ABSTRACT

Gender has a significant impact on the development and presentation of mental illness and the overall mental health of individuals. It affects how mental illness develops and the treatment plan. Socioeconomics, social position, status, and power differentials influence gender roles as well as how individuals obtain treatment for mental illness. Mental illness does not typically resolve by itself. Treatment may involve medication or be non-pharmacological and therapy-based. Diagnostic strategies to identify mental illness in women and determine the best treatment plan are presented.

Introduction

Women and men are fundamentally, biologically different, so it should come as no surprise that mental health issues affect them differently. A mental illness can manifest itself in different ways across gender lines, so it is important for medical professionals to consider the individual impact of each disorder on each patient. Although women are more likely than men to seek help for mental health issues, there are still many women with untreated disorders in need of compassionate care.

Gender has a significant impact on the development and presentation of mental illness and the overall mental health of individuals. It affects how mental illness develops, how it is experienced, and how it is treated. Gender plays a role in socioeconomics, social position, status, and power differentials, which also affect how individuals develop and obtain treatment...
for mental illness. Gender also has an impact on how mental illness is perceived by others, and it can affect how and why individuals seek help. Exposure and susceptibility to mental illness are also impacted by gender differentials.

The most significant gender differences occur in the instance and rates of the more common mental health conditions, such as depression, anxiety and somatic disorders. In all of these disorders, women are affected at a higher rate than their male counterparts, and the impact of the illnesses is greater. Depression is twice as common in women than men, and symptoms are more severe and persistent. In more severe mental disorders, such as schizophrenia and bipolar disorder, there are fewer gender differences in regards to rate and prevalence. However, the impact of the illness and the initiation and continuation of treatment is impacted by gender. In addition, there are differences in the age of onset, frequency of psychotic episodes, social adjustment and interaction, and outcome based upon the individual’s gender.

Women experience mental health issues differently than their male counterparts. Therefore, it is important to study the impact gender has on mental illness and identify strategies for working with women that have mental health concerns. Women are often at a disadvantage to their male counterparts based on social status, income, marital standing, and societal expectations. In addition, women are at a greater risk of being victims of domestic violence and sexual assault, which can further impact the development and management of mental health issues. Women are also at a greater risk of experiencing comorbid disorders, which will further differentiate their experience from their male counterparts.
Many of the risk factors for mental illness are gender specific, or somewhat related to typical gender based roles. Women experience higher levels of gender based violence, socioeconomic disadvantage, low income and income inequality, low or subordinate social status, and increased responsibility for the care of others. These factors impact how women develop and experience mental illness, as well as how they seek and manage treatment.

Gender and mental health are interrelated. To better understand how women experience mental illness, it is important to examine the factors that contribute to these experiences and to identify how these experiences differ from those of men. This acknowledgement will enable treatment providers to provide appropriate care for female patients without allowing gender bias to impact the diagnosis, care and treatment of these patients.

**Gender-Specific Risk Factors**

Mental illness affects men and women differently in the way it manifests and is treated. In addition, there are a number of gender-specific risk factors that impact how and why mental illness develops. These factors are commonly related to income, employment, socioeconomic status, relationship roles, and biological determinants.

**Domestic Violence**

Domestic violence is one of the major risk factors in the development of mental health problems in women. Domestic violence is classified as any type of physical, psychological, or sexual harm that occurs within an intimate relationship.(6) Common examples of these behaviors include:(7)

- Physical aggression
• Psychological abuse
• Forced intercourse
• Other forms of sexual coercion
• Controlling behaviors (isolation from family and friends, monitoring movements, deprivation of basic necessities)

The prevalence of domestic violence is quite high. The following fact sheet, from the National Coalition Against Domestic Violence, provides an overview of the statistics regarding domestic violence and intimate partner sexual assault in the United States:(6)

**NCADV: Domestic Violence Facts**

**Basic Facts:**

- One in every four women will experience domestic violence in her lifetime.
- An estimated 1.3 million women are victims of physical assault by an intimate partner each year.
- Eighty-five percent (85%) of domestic violence victims are women.
- Historically, someone known by the woman has most often victimized them.
- Woman who are 20-24 years of age are at the greatest risk of nonfatal intimate partner violence.
- Most cases of domestic violence are never reported to the police.

In violent intimate relationships, women typically lack control and autonomy, which will limit their sense of self-worth and reliance.(7) In addition, women in domestic violence situations lack control over their own health, including their mental health, which limits their ability to seek and continue treatment.(8)
The most common mental health condition linked to domestic violence is depression.\(^{(9)}\) When women experience domestic violence, the humiliation, degradation, and lack of love and support can trigger depression. In addition to triggering depression, these factors can also enhance the symptoms associated with the condition.\(^{(10)}\) According to recent research studies, depression in women is often triggered by situations that include the above factors, all of which are part of domestic violence situations. Therefore, there is a direct correlation between domestic violence and the onset and continuation of depression.

Although domestic violence is most commonly associated with depression, it also has a strong correlation to anxiety and Post Traumatic Stress Disorder (PTSD).\(^{(7)}\) In fact, these three conditions often develop simultaneously in women who are victims of domestic violence.\(^{(11)}\) According to recent research studies, women with depressive disorders were approximately 2.5 times more likely to have been victims of domestic violence (with a prevalence estimated at 45.8%) than their female counterparts who were not victims of domestic violence.\(^{(8)}\) The rate of likelihood for a woman to experience anxiety is 3.5 times higher (27.6%) than it is for their counterparts who are not in a domestic violence situation.\(^{(12)}\) Women with PTSD are seven times more likely to have experienced domestic violence.\(^{(13)}\) Although the numbers are not as concrete, domestic violence can be linked to the development of other mental health issues such as eating disorders, obsessive compulsive disorder (OCD), schizophrenia, bipolar disorder, and other common mental health problems.\(^{(11)}\)

Mental health issues are especially connected to long term domestic violence situations, such as those that occur between individuals who cohabitate.\(^{(14)}\)
These forms of domestic violence tend to escalate over time and are repetitive in nature, further contributing to the woman’s sense of worthlessness and degradation.\(^{(11)}\) In social research studies involving depression, three features were identified in women: humiliation, enforced inferior ranking and subordination, and a feeling of entrapment. These factors are all common in domestic violence situations.\(^{(7)}\)

In addition to affecting how and when mental illness develops, domestic violence also affects how women are able to treat the condition and the access they have to resources. Repeated violent behaviors can alter how women identify and assess mental health concerns, as well as how they utilize health care and manage treatment.\(^{(8)}\) Constant subjugation to violence and coercive control diminishes a woman’s sense of self and self-esteem, as well as her coping ability and decision-making capabilities.\(^{(10)}\)

Domestic violence affects a woman’s ability to secure treatment by limiting access to various resources, including financial resources and social support networks.\(^{(15)}\) Women who are victims of domestic violence experience higher levels of unemployment and reduced incomes.\(^{(16)}\) In addition, women experience isolation from friends and family, thereby limiting their support network.\(^{(17)}\) Domestic violence weakens a woman’s social position while minimizing opportunities to secure appropriate healthcare, either due to a lack of financial resources or through manipulation and coercion. In addition, many women who are victims of domestic violence are hesitant to seek treatment because they do not want to draw attention to themselves or their situation.\(^{(18)}\) Finally, fear of retaliation from their partner often causes these women to remain silent.\(^{(14)}\)
Relationship and sexual violence is directly linked to Post Traumatic Stress Disorder which is typically a co-morbid condition with other mental health issues, although it can also occur independently. Approximately thirty one percent of rape victims develop PTSD, and the condition persists longer in victims of domestic and sexual violence than it does in other individuals.\(^{(9)}\) The development of PTSD can trigger the onset of other mental health issues, especially depression and anxiety. Therefore, victims of domestic and sexual violence will often experience a number of conditions at the same time, making identification and treatment more difficult.\(^{(17)}\)

The relationship between domestic violence and mental illness is further supported through:\(^{(19)}\)

- Three to four fold increases in rates of depression and anxiety in large community samples amongst those exposed to violence compared with those not exposed.
- Severity and duration of violence predicts severity and number of adverse psychological outcomes, even when other potentially significant factors have been statistically controlled in data analysis. This has been found in studies on the mental health impact of domestic violence.
- Marked reductions in the level of depression and anxiety once women stop experiencing violence and feel safe compared with increases in depression and anxiety when violence continues.

Not only is domestic violence a contributing factor in the development of mental illness, but it is also a more likely outcome in patients with mental health concerns. Individuals who have mental health issues are more likely to experience domestic violence, as they are often unable to rationally identify the issues present.\(^{(20)}\) However, few treatment providers screen
their mental health patients for domestic violence. Domestic violence is rarely discussed in clinical settings, even though patients will benefit from identification of the situation.(13)

Socioeconomic Disadvantage

There is a direct correlation between socioeconomic disadvantage and mental health issues in women. When women experience this disadvantage, they do not have access to the resources needed to treat mental health conditions. In addition, women who are in disadvantaged economic situations are more prone to developing mental health issues as a result of their economic situation. This is a result of the negative feelings and concerns associated with socioeconomic disadvantage.(21)

The link between socioeconomic status (SES) and mental health is further supported by the following factors:(22)

- While women are more likely to be diagnosed with depression and anxiety disorders, living below the poverty line is one of the most reliable predictors of depression and other mental health disorders.
- The link between depression and low-income women can be attributed to increased stress caused by living in poverty and minimal social support often associated with low SES.
- Welfare reform designed to facilitate the transition from welfare to work has placed limitations on benefits that many low-income women can use to ensure the well-being of their families, causing increased stress and contributing to the onset and exacerbation of psychological illness.
- Low SES and material deprivation have also been linked to the presence of depression among pregnant women.
- While actual occurrence rates may be similar, women in low-SES households are more likely to report domestic violence. Limitations in socioeconomic means may lead a lower SES woman to return to an abusive relationship.

![Four in Ten Uninsured Women Live Below the Poverty Line, 2012](http://kff.org)

*(Photo courtesy of: http://kff.org)*
**Income Inequality**

Much like socioeconomic disadvantage, income inequality also affects the development and subsequent treatment of mental health conditions in women. Women are at a higher risk of developing mental illness in areas where income levels vary widely.\(^{(23)}\) Income gaps within a community can contribute to a feeling of impoverishment, even when an individual is not poor by poverty standards.\(^{(24)}\) These income gaps can cause women to feel a lower sense of worth and value, thereby blaming themselves for their financial situation. In many instances this will increase the prevalence of depression in these women. Women experience the negative effects of income inequality at a greater level than their male counterparts.\(^{(5)}\)

Income inequity differs from socioeconomic disadvantage as it affects entire regions. Women who live in areas with large income disparities are more likely to experience mental health issues than women who live in areas with less financial diversity.\(^{(25)}\) These trends are not limited to small, local communities. They exist on a broader scale at the regional and state level. In a national mental health study, 34,653 adults were assessed and identified using data to collect and analyze the levels of income inequality in each state. These states were then categorized in order from those with the greatest disparity to those with the least. The research study found that women who lived in states with the greatest level of income disparity were two times as likely to experience depressive disorders as those who lived in states with lower levels of disparity.\(^{(26)}\)

Women also experience income inequality on a larger social level. These disparities often occur in the workplace and within social class systems. Women are typically paid less than their male counterparts, and employment opportunities that are commonly female dominated have a lower fiscal value.
than those that are considered male dominated. This broader level of income inequality puts women at a disadvantage and can affect their ability to identify and access adequate resources. Many women lack adequate health insurance, as well as the financial resources that are needed to obtain assistance.\(^{(27)}\)

**Subordinate Status**

There is a direct correlation between subordinate status and adverse mental health outcomes. In fact, those who are at a social disadvantage experience mental health issues at a rate that is 2 to 2 ½ times higher than those who are not at a disadvantage.\(^{(21)}\) In lower social classes, women experience more negative life events than their more advantaged counterparts. These women also have less control over decision making and other factors that provide them with a semblance of control over their own health.\(^{(28)}\) Women who are socially disadvantaged also lack access to the appropriate supportive social structures. These factors directly contribute to an increase in the number of women who experience non-psychotic psychiatric disorders such as depression and anxiety.\(^{(29)}\)

Social status is something that women are aware of. A woman’s social position provides her with an awareness of one’s exact social rank and a solid understanding of how this rank affects advantage and disadvantage.\(^{(30)}\) This awareness of social status and understanding of the disadvantages contributes directly to the development of non-psychotic disorders. Depression is especially common in this group.\(^{(23)}\) In fact, recent studies have shown that depression is strongly associated with several interrelated factors:\(^{(31)}\)

- Perceptions of the self as inferior or in an unwanted subordinate position, with low self-confidence.
Behaving in submissive or in non-assertive ways.
- Experiencing a sense of defeat in relation to important battles, and wanting to escape but being trapped.

Subordinate status is especially relevant to women and their mental health status as there is a direct link between the qualities that characterize depression and inferior social status and the traits that have been deemed desirable “feminine” qualities. Women are encouraged to be submissive and dependent, and anything that strays from these norms is considered undesirable female behavior. These expectations place undue stress on women as they attempt to follow these standards while maintaining some semblance of self. The social pressure to assume a powerless role can further exacerbate symptoms of depression and anxiety.\(^2\)

Women who are in subordinate positions experience higher levels of mental illness than those who are less disadvantaged. Therefore, providers who work with women in subordinate positions must be aware of the challenges they face and identify any issues that may arise as a result of their subordinate status.

**Responsibility for Others**

One of the contributing factors in the development and progression of non-psychotic mental health problems in women is the responsibility toward others. Women tend to be the primary caregivers of both their children and elderly parents, and the responsibility they feel in this role can both cause the development of non-psychotic problems and affect how and when the woman seeks treatment. Women often maintain a number of roles that require them to act as caregivers, such as wife, mother, homemaker, employee, caregiver to elderly parents, and friend. These roles all come
with a number of demands that the woman must meet, each of which places additional stress on them. (1)

Unlike previous decades, most women work outside the home in full-time jobs. However, even though these women work similar hours to their male counterparts, the bulk of household and childcare responsibilities still fall to women in traditional heterosexual partnerships. (32) Therefore, many women experience additional stress as they attempt to maintain their careers and still maintain the household and provide care for their spouses and children. This can lead to feelings of incompetence as women worry about failing at their careers and also failing at their parental and spousal duties. In fact, women in these situations experience two to three times more stress and anxiety than their non-working or childless female counterparts. (33) In addition, women in these roles experience higher levels of stress and anxiety than their male counterparts who are employed outside the home and are also parents. Sarah Rosenfield reported that compared to men, women perform 66% more of the domestic work, sleep one-half hour less per night, and perform an extra month of work each year. Needless to say, increased workloads and decreased attention to rest and relaxation are stressful and pose obstacles to women's mental health. (34)

Women are socialized to form meaningful relationships with others, which can serve as a support network. However, these relationships and expectations can also cause additional stress for them. There is an expectation that women will assume caretaking roles within their relationships, and this can put undue stress on them to balance their duties along with other obligations. (35)
When a woman is taking care of individuals who are not doing well physically and/or emotionally, she will experience even higher levels of stress. This is especially common when women assume the role of caretaker for elderly parents.\(^{(36)}\) In many instances, it is assumed that the female child will assume this responsibility, with minimal expectations of male children. For these women, this obligation (even if it is the woman’s choice) can cause extreme stress, especially when the woman has offspring of her own that also require care.\(^{(37)}\)

![Graph: The Percentage of Men and Women Providing Basic Parental Care Increased Dramatically](https://www.metlife.com)

Socially, women are still considered the primary caregivers of children regardless of whether they work outside of the home. Many women struggle to maintain their professional careers while still fulfilling their maternal obligations. There are fewer expectations placed on men.\(^{(36)}\) Therefore, it is quite common for women to feel solely responsible for childcare, even when it is not their primary job. Many women will feel overwhelmed as they struggle to maintain their professional selves, while striving to be “good”
mothers to their children. In fact, current research shows a direct connection between a woman's stress level and her career and childcare obligations.\(^{(38)}\) In addition, there is significant social pressure to balance both obligations without negatively impacting either. At the same time, women are prompted to be “perfect” mothers through various media outlets and social media networks. This pressure can cause further anxieties in women already attempting to manage it all.\(^{(39)}\)

According to current research, it is most common for women to seek social support networks when experiencing stress related to caregiving obligations. In fact, many women rely on their peers, both face-to-face and virtual, to serve as a support system for them to vent and seek camaraderie.\(^{(1)}\) In addition, some women may attempt to manage their stress by praying, worrying, venting, getting advice, or engaging in behaviors that are not related to the problem at all (including such antisocial behaviors as the misuse or abuse of alcoholic beverages). Although not completely healthy, this attempt to seek social support and distraction are considered avoidant coping strategies because they do not focus on solving or overcoming a problem, only on alleviating the stress associated with the problem.\(^{(38)}\)

Recent studies have shown:

"Women are more likely than men to experience internalizing disorders. Primary symptoms of internalizing disorders involve negative inner emotions as opposed to outward negative behavior. Depression (both mild and severe) and anxiety (generalized or "free-floating" anxiety, phobias, and panic attacks) are internalizing disorders common to women. Symptoms include sadness; a sense of loss, helplessness, or hopelessness; doubt about one's ability to handle problems; high levels of worry or nervousness; poor self-esteem; guilt, self-reproach, and self-blame; decreased energy,
motivation, interest in life, or concentration; and problems with sleep or appetite.”(40)

**Depressive Disorders**

Depressive disorders are the most common mental disorders experienced by women. They can range in severity from mild depressive episodes to the more severe form of clinical depression. Some women will experience individual depressive episodes that are caused by specific situations and events, while others will experience lifelong depressive symptoms.(2) The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM 5) has identified a number of specific depressive conditions that fall within the category of Depressive Disorders. They are listed as:(41)

- Depressive Disorders
- Disruptive Mood Dysregulation Disorder
- Major Depressive Disorder, Single and Recurrent Episodes
- Persistent Depressive Disorder (Dysthymia)
- Premenstrual Dysphoric Disorder
- Substance/Medication-Induced Depressive Disorder
- Depressive Disorder Due to Another Medical Condition
- Other Specified Depressive Disorder
- Unspecified Depressive Disorder

In addition to the disorders listed above, many women will experience postpartum depressive episodes. These are directly related to childbirth and occur within the immediate postpartum period.(42)

Depressive disorders include any condition that involves a level of sadness that is severe or persistent enough to interfere with an individual’s ability to function. This level of sadness typically causes decreased interest in
activities and a lack of pleasure in everyday life. The cause will vary depending on the type and severity of the depressive episode. Similarly, treatment will be dependent on the type and severity of the depression. Individuals who are clinically depressed will often require pharmacological intervention, while those experiencing situational depression may benefit from other forms of treatment such as counseling, group therapy or psychiatric therapy.

