

Depression

Depression globally impacts 121 million people and causes work, home life and relationships to suffer (1). Depression, which affects 10-20% of people throughout life, increases health care costs by increase the severity of many diseases. Depression often occurs in combination with other mental illnesses, such as anxiety disorders; other symptoms, such as pain; and chronic medical illnesses, such as heart disease and chronic lung disease. It increases the risk of death after a heart attack and increases the risk of infection by weakening the immune system. Depression impairs quality of life, impairs physical and mental functioning and increases disability.

Not only does depression decreases quality of life, but also it can be deadly. Older people, as a group, are most at risk for suicide. One quarter of all suicides are committed by the elderly with the most common cause of suicide being depression.

Causes

Although the exact cause of depression is not known, scientists believe that there is an imbalance in the neurotransmitters, also known as chemical messengers, in the brain. This hypothesis has led to the development of many medications used to adjust the neurotransmitters in the brain. Some believe a chemical imbalance leads to depression while others argue it is a pattern of thinking.

Depression is often precipitated by a stressful life event, such as a death of a loved one. It is normal to have a grief reaction after a stressful life event but prolonged depression is not normal. Other risk factors for depression are listed in table 5.

Table 1: Risk Factors for Depression

- Having a family history of depression
- Going through a stressful life situation
- Being female
- Chronic pain
- Disability
- Having a traumatic experience in childhood such as growing up in a house with conflicts including abuse, family violence, or growing up in an alcoholic environment
- Dependence on drugs and alcohol
- Certain medications including steroids, theophylline, sleeping pills, and some

blood pressure medicines

- Any chronic disease state especially hypothyroidism, heart disease, after a heart attack, after a stroke, Parkinson's disease, Alzheimer's disease and anemia.

Signs and Symptoms

It is normal to feel sad from time to time, but one should not be so sad that it interferes with daily functioning. Depressed individuals usually feel worse in the morning. Symptoms of depression have to be present for at least two weeks and cause disability or dysfunction and not be related to another medical disease. Many individuals suffer from a less severe form of depression called dysthymic disorder, where a less severe sad mood persists for at least two years.

Symptoms of depression are numerous, but the hallmark symptom is an extraordinary sense of sadness. Absence of pleasure and individuals not involving themselves in activities they used to enjoy such as eating, work, sex, spending times with friends and family or participating in hobbies is often present.

Depression often causes problems with sleep. The most common problem is early morning awakening with difficulty going back to sleep. Appetite is also affected, which can either be lack of appetite or increased eating. Some depressed individual eat more and consequently gain weight while others eat less and lose weight. Depression can also present with vague, non-specific complaints such as decreased energy.

Depression also results in a decreased ability to concentrate with many depressed individuals feeling they are developing dementia. Hopelessness is another common feature of depression, resulting in a negative perspective of the future. This is often associated with helplessness or the feeling that no one, including themselves, will be able to help them out of the way they are feeling.

Slowed thinking or slowed movement and speech is another feature of depression. Depressed patients often feel excessively guilty. Depressed mood can lead to a diminished self-esteem and agitation. The most feared feature of depression is suicide.

Table 2: Common Depression Symptoms

- Feeling of sadness
- Loss of interest in activities
- Boredom
- Irritability

- Sleep disturbances – particularly early morning waking
- Feelings of guilt
- Lack of energy
- Loss of concentration
- Appetite change – eating too much or not enough
- Agitation

Diagnosis

It is sometimes difficult for the doctor to differentiate the signs and symptoms of depression from other medical illnesses. Depression is associated with increased somatic symptoms, which are multiple physical complaints more related to depression than an underlying physical problem.

Depression is a severe disease that needs to be diagnosed and treated. Depression often goes undiagnosed or receives inadequate treatment in primary care. Doctors give less priority to treating depression than other medical conditions such as diabetes and heart disease even though depression affects quality of life more than many other medical illnesses. The health care system has built in barriers to diagnosing depression. Therefore, a large responsibility for the diagnosis and treatment of depression falls upon the patient.

