short half-  
life and no active  
metabolites, such  
as lorazepam

**For breastfeeding women  
who require benzodiazepines  
(eg, patients with severe  
anxiety or agitation**

**BZD**



Dr.Shahmoradi . Psychiatrist



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# Postpartum psychosis



Dr. Shahmoradi . Psychiatrist



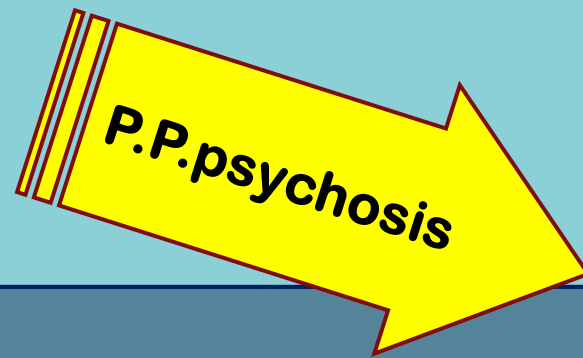
**P.P.psychosis**

**Postpartum  
psychosis  
constitutes a  
medical emergency,  
generally requiring  
rapid identification  
and intervention.**





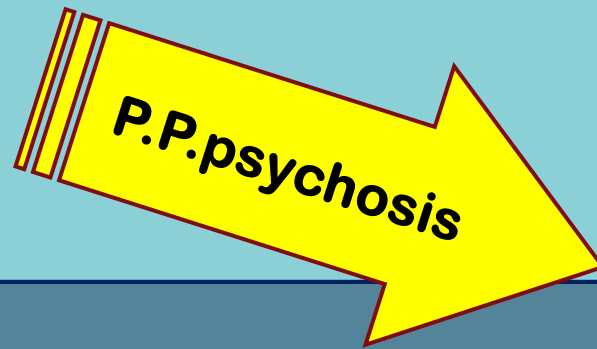
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**rapid onset of psychotic symptoms including hallucinations and delusions, bizarre behavior, confusion, and disorganization that may appear to be delirium.**



Dr. Shahmoradi - Psychiatrist



**medical emergency  
and generally  
requires rapid  
intervention and  
hospitalization**







**Hallucinations – Sensory experiences without physical sensory stimulation tactile, visual, auditory, gustatory, and olfactory sensations.**

**Delusions – Fixed, false, idiosyncratic beliefs that are not culturally based.**

**Thought disorganization.**

**Disorganized behavior**

**P.P.psychosis**



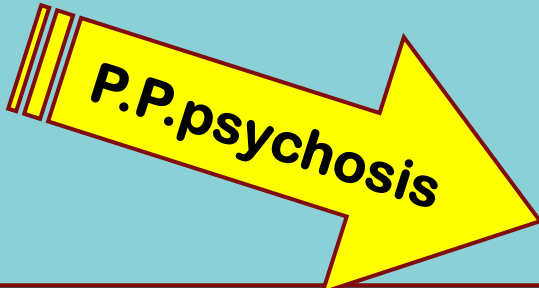




**Postpartum psychosis  
is relatively rare,  
occurring in 1 to 2 per  
1000 births, and is far  
less common than  
postpartum blues and  
postpartum  
depression**

**P.P.psychosis**





**risk of a hospital admission for psychosis to be increased during the first month postpartum (1.09 to 21.7) compared with any other time in a woman's life**





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**P.P.psychosis**

**Postpartum psychosis  
has been strongly and  
consistently associated  
with bipolar disorder**

**50 percent or more of  
women with postpartum  
psychosis have no prior  
psychiatric history**





پزشکف و خدمات بهداشتی درمانی ارک

History of bipolar disorder, schizophrenia, or schizoaffective disorder

Family history of postpartum psychosis.

History of postpartum psychosis

previous hospitalization for bipolar disorder is strongly predictive of the development of postpartum psychosis

**Risk factors**

**P.P.psychosis**

25 to 40 percent of deliveries in women with bipolar disorder are affected by postpartum psychosis

Family history of bipolar disorder.

First pregnancy.





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**Genetic**

**Immunology**

**P.P. psychosis**

**Hormonal**



**Etiology**



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sleep deprivation may be a factor in the development of postpartum psychosis.