Depression is classified in two ways. Some depressive disorders are classified based upon specific symptoms and broken into categories in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition. These include:

- Major depressive disorder (often called major depression)
- Persistent depressive disorder (dysthymia)
- Other specified or unspecified depressive disorder

Other forms of depression are categorized and diagnosed based upon etiology. These include:

- Premenstrual dysphoric disorder
- Depressive disorder due to another medical condition
- Substance/medication-induced depressive disorder

While depressive disorders can appear at any age, especially when these disorders are related to other factors such as pregnancy and childbirth, the most common age for development is anywhere from the mid-teens through the thirties. It is important to note, however, that many patients will report symptoms of depression, but will not fit within one of the categories. It is quite common for women to experience depressive symptoms without having a major form of depression. According to data provided by primary
care providers, as many as 30% of patients report depressive symptoms, but fewer than 10% have major depression.(47)

It is important to differentiate between depressive symptoms and diagnosable depression. Many women experience a low or discouraged mood as the result of various life factors such as financial problems, marital issues, lack of job satisfaction, etc. However, these feelings do not automatically classify an individual as being clinically depressed. Therefore, many providers refer to these feelings as demoralization and grief.(43) These depressive feelings are generally infrequent and less severe than major depressive symptoms. They often come in spurts and are tied to specific circumstances or events. They typically go away when the circumstances improve. While these are still difficult feelings to cope with, they are not managed in the same way as major depressive symptoms.(48) The spectrum of mood disorders are classified as in the diagram below:

(Photo courtesy of: http://www.clinicaljunior.com)
Due to the different types of depression, as well as the frequency of feelings of demoralization and grief, it is important to accurately assess and diagnose depression. There are a number of factors to consider when determining the type and severity of depression. First, it is important to understand causes and trends related to major depression in women. According to extensive research studies, the following facts help to guide clinicians in the management of depression in women:(44)

- Heredity accounts for about half of the etiology (less so in late-onset depression). Thus, depression is more common among 1st-degree relatives of depressed patients, and concordance between identical twins is high. Also, genetic factors probably influence the development of depressive responses to adverse events.
- Other theories focus on changes in neurotransmitter levels, including abnormal regulation of cholinergic, catecholaminergic (noradrenergic or dopaminergic), and serotonergic (5-hydroxytryptamine) neurotransmission. Neuroendocrine dysregulation may be a factor, with particular emphasis on 3 axes: hypothalamic-pituitary-adrenal, hypothalamic-pituitary-thyroid, and growth hormone.
- Psychosocial factors also seem to be involved. Major life stresses, especially separations and losses, commonly precede episodes of major depression; however, such events do not usually cause lasting, severe depression except in people predisposed to a mood disorder.
- People who have had an episode of major depression are at higher risk of subsequent episodes. People who are less resilient and/or who have anxious tendencies may be more likely to develop a depressive disorder. Such people often do not develop the social skills to adjust to life pressures. Depression may also develop in people with other mental disorders.
Women are at higher risk, but no theory explains why. Possible factors include greater exposure to or heightened response to daily stresses, higher levels of monoamine oxidase (the enzyme that degrades neurotransmitters considered important for mood), higher rates of thyroid dysfunction, and endocrine changes that occur with menstruation and at menopause. In postpartum depression (see Postpartum Depression), symptoms develop within 4 weeks after delivery; endocrine changes have been implicated, but the specific cause is unknown.

In seasonal affective disorder, symptoms develop in a seasonal pattern, typically during autumn or winter; the disorder tends to occur in climates with long or severe winters.

Depressive symptoms or disorders may accompany various physical disorders, including thyroid and adrenal gland disorders, benign and malignant brain tumors, stroke, AIDS, Parkinson disease, and multiple sclerosis. Certain drugs, such as corticosteroids, some β-blockers, interferon, and reserpine, can also result in depressive disorders. Abuse of some recreational drugs (i.e., alcohol, amphetamines) can lead to or accompany depression. Toxic effects or withdrawal of drugs may cause transient depressive symptoms.

**Signs and Symptoms**

There are a number of signs and symptoms that are associated with depressive episodes. The following is a thorough list of the various symptoms patients may experience:[43]

- Cognitive, psychomotor, and other types of dysfunction (i.e., poor concentration, fatigue, loss of sexual desire, loss of interest or pleasure in nearly all activities that were previously enjoyed, sleep disturbances)
- Depressed mood
- Thoughts of suicide and suicide attempts
- Comorbidity with other mental symptoms or disorders (i.e., anxiety and panic attacks)
- Abuse of alcohol and/or recreational drugs

When a woman presents with depressive symptoms, it is necessary to determine the type and severity of depression. Therefore, the following criteria will be used as outlined in Table I below.\(^{(49)}\)

**Table I.**

<table>
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<th>Disorder</th>
<th>Definition</th>
<th>Diagnostic Criteria</th>
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| Major Depression (unipolar disorder) | Patients may appear miserable, with tearful eyes, furrowed brows, down-turned corners of the mouth, slumped posture, poor eye contact, lack of facial expression, little body movement, and speech changes (i.e., soft voice, lack of prosody, use of monosyllabic words). Appearance may be confused with Parkinson disease. In some patients, depressed mood is so deep that tears dry up; they report that they are unable to experience usual emotions and feel that the world has become colorless and lifeless. Nutrition may be severely impaired, requiring immediate intervention. Some depressed | For diagnosis, \( \geq 5 \) of the following must have been present nearly every day during the same 2 week period, and one of them must be depressed mood or loss of interest or pleasure:  
- Depressed mood most of the day  
- Markedly diminished interest or pleasure in all or almost all activities for most of the day  
- Significant (> 5%) weight gain or loss or decreased or increased appetite  
- Insomnia (often sleep-maintenance insomnia) or hypersomnia |
| **Persistent depressive disorder** | Depressive symptoms that persist for ≥ 2 years without remission are classified as persistent depressive disorder (PDD), a category that consolidates disorders formerly termed chronic major depressive disorder and dysthymic disorder.  

Symptoms typically begin insidiously during adolescence and may persist for many years or decades. The number of symptoms often fluctuates above and below the threshold for major depressive episode. Affected patients may be habitually gloomy, pessimistic, humorless, passive, lethargic, introverted, hypercritical of self and others, and complaining. | For diagnosis, patients must have had a depressed mood for most of the day for more days than not for ≥ 2 years plus ≥ 2 of the following:  
- Poor appetite or overeating  
- Insomnia or hypersomnia  
- Low energy or fatigue  
- Low self-esteem  
- Poor concentration or difficulty making decisions  
- Feelings of hopelessness |
| --- | --- | --- |
| patients neglect personal hygiene or even their children, other loved ones, or pets. | • Psychomotor agitation or retardation observed by others (not self-reported)  
• Fatigue or loss of energy  
• Feelings of worthlessness or excessive guilt  
• Diminished ability to think or concentrate or indecisiveness  
• Recurrent thoughts of death or suicide, a suicide attempt, or a specific plan for committing suicide |
Patients with PDD are also more likely to have underlying anxiety, substance use, or personality (i.e., borderline personality) disorders.

| Pre-menstrual dysphoric disorder | Premenstrual dysphoric disorder involves mood and anxiety symptoms that are clearly related to the menstrual cycle, with onset during the premenstrual phase and a symptom-free interval after menstruation. Symptoms must be present during most menstrual cycles during the past year. Manifestations are similar to those of premenstrual syndrome but are more severe, causing clinically significant distress and/or marked impairment of occupational or social functioning. The disorder may begin any time after menarche; it may worsen as menopause approaches but ceases after menopause. Prevalence is estimated at 2 to 6% of women menstruating in a 12-mo interval. |
| For diagnosis, patients must have ≥ 5 symptoms during the week before menstruation. Symptoms must begin to remit within a few days after onset of menses and become minimal or absent in the week after menstruation. Symptoms must include ≥ 1 of the following: • Marked mood swings (e.g., suddenly feeling sad or tearful) • Marked irritability or anger or increased interpersonal conflicts • Marked depressed mood, feelings of hopelessness, or self-deprecating thoughts • Marked anxiety, tension, or an on-edge feeling In addition, ≥ 1 of the |
| **Other depressive disorder** | Clusters of symptoms with characteristics of a depressive disorder that do not meet the full criteria for other depressive disorders but that cause clinically significant distress or impairment of functioning are classified as other depressive (specified/unspecified) disorder. Included are recurrent periods of dysphoria with ≥ 4 other depressive symptoms that last < 2 week in people who have never met criteria for another mood disorder (i.e., recurrent brief depression) and depressive periods that last |

following must be present:
- Decreased interest in usual activities
- Difficulty concentrating
- Low energy or fatigue
- Marked change in appetite, overeating, or specific food cravings
- Hypersomnia or insomnia
- Feeling out of control or overwhelmed.
- Physical symptoms such as breast tenderness or swelling, joint or muscle pain, a feeling of being bloated, and weight gain
longer but that include insufficient symptoms for diagnosis of another depressive disorder.

Specifiers: Major depression and persistent depressive disorder may include one or more specifiers that describe additional manifestations during a depressive episode:

• Anxious distress: Patients feel tense and unusually restless; they have difficulty concentrating because they worry or fear that something awful may happen, or they feel that they may lose control of themselves.

• Mixed features: Patients also have ≥ 3 manic/hypomanic symptoms (i.e., elevated mood, grandiosity, greater talkativeness than usual, flight of ideas, decreased sleep).

• Melancholic: Patients have lost pleasure in nearly all activities or do not respond to usually pleasurable stimuli. They may be despondent and despairing, feel excessive or inappropriate guilt, or
have early morning awakenings, marked psychomotor retardation or agitation, and significant anorexia/weight loss.

- Atypical: Patients' mood temporarily brightens in response to positive events (i.e., a visit from children).

They also have ≥ 2 of the following: overreaction to perceived criticism or rejection, feelings of leaden paralysis (a heavy or weighted-down feeling, usually in the extremities), weight gain or increased appetite, and hypersomnia.

- Psychotic: Patients have delusions and/or hallucinations. Delusions often involve having committed unpardonable sins or crimes, harboring incurable or shameful disorders, or being persecuted.

Hallucinations may be auditory (i.e., hearing accusatory or condemning voices) or visual. If only voices are described, careful consideration should be given to
whether the voices represent true hallucinations.

- **Catatonic**: Patients have severe psychomotor retardation, engage in excessive purposeless activity, and/or withdraw; some patients grimace and mimic speech (echolalia) or movement (echopraxia).

- **Peripartum onset**: Onset is during pregnancy or in the 4 weeks after delivery. Psychotic features may be present; infanticide is often associated with psychotic episodes involving command hallucinations to kill the infant or delusions that the infant is possessed.

- **Seasonal pattern**: Episodes occur at a particular time of year, most often fall or winter.
In addition to the individual diagnostic criteria listed above, the following table outlines specific methods used to diagnose all forms of depression that are used when a patient presents with a variety of symptoms.\(^{(50)}\)

<table>
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<th>Initial Diagnosis:</th>
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<tr>
<td>▪ Clinical criteria (DSM-5)</td>
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<td>▪ CBC, electrolytes, and TSH, vitamin B12, and folate levels to rule out physical disorders that can cause depression</td>
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Diagnosis is based on identification of the symptoms and signs and the clinical criteria described above. To help differentiate depressive disorders from ordinary mood variations, there must be significant distress or impairment in social, occupational, or other important areas of functioning. Several brief questionnaires are available for screening. They help elicit some depressive symptoms but cannot be used alone for diagnosis. Specific close-ended questions help determine whether patients have the symptoms required by DSM-5 criteria for diagnosis of major depression.

Severity is determined by the degree of pain and disability (physical, social, occupational) and by duration of symptoms. A physician should gently but directly ask patients about any thoughts and plans to harm themselves or others, any previous threats of and/or attempts at suicide, and other risk factors. Psychosis and catatonia indicate severe depression. Melancholic features indicate severe or moderate depression. Coexisting physical conditions, substance abuse disorders, and anxiety disorders may add to severity.

Differential diagnosis:
Depressive disorders must be distinguished from demoralization and grief. Other
mental disorders (i.e., anxiety disorders) can mimic or obscure the diagnosis of depression. Sometimes more than one disorder is present. Major depression (unipolar disorder) must be distinguished from bipolar disorder. In elderly patients, depression can manifest as dementia of depression (formerly called pseudodementia), which causes many of the symptoms and signs of dementia such as psychomotor retardation and decreased concentration. However, early dementia may cause depression.

In general, when the diagnosis is uncertain, treatment of a depressive disorder should be tried. Differentiating chronic depressive disorders, such as dysthymia, from substance abuse disorders may be difficult, particularly because they can coexist and may contribute to each other. Physical disorders must also be excluded as a cause of depressive symptoms. Hypothyroidism often causes symptoms of depression and is common, particularly among the elderly. Parkinson disease, in particular, may manifest with symptoms that mimic depression (i.e., loss of energy, lack of expression, paucity of movement). A thorough neurologic examination is needed to exclude this disorder.

Testing: No laboratory findings are pathognomonic for depressive disorders. Tests for limbic-diencephalic dysfunction are rarely indicated or helpful. However, laboratory testing is necessary to exclude physical conditions that can cause depression. Tests include complete blood count (CBC), thyroid stimulating hormone (TSH) levels, and routine electrolyte, vitamin B12, and folate levels. Testing for illicit drug use is sometimes appropriate.

**Anxiety**

Anxiety disorders are quite common in women. In fact, they are one of the most frequently diagnosed mental health conditions in women, along with depression. Anxiety disorders differ from mild forms of situational anxiety that are triggered by stressful events. They typically last more than six
months and will increase in severity if they remain untreated. There are a number of different types of anxiety disorders that differ in severity, duration, and trigger. However, most disorders are more common in women than men:

- General Anxiety Disorder - Women are twice as likely to be affected as men.
- Panic Disorder - Women are twice as likely to be affected as men.
- Social Anxiety Disorder - Equally common among men and women, typically beginning around age thirteen.
- Specific Phobias - Women are twice as likely to be affected as men.
- Obsessive Compulsive Disorder (OCD) - Equally common among men and women.
- Posttraumatic Stress Disorder (PTSD) - Women are more likely to be affected than men.
- Major Depressive Disorder - More prevalent in women than in men.
- Persistent Depressive Disorder (PDD) - Women are twice as likely to be affected as men.

It is very common for anxiety disorders to occur alongside other mental health conditions. Women are especially prone to co-morbid mental health conditions that include anxiety. In many instances, women will be affected by both depression and anxiety. It is also common for women to experience anxiety and alcohol/substance abuse concurrently.

**Types of Anxiety Disorders**

There are a number of different types of anxiety disorders that are classified based upon the symptoms, duration, and severity. The illustration (pg. 39) and Table II below outlines the different types of anxiety disorders.
Table II.

