TANNER CLINIC

*"The **PATIENT** is at the **CENTER** of everything we do."*

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DEPRESSION OVERVIEW

DEPRESSION RISK FACTORS

Because the cause of depression is not known it is difficult to pinpoint who may develop depression over their life and development. The following risk factors have been shown to increase the chance that a child or adolescent might develop depression.

- Family history of depression

- Low birth weight

- Conflict or dysfunction in the home

- Early significant problems (such as abuse, neglect, the loss of a loved one in early life)

-Difficulty with school or friends
- Negative outlook or poor coping skills

- History of episodes of depression
- Other mental health problems including learning disabilities, attention deficit hyperactivity disorder, or significant defiance or conduct problems.
-Chronic health problems or illness.

Depression is often thought of as an adult problem. However depression is something that can be a common problem for children, especially adolescents. Depression symptoms can hurt their performance at school, interfere with relationships and can cause long term effects if not addressed and treated. Depression in children can also be associated with problems with behavior, substance abuse as well as other mental health problems. It can also appear differently than it does in adults that can make the problem difficult to recognize.

The good news is that depression in children and adolescents can be treated. Counseling, medicine and other treatments can help improve symptoms and allow children to develop and learn in school just like children without this issue. It can also allow them to form healthy friendships and relationships with family. Treatment can also help their self-confidence. This handout discusses the causes, risk factors, signs and symptoms, and diagnosis of depression in children and adolescents.

CAUSE OF DEPRESSION — The exact causes of depression are not known. Research of twins suggest that genes and environment both play important roles in the development of depression. Also, an individual's behaviors and thoughts can play a role in the development and course of depression. One example is that people with depression tend to be pessimistic about the future, themselves, and their surroundings and this worsens their depression, while helping them change these thoughts and attitudes can help the same individual improve their depression significantly. In addition, chemicals in the brain called **neurotransmitters** (like serotonin, norepinephrine, and dopamine) play a role in depression if the levels are not in balance. Neurotransmitters send messages from one nerve cell to another. They are key in all neurologic function like movement, sensation, memory, and emotions. **Antidepressants and counseling are designed to reverse abnormal changes in brain chemistry and function.**

DEPRESSION SYMPTOMS — Depression can present in a variety of ways and can be mild or severe or anything in between. Part of the variety is that depression can often be accompanied by other mental health problems that can change how it appears.

Diagnostic criteria — Depression most often refers to what is called unipolar major depression (or major depressive disorder). There are five criteria that are used to diagnose unipolar major depression in a child. These criteria must be present for most of the day for at least 2 weeks. For an official diagnosis, one of the symptoms must be either depressed mood or diminished interest or pleasure. However, children who do not meet the diagnostic criteria for unipolar major depression but still have difficulty functioning with similar symptoms are often treated with the same treatments.

Depressed or irritable mood —Feeling low, down, sad, or blue much of the time. This is an important symptom of depression. Other ways that this mood can be seen is perceiving others as mean or not caring, obsessing about perceived unpleasant situations, having a gloomy or hopeless attitude, thinking that life is unfair, or being concerned that they might disappoint people.

A challenging aspect about depression in children and adolescents is that they are not mature enough to know that they are depressed. Often they will instead have an irritable mood, feel annoyed or easily bothered by many people and situations. Instead of communicating that they are sad, they will rather be negative, oppositional, or they will start arguments or fights to show that they do not feel well emotionally. Anger outburst or intolerance of minor annoyances can be the presenting situation.

Adolescents will often try to cope with these feelings by searching for temporary relief in activities like: spending time with friends, dangerous/thrill-seeking activities, sexual promiscuity or drug use. Adolescents as a whole are very interested in their friends and peers and so the need to connect with others is very important to them. Sometimes adolescents with depression will seek out peers dealing with the same symptoms which can create a destructive situation making the symptoms worse.

Diminished interest or pleasure — Another fundamental symptom in depression is that the child or adolescent will no longer enjoy activities or feel pleasure that they previously enjoyed. The term for this is anhedonia. These activities now seem boring or stupid. These children will sometimes isolate themselves from friends and avoid activities altogether.

Change in appetite or weight — Depression can cause either an increased or decreased appetite. This can be associated with weight changes especially weight loss which is always a concern in children.

Sleep disturbance — One of the most common presenting symptoms that can be a red flag for depression is sleeping difficulties. Children or adolescents may have difficulty getting to sleep, or wake frequently at night. They may also sleep longer and later and often will complain of not feeling rested after sleeping.