**P.P.psychosis**

**there is dysregulation of the immunoneuroendocrine set point in postpartum psychosis with over-activation of the monocyte and macrophage arm of the immune system**



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**P.P.psychosis**

**There is no  
evidence of a link  
between stressful  
life events and  
the development of  
postpartum  
psychosis**







An increased risk of postpartum psychosis may be associated with D<sub>2</sub> receptor agonists (bromocriptine and cabergoline) used to suppress lactation, particularly in women with pre-existing psychiatric histories

P.P.psychosis

There is no evidence of a link between stressful life events and the development of postpartum psychosis





## **P.P. psychosis**

**Postpartum psychosis most commonly presents within two weeks of childbirth. Persistent severe insomnia is often the first indication of an incipient postpartum psychosis**





**P.P.psychosis**

**Command auditory hallucinations may be present, instructing the mother to harm the baby or herself. When command hallucinations are present, the individual requires a higher level of care or hospitalization.**





irritability

anxiety

**rapid  
mood  
change**

**P.P. psychosis**

**psycho  
motor  
agitation**

**manic or  
depressed mood  
(or both)**

**severe  
insomnia**





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**In some cases, the patient may appear to be delirious (disorientation to person, place, or time), without evidence of cause**

**P.P.psychosis**

**mental status may fluctuate between periods of confusion or perplexity and intermittent clearing.**





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In contrast, psychosis that is not associated with childbirth typically presents **without** disorientation to person, place, or time

P.P.psychosis





به دانش درماندگان

# Delusion

postpartum psychosis tend to be related to the patient's mood state (in the depressed or mixed state, the believe that the baby is evil or that people are poisoning her).

olve their baby and are **less bizarre** than typically seen in schizophrenia.

P.P. psychosis





**Episodes  
of  
postpartu  
m  
psychosis  
can be  
severe  
and  
prolonged**

**P.P.psychosis**

**may  
interfere  
with  
maternal-  
infant  
bonding,  
which is  
also  
disrupted  
by inpatient  
hospitalizat  
ion of the  
mother.**

**first-  
episode  
postpartum  
psychosis  
appear to  
have a high  
risk of  
recurrence  
outside of  
the  
postpartum**

**Course**





**11 to 26 years**

**6.1 % experienced one or more subsequent episodes exclusively limited to the postpartum time period**

**56.5 percent) experienced one or more subsequent episodes outside of the postpartum**

**43.5 % did not experience subsequent episodes and were classified as having "isolated postpartum psychosis"**

**645 patients with a first psychosis episode postpartum**

**P.P. psychosis**





**P.P.psychosis**

does not classify postpartum psychosis as a distinct diagnostic entity. Instead, patients with postpartum psychosis are assigned a diagnosis based on their primary mental disorder, with the addition of the specifier “with peripartum onset” if onset of the current episode was during pregnancy or within four weeks postpartum.

**DSM-5**





Major depressive disorder, with psychotic features, with peripartum onset. during pregnancy

- Bipolar disorder, current episode manic, with psychotic features, with peripartum onset
- Brief psychotic disorder, with postpartum onset (if the onset is during pregnancy or within four weeks postpartum)

DSM-5

P.P. psychosis





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**Women presenting for medical care during pregnancy or postpartum should be screened for current mental health problems, a history of psychiatric treatment, and a family history of mental illness.**

**P.P.psychosis**



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**Patients screening positive for any of these items should be further assessed for a history of mania or hypomania, psychotic depression, or a psychotic disorder.**

**P.P.psychosis**







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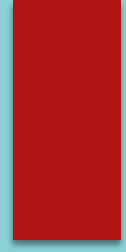
**Patients with a family history of psychiatric disorders should be queried further about a family history of hospitalization, suicide, mania, depression, or psychotic disorder.**

**P.P.psychosis**



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**Patients with a personal or family history of one of these conditions should be educated and monitored during the first weeks of the postpartum period.**


**P.P.psychosis**



**P.P.psychosis**

**More intensive monitoring and prophylactic treatment should be considered for patients with a history of bipolar or schizoaffective disorder**