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Description</th>
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| Panic Disorder | Panic disorder is a real illness that can be successfully treated. It is characterized by sudden attacks of terror, usually accompanied by a pounding heart, sweatiness, weakness, faintness, or dizziness. During these attacks, people with panic disorder may flush or feel chilled; their hands may tingle or feel numb; and they may experience nausea, chest pain, or smothering sensations. Panic attacks usually produce a sense of unreality, a fear of impending doom, or a fear of losing control. A fear of one’s own unexplained physical symptoms are also a symptom of panic disorder. People having panic attacks sometimes believe they are having heart attacks, losing their minds, or on the verge of death. They can’t predict when or where an attack will occur, and between episodes many worry intensely and dread the next attack. Panic attacks can occur at any time, even during sleep. An attack usually peaks within 10 minutes, but some symptoms may last much longer. Panic disorder affects about 6 million American adults and is twice as common in women as men. Panic attacks often begin in late adolescence or early adulthood, but not everyone who experiences panic attacks will develop panic disorder. Many people have just one attack and never have another. The tendency to develop panic attacks appears to be inherited.

People who have full-blown, repeated panic attacks can become very disabled by their condition and should seek treatment before they start to avoid places or situations where panic attacks have occurred. For example, if a panic attack happened in an elevator, someone with panic disorder may develop a fear of elevators that could affect the choice of a job or an apartment, and restrict
where that person can seek medical attention or enjoy entertainment. Some people’s lives become so restricted that they avoid normal activities, such as grocery shopping or driving. About one-third become housebound or are able to confront a feared situation only when accompanied by a spouse or other trusted person. When the condition progresses this far, it is called agoraphobia, or fear of open spaces.

Early treatment can often prevent agoraphobia, but people with panic disorder may sometimes go from doctor to doctor for years and visit the emergency room repeatedly before someone correctly diagnoses their condition. This is unfortunate, because panic disorder is one of the most treatable of all the anxiety disorders, responding in most cases to certain kinds of medication or certain kinds of cognitive psychotherapy, which help change thinking patterns that lead to fear and anxiety.

Panic disorder is often accompanied by other serious problems, such as depression, drug abuse, or alcoholism. These conditions need to be treated separately. Symptoms of depression include feelings of sadness or hopelessness, changes in appetite or sleep patterns, low energy, and difficulty concentrating. Most people with depression can be effectively treated with antidepressant medications, certain types of psychotherapy, or a combination of the two.

**Obsessive-Compulsive Disorder**

People with obsessive-compulsive disorder (OCD) have persistent, upsetting thoughts (obsessions) and use rituals (compulsions) to control the anxiety these thoughts produce. Most of the time, the rituals end up controlling them.

For example, if people are obsessed with germs or dirt, they may
develop a compulsion to wash their hands over and over again. If they develop an obsession with intruders, they may lock and relock their doors many times before going to bed. Being afraid of social embarrassment may prompt people with OCD to comb their hair compulsively in front of a mirror—sometimes they get “caught” in the mirror and can’t move away from it. Performing such rituals is not pleasurable. At best, it produces temporary relief from the anxiety created by obsessive thoughts.

Other common rituals are a need to repeatedly check things, touch things (especially in a particular sequence), or count things. Some common obsessions include having frequent thoughts of violence and harming loved ones, persistently thinking about performing sexual acts the person dislikes, or having thoughts that are prohibited by religious beliefs. People with OCD may also be preoccupied with order and symmetry, have difficulty throwing things out (so they accumulate), or hoard unneeded items.

Healthy people also have rituals, such as checking to see if the stove is off several times before leaving the house. The difference is that people with OCD perform their rituals even though doing so interferes with daily life and they find the repetition distressing.

Although most adults with OCD recognize that what they are doing is senseless, some adults and most children may not realize that their behavior is out of the ordinary.

OCD affects about 2.2 million American adults, and the problem can be accompanied by eating disorders, other anxiety disorders, or depression. It strikes men and women in roughly equal numbers and usually appears in childhood, adolescence, or early adulthood. One-third of adults with OCD develop symptoms as children, and research indicates that OCD might run in families. The course of the disease is quite varied. Symptoms may come and go, ease over time, or get worse. If OCD becomes severe, it
can keep a person from working or carrying out normal responsibilities at home. People with OCD may try to help themselves by avoiding situations that trigger their obsessions, or they may use alcohol or drugs to calm themselves. OCD usually responds well to treatment with certain medications and/or exposure-based psychotherapy, in which people face situations that cause fear or anxiety and become less sensitive (desensitized) to them.

The National Institute of Mental Health (NIMH) is supporting research into new treatment approaches for a person with OCD that does not respond well to the usual therapies. These approaches include combination and augmentation (add-on) treatments, as well as modern techniques such as deep brain stimulation.

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<tr>
<th>Post-Traumatic Stress Disorder</th>
<th>Post-traumatic stress disorder (PTSD) develops after a terrifying ordeal that involved physical harm or the threat of physical harm. The person who develops PTSD may have been the one who was harmed, the harm may have happened to a loved one, or the person may have witnessed a harmful event that happened to loved ones or strangers. PTSD was first brought to public attention in relation to war veterans, but it can result from a variety of traumatic incidents, such as mugging, rape, torture, being kidnapped or held captive, child abuse, car accidents, train wrecks, plane crashes, bombings, or natural disasters such as floods or earthquakes. People with PTSD may startle easily, become emotionally numb (especially in relation to people with whom they used to be close), lose interest in things they used to enjoy, have trouble feeling affectionate, be irritable, become more aggressive, or even become violent. They avoid situations that remind them of the original incident, and</th>
</tr>
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anniversaries of the incident are often very difficult. PTSD symptoms seem to be worse if another person, as in a mugging or a kidnapping, deliberately initiated the event that triggered them.

Most people with PTSD repeatedly relive the trauma in their thoughts during the day and in nightmares when they sleep. These are called flashbacks.

Flashbacks may consist of images, sounds, smells, or feelings, and are often triggered by ordinary occurrences, such as a door slamming or a car backfiring on the street. A person having a flashback may lose touch with reality and believe that the traumatic incident is happening all over again.

Not every traumatized person develops full-blown or even minor PTSD. Symptoms usually begin within 3 months of the incident but occasionally emerge years afterward. They must last more than a month to be considered PTSD.

The course of the illness varies. Some people recover within 6 months, while others have symptoms that last much longer. In some people, the condition becomes chronic. PTSD affects about 7.7 million American adults, but it can occur at any age, including childhood. Women are more likely to develop PTSD than men, and there is some evidence that susceptibility to the disorder may run in families. Depression, substance abuse, or one or more of the other anxiety disorders often accompanies PTSD. Certain kinds of medication and certain kinds of psychotherapy usually treat the symptoms of PTSD very effectively.

| Social Anxiety | Social phobia, also called social anxiety disorder, is diagnosed when people become overwhelmingly anxious and excessively |
Disorder

self-conscious in everyday social situations. People with social phobia have an intense, persistent, and chronic fear of being watched and judged by others and of doing things that will embarrass them. They can worry for days or weeks before a dreaded situation. This fear may become so severe that it interferes with work, school, and other ordinary activities, and can make it hard to make and keep friends.

While many people with social phobia realize that their fears about being with people are excessive or unreasonable, they are unable to overcome them. Even if they manage to confront their fears and be around others, they are usually very anxious beforehand, are intensely uncomfortable throughout the encounter, and worry about how they were judged for hours afterward.

Social phobia can be limited to one situation (such as talking to people, eating or drinking, or writing on a blackboard in front of others) or may be so broad (such as in generalized social phobia) that the person experiences anxiety around almost anyone other than the family. Physical symptoms that often accompany social phobia include blushing, profuse sweating, trembling, nausea, and difficulty talking. When these symptoms occur, people with social phobia feel as though all eyes are focused on them.

Social phobia affects about 15 million American adults. Women and men are equally likely to develop the disorder, which usually begins in childhood or early adolescence. There is some evidence that genetic factors are involved. Social phobia is often accompanied by other anxiety disorders or depression, and substance abuse may develop if people try to self-medicate their anxiety. Social phobia can be successfully treated with certain kinds of psychotherapy or medications.
Specific Phobias

A specific phobia is an intense, irrational fear of something that poses little or no actual danger. Some of the more common specific phobias are centered on closed-in places, heights, escalators, tunnels, highway driving, water, flying, dogs, and injuries involving blood.

Specific phobias aren’t just extreme fear; they are irrational fear of a particular thing. You may be able to ski the world’s tallest mountains with ease but be unable to go above the 5th floor of an office building. While adults with phobias realize that these fears are irrational, they often find that facing, or even thinking about facing, the feared object or situation brings on a panic attack or severe anxiety.

Specific phobias affect an estimated 19.2 million adult Americans and are twice as common in women as men. They usually appear in childhood or adolescence and tend to persist into adulthood. The causes of specific phobias are not well understood, but there is some evidence that the tendency to develop them may run in families. If the feared situation or feared object is easy to avoid, people with specific phobias may not seek help; but if avoidance interferes with their careers or their personal lives, it can become disabling and treatment is usually pursued. Specific phobias respond very well to carefully targeted psychotherapy.

<table>
<thead>
<tr>
<th>Generalized Anxiety Disorder</th>
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<tr>
<td>People with generalized anxiety disorder (GAD) go through the day filled with exaggerated worry and tension, even though there is little or nothing to provoke it. They anticipate disaster and are overly concerned about health issues, money, family problems, or difficulties at work. Sometimes just the thought of getting through</td>
</tr>
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the day produces anxiety. GAD is diagnosed when a person worries excessively about a variety of everyday problems for at least 6 months. People with GAD can’t seem to get rid of their concerns, even though they usually realize that their anxiety is more intense than the situation warrants. They can’t relax, startle easily, and have difficulty concentrating.

Often people with GAD have trouble falling asleep or staying asleep. Physical symptoms that often accompany the anxiety include fatigue, headaches, muscle tension, muscle aches, difficulty swallowing, trembling, twitching, irritability, sweating, nausea, lightheadedness, having to go to the bathroom frequently, feeling out of breath, and hot flashes. When their anxiety level is mild, people with GAD can function socially and hold down a job. Although they don’t avoid certain situations as a result of their disorder, people with GAD can have difficulty carrying out the simplest daily activities if their anxiety is severe.

GAD affects about 6.8 million American adults, including twice as many women as men. The disorder develops gradually and can begin at any point in the life cycle, although the years of highest risk are between childhood and middle age. There is evidence that genes play a modest role in GAD. Other anxiety disorders, depression, or substance abuse often accompany GAD, which rarely occurs alone. GAD is commonly treated with medication or cognitive-behavioral therapy, but co-occurring conditions must also be treated using the appropriate therapies.
Somatic Disorders

Somatic Disorders are mental health conditions that cause a patient to experience physical symptoms, such as pain, even though no medical condition exists. They cannot be linked to a physical cause, and they occur in the absence of substance abuse or any other type of mental illness. These symptoms feel very real for individuals afflicted with the disorder, and typically affect their ability to function.

It is a challenge for practitioners to identify somatic disorders due to the physical nature of the symptoms. It will often require a long period of
testing to rule out physical conditions before somatic disorders are considered.\(^{(58)}\)

Identifying somatic symptom disorder typically requires a number of appointments and tests to ensure that a physical condition is not present. On examination, a patient with somatic symptom disorder typically displays the following:\(^{(59)}\)

- Appearance - Normal
- Attitude and behavior - Attitude is appropriate and behavior demonstrates a preoccupation with physical symptoms and complaints
- Mood - Mildly anxious and depressed
- Affect - Full range and appropriate
- Thought disorder - None, although thoughts are limited to issues around physical symptoms
- Hallucinations - None
- Delusions - None
- Obsessions - None
- Compulsions - None
- Attention - Within normal range
- Memory - Within normal range
- Concentration - Within normal range
- Orientation - Oriented to time, place, and person
- Insight and judgment - Insight appears limited in that nonmedical causes of symptoms are not considered; judgment appears unimpaired
- Suicidal and homicidal ideation - No evidence of such

There are several types of somatic disorders. The most recent edition of the Diagnostic and Statistical Manual of Mental Disorders has a revised classification system for Somatic Disorders. However, many practitioners
still rely on the previous classification system to differentiate between types of somatic disorders.\textsuperscript{(60)} The symptoms and presentation will vary depending on the type of disorder.

The following Table III provides an overview of the different types of somatic disorders:\textsuperscript{(61)}

\begin{table}[h]
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\begin{tabular}{|l|p{\textwidth}|}
\hline
\textbf{Somatization Disorder} & Patients with somatization disorder (formally called hysteria or Briquet's syndrome) typically have a long history of going to the doctor for many different unexplainable symptoms. This pattern of symptoms has occurred for many years and began before they were 30 years old. Their symptom history must include various pain issues, gastrointestinal problems (i.e., diarrhea or vomiting), sexual symptoms (i.e., low libido), and symptoms that would suggest a neurological problem (i.e., paralysis or seizures). \\
\hline
\textbf{Undifferentiated Somatoform Disorder} & This is similar to somatization disorder, except that the patient must complain of at least one unexplainable symptom for at least 6 months. Common complaints include digestive problems and chronic fatigue. \\
\hline
\textbf{Conversion Disorder} & Individuals with this disorder have symptoms or difficulties with their senses (i.e., blindness, deafness) or their motor functioning (i.e., difficulties swallowing, weakness in a specific area). Their symptoms are “pseudoneurological”, which means they suggest a neurological cause but no such cause can be found. Prior to the onset or worsening of their symptoms they experienced conflict or other types of stress that is believed to be associated with the development of the disorder. \\
\hline
\end{tabular}
\end{table}
Pain Disorder | As the name suggests, pain is the primary complaint with this disorder. There is no physical explanation for the pain. Underlying psychological issues are believed to play a role in triggering, maintaining, or exacerbating the pain or making it more intense.

Hypochondriasis | Individuals with this disorder (often called “hypochondriacs” by those who know them) are preoccupied with the belief or fear that they have a serious medical condition. Their belief or fear is triggered by their own misinterpretation of their physical symptoms or bodily functions (i.e., they have occasional headaches and fear they have a brain tumor).

Body Dysmorphic Disorder | Individuals with this disorder become extremely preoccupied with and distressed about one or more imagined or actual (but minor) physical flaws (i.e., someone with a small scar on her hand always wears gloves or keeps her hand hidden from others).

Somatoform Disorder not Otherwise Specified (NOS) | This is essentially a catch-all diagnosis for anyone who meets the basic criteria for a somatoform disorder but doesn’t meet the criteria for one of the other somatoform disorders.

In previous versions of the DSM, the section on Somatoform Disorders included various disorders that were characterized by an unusual preoccupation with physical symptoms and/or a physical illness. Within this section, the different diagnoses are broken into four distinct disorders:(60)

1. Somatization Disorder
2. Hypochondriasis
3. Pain Disorder
4. Undifferentiated Somatoform Disorder
Each of the four disorders listed above had distinct criteria that differentiated it from the others. The following is a list of the criteria for each disorder:

1. Somatization Disorder:
   Presence of at least 8 specific symptoms that occurred over a period of several years, during which time there was no valid medical explanation.

2. Hypochondriasis:
   A persistent fear and suspicion of illness based on the misinterpretation of symptoms, both real and perceived.

3. Pain Disorder:
   The presence of severe pain considered as primarily psychological, and not physical in nature.

4. Undifferentiated Somatoform Disorder:
   This is similar to somatization disorder. However, the patient presents fewer complaints and the duration of the occurrence is shorter.

The four disorders listed above were combined in the DSM-5 and are now part of the general disorder known as Somatic Symptom Disorder. According to the American Psychiatric Association (APA), there were too many similarities between the four disorders listed above, which caused some confusion when diagnosing a patient. Somatic Symptom Disorder combines the elements from each of the other disorders to create a general category that can be used to diagnose a patient who shows signs of preoccupation with somatic symptoms. The new category is broad enough to encompass a number of patients.

The criteria for Somatic Symptom Disorder are as follows:

A. One or more somatic symptoms that are distressing or result in significant disruption of daily life.
B. Excessive thoughts, feelings, or behaviors related to the somatic symptoms or associated health concerns as manifested by at least one of the following:

1. Disproportionate and persistent thoughts about the seriousness of one’s symptoms;
2. Excessive time and energy devoted to these symptoms or health concerns;
3. Although any one somatic symptom may not be continuously present, the state of being symptomatic is persistent (typically more than six months).

It’s important for the provider to specify if:
The somatic symptom(s) are a predominant pain (i.e., a previous pain disorder); this specifier is for individuals whose somatic symptoms predominantly involve pain.

Also, the provider is recommended to specify the following characteristics of somatization:

- **Persistence:**
  
  A persistent course is characterized by severe symptoms, marked impairment, and long duration (more than six months).