Psychomotor agitation or retardation (restlessness or sluggishness) — A more sever symptom of depression is that their movement and speech will slow. Severely depressed children or adolescents find it difficult to move or speak as they used to.

Fatigue or loss of energy — Depression can be associated with feeling like you have no energy. A child may be sleepy or may feel like their limbs are heavy. They will often want to lay down.

Feelings of worthlessness or guilt — Although this is a common symptom in depression, children sometimes do not want to admit or talk about these things. Instead they may demonstrate this feeling through their behavior like if they:

- Are unhappy with themselves
- Are unwilling to recognize their accomplishments or good attributes
- Blame themselves for many things out of their control or unrelated to them
- Hope to make themselves feel better by lying about their accomplishments
- Are envious focused and frustrated by other's accomplishments
- Are convinced they will fail at new things and will not try them
- Think they deserve to be punished for things that are not their fault

Poor concentration and decision making — This can be confused sometimes with attention-deficit and hyperactivity disorder. They may have more difficulty remembering things, focusing on work or tests. Their school performance may suffer.

Recurring thoughts of death or suicide — A very concerning symptom of depression is repeated thoughts about death or suicide. This can show up with them focused on music or reading with morbid themes about death or suicide. Sometimes they may think that life is not worth living and that others would be better off if they were dead. Even more concerning is active thoughts about their suicide or even plans about suicide. Sometimes if depressed teenagers are in unhealthy relationships with peers with similar symptoms, they may enter suicide pacts. These thoughts or plans are often based in a sense that there is no hope or to escape their chronic emotional pain.

Preventing suicide — One bit of good news is that suicide is often preventable. Take any mention of suicide seriously. The following are signs of increased risk of suicide:

- Substance abuse — especially more than previous alcohol or drug use
- Feeling like they don't have a purpose
- Ideation — mentioning suicide, dying, or harming themselves, especially concerning if there is a plan associated
- Feeling like there is no resolution, trapped
- Hopelessness
- Withdrawal from friends, family, and society or activities they previously enjoyed
- Anxiety or changes in sleep patterns as well as agitation
- Anger
- Recklessness
- Mood changes

Parents who are concerned that their child is considering suicide should seek care as soon as possible. Do one of the following if suicide is a concern:

- Call their healthcare provider for advice or an urgent appointment
- Take the child to the local emergency department
- Call the National Suicide Prevention Lifeline (www.suicidepreventionlifeline.org) at 1-800-273-TALK (8255).

If there is an urgent risk of suicide, this is an emergency, often requiring an emergency room visit. If depression preceded the suicidal thoughts or actions, treatment of this depression needs to start. Often this will be started at an inpatient facility (in a hospital for mental health issues)

FUNCTIONAL PROBLEMS — Depression can affect activities in a child's every-day life including relationships with loved ones or friends, school performance, or other functions. Children with depression are also more likely to do risky things like use drugs or alcohol as well as make poor decisions about sexual promiscuity. These behaviors and functional difficulties can worsen the depression symptoms.

CO-MORBIDITY — Co-morbidity means having more than one medical problem. Depression is often associated with other health issues, especially mental health problems. Studies show that adolescents with depression up to 70 percent can have other mental health issues and some can have more than two. The most common co-morbid conditions include:

- Anxiety disorders
- Attention deficit hyperactivity disorder-ADHD
- Oppositional defiant disorder-ODD
- Substance use disorders

Depression can lead to other disorders like eating disorders or substance use disorders, which can make depression worse and more difficult to treat.

COURSE OF ILLNESS — Studies indicate that in children who are being treated for depression, the condition often lasts roughly 8 to 13 months. Even if a child recovers, there is a 30 to 70 percent chance that these symptoms may return, called a relapse. For adolescents, depression might last 4 to 9 months, and 20 to 50 percent might relapse.

TREATMENT OVERVIEW

The good news is that depression in children and adolescents can be safely and effectively treated. Psychological talk treatments (psychotherapy), medication therapy (pharmacotherapy), and sometimes other measures can treat symptoms and help children and adolescents to succeed in school, develop and maintain healthy relationships, and feel more self-confident. Although it is not clear that antidepressants cause suicide in children and adolescents, **it is clear that depression can cause suicide.**

EDUCATION — Parents being involved in a child or adolescents treatment and management of depression is very important. It is important to be familiar with depression and how it may act. Better education can help you make good decisions for the treatment of your child in the following ways:

- You may be able to identify their own mental health difficulties, possibly even depression
- You can understand how depression affects relationships and school-work to better support the child through these difficulties.
- You can learn the important role that you and other members of your child's circle (teachers, siblings) can fill in helping your child overcome these symptoms.
- The more you learn about treatment options, the better decisions you can make for your child's treatment.
- You can learn how to make your child's environment safer including removing potential mechanisms of suicide (medications, weapons).
- You can better learn how to recognize depression symptoms and whether they are returning after an episode of depression has ended.