**The onset and course of  
psychotic symptoms  
(episodic versus chronic)**

**P.P.psychotic**

**Course**

**The nature of the affective  
symptoms (depressed, manic,  
or mixed state, or not present)**

**The presence of passive death  
wishes, suicidal thoughts, and/or  
suicidal plans**

**The impact of these  
symptoms on the patient's  
behavior and functioning**



**The patient's history and family history of prior affective or psychotic episodes**

**P.P.psychosis**

**Safety of the child and others under the patient's care**

**The presence of a comorbid substance use disorder**





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**medical causes of psychosis. The history should consider past and current general medical**

**P.P.psychosis**

**psychiatric conditions, current medications, and the use of alcohol and illicit substances. The physical examination should include a basic neurologic and mental status evaluation.**





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**P.P.psychosis**

**Women with bipolar disorder are at high risk of recurrence in pregnancy and postpartum, which may present as postpartum psychosis**

**Women who discontinue mood stabilizers before or during the pregnancy may be at an increased risk of postpartum psychosis.**

**Risk factors**

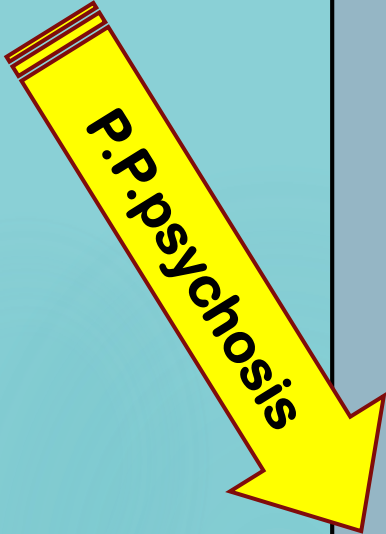
**women without a prior history, a postpartum psychotic episode may be the first manifestation of bipolar disorder.**



Dr. Shafiqul Islam, Psychiatrist



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- **family history of bipolar disorder should increase the suspicion for bipolar disorder in the patient, particularly if presenting with postpartum psychosis.**

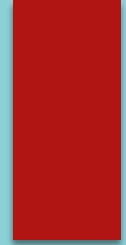






**P.P.psychosis**

# Schizoaffective disorder



**Postpartum psychosis also presents with manic, depressive, or mixed episodes in schizoaffective disorder. The distinguishing feature of this disorder, compared with bipolar disorder, is the history or subsequent development of chronic psychosis without mood symptoms.**

**D.D**





**P.P.psychosis**

**Schizophrenia**



**20 to 25 percent of patient with schizophrenia will relapse during the postpartum time period**

**D.D**





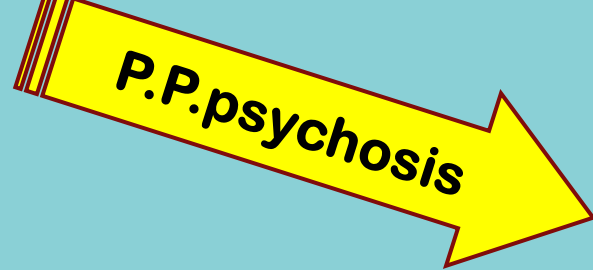
This condition can present up to several months after delivery. The psychotic features occur in conjunction with severe depressive symptoms. The psychosis commonly takes the form of paranoid delusions of persecution.

P.P.psychosis

D.D

Major depression with psychotic features





Neither hallucinations nor agitation are common. Psychotic depression is often preceded by longstanding untreated postpartum depression. Clinically, it is then referred to as "late-onset postpartum psychosis."





# Brief psychotic disorder with postpartum onset

sudden onset of delusions, hallucinations, or disorganized speech during pregnancy or within four weeks postpartum.

duration of the episode is at least one day but less than one month with full return to premorbid level of functioning.

P.P.psychosis

D.D





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# Substance use disorders

P.P.psychosis

Self-medication with drugs (including prescription drugs) and alcohol is a common complication of mood disorders, even in pregnant and postpartum women. Women with a prior history of a substance use disorder are at risk of relapse when they develop antepartum and postpartum mood disturbances. Psychosis can present as the result of substance intoxication or withdrawal.