- **Severity:**
  
  - Mild: Only one of the symptoms specified in Criterion B is fulfilled.
  - Moderate: Two or more of the symptoms specified in Criterion B are fulfilled.
  - Severe: Two or more of the symptoms specified in Criterion B are fulfilled, plus there are multiple somatic complaints (or one very severe somatic symptom).
Menstruation/Menopause and Mental Health

Many women experience hormonal and emotional changes during the time of menstruation and menopause. Approximately seventy-five percent of women experience noticeable psychological symptoms during menstruation, and approximately ninety percent of women report unpleasant psychological symptoms during menopause. (46)

Premenstrual Mood Changes

It is approximated that seventy-five percent of women experience premenstrual syndrome. (64) Premenstrual syndrome can range from mild to severe and will affect each woman differently. The most common symptoms of premenstrual syndrome include: (65)

- Depression
- Anger
- Irritability
- Anxiety
- Sensitivity to rejection
- Sense of feeling overwhelmed
- Social withdrawal

In addition to psychological symptoms, many women will also experience physical symptoms. These include: (66)

- Fatigue (feeling tired)
- Sleep disturbance
- Increased appetite
- Abdominal bloating
- Breast tenderness
- Headaches (sometimes known as menstrual migraines)
• Muscle aches and joint pain
• Swelling of extremities

**Premenstrual Dysphoric Disorder**

Some women will experience more severe physical and psychological symptoms associated with menstruation. For these women, the symptoms are often debilitating and can cause erratic, impulsive behavior that is inconsistent with “normal” premenstrual syndrome. Premenstrual Dysphoric Disorder (PMDD) affects approximately three to eight percent of women who are of childbearing age. The most common symptoms of PMDD include:

• Severe irritability
• Depression
• Anxiety
• Mood swings

It is important to note that PMDD is not the same as standard premenstrual syndrome, as the symptoms are much more severe and impact the patient’s ability to function. Many women who suffer from PMDD will require medication to alleviate the symptoms and balance out their hormones. Therefore, it is important to properly diagnose PMDD. The first step in diagnosis is for the patient to track her symptoms for a few months to identify the severity and patterns of the symptoms.

Once the patient has tracked her symptoms, the provider will use a prospective scale, such as the Calendar of Premenstrual Experience or the Prospective Record of the Severity of Menstruation, to determine if the symptoms are severe and consistent enough to warrant a diagnosis of PMDD.
Causes of Premenstrual Dysmorphic Disorder

The exact cause of PMDD is not known. However, recent research has linked PMDD to specific hormonal changes that occur during menstruation. Specifically, researchers have found a connection between reduced serotonin levels and the onset of PMDD. The brain cells that rely on serotonin are responsible for controlling mood, attention, sleep, and pain. Therefore,
when serotonin levels are significantly reduced, the patient experiences negative symptoms associated with these functions of the body. (72)

**Menopause**

Most women will experience physical and physiological changes with the onset of menopause. The hormonal fluctuations that occur during this phase are often significant enough to have an impact on the overall mental health of the patient. Many women will experience a change in mood and feelings, including anxiety and mental discomfort. While most psychological effects are caused by hormonal fluctuations, some will be caused by the change itself. Many women have difficulty coping with the physical changes that come with menopause, which can lead to depressive states. (73)

A number of women will experience depression during perimenopause as well as throughout menopause. In the stage where the body prepares for the transition to menopause, which can occur up to eight years before the onset of menopause, hormonal fluctuations will cause women to experience depressive symptoms. For some women, the depression will be significant. In most instances, the depression will last until a year or two after the woman has stopped menstruating. (74)

**Mental Illness During Pregnancy**

A number of women will experience mental health issues during pregnancy and the postpartum period. Approximately twenty percent of women will experience mood or anxiety disorders, with a number of women experiencing the conditions concurrently. (75) In some instances, women will have a pre-existing condition that is exacerbated by pregnancy and
postpartum hormones, while other women will experience these conditions after without a pre-pregnancy diagnosis. (76)

Many women with pre-existing mental health conditions will discontinue pharmacologic treatment during pregnancy to reduce the risk of the fetal exposure to the medications. In fact, some medications are too harmful to be taken during pregnancy. (77) In these situations, the woman will often experience an increase in symptoms that may extend beyond the pregnancy. However, this may not be the best or safest option for some patients. In some instances, the psychiatric condition may be more detrimental to the mother and child than the treatment. In those situations, the risk and benefit of each course of action must be considered before making a decision. (78)

**Common Psychiatric Disorders in Pregnancy**

The two most common disorders experienced in pregnancy (not including those that were present prior to pregnancy) are anxiety and depression. Approximately thirty percent of women experience depression and/or anxiety during pregnancy. (79) The severity of the symptoms can range from mild to severe. In mild cases, women can manage their symptoms with therapy, environmental manipulation, exercise, social support networks, support groups, and other non-pharmacologic therapies. In more severe cases, patients will typically require professional psychotherapy, pharmacologic therapy, and inpatient or outpatient treatment. (80)

There are a number of symptoms that appear when a woman experiences depression during pregnancy. The first and most indicative symptom is a depressed mood that lasts throughout the day and extends beyond two weeks in duration. Women also experience a loss of interest in everyday
activities and feel little pleasure in activities that would normally be enjoyable.\(^{46}\) In addition, the patient may experience one or more of the following symptoms:\(^{81}\)

- Fatigue or lack of energy
- Restlessness or feeling slowed down
- Feelings of guilt or worthlessness
- Difficulty concentrating
- Trouble sleeping or sleeping too much
- Recurrent thoughts of death or suicide

If left untreated, severe depression can pose a risk to the mother and her fetus. Symptoms will often extend into the postpartum period and can negatively affect the health of the mother and child.

Many women will experience anxiety during pregnancy. In some cases, the woman will have a pre-existing condition that is enhanced during pregnancy. In other instances, the patient will experience a pregnancy-induced case of anxiety. In these instances, it is common for the woman to present with either panic disorder, obsessive compulsive disorder, or generalized anxiety disorder.\(^{76}\) During pregnancy exams, it is important to conduct a thorough mental assessment to identify any signs of anxiety in the patient. Common anxiety symptoms include:\(^{82}\)

- Panic attacks
- Hyperventilation
- Repeated thoughts or images of frightening things happening to the baby
- Excessive worry
- Restless sleep
Medication During the Pregnancy and Postpartum Period

In instances of depression and anxiety, pharmacologic treatment is often necessary to manage the symptoms. However, many of these medications can be detrimental during pregnancy and the post partum period as they can pose a risk to the fetus and/or newborn child. In fact, there are currently no medications that are approved for use during pregnancy. However, some cases may require pharmacologic intervention. In these situations, it is necessary to weigh the benefits against the risks. With some medications, the risk of developing teratogenesis (congenital malformations) from exposure to psychiatric medications is very high. The deformities can include cleft lip or palate, or major deformations of the organs in the fetus. Table IV describes the medication exposure risks that occur during pregnancy.

Table IV.

| Teratogenesis | The baseline incidence of major congenital malformations in newborns born in the United States is estimated to be between 2 and 4%. During the earliest stages of pregnancy, formation of major organ systems takes place and is complete within the first 12 weeks after conception. Therefore, discussion around risks of exposures during pregnancy may be broken down, by the timing of exposure or trimester, with particular vigilance around first trimester exposures. A teratogen is defined as an agent that interferes the in utero development process and produces some type of organ malformation or dysfunction. For each organ or organ system, there exists a critical period during which development takes place and is susceptible to the effects of a teratogen. For example, neural tube folding and closure, forming the brain and spinal cord, occur within the first four weeks of gestation. |
### Neonatal Symptoms

Neonatal toxicity or perinatal syndromes (sometimes referred to as neonatal “withdrawal”) refer to a spectrum of physical and behavioral symptoms observed in the acute neonatal period that can be attributed to drug exposure at or near the time of delivery. Anecdotal reports that attribute these syndromes to drug exposure must be cautiously interpreted, and larger samples studied in order to establish a causal link between exposure to a particular medication and a perinatal syndrome.

### Long-Term Effects

Although the data suggest that some medications may be used safely during pregnancy if clinically warranted, our knowledge regarding the long-term effects of prenatal exposure to psychotropic medications is incomplete. Because neuronal migration and differentiation occur throughout pregnancy and into the early years of life, the central nervous system (CNS) remains particularly vulnerable to toxic agents throughout pregnancy. While exposures to teratogens early in pregnancy may result in clear abnormalities, exposures that occur after neural tube closure (at 32 days of gestation) may produce more subtle changes in behavior and functioning.

Behavioral teratogenesis refers to the potential of a psychotropic drug administered during pregnancy to have long-term neurobehavioral effects. To date, few studies have systematically investigated the impact of exposure to psychotropic medications in utero on human development and behavior, such as the risk for cognitive or behavioral problems later in the development of children exposed to an antidepressant medication in utero.
There are also a number of complications that can occur during the postpartum period. If a woman is breastfeeding, the risk of transmitting the medication through the breast milk is high. The following Table V includes a list of the most common medications used to treat mental health issues, as well as their potential complications (during pregnancy and while breastfeeding):(75,78)

Table V.

| Anti-depressants | A relatively small number of cases of first trimester exposure to antidepressants have been reported, but these reports have suggested no increased risk of birth defects. Since there have probably been millions of cases of accidental first trimester exposure in the over thirty years of treatment with tricyclic antidepressants, the lack of reports suggesting teratogenicity is encouraging. Several studies that compared tricyclic antidepressants and SSRIs (selective serotonin reuptake inhibitors) did not demonstrate an increased risk of congenital malformation. Prozac is the most prescribed antidepressant in the United States and has been the most researched. Data collected from over 2500 cases indicate no increase in risk of major congenital malformation in exposed infants. Studies of other specific SSRI medications carry the same results but have not been researched as extensively. MAOIs (monoamine oxidase inhibitors) are generally not used during pregnancy because they require dietary restrictions, potentially compromising the mother’s nutritional status, affecting blood pressure, and adversely reacting with terbutaline (used to suppress premature labor). |


Studies of antidepressants and safety during pregnancy:
Recent studies have suggested that exposure to SSRIs at the time of delivery may be associated with poor perinatal outcomes. Several studies have reported increased rates of admission to the special care nursery among SSRI-exposed infants. The most commonly reported symptoms in the newborns include tremor, restlessness, increased muscle tone, and increased crying. These symptoms, however, resolve within 1 to 4 days after birth without any specific medical intervention.

The best long-term study of antidepressant-exposed fetuses followed 80 cases up to age seven. When compared to a control group without any exposure to antidepressants during pregnancy, the exposed children showed no significant differences in IQ, temperament, behavior, reactivity, mood, distractibility, or activity level. Of all the antidepressants, fluoxetine (Prozac) is the best characterized antidepressant. Data collected from over 2500 cases indicate no increase in risk of major congenital malformation in fluoxetine-exposed infants. One prospective study of 531 infants with first trimester exposure to SSRIs (mostly citalopram, n=375) did not demonstrate an increased risk of organ malformation.

Several meta-analyses combining studies with exposures to SSRIs do not demonstrate an increase in risk of congenital malformation in children exposed to these antidepressants, with the exception of paroxetine (Paxil). There has been particular controversy around paroxetine use in pregnancy, as past reports have suggested that first trimester exposure to paroxetine was associated with an increased risk of cardiac defects including atrial and ventricular septal defects.
Other published studies have not demonstrated increased teratogenicity of paroxetine. Importantly, independently conducted meta-analyses of available data sets have consistently found a lack of association between paroxetine exposure and cardiovascular malformations. Even so, these findings prompted the FDA to change the category label of paroxetine from C to D.

Three prospective and more than ten retrospective studies have examined the risk of organ malformation in over 400 cases of first trimester exposure to tricyclic antidepressants. When evaluated on an individual basis and when pooled, these studies do not indicate a significant association between fetal exposure to TCAs and risk for any major congenital anomaly. Among the TCAs, desipramine and nortriptyline are often preferred since they are less anticholinergic and the least likely to exacerbate orthostatic hypotension that occurs during pregnancy.

Bupropion may be an option for women who have not responded to fluoxetine or a tricyclic antidepressant, as data thus far have not indicated an increased risk of malformations associated with bupropion use during pregnancy. The most recent information from the Bupropion Pregnancy Registry maintained by the manufacturer GlaxoSmithKline includes data from 517 pregnancies involving first trimester exposure to bupropion. In this sample, there were 20 infants with major malformations. This represents a 3.9% risk of congenital malformation that is consistent with what is observed in women with no known teratogen exposure.

While the information above regarding the overall risk of malformation is reassuring, earlier reports had revealed an unexpectedly high number of malformations of the heart and great vessels in bupropion-exposed infants.
A retrospective cohort study including over 1200 infants exposed to bupropion during the first trimester did not reveal an increased risk of malformations in the bupropion-exposed group of infants nor did it demonstrate an increased risk for cardiovascular malformations.

Scant information is available regarding the reproductive safety of monoamine oxidase inhibitors (MAOIs), and these agents are generally not used in pregnancy as they may produce a hypertensive crisis when combined with tocolytic medications, such as terbutaline.

With regard to the newer antidepressants, prospective data on 150 women exposed to venlafaxine (Effexor) during the first trimester of pregnancy suggest no increase in risk of major malformation as compared to non-exposed controls. To date, the literature does not include prospective data on the use of duloxetine (Cymbalta). Another prospective study assessed outcomes in 147 women taking either nefazodone (n=89) or trazodone (n=58) during their first trimester of pregnancy and compared them to two control groups of women exposed to either non-teratogenic drugs (n = 147) or to other antidepressants (n=147).

There were no significant differences among exposed and non-exposed groups with regard to rates of congenital malformations. In another report, there were no differences in malformation rates among women who took mirtazapine (Remeron) (n=104) during pregnancy as compared to women who took other antidepressants or controls exposed to known non-teratogens.
While these initial reports are reassuring, larger samples are required to establish the reproductive safety of these newer antidepressants. It is estimated that at least 500 to 600 exposures must be collected to demonstrate a two-fold increase in risk for a particular malformation over what is observed in the general population.

In general, the SSRIs, specifically fluoxetine, citalopram, and sertraline, are the antidepressants most commonly used during pregnancy. Several recent studies have suggested that exposure to SSRIs near the time of delivery may be associated with poor perinatal outcomes. Attention has focused on a range of transient neonatal distress syndromes associated with exposure to (or withdrawal from) antidepressants in utero. These syndromes appear to affect about 25% of babies exposed to antidepressants late in pregnancy.

The most commonly reported symptoms in the newborns include tremor, restlessness, increased muscle tone, and increased crying. Reassuringly, these syndromes appear to be relatively benign and short-lived, resolving within 1 to 4 days after birth without any specific medical intervention.

These studies deserve careful consideration, yet one of the major shortcomings is that most have failed to use raters blinded to the mother’s treatment status. The decision to admit a newborn to a special care nursery may represent a reasonable precaution for an infant exposed to medication in utero and may not be an indication of a serious problem.
Another limitation is that few studies have attempted to assess maternal mood during pregnancy or at the time of delivery. There is ample evidence to suggest that depression or anxiety in the mother may contribute to poor neonatal outcomes, including premature delivery and low birth weight, and it is important to evaluate the contribution of maternal mood to neonatal outcomes.

Based on these findings, many women are advised to taper or discontinue treatment with SSRIs prior to delivery; however, this strategy has not been shown to change neonatal outcomes. Importantly, neonatal effects have been reported with both untreated mood and anxiety disorders, as well as with medication, and limited studies have adequately teased out these variables.

One important consideration is that discontinuation of or reductions in the dosage of medication in the latter part of pregnancy may increase the risk of postpartum depression. The postpartum period is a time of increased vulnerability to psychiatric illness and depression or anxiety during pregnancy has been associated with postpartum depression.

Another concern has been that maternal SSRI use may be associated with a higher than expected number of cases of persistent pulmonary hypertension of the newborn (PPHN). In one report, the use of an SSRI antidepressant after the 20th week of gestation was significantly associated with a six-fold greater risk of PPHN. If we assume that these findings are correct, the risk is still relatively small; the authors estimate the risk of PPHN to be less than 1% in infants exposed to SSRIs in utero. Since the initial report on this topic, three studies have found no association between antidepressant use during pregnancy and PPHN, and one study showed a much lower risk than the 1% originally reported.
These findings taken together bring into question whether there is an association at all and suggest that, if there is a risk, it is much lower than that reported in the original 2006 report. To date, two studies have systematically investigated the impact of exposure to antidepressants in utero on human development and behavior.

The first of these studies followed a cohort of 135 children who had been exposed to either tricyclic antidepressants or fluoxetine (Prozac) during pregnancy (most commonly during the first trimester) and compared these subjects to a cohort of non-exposed controls. Results indicated no significant differences in IQ, temperament, behavior, reactivity, mood, distractibility, or activity level between exposed and non-exposed children followed up to 7 years of age.