DEPRESSION TREATMENT OPTIONS — Treatment options for depression in children and adolescents include psychotherapy (sometimes called counseling or "talk therapy") and pharmacotherapy (medication). The specific treatment plan will depend on the child and family's individual situation, preferences, and the severity of the depression.

Children and adolescents with mild depression are usually treated with counseling alone.

After trying therapy for 4-6 weeks, if there is no improvement or if the depression symptoms are worsening at any point, medication may need to be considered at that time.

Children and adolescents with moderate to severe depression generally require psychotherapy and one or more medications.

This "combination therapy" can help improve relationships, help the child cope with symptoms and can lead to resolution of symptoms and eventually stopping both medication and therapy.

Your pediatrician will likely be able to diagnose and treat depression in your child, however depending on the severity and also possible other co-morbidities or complications, they may want to work closely with mental health specialists (psychiatrist, psychologist, social worker, and/or counselor) to provide an effective team approach to your child's care. A psychiatrist is a medical doctor who specializes in mental health disorders. Ideally it would be best to work with a psychiatrist who has studied and is board certified in the treatment of children or adolescents, or if the person has adult-only training, it would be helpful if the psychiatrist has experience treating adolescents. Some psychiatrists will provide medication and counseling, or you may work with a team approach with a therapist/psychologist providing therapy and medication being provided by a psychiatrist or your child's pediatrician. A psychiatrist is especially important if your child has not responded well to the first-line treatments that your child's pediatrician has tried and may require more specialized medicines with which the pediatrician has less experience.

COUNSELING TO TREAT DEPRESSION — **Psychotherapy (also called "talk therapy" or counseling) teaches patients and their families to understand themselves and the nature of depression.** This includes both the depressed feelings as well as how the depression affects their relationships, school, work and other responsibilities. Therapy is often weekly in the therapist's office for 30 to 60 minutes. Discussion during therapy can include feelings, thoughts, behaviors, and relationships. Two types of therapy that have good studies to show benefit are:

- **Cognitive behavioral therapy (CBT)** – Therapy that focuses on feelings, thoughts, and behaviors that make the symptoms worse and how to intervene and change these patterns.
- Interpersonal psychotherapy – This focuses more on how your child's relationships affect how they feel and how they can approach these relationships in a more healthy manner.
- Family-based interpersonal therapy – More beneficial for younger patients, this therapy involves the family and can help parents and siblings guide the child interactions with family and peers.

Other psychotherapies that can be helpful, especially for children or adolescents with thoughts or actions harming themselves are family therapy and dialectical behavior therapy (a form of CBT).

In most cases for older children and adolescents, parents are often not present for therapy sessions. This is because of a right to privacy for the child as well as the fact that children will often be reluctant to discuss certain issues in front of parents or family.

Therapy often starts as education to better understand both the nature of the symptoms as well as how depression started and is continuing in your child's life. This is often followed by a focus on changing unhelpful thoughts or behaviors. Therapy can help right after starting. However, more often you will not see significant benefit until after 8 or even 10 weeks of therapy.

Therapy can be provided by psychiatrists, psychologists, clinical social workers, and clinical nurse specialists. Choosing a therapist is a very important decision. You should look at what training they've had, how comfortable they are working with children or adolescents and make sure that your child feels comfortable with the relationship that the therapist will form over the first few weeks.

Some questions you may want to ask a potential therapist are:

- What training or experience do you have with children and adolescents?
- Are family members included in some aspects of the treatment? In what way?
- Do you feel comfortable using CBT or interpersonal psychotherapy for depression?

As mentioned above, severely depressed or suicidal children or teens are often treated in an inpatient facility. In that environment, depression treatment can involve many different approaches including medication, individual, group, and/or family therapy, physical exercise, art/music therapy, and school work.

MEDICATION TO TREAT DEPRESSION — As mentioned above, children with more severe symptoms and especially with suicidal risks or thoughts will need treatment with medication. These medicines help address problems with neurotransmitter chemicals in the brain. The most common first-line treatment for depression is a selective serotonin reuptake inhibitor or SSRI.