D.D



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# Psychosis due to general medical conditions

P.P.psychosis

- **Infectious diseases**
  - **Central nervous system**
- **Endocrine dysfunction**
- **Metabolic**

D.D







**P.P.psychosis**

**safety and initiating medications for psychosis, agitation, and insomnia are the initial priorities of clinical management.**






**P.P.psychosis**

**Important next steps include evaluation and testing to exclude other medical causes of psychosis, and diagnosing/starting treatment for an underlying psychiatric disorder**






P.P.psychosis

**Postpartum psychosis  
is typically treated  
with a combination of  
antipsychotic  
medication and a  
mood stabilizer.**





P.P.psychosis

**Adjunctive  
psychotherapy can be  
useful and includes  
psychoeducation,  
support, coordination of  
care, and encouraging  
treatment adherence.**





# Safety

**The first priority  
of treatment**

**usually be  
hospitalized  
until stable**

**mother should  
not be left alone  
with the infant.**

**separation of  
mother and baby  
at this critical time  
is not optimal**

**P.P.psychosis**





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**P.P.psychosis**

**Women with mild to moderate illness may be able to breastfeed.**

**who are more severely ill may be too disorganized or present too much of a risk to the baby to breastfeed.**

**All psychotropic medications taken by the mother are transferred into breast milk and are passed on to the nursing infant.**



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**The benefits of a  
psychotropic  
medication for the  
mother need to be  
weighed against risks  
to the infant from  
medication exposure.**

**P.P.psychosis**



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**P.P.psychosis**

**The exposure of infants to antipsychotics via human milk generally appears to be low and clinically insignificant in the limited data available**





**P.P.psychosis**

**ECT**



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**P.P.psychosis**

**suggest first-line  
treatment of patients  
with postpartum  
psychosis with one of  
the older, second-  
generation**





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**P.P.psychosis**

**SGAs are generally preferred over FGAs due to lower rates of extrapyramidal symptoms [12] and tardive dyskinesia**





# Risperidone

P.P.psychosis

# Olanzapine

# Quetiapine





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P.P.psychosis

# Haloperidol



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P.P.psychosis

**Benzotropine** (0.5 mg orally twice daily) is often administered in conjunction with FGAs to reduce extrapyramidal symptoms, though its safety in breastfeeding is unknown.







# Agitation

P.P.psychosis

**For mild agitation,  
0.5 to 2 mg  
of haloperidol may  
be sufficient;**





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**olanzapine**

**P.P.psychosis**

**Ziprasidone**





**Patients should be treated with an antipsychotic to remission. Treatment should be continued for at least one year to reduce the risk of relapse. Some patients will merit lifetime prophylaxis due to potential for relapse without medication and risk factors such as suicidality.**

**P.P.psychosis**





# Insomnia

P.P.psychosis

**antipsychotic  
with a  
benzodiazepin  
e rather than  
other  
medications**





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P.P.psychosis

# lorazepam



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**For women with  
postpartum psychosis  
who plan to breastfeed,  
we suggest treatment  
with **valproate** rather  
than **lithium**.**

**P.P.psychosis**





# PREVENTION

P.P.psychosis

**Women with a history of bipolar disorder, a psychotic disorder, or a history of postpartum psychosis can be identified through screening during prenatal care**





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- ❖ **Suicide**
- ❖ **Homicide**  
**(infanticide)**





**Economic**

**Congenital  
Problem**

**Risk factors**

**Female**

**Neonaticide**





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**Low  
education**

**Poverty**

**Poor**

**Less19y**

**Preterm**

**Primipar**



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**Single**

**Living at home with  
partner**

**Limited  
communication  
mother with  
family**



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# Strict antiabortion law

**Stigma of having  
illegitimate in  
unmarried**





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# Psychiatry illnesses Psychosis

**Disturbance  
balance of  
mind**



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**95%of commit  
neonatal deliver  
at home and 15%  
resive any  
antenatal care**







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# Infant homicide

**M=F**

**Mother older than 25 y (average 34y)**

**Black population > weight**





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**75% have  
psychiatric  
disorder**

**Alcohol and cocaine use  
(antenatal, postnatal)**

**Munchausen by  
proxy**



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**Rumination about  
harming the baby can  
occur in postpartum  
depression**



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described as "scary thoughts," and are usually not revealed unless patients are questioned directly. Thoughts of harming the baby are generally experienced as unacceptable (ego dystonic) and intrusive. However, these thoughts may indicate that patients are psychotic and should thus prompt an evaluation for psychotic symptoms such as delusions or hallucinations.