A more recent report from the same group that followed a cohort of children exposed to fluoxetine or tricyclic antidepressants for the entire duration of the pregnancy yielded similar results. The authors concluded that their findings support the hypothesis that fluoxetine and tricyclic antidepressants are not behavioral teratogens and do not have a significant effect on cognitive development, language or behavior.

Nursing:
Data suggests that using tricyclic antidepressants, fluoxetine, paroxetine, and sertraline during breastfeeding exposes the infant to low amounts of the drug and complications in the infant appear to be rare. Accumulated data regarding the use of SSRIs have been reassuring, showing that the typical serum levels of the medication in the infant have either been very low or undetectable.
Maintenance treatment with a mood stabilizer can significantly reduce the risk of relapse in pregnant women with bipolar disorder. However, many of the medications commonly used carry some teratogenic risk.

First trimester exposure to lithium has been associated with an increased risk of cardiovascular malformation between .05% and .1%. Prenatal exposure to valproic acid can increase the risk of fetal malformation by up to 4%. There is limited information on the reproductive safety of other newer anticonvulsants. There is, however, increased support for the reproductive safety of lamotrigine (Lamictal). Of 360 children exposed to lamotrigine alone, 2.8% had a major malformation, which is within the range of 2 to 4% observed in women with no exposure to toxic agents.

For women with bipolar disorder, maintenance treatment with a mood stabilizer during pregnancy can significantly reduce the risk of relapse. However, many of the medications commonly used to treat bipolar disorder carry some teratogenic risk when used during pregnancy. Concerns regarding fetal exposure to lithium have typically been based on early reports of higher rates of cardiovascular malformations (i.e., Ebstein’s anomaly) following prenatal exposure to this drug.

More recent data suggest the risk of cardiovascular malformations following first trimester exposure to lithium is smaller than previous assessments and is estimated to be between 1 in 2000 (0.05%) and 1 in 1000 (0.1%). Compared to lithium, prenatal exposure to some anticonvulsants is associated with a far greater risk for organ malformation. First trimester use of carbamazepine (Tegretol) has been associated with a 1% risk of neural tube defect.
Of all of the medications used for psychiatric disorders, the one with the greatest potential of serious birth defects is valproic acid (depakote). Factors that appear to increase the risk for teratogenesis include higher maternal serum anticonvulsant levels and exposure to more than one anticonvulsant. With a risk of neural tube defect ranging from 1 to 6%, valproic acid (depakote) is often considered one of last resort to treat mood disorders in reproductive aged women, since the risk for teratogenicity is high in very early pregnancy, before many women realize they are pregnant. Prenatal exposure to valproic acid has also been associated with characteristic craniofacial abnormalities, cardiovascular malformation, limb defects and genital anomalies, as well as other central nervous system structural abnormalities.

Valproic acid exposure during pregnancy has been associated with poorer neurocognitive development in children followed to three years of age. In the same study, lamotrigine use (discussed below) did not affect neurocognitive development. While other anticonvulsants are being used more frequently in the treatment of bipolar disorder, there is limited information on the reproductive safety of these newer anticonvulsants, specifically gabapentin (Neurontin), oxcarbazepine (Trileptal), tigabine (Gabbitril), levetiracetam (Keppra), zonisamide (Zonegran).

One report has raised concerns regarding potential teratogenicity of topiramate (Topamax). However, there is a growing body of information the reproductive safety of lamotrigine (Lamictal), and this may be a useful alternative for some women. GlaxoSmithKline (GSK) created the International Lamotrigine Pregnancy Registry in 1992 to monitor pregnancies exposed to lamotrigine for the occurrence of major birth defects.
Data from the Registry did not show an elevated risk of malformations associated with lamotrigine exposure. Other data from the North-American Anti-Epileptic Drug Registry indicates the prevalence of major malformations in a total of 564 children exposed to lamotrigine monotherapy was 2.7%; however, five infants had oral clefts, indicating a prevalence rate of 8.9 per 1000 births.

In a comparison group of 221,746 unexposed births, the prevalence rate for oral clefts was 0.37/1000, indicating a 24-fold increase in risk of oral cleft in infants exposed to lamotrigine. However, other registries have not demonstrated such a significant increase in risk for oral clefts. It is important to put this risk into perspective. If we assume that the findings from the North American registry are true, the absolute risk of having a child with cleft lip or palate is about 0.9%.

Atypical antipsychotic agents (discussed in greater detail below) are commonly used often to manage the acute symptoms of bipolar illness, as well as for maintenance treatment. While the data regarding the reproductive safety of these newer agents is limited, no studies thus far have indicated any teratogenic risk associated with this class of medications. For this reason, some women may choose to use an atypical antipsychotic agent during pregnancy (especially during the first trimester) in order to avoid using a known teratogen, such as lithium or valproic acid.

Nursing:
There have been reports of toxicity in nursing infants related to exposure to various mood stabilizers. Lithium is excreted in high levels in the breast milk and nursing infants experience large exposures.
Signs of toxicity in the infant have included cyanosis, poor muscle tone, and hypothermia. The lowest possible effective dosage should be used along with close monitor of the infant’s condition.

There have also been concerns regarding the use of carbamazepine and valproic acid. Both medications have been associated with liver function abnormalities in adults and in some cases, hepatotoxicity. The risk of hepatotoxicity is greatest in children under the age of two, so infants exposed to these medications might be especially vulnerable. The American Academy of Pediatrics, however, has deemed both medications to be appropriate for use in breastfeeding mothers.

<table>
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<th>Anti-Anxiety Medications</th>
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| Benzodiazepines are commonly prescribed to people suffering from anxiety disorders. Older studies suggest that there may be an increased risk of cleft lip and palate amounting to .7%, but these results have been widely debated. If correct, the likelihood that a woman exposed to benzodiazepines during the first trimester will give birth to a child with this congenital anomaly remains less that 1%.

Benzodiazepines are also associated with prenatal syndrome, including feeding problems, hypothermia, and deficiency in baby’s muscle tone. No systematic data are available on the reproductive safety of other, non-benzodiazepine anxiolytic agents and hypnotic agents, therefore their use during pregnancy is not recommended. The consequences of prenatal exposure to benzodiazepines have been debated for over twenty years. Three prospective studies support the absence of increased risk of organ malformation following first trimester exposure to benzodiazepines.
More controversial has been the issue of whether first trimester exposure to benzodiazepines increases risk for specific malformations. Initial reports suggested that there might be an increased risk of cleft lip and palate, however, more recent reports have shown no association between exposure to benzodiazepines and risk for cleft lip or palate. This risk— if it exists — is calculated to be 0.7%, approximately a ten-fold increase in risk for oral cleft over that observed in the general population. Nonetheless, the likelihood that a woman exposed to benzodiazepines during the first trimester will give birth to a child with this congenital anomaly, although significantly increased, remains less than 1%.

Currently, no systematic data are available on the reproductive safety of non-benzodiazepine anxiolytic agents such as buspirone and hypnotic agents zolpidem (Ambien) and zaleplon (Sonata). Therefore, these medications are not recommended for use in pregnancy.

Anti-Anxiety Agents: Data suggests that the use of benzodiazepines exposes the nursing infant to low levels of medication and indicates a relatively low incidence of adverse events. The studies conducted have been limited, however, and further research is needed to make these claims more certain.

| Anti-Psychotic Medications | High-potency antipsychotics, like Haldol, are effective schizophrenia and bipolar medications. Recent studies have shown no increased risk to fetus or baby and are recommended for used during pregnancy for high-risk patients. Low-potency neuroleptic agents, however, are associated with higher risks of congenital malformations after first trimester exposure and are not recommended. There is not enough data to identify the effects of atypical antipsychotics on the fetus and are not recommended. |
In addition to the atypical antipsychotic medications described above, recent studies have not demonstrated teratogenic risk associated with high-or medium-potency neuroleptic medications; however, a recent meta-analysis of the available studies noted a higher risk of congenital malformations after first trimester exposure to low-potency neuroleptic agents. In clinical practice, higher potency neuroleptic agents such as haloperidol (Haldol), perphenazine (Trilafon), and trifluoperazine (Stelazine) are recommended over the lower potency agents in managing pregnant women with psychiatric illness.

Atypical antipsychotic medications are increasingly being used to treat a spectrum of psychiatric disorders, including psychotic disorders and bipolar disorder, as well as treatment refractory depression and anxiety disorders. The first and largest published prospective study on the reproductive safety of the atypical agents provided reassuring data regarding the risk of malformations in the first trimester, although aripiprazole (Abilify) was not among the medications studied. Investigators prospectively followed a group of 151 women taking olanzapine (Zyprexa), risperidone (Risperdal), quetiapine (Seroquel), or clozapine (Clozapine) and compared outcomes to controls without exposure to known teratogens. The study showed that there were no differences between the study groups in terms of risk for major malformations, or rates of obstetrical or neonatal complications. While this information is reassuring, it is far from definitive, and larger studies are required to provide more information about the reproductive safety of these medications. To this end, the National Pregnancy Registry has been created to prospectively gather information regarding outcomes in infants exposed in utero to these newer atypical antipsychotic medications.
The U.S. Food and Drug Administration (FDA) recently updated labels for the entire class of antipsychotic drugs to include warnings regarding the use of antipsychotic drugs (both the typical and atypical agents) during pregnancy. The new drug labels now contain more details on the potential risk for abnormal muscle movements (extrapyramidal signs or EPS) and withdrawal symptoms in newborns exposed to these drugs during the third trimester of pregnancy. These recommendations were derived from adverse event reporting. While this may signal a potential problem associated with exposure to antipsychotic medications, it does not yield accurate information regarding the prevalence of an adverse event.

Nursing:
Information regarding these medications is limited. The use of chlorpromazine has been associated with adverse symptoms including sedation and developmental delay. These events seem to be rare when medium- or high-potency medications are used instead. Less data is available on atypical anti-psychotic medications.

**Mental Illness During the Postpartum Period**

It is quite common for women to experience some type of mood disturbance during the postpartum period. In fact, approximately eighty five percent of women will experience some sort of disturbance in the weeks following birth.(85) In most instances, the symptoms are mild and do not cause a significant disruption to the woman’s life. However, approximately fifteen percent of women will experience more severe cases of depression or anxiety.(86) These women will exhibit symptoms that typically cause disruption to their lives and affect everyday functions. The postpartum
psychiatric illnesses are divided into three categories ranging from least severe to most severe. They are listed and further defined in the illustration below:

1. Postpartum blues
2. Postpartum depression
3. Postpartum psychosis

(Photo courtesy of: http://medicalterms.info)

Table VI below provides detailed descriptions of each type of postpartum psychiatric illness.\textsuperscript{(42)}
Table VI.

| Postpartum Blues | It appears that about 50 to 85% of women experience postpartum blues during the first few weeks after delivery. Given how common this type of mood disturbance is, it may be more accurate to consider the blues as a normal experience following childbirth rather than a psychiatric illness. Rather than feelings of sadness, women with the blues more commonly report mood lability, tearfulness, anxiety or irritability.

The post partum symptoms typically peak on the fourth or fifth day after delivery and may last for a few hours or a few days, remitting spontaneously within two weeks of delivery. While these symptoms are unpredictable and often unsettling, they do not interfere with a woman’s ability to function. No specific treatment is required; however, it should be noted that sometimes the post partum blues heralds the development of a more significant mood disorder, particularly in women who have a history of depression. If symptoms of depression persist for longer than two weeks, the patient should be evaluated to rule out a more serious mood disorder. |
| Postpartum Depression | PPD typically emerges over the first two to three postpartum months but may occur at any point after delivery. Some women actually note the onset of milder depressive symptoms during pregnancy. Postpartum depression is clinically indistinguishable from depression occurring at other times during a woman’s life. The symptoms of postpartum depression include:
- Depressed or sad mood
- Tearfulness
- Loss of interest in usual activities
- Feelings of guilt
- Feelings of worthlessness or incompetence |
- Fatigue
- Sleep disturbance
- Change in appetite
- Poor concentration
- Suicidal thoughts

Significant anxiety symptoms may also occur. Generalized anxiety is common, but some women also develop panic attacks or hypochondriasis. *Postpartum obsessive-compulsive disorder* has also been reported, where women report disturbing and intrusive thoughts of harming their infant. Especially with milder cases, it may be difficult to detect postpartum depression because many of the symptoms used to diagnose depression (i.e., sleep and appetite disturbance, fatigue) also occur in postpartum women in the absence of depression. The Edinburgh Postnatal Depression Scale is a 10-item questionnaire that may be used to identify women who have PPD. On this scale, a score of 12 or greater or an affirmative answer on question 10 (presence of suicidal thoughts) raise concern and indicate a need for more thorough evaluation.

| Postpartum Psychosis | Postpartum psychosis is the most severe form of postpartum psychiatric illness. It is a rare event that occurs in approximately 1 to 2 per 1000 women after childbirth. Its presentation is often dramatic, with onset of symptoms as early as the first 48 to 72 hours after delivery. The majority of women with puerperal psychosis develop symptoms within the first two postpartum weeks. It appears that in most cases, postpartum psychosis represents an episode of bipolar illness; the symptoms of puerperal psychosis most closely resemble those of a rapidly evolving manic (or mixed) episode. |
The earliest signs of postpartum psychosis are restlessness, irritability, and insomnia. Women with this disorder exhibit a rapidly shifting depressed or elated mood, disorientation or confusion, and erratic or disorganized behavior. Delusional beliefs are common and often center on the infant. Auditory hallucinations that instruct the mother to harm herself or her infant may also occur. Risk for infanticide, as well as suicide, is significant in this population.

While it is common for women to experience some level of postpartum blues within the first few weeks of giving birth, in most instances the symptoms resolve themselves quickly and cause little disruption to their daily lives. These mild shifts are caused by hormonal changes that occur immediately after birth. In the forty-eight hours immediately following delivery, the woman experiences a significant decrease in estrogen and progesterone. This can trigger mild to moderate alterations in mood. However, there is no conclusive answer as to why some women experience more severe forms of postpartum psychiatric illness. Current theories focus on hormone sensitivity. It is believed that some women experience increased sensitivity to hormonal changes, which can make them more susceptible to severe postpartum mood alterations. For these women, the mood disturbances do not diminish within a few weeks. They can continue indefinitely and often require pharmacologic treatment to minimize the symptoms.

Research studies have also identified a connection between women who lack appropriate social supports and/or report dissatisfaction with their marital situations, and the development of postpartum psychiatric illnesses. In these instances, women will often be more prone to experiencing more severe forms of psychiatric illness than their female counterparts who have
appropriate support mechanisms in place. Women who experience stressful life events during pregnancy or in the time immediately following delivery are also at an increased risk of developing more severe postpartum psychiatric symptoms.\(^{(85)}\)

One of the most common factors in the development of Postpartum Depression is a genetic or biological vulnerability to psychiatric illness. Women who have a history of previous psychiatric illnesses, such as depression or bipolar disorder, are at an increased risk of developing severe postpartum disorder. Therefore, women with a history of mental illness should be monitored carefully throughout the duration of pregnancy and within the weeks immediately following delivery.\(^{(90)}\)

The above factors are all connected to the onset of postpartum depression. More specifically, the following is a complete list of the risk factors that have been indicated in cases of postpartum psychiatric illness:\(^{(91)}\)

- Previous episode of PPD
- Depression during pregnancy
- History of depression or bipolar disorder
- Recent stressful life events
- Inadequate social supports
- Marital problem

To accurately diagnose postpartum mental illness the woman will require a thorough psychiatric evaluation. Postpartum blues can typically be diagnosed and treated by the woman’s primary care physician. However, more severe forms of postpartum mental illness will require an evaluation by a trained mental health professional.
The following is a list of the steps taken during diagnosis:(81)

1. Clinical evaluation for postpartum mood and anxiety disorders
2. Medication management
3. Consultation regarding breastfeeding and psychotropic medications
4. Recommendations regarding non-pharmacological treatments
5. Referral to support services within the community

**Treatment for Postpartum Illness**

Treatment options for postpartum mental illness will vary depending on the type and severity of illness. Women who experience mild postpartum blues will typically require minimal intervention. In most instances, non-pharmacological treatment will be sufficient. Most women will see positive results with the addition of support mechanisms, counseling, and cognitive behavioral therapy.(92) Non-pharmacologic treatments are the most appealing as they minimize the risks associated with psychiatric medication and breastfeeding. Many women are hesitant to initiate medication, as they may have to discontinue breastfeeding to do so. Other women are uncomfortable relying on pharmacologic therapy for treatment.(93)

In more severe cases, women will typically require medication to minimize the symptoms. However, before initiating pharmacologic treatment, it is important to ensure the illness is not caused by a medical condition such as thyroid dysfunction or anemia. This will be determined during an initial consult and through the use of basic laboratory tests.(94) While medication will help minimize the symptoms of severe postpartum depression, the patient will typically see greater results if other non-pharmacologic therapies are used alongside medication. Pharmacologic therapy combined with counseling, cognitive behavioral therapy, and support networks have the highest success rate for women with postpartum depression.(95)
Although postpartum depression is caused by different factors than standard forms of depression, most conventional antidepressants will effectively treat postpartum mental illness. Standard doses have proven to be effective and well tolerated by patients. Typically, patients will start with Specific Serotonin Reuptake Inhibitors (SSRIs), as they are non-sedating and well tolerated. They can also be taken while breastfeeding with minimal risk to the infant.\textsuperscript{(92)} If SSRIs do not work, or if the woman is unable to tolerate them, other agents may be used. Wellbutrin is a common second choice when SSRIs are not tolerated. Tricyclic antidepressants may be prescribed, but due to the high sedative effect they produce, they must be prescribed only to women who would benefit from sedation (i.e., those women experiencing sleep disturbances).\textsuperscript{(96)}

Women experiencing severe postpartum psychosis will require more intensive pharmacologic therapy, and will sometimes require time in an inpatient facility. This level of postpartum mental illness is considered a psychiatric emergency, and pharmacologic treatment is always necessary. In most instances, the woman will be required to cease breastfeeding so stronger agents can be used. Most women will require a mood stabilizer in addition to general antidepressants. Some women will also benefit from electroconvulsive therapy (ECT).\textsuperscript{(97)}

**Pharmacologic Agents and Breastfeeding**

All psychotropic medications are secreted into breast milk and transmitted to the infant during breastfeeding. However, the concentrations of different agents will vary widely depending on dosage, rate of drug metabolism, and frequency, timing, and duration of infant feedings.\textsuperscript{(84)} Infant complications related to most tricyclic antidepressants are rare, and there have been no reported complications associated with other antidepressants. Women with
other postpartum mental health conditions, such as bipolar disorder or postpartum psychosis will have more difficulty continuing to breastfeed while taking medication. The levels of medication secreted into the breast milk are much higher with the agents used to treat these conditions, and the adverse affects are greater.(98)

**Treatment Options**

Mental illness does not typically resolve by itself. It requires treatment. In some instances, that treatment is in the form of medication. In other cases, women can benefit from non-pharmacologic therapy such as cognitive behavioral therapy, support groups, and stress reducing techniques. The specific treatment used will vary depending on the type and severity of the mental illness.