Issues that need to be considered when deciding to start an anti-depressant medication include:

- Possible risks vs. expected benefits.
- Issues with dosage and frequency
- How long will it take to see the full effect of the medicine
- Alternatives to medicine
- Potential complications with other medications the child is taking

More information about anti-depressant medicines is available from the American Academy of Child and Adolescent Psychiatry,in partnership with the American Psychiatric Association online at

www.parentsmedguide.org/pmg_depression.html.

Selective serotonin reuptake inhibitors (SSRIs) — Medications called selective serotonin reuptake inhibitors (SSRIs) are often the first-line medicine for depression in children. This class of medicine is chosen because the side effects are mild and rare, and the dose is taken once daily.

The SSRIs that have been studied in children and adolescents are fluoxetine (Prozac), sertraline (Zoloft), paroxetine (Paxil), citalopram (brand name: Celexa), and escitalopram (brand name: Lexapro). Two of these antidepressants have been approved by the United States Food and Drug Administration (FDA) to treat depression in youth: Fluoxetine for eight years old and up, and escitalopram for 12 years old and up. There are other SSRI medications that are used and tolerated well in children like the ones listed above.

Side effects — Many side effects of SSRI medication will one to two weeks after starting the medication and can include headache, abdominal pain, diarrhea and nausea, sleep changes, jitteriness, agitation, sexual side effects (decreased libido, delayed ability or inability to experience orgasm/ejaculate), or a tendency to bruise.

A more serious potential side effect of SSRIs is serotonin syndrome. Symptoms of serotonin syndrome include hyperthermia (overheating), agitation and anxiety. Serotonin syndrome can occur with a high dose of SSRI itself or if it is combined with other medicines that increase serotonin levels. One example is a migraine medicine family called triptans.

Just because one type of SSRI is not effective, does not mean that another member of the SSRI family will not work. Studies have shown that trying another SSRI after failing another one can work for adolescents about half of the time.

Antidepressants and the risk of suicide — Suicide is a significant concern for depressed adolescents and children. One important issue is that there have been studies showing a very small increased risk of suicidal thoughts and behavior young people who are starting anti-depressant medication. An important consideration is that, in most cases, the benefit of treating depression symptoms is much more likely to prevent suicide than the risk that the medicine may cause suicidal thoughts or actions.

The decision to start or not start SSRI medication must take this risk into consideration weighed against the likely benefit of treating symptoms of depression and that this may prevent suicide as well. Either way, any signs of suicidal thoughts, statements, or actions needs to be brought to the attention of the child's treatment team sooner rather than later.

Although treatment of depression can decrease the risk of suicide, suicide still is possible. Because of this, it is very important for parents and mental health providers to closely monitor children and adolescents for signs of suicide for at least the first 12 weeks of treatment. If suicidal thoughts or behaviors develop during treatment with an antidepressant, options may include changing the medication does, changing to a new SSRI, or even stopping the medication.

ANTIDEPRESSANT MEDICATION ISSUES

Most children and adolescents will not see the full effect of SSRI medication for four to six weeks, or sometimes even longer. This can take even longer as usually during the first few weeks, the dose is usually increased gradually.

After six to 8 weeks on the medicine, a full effect is should be reached. If this is not sufficient to reduce the depression symptoms, one option is to increase the dose. Another option is to transition to another medication if you are running into concerning side effects.

Duration — Often after being on the medication for 8-12 months a trial off of it can be considered. This should only be considered if the depression symptoms have improved for a significant period of time. This break should come at a low stress time like summer break.

SSRI medications should not be stopped all at once. They should be slowly weaned off. Fluoxetine or Prozac is an exception to this as it stays in the blood for a longer period of time and can be stopped more suddenly. Problems associated with weaning SSRI medications include jitteriness, dizziness, nausea, fatigue, muscle aches, chills, anxiety, and irritability. These are rarely dangerous or life threatening, although they can be distressing and very uncomfortable.

Another problem that can happen while stopping antidepressant medicine is a return of depression symptoms. Often restarting the medication for a time can help resolve this with a later wean planned.

Maintenance drug therapy — More long term treatment with SSRI medication can sometimes be appropriate for children who are at a high risk of depression symptoms returning. This often occurs in pediatric patients who stop their antidepressants too soon after their symptoms improve. Maintenance therapy may last from one year to a chronic problem for their whole life, depending upon the individual's situation and personal history of depression.

Therapy with other medications — People who have other significant symptoms like panic attacks, obsessive-compulsive disorder, or mania may need treatment with other medications. Treatment with more than one medication, including an antidepressant and an anti psychotic, anti anxiety, mood-stabilizing (eg, lithium), or anticonvulsant medication may be recommended in these situations.