**2 to 7 per 100,000 infants  
Infanticide during  
postpartum depression may  
be more likely to occur in  
women who are psychotic  
or were previously admitted  
to a psychiatric hospital**





- **Mothers who kill their infants often try to kill themselves and one study found that among 80 postpartum women who committed suicide over a 15-year period, two killed their infant before killing themselves**





**A case series of 10 mothers with postpartum depression who killed their infants found that the pregnancy was wanted and the baby was healthy, but that the women felt overwhelmed and were reluctant to be left alone with the baby**







**Homicidal behavior is rare in postpartum psychosis. Approximately a third of women hospitalized for postpartum psychosis expressed delusions about their infants, and 9 percent had thoughts of harming their infants**





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**Approximately 4 percent of women with postpartum psychosis have been found to commit infanticide**





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**Disorganization and confusion in the mother add to the potential risks for the infant, who should not be left alone in the care of a mother with postpartum psychosis**





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# Maternal suicide



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Research suggests **suicide** is a **leading cause** of **maternal death** in the

**1<sup>st</sup> year**  
**following**  
**childbirth.<sup>1</sup>**







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Maternal suicide is most frequently completed between

**6 to 12**  
months  
postpartum.<sup>5</sup>





Maternal **suicide deaths** are **more common** than maternal **deaths** caused by **postpartum hemorrhage** or **hypertensive disorders**.<sup>2</sup>







The severity and rapidly evolving nature of **postpartum psychosis** increases the risk of maternal suicide.<sup>6</sup>





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Suicide accounts for  
up to **20%** of  
**postpartum**  
**deaths.**<sup>3/4</sup>





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**Depression during pregnancy greatly increases thoughts about suicide while pregnant.<sup>4</sup>**





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**Cause of direct death in first year after the end of the pregnancy**

**Second direct maternal death during or within 42 days of the end of pregnancy**

**The fifth most common cause of woman death during pregnancy**





# Postpartum depression

1-5/100000  
Live birth

**most were receiving mental health treatment but did not manifest suicidal ideas or endorse recent self-harm at the time of the last clinical contact, and the most had a primary diagnosis was depression**





# Postpartum BMD

**active suicidal ideation, a specific plan, and intent to kill themselves may require constant observation. Outpatients are commonly seen on a weekly basis until they have responded (ie, the patient's safety has stabilized and the number, intensity, and frequency of psychotic and mood symptoms has improved substantially). Following response, patients can be seen every two to four weeks until they remit.**





**Bipolar patients with  
postpartum mood  
episodes may be at risk  
for suicide**







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# Postpartum psychosis

**baby is evil or  
that people are  
poisoning her**





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# Postpartum psychosis

**In the first year after childbirth, suicide increases 70-fold and is the leading cause of maternal death in the general population**

**Among women with first-episode postpartum psychosis, a systematic review and meta-analysis reported suicide rates as high as 4 to 11 percent**



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**suicide prevalence  
was 4.62 times  
higher in women  
with low  
educational levels.**



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**suicide Women with comorbid depression or an anxiety disorder showed a 17.04 times greater risk of suicide than those who did not suffer from any mood disorder.**



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**A study of 1567 women who were admitted to a psychiatric hospital (diagnoses not specified) within one year of childbirth found that compared with the general population, completed suicide among admitted patients was 17 times higher**





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**Fetal or infant death  
was associated with  
suicide attempts in  
postpartum women**

**Suicide attempt**

**a rate of approximately 44  
attempts for every 100,000 live  
births;**

**Fetal or infant death was  
associated with suicide  
attempts in postpartum  
women**





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## Suicide attempt

**Women with a  
psychiatric disorder  
were at a 27.4-fold  
increased risk**







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## Suicide attempt

**substance use  
disorder were at a 6.2-  
fold increased risk**





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## Suicide attempt

**dual diagnosis were at an 11.1-fold increased risk of postpartum suicide attempt compared with controls.**





د. شاهرمان



# با ارزیابی موفقیت و پیروزی



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