Non-pharmacologic options will typically be used as a first line of treatment, with medication being added if the patient does not respond. However, once pharmacologic agents are introduced, the patient will benefit from the inclusion of non-pharmacologic therapies as well.

**Medication**

Many women who are diagnosed with mental illness will require medication to treat their symptoms. However, the specific type and amount of medication prescribed will depend on the specific needs of the patient. Some patients will have mild symptoms that may respond well to small doses of medication, while other patients will require much heavier doses to manage more severe symptoms. It is important to assess each patient and develop a treatment regimen that will best address the specific symptoms
present. If a patient is afflicted with more than one mental illness, multiple medications may be required to manage the symptoms.\(^{(99)}\)

Medications treat the symptoms of mental disorders. They cannot cure the disorder, but they minimize symptoms so that the patient is more likely to be able to function. However, people respond differently to medications. Some individuals benefit greatly from medications and only require them for a short time. For example, a person with depression may feel much better after taking a medication for a few months, and may never need it again. People with disorders like schizophrenia or bipolar disorder, or people who have long-term or severe depression or anxiety may need to take medication for a much longer time. Some people experience side effects from medications, while others may not. Doses can be small or large, depending on the medication and the person.

Factors that can affect how medications work in people include:\(^{(2)}\)

- Type of mental disorder, such as depression, anxiety, bipolar disorder, and schizophrenia
- Age
- Gender
- Body size
- Physical illnesses
- Habits like smoking and drinking
- Liver and kidney function
- Genetics
- Other medications and herbal/vitamin supplements
- Diet
- Whether medications are taken as prescribed.
The following Table VII, provides a complete overview of each type of mental illness and the corresponding treatments:\(^{(100-104)}\)

**Table VII.**

<table>
<thead>
<tr>
<th>Schizophrenia</th>
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<td><strong>Treatment</strong></td>
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<table>
<thead>
<tr>
<th>Medication Types</th>
<th>Some of the more commonly used medications include:</th>
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<tbody>
<tr>
<td></td>
<td>• Chlorpromazine (Thorazine)</td>
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<td></td>
<td>• Haloperidol (Haldol)</td>
</tr>
<tr>
<td></td>
<td>• Perphenazine (generic only)</td>
</tr>
<tr>
<td></td>
<td>• Fluphenazine (generic only)</td>
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</table>

In the 1990's, new antipsychotic medications were developed. These new medications are called second generation, or "atypical" antipsychotics.

One of these medications was clozapine (Clozaril). It is a very effective medication that treats psychotic symptoms, hallucinations, and breaks with reality, such as when a person believes he or she is the president. But clozapine can sometimes cause a serious problem called agranulocytosis, which is a loss of the white blood cells that help a person fight infection. Therefore, people who take clozapine must get their white blood cell counts checked every week or two. This problem and the cost of blood tests make treatment with clozapine difficult for many people. Still, clozapine is potentially helpful for people who do not respond to other antipsychotic medications.
Other atypical antipsychotics were developed. All of them are effective. Agranulocytosis is less likely to occur with atypical antipsychotic medication other than clozapine, but it has been reported. These include:

- Risperidone (Risperdal)
- Olanzapine (Zyprexa)
- Quetiapine (Seroquel)
- Ziprasidone (Geodon)
- Aripiprazole (Abilify)
- Paliperidone (Invega)
- Lurasidone (Latuda)

### Drug Side Effects

Some people have side effects when they start taking these medications. Most side effects go away after a few days and often can be managed successfully. People who are taking antipsychotics should not drive until they adjust to their new medication. Side effects of many antipsychotics include:

- Drowsiness
- Dizziness when changing positions
- Blurred vision
- Rapid heartbeat
- Sensitivity to the sun
- Skin rashes
- Menstrual problems for women.

Atypical antipsychotic medications can cause major weight gain and changes in a person's metabolism. This may increase a person's risk of getting diabetes and high cholesterol. A person's weight, glucose levels, and lipid levels should be monitored regularly by a doctor while taking an atypical antipsychotic medication.
Typical antipsychotic medications can cause side effects related to physical movement, such as:
- Rigidity
- Persistent muscle spasms
- Tremors
- Restlessness

Long-term use of typical antipsychotic medications may lead to a condition called tardive dyskinesia (TD). TD causes muscle movements a person can’t control. The movements commonly happen around the mouth. TD can range from mild to severe, and in some people the problem cannot be cured. Sometimes people with TD recover partially or fully after they stop taking the medication.

Every year, an estimated 5% of people taking typical antipsychotics get TD. The condition happens to fewer people who take the new, atypical antipsychotics, but some people may still get TD. People who think that they might have TD should check with their doctor before stopping their medication.

Antipsychotics can produce unpleasant or dangerous side effects when taken with certain medications. For this reason, all doctors treating a patient need to be aware of all the medications that person is taking. Doctors need to know about prescription and over-the-counter medicine, vitamins, minerals, and herbal supplements. People also need to discuss any alcohol or other drug use with their doctor.

**Administration**

Antipsychotics are usually pills that people swallow, or liquid they can drink. Some antipsychotics are shots that are given once or twice a month.
## Depression

### Treatment

Depression is commonly treated with antidepressant medications. Antidepressants work to balance some of the natural chemicals in our brains. These chemicals are called neurotransmitters, and they affect our mood and emotional responses. Antidepressants work on neurotransmitters such as serotonin, norepinephrine, and dopamine.

### Medication Types

The most popular types of antidepressants are called selective serotonin reuptake inhibitors (SSRIs). These include:

- Fluoxetine (Prozac)
- Citalopram (Celexa)
- Sertraline (Zoloft)
- Paroxetine (Paxil)
- Escitalopram (Lexapro)

Other types of antidepressants are serotonin and norepinephrine reuptake inhibitors (SNRIs). SNRIs are similar to SSRIs and include venlafaxine (Effexor) and duloxetine (Cymbalta). Another antidepressant that is commonly used is bupropion (Wellbutrin). Bupropion, which works on the neurotransmitter dopamine, is unique in that it does not fit into any specific drug type.

SSRIs and SNRIs are popular because they do not cause as many side effects as older classes of antidepressants. Older antidepressant medications include tricyclics, tetracyclics, and monoamine oxidase inhibitors (MAOIs). For some people, tricyclics, tetracyclics, or MAOIs may be the best medications.
## Drug Side Effects

Antidepressants may cause mild side effects that usually do not last long. Any unusual reactions or side effects should be reported to a doctor immediately.

The most common side effects associated with SSRIs and SNRIs include:

- Headache, which usually goes away within a few days.
- Nausea (feeling sick to your stomach), which usually goes away within a few days.
- Sleeplessness or drowsiness, which may happen during the first few weeks but then goes away. Sometimes the medication dose needs to be reduced or the time of day it is taken needs to be adjusted to help lessen these side effects.
- Agitation (feeling jittery).
- Sexual problems, which can affect both men and women and may include reduced sex drive, and problems having and enjoying sex.

Tricyclic antidepressants can cause side effects, including:

- Dry mouth
- Constipation
- Bladder problems: It may be hard to empty the bladder, or the urine stream may not be as strong as usual. Older men with enlarged prostate conditions may be more affected.
- Sexual problems, which can affect both men and women and may include reduced sex drive, and problems having and enjoying sex.
- Blurred vision, which usually goes away quickly.
- Drowsiness: usually, antidepressants that make you drowsy are taken at bedtime.
People taking MAOIs need to be careful about the foods they eat and the medicines they take. Foods and medicines that contain high levels of a chemical called tyramine are dangerous for people taking MAOIs. Tyramine is found in some cheeses, wines, and pickles. The chemical is also in some medications, including decongestants and over-the-counter cold medicine.

Mixing MAOIs and tyramine can cause a sharp increase in blood pressure, which can lead to stroke. People taking MAOIs should ask their doctors for a complete list of foods, medicines, and other substances to avoid. An MAOI skin patch has recently been developed and may help reduce some of these risks. A doctor can help a person figure out if a patch or a pill will work for her.

| Administration | The medication should be taken in the right dose for the right amount of time. It can take three or four weeks until the medicine takes effect. Some people take the medications for a short time, and some people take them for much longer periods. People with long-term or severe depression may need to take medication for a long time. Once a person is taking antidepressants, it is important not to stop taking them without the help of a doctor. Sometimes people taking antidepressants feel better and stop taking the medication too soon, and the depression may return. When it is time to stop the medication, the doctor will help the person slowly and safely decrease the dose. It's important to give the body time to adjust to the change. |
Antidepressants are safe and popular, but some studies have suggested that they may have unintentional effects, especially in young people. In 2004, the FDA looked at published and unpublished data on trials of antidepressants that involved nearly 4,400 children and adolescents. They found that 4 percent of those taking antidepressants thought about or tried suicide (although no suicides occurred), compared to 2 percent of those receiving placebos (sugar pill).

In 2005, the FDA decided to adopt a "black box" warning label—the most serious type of warning—on all antidepressant medications. The warning says there is an increased risk of suicidal thinking or attempts in children and adolescents taking antidepressants. In 2007, the FDA proposed that makers of all antidepressant medications extend the warning to include young adults up through age 24.

The warning also says that patients of all ages taking antidepressants should be watched closely, especially during the first few weeks of treatment. Possible side effects to look for are depression that gets worse, suicidal thinking or behavior, or any unusual changes in behavior such as trouble sleeping, agitation, or withdrawal from normal social situations. Families and caregivers should report any changes to the doctor.

Results of a comprehensive review of pediatric trials conducted between 1988 and 2006 suggested that the benefits of antidepressant medications likely outweigh their risks to children and adolescents with major depression and anxiety disorders. The study was funded in part by NIMH.
Finally, the FDA has warned that combining the newer SSRI or SNRI (serotonin norepinephrine reuptake inhibitor) antidepressants with one of the commonly used "triptan" medications used to treat migraine headaches could cause a life-threatening illness called "serotonin syndrome." A person with serotonin syndrome may be agitated, have hallucinations (see or hear things that are not real), have a high temperature, or have unusual blood pressure changes. Serotonin syndrome is usually associated with the older antidepressants called MAOIs, but it can happen with the newer antidepressants as well, if they are mixed with the wrong medications.

<table>
<thead>
<tr>
<th>Bipolar Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Treatment</strong></td>
</tr>
</tbody>
</table>

Bipolar disorder, also called manic-depressive illness, is commonly treated with mood stabilizers. Sometimes, antipsychotics and antidepressants are used along with a mood stabilizer.

People with bipolar disorder usually try mood stabilizers first. In general, people continue treatment with mood stabilizers for years. Lithium is a very effective mood stabilizer. It was the first mood stabilizer approved by the FDA in the 1970's for treating both manic and depressive episodes.

Anticonvulsant medications also are used as mood stabilizers. They were originally developed to treat seizures, but they were found to help control moods as well. One anticonvulsant commonly used as a mood stabilizer is valproic acid, also called divalproex sodium (Depakote). For some people, it may work better than lithium. Other anticonvulsants used as mood stabilizers are carbamazepine (Tegretol), lamotrigine (Lamictal) and oxcarbazepine (Trileptal).
Atypical antipsychotic medications are sometimes used to treat symptoms of bipolar disorder. Often, antipsychotics are used along with other medications.

Antipsychotics used to treat people with bipolar disorder include:

- Olanzapine (Zyprexa), which helps people with severe or psychotic depression, which often is accompanied by a break with reality, hallucinations, or delusions
- Aripiprazole (Abilify), which can be taken as a pill or as a shot
- Risperidone (Risperdal)
- Ziprasidone (Geodon)
- Clozapine (Clorazil), which is often used for people who do not respond to lithium or anticonvulsants.
- Lurasidone (Latuda)

Antidepressants are sometimes used to treat symptoms of depression in bipolar disorder. Fluoxetine (Prozac), paroxetine (Paxil), or sertraline (Zoloft) are a few that are used. However, people with bipolar disorder should not take an antidepressant on its own. Doing so can cause the person to rapidly switch from depression to mania, which can be dangerous. To prevent this problem, doctors give patients a mood stabilizer or an antipsychotic along with an antidepressant.

Research on whether antidepressants help people with bipolar depression is mixed. An NIMH-funded study found that antidepressants were no more effective than a placebo to help treat depression in people with bipolar disorder. The people were taking mood stabilizers along with the antidepressants.
### Drug Side Effects

Treatments for bipolar disorder have improved over the last 10 years. But everyone responds differently to medications. If there are any side effects, patients should inform their doctor right away. He or she may change the dose or prescribe a different medication.

Different medications for treating bipolar disorder may cause different side effects. Some medications used for treating bipolar disorder have been linked to unique and serious symptoms, which are described below.

Lithium can cause several side effects, and some of them may become serious. They include:

- Loss of coordination
- Excessive thirst
- Frequent urination
- Blackouts
- Seizures
- Slurred speech
- Fast, slow, irregular, or pounding heartbeat
- Hallucinations (seeing things or hearing voices that do not exist)
- Changes in vision
- Itching, rash
- Swelling of the eyes, face, lips, tongue, throat, hands, feet, ankles, or lower legs

If a person with bipolar disorder is being treated with lithium, he or she should visit the doctor regularly to check the levels of lithium in the blood, and make sure the kidneys and the thyroid are working normally.
Some possible side effects linked with valproic acid/divalproex sodium include:

- Changes in weight
- Nausea
- Stomach pain
- Vomiting
- Anorexia
- Loss of appetite

Valproic acid may cause damage to the liver or pancreas, so people taking it should see their doctors regularly. Also, valproic acid may affect young girls and women in unique ways. Sometimes, it may increase testosterone (a male hormone) levels in teenage girls and lead to a condition called polycystic ovarian syndrome (PCOS). PCOS is a disease that can affect fertility and make the menstrual cycle become irregular, but symptoms tend to go away after valproic acid is stopped. Valproic acid also may cause birth defects in women who are pregnant.

Lamotrigine can cause a rare but serious skin rash that needs to be treated in a hospital. In some cases, this rash can cause permanent disability or be life-threatening. In addition, valproic acid, lamotrigine, carbamazepine, oxcarbazepine and other anticonvulsant medications (listed in the chart at the end of this document) have an FDA warning. The warning states that their use may increase the risk of suicidal thoughts and behaviors. People taking anticonvulsant medications for bipolar or other illnesses should be closely monitored for new or worsening symptoms of depression, suicidal thoughts or behavior, or any unusual changes in mood or behavior.
People taking these medications should not make any changes without talking to their health care professional.

Other medications for bipolar disorder may also be linked with rare but serious side effects. Patients should always talk with their doctor or pharmacist about any potential side effects before taking the medication.

<table>
<thead>
<tr>
<th>Administration</th>
</tr>
</thead>
</table>
| Medications should be taken as directed by a doctor. Sometimes a person's treatment plan needs to be changed. When changes in medicine are needed, the doctor will guide the change. A person should never stop taking a medication without asking a doctor for help.  

Treatment works best when it is continuous, rather than on and off. However, mood changes can happen even when there are no breaks in treatment. Patients should be open with their doctors about treatment. Talking about how treatment is working can help it be more effective.  

It may be helpful for people or their family members to keep a daily chart of mood symptoms, treatments, sleep patterns, and life events. This chart can help patients and doctors track the illness. Doctors can use the chart to treat the illness most effectively.  

Because medications for bipolar disorder can have serious side effects, it is important for anyone taking them to see the doctor regularly to check for possibly dangerous changes in the body. |
### Anxiety Disorder

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Antidepressants, anti-anxiety medications, and beta-blockers are the most common medications used for anxiety disorders.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Anxiety disorders include:</td>
</tr>
<tr>
<td></td>
<td>- Obsessive compulsive disorder (OCD)</td>
</tr>
<tr>
<td></td>
<td>- Post-traumatic stress disorder (PTSD)</td>
</tr>
<tr>
<td></td>
<td>- Generalized anxiety disorder (GAD)</td>
</tr>
<tr>
<td></td>
<td>- Panic disorder</td>
</tr>
<tr>
<td></td>
<td>- Social phobia</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medication Types</th>
<th>Antidepressants were developed to treat depression, but they also help people with anxiety disorders. SSRIs such as fluoxetine (Prozac), sertraline (Zoloft), escitalopram (Lexapro), paroxetine (Paxil), and citalopram (Celexa) are commonly prescribed for panic disorder, OCD, PTSD, and social phobia. The SNRI venlafaxine (Effexor) is commonly used to treat GAD. The antidepressant bupropion (Wellbutrin) is also sometimes used. When treating anxiety disorders, antidepressants generally are started at low doses and increased over time. Some tricyclic antidepressants work well for anxiety. For example, imipramine (Tofranil) is prescribed for panic disorder and GAD. Clomipramine (Anafranil) is used to treat OCD. Tricyclics are also started at low doses and increased over time. MAOIs are also used for anxiety disorders. Doctors sometimes prescribe phenelzine (Nardil), tranylcypromine (Parnate), and isocarboxazid (Marplan). People who take MAOIs must avoid certain food and medicines that can interact with their medicine and cause dangerous increases in blood pressure. For more information, see the section on medications used to treat depression.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>
Benzodiazepines (anti-anxiety medications):
The anti-anxiety medications called benzodiazepines can start working more quickly than antidepressants. The ones used to treat anxiety disorders include:

- Clonazepam (Klonopin), used for social phobia and GAD, is an anticonvulsant medication
- Lorazepam (Ativan) is used for panic disorder
- Alprazolam (Xanax) is used for panic disorder and GAD.
- Buspirone (Buspar) is an anti-anxiety medication used to treat GAD. Unlike benzodiazepines, however, it takes at least two weeks for buspirone to begin working.

Beta-blockers:
Beta-blockers control some of the physical symptoms of anxiety, such as trembling and sweating. Propranolol (Inderal) is a beta-blocker usually used to treat heart conditions and high blood pressure. The medicine also helps people who have physical problems related to anxiety. For example, when a person with social phobia must face a stressful situation, such as giving a speech, or attending an important meeting, a doctor may prescribe a beta-blocker. Taking the medicine for a short period of time can help the person keep physical symptoms under control.

<table>
<thead>
<tr>
<th>Drug Side Effects</th>
<th>The most common side effects for benzodiazepines are drowsiness and dizziness. Other possible side effects include:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Upset stomach</td>
</tr>
<tr>
<td></td>
<td>- Blurred vision</td>
</tr>
<tr>
<td></td>
<td>- Headache</td>
</tr>
<tr>
<td></td>
<td>- Confusion</td>
</tr>
<tr>
<td></td>
<td>- Grogginess</td>
</tr>
<tr>
<td></td>
<td>- Nightmares</td>
</tr>
</tbody>
</table>
Possible side effects from buspirone (BuSpar) include:
- Dizziness
- Headaches
- Nausea
- Nervousness
- Lightheadedness
- Excitement
- Trouble sleeping

Common side effects from beta-blockers include:
- Fatigue
- Cold hands
- Dizziness
- Weakness

In addition, beta-blockers generally are not recommended for people with asthma or diabetes because they may worsen symptoms.

**Administration**

People can build a tolerance to benzodiazepines if they are taken over a long period of time and may need higher and higher doses to get the same effect. Some people may become dependent on them. To avoid problems of drug dependency, doctors usually prescribe the medication for short periods, a practice that is especially helpful for people who have substance abuse problems or who become dependent on medication easily. If people suddenly stop taking benzodiazepines, they may get withdrawal symptoms, or their anxiety may return. Therefore, they should be tapered off slowly. Buspirone and beta-blockers are similar. They are usually taken on a short-term basis for anxiety. Both should be tapered off slowly. Talk to the doctor before stopping any anti-anxiety medication.
### Attention Deficit/Hyperactivity Disorder (ADHD)

#### Treatment

Attention deficit/hyperactivity disorder (ADHD) occurs in both children and adults. ADHD is commonly treated with stimulants, such as:

- Methylphenidate (Ritalin, Metadate, Concerta, Daytrana)
- Amphetamine (Adderall)
- Dextroamphetamine (Dexedrine, Dextrostat)

In 2002, the FDA approved the nonstimulant medication atomoxetine (Strattera) for use as a treatment for ADHD. In February 2007, the FDA approved the use of the stimulant lisdexamfetamine dimesylate (Vyvanse) for the treatment of ADHD in children ages 6 to 12 years.

#### Drug Side Effects

Most side effects are minor and disappear when dosage levels are lowered.

Most common side effects include:

- **Decreased appetite** - Individuals seem to be less hungry during the middle of the day, but they are often hungry by dinnertime as the medication wears off.

- **Sleep problems** - If an individual cannot fall asleep, the provider may prescribe a lower dose. The doctor might also suggest that medication be taken earlier in the day, or to stop the afternoon or evening dose. To help ease sleeping problems, a provider may add a low dose of an antidepressant or a medication called clonidine.

- **Stomachaches and headaches**
Less common side effects include:

- **Tics** –
  A few individuals will develop sudden, repetitive movements or sounds called tics. These tics may or may not be noticeable. Changing the medication dosage may make tics go away.
- **Personality change** –
  Some individuals also may appear to have a personality change, such as appearing "flat" or without emotion.

In 2007, the FDA required that all makers of ADHD medications develop Patient Medication Guides. The guides must alert patients to possible heart and psychiatric problems related to ADHD medicine. The FDA required the Patient Medication Guides because a review of data found that ADHD patients with heart conditions had a slightly higher risk of strokes, heart attacks, and sudden death when taking the medications. The review also found a slightly higher risk (about 1 in 1,000) for medication-related psychiatric problems, such as hearing voices, having hallucinations, becoming suspicious for no reason, or becoming manic. This happened to patients who had no history of psychiatric problems. The FDA recommends that any treatment plan for ADHD include an initial health and family history examination. This exam should look for existing heart and psychiatric problems.

The non-stimulant ADHD medication called atomoxetine (Strattera) carries another warning. Studies show that individuals with ADHD who take atomoxetine are more likely to have suicidal thoughts than individuals with ADHD who do not take atomoxetine. An individual may develop serious symptoms suddenly.
If the following symptoms appear while taking atomoxetine, it is important for the patient to seek treatment immediately:

- Acting more subdued or withdrawn than usual
- Feeling helpless, hopeless, or worthless
- New or worsening depression
- Thinking or talking about hurting himself or herself
- Extreme worry
- Agitation
- Panic attacks
- Trouble sleeping
- Irritability
- Aggressive or violent behavior
- Acting without thinking
- Extreme increase in activity or talking
- Frenzied, abnormal excitement
- Any sudden or unusual changes in behavior

**Administration**

Stimulant medications can be short-acting or long-acting, and can be taken in different forms such as a pill, patch, or powder. Long-acting, sustained and extended release forms allow individuals to take the medication just once a day. ADHD medications help many individuals who are hyperactive and impulsive. They help people focus, work, and learn. Stimulant medication also may improve physical coordination. However, different people respond differently to medications, so individuals taking ADHD medications should be watched closely.

The various medications listed in the table above can be beneficial in helping to minimize the symptoms associated with mental illness. However, some women will not respond fully to pharmacologic treatment. Women with
schizophrenia or bipolar disorder may continue to experience severe symptoms even with pharmacologic intervention. In these instances, women will require additional treatment options, including support networks, psychiatric therapy, and possibly assistance with daily tasks.(105)

Initiating pharmacologic treatment requires a thorough assessment and analysis of the patient’s condition and specific needs. There are numerous medications available to treat each condition, and each medication acts differently. Therefore, the specific medication used will depend on the needs of the patient. The following medication tables provide the trade name, generic name, and the U.S. Food and Drug Administration (FDA) approved age for each type of psychiatric medication. This list will provide a starting point for identifying the pharmacologic options available to treat patients.(106)

<table>
<thead>
<tr>
<th>Trade Name</th>
<th>Generic Name</th>
<th>FDA Approved Age</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Combination Antipsychotic and Antidepressant Medication</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symbyax (Prozac &amp; Zyprexa)</td>
<td>fluoxetine &amp; olanzapine</td>
<td>18 and older</td>
</tr>
<tr>
<td><strong>Antipsychotic Medications</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abilify</td>
<td>Aripiprazole</td>
<td>10 and older for bipolar disorder, manic or mixed episodes; 13 to 17 for schizophrenia and bipolar</td>
</tr>
<tr>
<td>Clozaril</td>
<td>Clozapine</td>
<td>18 and older</td>
</tr>
<tr>
<td>Fanapt</td>
<td>Iloperidone</td>
<td>18 and older</td>
</tr>
<tr>
<td>fluphenazine (generic only)</td>
<td>Fluphenazine</td>
<td>18 and older</td>
</tr>
<tr>
<td>Geodon</td>
<td>Ziprasidone</td>
<td>18 and older</td>
</tr>
<tr>
<td>Drug</td>
<td>Active Ingredient</td>
<td>Age Range</td>
</tr>
<tr>
<td>--------------------</td>
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</tr>
<tr>
<td>Haldol</td>
<td>Haloperidol</td>
<td>3 and older</td>
</tr>
<tr>
<td>Invega</td>
<td>Paliperidone</td>
<td>18 and older</td>
</tr>
<tr>
<td>Latuda</td>
<td>Lurasidone</td>
<td>18 and older</td>
</tr>
<tr>
<td>Loxitane</td>
<td>Loxapine</td>
<td>18 and older</td>
</tr>
<tr>
<td>Moban</td>
<td>Molindone</td>
<td>18 and older</td>
</tr>
<tr>
<td>Navane</td>
<td>Thiothixene</td>
<td>18 and older</td>
</tr>
<tr>
<td>Orap (for Tourette's syndrome)</td>
<td>Pimozide</td>
<td>12 and older</td>
</tr>
<tr>
<td>Perphenazine (generic only)</td>
<td>Perphenazine</td>
<td>18 and older</td>
</tr>
<tr>
<td>Risperdal</td>
<td>Risperidone</td>
<td>13 and older for schizophrenia; 10 and older for bipolar mania and mixed episodes; 5 to 16 for irritability associated with autism</td>
</tr>
<tr>
<td>Seroquel</td>
<td>Quetiapine</td>
<td>13 and older for schizophrenia; 18 and older for bipolar disorder; 10-17 years for treatment of manic and mixed episodes of bipolar disorder</td>
</tr>
<tr>
<td>Stelazine</td>
<td>Trifluoperazine</td>
<td>18 and older</td>
</tr>
<tr>
<td>thioridazine (generic only)</td>
<td>Thioridazine</td>
<td>2 and older</td>
</tr>
<tr>
<td>Thorazine</td>
<td>Chlorpromazine</td>
<td>18 and older</td>
</tr>
<tr>
<td>Zyprexa</td>
<td>Olanzapine</td>
<td>18 and older; ages 13-17 as second line treatment for manic or mixed episodes of bipolar disorder and schizophrenia</td>
</tr>
<tr>
<td>Trade Name</td>
<td>Generic Name</td>
<td>FDA Approved Age</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td><strong>Antidepressant Medications</strong></td>
<td><strong>(also used for anxiety disorders)</strong></td>
<td></td>
</tr>
<tr>
<td>Anafranil (tricyclic)</td>
<td>Clomipramine</td>
<td>10 and older (OCD only)</td>
</tr>
<tr>
<td>Asendin</td>
<td>Amoxapine</td>
<td>18 and older</td>
</tr>
<tr>
<td>Aventyl (tricyclic)</td>
<td>Nortriptyline</td>
<td>18 and older</td>
</tr>
<tr>
<td>Celexa (SSRI)</td>
<td>Citalopram</td>
<td>18 and older</td>
</tr>
<tr>
<td>Cymbalta (SNRI)</td>
<td>Duloxetine</td>
<td>18 and older</td>
</tr>
<tr>
<td>Desyrel</td>
<td>Trazodone</td>
<td>18 and older</td>
</tr>
<tr>
<td>Effexor (SNRI)</td>
<td>Venlafaxine</td>
<td>18 and older</td>
</tr>
<tr>
<td>Elavil (tricyclic)</td>
<td>Amitriptyline</td>
<td>18 and older</td>
</tr>
<tr>
<td>Emsam</td>
<td>Selegiline</td>
<td>18 and older</td>
</tr>
<tr>
<td>Lexapro (SSRI)</td>
<td>Escitalopram</td>
<td>18 and older; 12 - 17 (major depressive disorder)</td>
</tr>
<tr>
<td>Ludiomil (tricyclic)</td>
<td>Maprotiline</td>
<td>18 and older</td>
</tr>
<tr>
<td>Luvox (SSRI)</td>
<td>Fluvoxamine</td>
<td>8 and older (OCD only)</td>
</tr>
<tr>
<td>Marplan (MAOI)</td>
<td>Isocarboxazid</td>
<td>18 and older</td>
</tr>
<tr>
<td>Nardil (MAOI)</td>
<td>Phenelzine</td>
<td>18 and older</td>
</tr>
<tr>
<td>Norpramin (tricyclic)</td>
<td>Desipramine</td>
<td>18 and older</td>
</tr>
<tr>
<td>Pameler (tricyclic)</td>
<td>Nortriptyline</td>
<td>18 and older</td>
</tr>
<tr>
<td>Parnate (MAOI)</td>
<td>Tranylcypromine</td>
<td>18 and older</td>
</tr>
<tr>
<td>Paxil (SSRI)</td>
<td>Paroxetine</td>
<td>18 and older</td>
</tr>
<tr>
<td>Pexeva (SSRI)</td>
<td>paroxetine-</td>
<td>18 and older</td>
</tr>
<tr>
<td></td>
<td>mesylate</td>
<td></td>
</tr>
<tr>
<td>Pristiq</td>
<td>desvenlafaxine</td>
<td>18 and older</td>
</tr>
<tr>
<td></td>
<td>(SNRI)</td>
<td></td>
</tr>
<tr>
<td>Prozac (SSRI)</td>
<td>Fluoxetine</td>
<td>8 and older</td>
</tr>
<tr>
<td>Trade Name</td>
<td>Generic Name</td>
<td>FDA Approved Age</td>
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<tr>
<td>------------------</td>
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<td>------------------------------------------</td>
</tr>
<tr>
<td><strong>Mood Stabilizing and Anticonvulsant Medications</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depakote</td>
<td>divalproex sodium (valproic acid)</td>
<td>2 and older (for seizures)</td>
</tr>
<tr>
<td>Eskalith</td>
<td>lithium carbonate</td>
<td>12 and older</td>
</tr>
<tr>
<td>Lamictal</td>
<td>Lamotrigine</td>
<td>18 and older</td>
</tr>
<tr>
<td>lithium citrate (generic only)</td>
<td>lithium citrate</td>
<td>12 and older</td>
</tr>
<tr>
<td>Lithobid</td>
<td>lithium carbonate</td>
<td>12 and older</td>
</tr>
<tr>
<td>Neurontin</td>
<td>Gabapentin</td>
<td>18 and older</td>
</tr>
<tr>
<td>Tegretol</td>
<td>Carbamazepine</td>
<td>any age (for seizures)</td>
</tr>
<tr>
<td>Topamax</td>
<td>Topiramate</td>
<td>18 and older</td>
</tr>
<tr>
<td>Trileptal</td>
<td>Oxcarbazepine</td>
<td>4 and older</td>
</tr>
<tr>
<td>Trade Name</td>
<td>Generic Name</td>
<td>FDA Approved Age</td>
</tr>
<tr>
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<tr>
<td><strong>Anti-anxiety Medications (Benzodiazepines, except BuSpar)</strong></td>
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</tr>
<tr>
<td>Ativan</td>
<td>Lorazepam</td>
<td>18 and older</td>
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<tr>
<td>BuSpar</td>
<td>Buspirone</td>
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<tr>
<td>Klonopin</td>
<td>Clonazepam</td>
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</tr>
<tr>
<td>Librium</td>
<td>Chlordiazepoxide</td>
<td>18 and older</td>
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<tr>
<td>oxazepam (generic only)</td>
<td>Oxazepam</td>
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</tr>
<tr>
<td>Tranxene</td>
<td>Clorazepate</td>
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</tr>
<tr>
<td>Valium</td>
<td>Diazepam</td>
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<tr>
<td>Xanax</td>
<td>Alprazolam</td>
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<th>Trade Name</th>
<th>Generic Name</th>
<th>FDA Approved Age</th>
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<tr>
<td><strong>ADHD Medications (stimulant medications except for Intuniv and Straterra)</strong></td>
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<tr>
<td>Adderall</td>
<td>Amphetamine</td>
<td>3 and older</td>
</tr>
<tr>
<td>Adderall XR</td>
<td>amphetamine (ER)</td>
<td>6 and older</td>
</tr>
<tr>
<td>Concerta</td>
<td>methylphenidate (LA)</td>
<td>6 and older</td>
</tr>
<tr>
<td>Daytrana</td>
<td>methylphenidate patch</td>
<td>6 and older</td>
</tr>
<tr>
<td>Desoxyn</td>
<td>Methamphetamine</td>
<td>6 and older</td>
</tr>
<tr>
<td>Dextroamphetamine</td>
<td>Dextroamphetamine</td>
<td>3 and older</td>
</tr>
<tr>
<td>Dextrostat</td>
<td>Dextroamphetamine</td>
<td>3 and older</td>
</tr>
<tr>
<td>Focalin</td>
<td>Dexamethasone</td>
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</tr>
<tr>
<td>Medicine</td>
<td>Active Ingredient</td>
<td>Age Range</td>
</tr>
<tr>
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</tr>
<tr>
<td>Focalin XR</td>
<td>Dexmethylphenidate (ER)</td>
<td>6 and older</td>
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<tr>
<td>Intuniv</td>
<td>Guanfacine</td>
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<td>Metadate ER</td>
<td>Methylphenidate (ER)</td>
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<td>Metadate CD</td>
<td>Methylphenidate (ER)</td>
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<tr>
<td>Methylin</td>
<td>Methylphenidate (oral solution and chewable tablets)</td>
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<td>Ritalin</td>
<td>Methylphenidate</td>
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<td>Ritalin SR</td>
<td>Methylphenidate (ER)</td>
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<td>Ritalin LA</td>
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<td>Strattera</td>
<td>Atomoxetine</td>
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<tr>
<td>Vyvanse</td>
<td>Lisdexamfetamine dimesylate</td>
<td>6 and older</td>
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*ER=Extended Release; LA=Long-Acting

**Concerns With Pregnant and Nursing Mothers**

In instances of depression and anxiety, pharmacologic treatment is often necessary to manage the symptoms. However, many of these medications can be detrimental during pregnancy and the post partum period as they can pose a risk to the fetus and/or newborn child. In fact, there are currently no medications that are approved for use during pregnancy. However, some cases may require pharmacologic intervention. In these situations, it is necessary to weigh the benefits against the risks. With some medications, the risk of developing teratogenesis (congenital malformations) from exposure to psychiatric medications is very high. The deformities can include cleft lip or palate, or major deformations of the organs in the fetus.(98)
All psychotropic medications are secreted into breast milk and transmitted to the infant during breastfeeding. However, the concentrations of different agents will vary widely depending on dosage, rate of drug metabolism, and frequency, timing, and duration of infant feedings. (84) Infant complications related to most tricyclic antidepressants are rare, and there have been no reported complications associated with other antidepressants. Women with other postpartum mental health conditions, such as bipolar disorder or postpartum psychosis will have more difficulty continuing to breastfeed while taking medication. The levels of medication secreted into the breast milk are much higher with the agents used to treat these conditions, and the adverse affects are greater. (98)

Non-Pharmacologic Treatment

In addition to pharmacologic treatment, many women will benefit from non-pharmacologic treatments. These treatments are often used in conjunction with medication to minimize the symptoms associated with mental illness. However, non-pharmacologic therapies may be used on their own with patients who are diagnosed with non-psychotic forms of psychiatric illness, as well as for those who have mild symptoms. Non-pharmacologic treatments are often used as the first treatment for individuals, with pharmacologic agents being introduced if the patient does not respond to initial treatment. (107) Non-pharmacologic treatment is diverse and can be tailored to meet the specific needs of the patient.

The most common form of non-pharmacologic treatment is psychosocial treatment. This includes psychotherapy, social, and vocational training. It is intended to provide support to individuals with mental illness, as well as develop the skills and resources necessary to maintain daily living activities. Treatment is proven to help reduce the negative effects of the condition.
while improving the patient’s basic functioning abilities \(^{(108)}\). Psychosocial treatments can minimize hospital visits and provide patients with the coping skills necessary to maintain relationships and obtain employment. These therapies are typically provided by a psychiatrist, social worker, nurse or counselor.\(^{(109)}\)

When psychosocial therapies are prescribed in conjunction with medication, a therapist and psychiatrist will typically work together to treat the patient. They will both track patient progress and consult with each other to identify any issues or concerns that may require them to alter treatment. The goal is patient support and symptom management.\(^{(110)}\) There are a variety of different types of non-pharmacological psychosocial treatments available. The following Table VIII provides a thorough overview of each type and the benefits and risks associated with it.\(^{(108)}\)

### Table VIII.

| **Individual Psychotherapy** | Individual psychotherapy involves regularly scheduled sessions between the patient and a mental health professional. The goal of this treatment is to help individuals understand why they are acting and thinking in ways that are troubling or dangerous to themselves (or others). This allows a person to have more control over their behaviors and to change these behaviors when possible.

Therapists offer many different types of psychotherapy. Talk-therapy sessions may focus on a person's problems, thoughts, experiences, feelings or relationships. By sharing experiences with a trained, understanding and knowledgeable person, individuals with mental illnesses may gradually understand more about themselves and problems they are facing. |
|---|---|

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Individual psychotherapy is used successfully to treat emotional, behavioral, and social problems in people with schizophrenia, bipolar disorder, attention-deficit/hyperactivity disorder (ADD/ADHD), depression, eating disorders, anxiety disorders and other mental illnesses. In general no one type of therapy is necessarily "better" than another type, although certain mental illnesses have been shown to respond better to specific psychotherapies. When deciding which therapy, or therapies, will likely be the most successful treatment option for an individual, a psychotherapist considers the nature of the problem to be treated and the individual's personality, cultural and family background, and personal experiences. Note that some psychotherapists have specific training in different treatments.

**Psychoeducation**

Psychoeducation involves teaching people about their illnesses and how they are treated. This allows people and their families to recognize signs of relapse in order to get necessary treatment before mental illness worsens or occurs again. Family psychoeducation includes teaching coping strategies and problem-solving skills to families (and friends) of people with mental illnesses to help them deal more effectively with their friends and relatives. It helps reduce distress, confusion, and anxieties within the family, which may help the individual with mental illness to recover. Psychoeducation in combination with medication has been used successfully to treat people with schizophrenia, bipolar disorder, attention-deficit/hyperactivity disorder (ADHD), depression, and other mental illnesses; it further allows individuals to support their loved ones through the treatment process. NAMI has developed a program called Family-to-Family, a free, 12-week educational and support program for family members of patients with mental illness.
The NAMI Family-to-Family program is available internationally throughout North America (including in Mexico, Puerto Rico and Canada), and is run by people who have family members of their own with mental illnesses. It has been shown in scientific studies to be useful in decreasing the distress of family members and improving outcomes (including less hospitalizations and increased functioning) of patients with mental illness. Two other programs developed by NAMI are Peer-to-Peer, created to help individuals maintain their wellness and recovery, and NAMI Basics, a program designed to help educate parents and other caregivers of children and adolescents living with mental illness.

| **Self-help and Support Groups** | Self-help and support groups for people and families dealing with mental illnesses are becoming increasingly common. Although not led by a professional therapist, these groups may be therapeutic because members give each other ongoing support. These groups also are comforting because ill people learn that others have problems similar to theirs: they are not alone in this world with their mental illness.

Members of support groups share frustrations and successes, referrals to qualified specialists and community resources, and information about what works best when trying to recover. They also share friendship and hope for themselves, their loved ones, and others in the group. Groups may also help families work together to advocate for needed research and treatments and for better hospital and community programs. When people act as a group rather than individually, they are often more effective in the fight against stigma and more successful at drawing public attention the discrimination that people living with mental illness often face. |
### Interpersonal Therapy
Interpersonal therapy focuses on the relationships a person has with others. The goal of interpersonal therapy is, of course, to improve interpersonal skills. The therapist actively teaches individuals to evaluate their interactions with others and to become aware of self-isolation and difficulties getting along with, relating to, or understanding others. He or she also offers advice and helps individuals make decisions about the best way to deal with other people. Interpersonal therapy is a psychosocial treatment used most frequently to help people with bipolar disorder, ADHD, depression, eating disorders and generalized anxiety disorder. It is often expected to last for approximately 3-4 months and to target specific symptoms over this time period.

### Cognitive Behavioral Therapy
Cognitive behavioral therapy (CBT) is a treatment that focuses on the relationship between an individual’s thoughts, feelings, and behaviors. A CBT therapist will try to explore the links between the thoughts and emotions that occur prior to disruptive behaviors in people with mental illness. By establishing these connections, individuals learn to identify and change inappropriate or negative thought patterns and as a consequence, can address the behaviors associated with their illness. A common goal is to recognize negative thoughts or mind-sets (mental processes such as perceiving, remembering, reasoning, decision making, and problem solving) and to replace them with positive thoughts, which will lead to more appropriate and beneficial behavior. For instance, CBT tries to replace thoughts that lead to low self-esteem ("I can't do anything right") with positive expectations ("I can do this correctly"). It often times involve “homework” to help an individual “practice their skills” in between treatment sessions.
CBT is often thought of as a “first-line treatment” in many anxiety disorders (including OCD, Panic Disorder, and PTSD). Along with medication treatment, CBT can successfully help people with schizophrenia, bipolar disorder, ADHD, depression, eating disorders, generalized anxiety disorder, panic disorder, OCD, substance abuse problems and other mental illnesses.

| Exposure Therapy | A type of behavioral therapy known as exposure therapy (or exposure and response prevention) is specifically useful for treating obsessive-compulsive disorder (OCD) and post-traumatic stress disorder (PTSD). During exposure therapy, an individual is deliberately exposed to whatever triggers the obsessive thoughts or reaction to a previous traumatic experience under controlled conditions. The individual is then taught techniques to avoid performing the compulsive rituals or to work through the trauma. This is helpful in decreasing the urges following a stimulus (thought or situation) that previously resulted in the individual being paralyzed by the thoughts and behaviors associated with their mental illness.

ERP (Exposure and Response Prevention) is thought of as a “first-line treatment“ for PTSD and OCD in certain situations. In many cases, exposure therapy is used along with medications due to the severity of symptoms. |
| Dialectical Behavior Therapy (DBT) | Dialectical behavior therapy (DBT) was initially developed to treat chronically suicidal individuals with Borderline Personality Disorder (BPD). Over time, DBT has evolved into a treatment for individuals with multiple different disorders, although many people who are treated with DBT have borderline personality disorder (BPD) as a primary diagnosis. |
DBT has also been adapted for behavioral disorders involving emotional dysregulation (such as substance dependence in individuals with BPD and binge eating disorder) and for treating people with severe depression and associated suicidal thoughts. DBT combines the basic strategies of behavior therapy with a philosophy that focuses on the idea that opposites may really not be opposite when looked at differently.

As a comprehensive treatment, DBT can:

- Decrease the frequency and severity of self-destructive behaviors
- Increase the motivation to change (by providing positive reinforcement)
- Teach new “coping skills” that generalize to a person’s natural environment
- Provide a treatment environment that emphasizes the strengths of both individuals and their treatments
- Enhance the therapist's motivation and ability to treat their clients effectively

In standard DBT, different types of psychosocial therapies—including individual psychotherapy, group skills training, and even phone consultations—may be used as part of treatment.

Psychodynamic Psychotherapy has its fundamental roots in the teachings of Sigmund Freud, Carl Jung, and other psychiatrists who practiced in the early twentieth century. Yet most therapists who offer this treatment are no longer driven by the rigid rules of traditional “psychoanalysis.” Psychodynamic psychotherapy is practiced differently by different therapists and will likely vary depending on the needs of their client.
There is not as much scientific data supporting the effectiveness of psychodynamic psychotherapy in some illnesses (such as schizophrenia) as opposed to other treatments (including CBT). Therefore it is no longer considered a “first-line treatment” in many mental illnesses. In spite of this, psychodynamic psychotherapy can be useful for some patients with depression, anxiety disorders, borderline personality disorder, and other mental illnesses. In many cases, psychodynamic psychotherapy occurs along with medication therapy.

**Assertive Community Treatment (ACT)**

ACT is a highly effective team-based model of providing comprehensive and flexible treatment and support to individuals who live with serious mental illness. Teams can include peer support specialists and practitioners with expertise in psychiatry, nursing, social work, substance abuse treatment, and employment that work closely together to provide integrated and outreach-oriented services.

**Dual Diagnosis and Integrated Treatment of Mental Illness and Substance Abuse Disorder**

Dual diagnosis services are treatments for people who live with co-occurring disorders—mental illness and substance abuse. Research has strongly indicated that to recover fully, a consumer with co-occurring disorder needs treatment for both problems—focusing on one does not ensure the other will go away. Dual diagnosis services integrate assistance for each condition, helping people recover from both in one setting, at the same time.
Summary

Women and men are fundamentally, biologically different, so it should come as no surprise that mental health issues affect them differently. A mental illness can manifest itself in different ways across gender lines, so it is important for medical professionals to consider the individual impact of each disorder on each patient. Although women are more likely than men to seek help for mental health issues, there are still many women with untreated disorders in need of compassionate care.

Gender has a significant impact on the development and presentation of mental illness and the overall mental health of individuals. It affects how mental illness develops, how it is experienced, and how it is treated. Gender plays a role in socioeconomics, social position, status, and power differentials, which also affect how individuals develop and obtain treatment for mental illness. Gender also has an impact on how mental illness is perceived by others, and it can affect how and why individuals seek help. Exposure and susceptibility to mental illness are also impacted by gender differentials.

The most significant gender differences occur in the instance and rates of the more common mental health conditions, such as depression, anxiety and somatic disorders. In all of these disorders, women are affected at a higher rate than their male counterparts, and the impact of the illnesses is greater. Depression is twice as common in women than men, and symptoms are more severe and persistent. In more severe mental disorders, such as schizophrenia and bipolar disorder, there are fewer gender differences in regards to rate and prevalence. However, the impact of the illness and the initiation and continuation of treatment is impacted by gender. In addition, there are differences in the age of onset, frequency of psychotic episodes,
social adjustment and interaction, and outcome based upon the individual’s gender.

Women experience mental health issues differently than their male counterparts. Therefore, it is important to study the impact gender has on mental illness and identify strategies for working with women with mental health concerns. Women are often at a disadvantage to their male counterparts based on social status, income, marital standing, and societal expectations. In addition, women are at a greater risk of being victims of domestic violence and sexual assault, which can further impact the development and management of mental health issues. Women are also at a greater risk of experiencing comorbid disorders, which will further differentiate their experience from their male counterparts.

Many of the risk factors for mental illness are gender specific, or somewhat related to typical gender based roles. Women experience higher levels of gender based violence, socioeconomic disadvantage, low income and income inequality, low or subordinate social status, and increased responsibility for the care of others. These factors impact how women develop and experience mental illness, as well as how they seek and manage treatment.

Gender and mental health are interrelated. To better understand how women experience mental illness, it is important to examine the factors that contribute to these experiences, which often differ from those of men. The numerous tables and diagrams included in this course are intended to assist clinicians to readily identify contributing factors and treatment options unique to women with a mental illness. The knowledgeable clinician will be able to recognize the unique experience of women with mental illness and avoid any gender bias that may impact their diagnosis, care and treatment.
References:


108. NAMI | About Psychosocial Treatments [Internet]. [cited 2014 Aug 1]. Available from: http://www.nami.org/Template.cfm?Section=About_Treatments_and_Supports&Template=/ContentManagement/ContentDisplay.cfm&ContentID=10510