Despite the fact that depression is an extremely severe disease, it often goes untreated. This is unfortunate because many effective treatments are available. There are major barriers to the treatment of depression. A patient not reporting it to his or her doctor or the doctor not asking about it is one common barrier. Another barrier is embarrassment on the part of the patient or health care provider to discuss it. It can be a time-consuming diagnosis to deal with in the office so doctors are sometimes reluctant to bring it up.

Depression is a difficult diagnosis to make. No characteristic exam finding, specific blood marker or diagnostic test definitively diagnoses depression. It is a diagnosis based on the a history and physical exam by your doctor. If your doctor does not ask you about depression or you do not tell him about depression it cannot be diagnosed.

Standardized screening forms can help clinicians make the diagnosis of depression. Based on the evaluation by the doctor and after the use of standardized testing a presumptive diagnosis is made.

Blood work is often done to rule out other diseases that may present with depression. Hypothyroidism, an under active thyroid gland, and anemia, a low red blood cell count, are two diagnoses that can mimic depression.

Table 3: Questions to help determine if you are depressed

- Do you feel sad most days?
- Are you dissatisfied with your life?
- Do you feel your life is empty?
- Have you dropped activities you used to enjoy?
- Are you often bored?
- Do you feel hopeful about the future?
- Do you ever feel helpless?
- Do you have anxiety about the future/Do you feel something bad is going to happen to you?
- Do you find life exciting?
- Do you lack energy?
- Are you frequently irritable?
- Do you get upset often?
- Do you have any sleep problems?
- Have you had any appetite changes?
- Do you cry frequently?
- Do you enjoy getting up in the morning?
- Do you have difficulty concentrating?
- Do you feel you have more memory problems than others?
- Would any of these other words describe you?: Anxious, sad, irritable, agitated, slow movement, loss of interest, sleep difficulties, or low self esteem.

The diagnosis of depression is dependent on the history and examination. If depression is not discussed during the course of the exam it will not be diagnosed or treated. Some doctors discuss depression but many do not. The only way to assure depression is evaluated is to bring up the topic. The best time to discuss depression is during the annual examination. The depression screening form is part of the annual evaluation form (discussed in *Improve Your Communication: How Talking Can Improve*

Health Care). It should be used to help screen you for depression. In addition, the use of the depression-tracking tool can be used to monitor for depression and track its treatment. Because depression can have such a negative effect on your life it should be evaluated in each patient every year.

Treatment

Treatments for depression can be broken down into drug and non-drug treatments. Without treatment most patients decline both mentally and physically. Treatments include lifestyle changes, counseling, medicines, photo therapy, and electro convulsive therapy.

Lifestyle interventions are first line treatments and should be used by everyone with depression. Lifestyle interventions include exercise, good nutrition, not smoking and limiting alcohol intake. Daily exercise treats depression and promotes well-being. Having an active social life by getting involved with social groups is an effective measure to treat and prevent depression.

Counseling is a first-line intervention for depression; it is commonly combined with medications. Counseling is very effective for mild depression. Cognitive therapy, one of the most common types of therapy, focuses on how each individual is responsible for his or her own feelings. These feelings affect the way he or she feels. Controlling feelings controls the course of depression. Counseling may take place on a one-to-one basis or in a group setting. David Burns popularized cognitive therapy in his landmark book *The Feeling Good Handbook*.

Medicine is a popular modality to treat depression. Medications alter the chemicals – also known as neurotransmitters – in the brain, and can have a profound impact on depression. Selective serotonin reuptake inhibitors (SSRIs) are the most commonly prescribed drugs for treating depression in the older population. Drugs in this class include: paroxetine (Paxil), escitalopram (Lexapro), fluoxetine (Prozac), sertraline (Zoloft), citalopram (Celexa), and fluvoxamine (Luvox).

Side effects with SSRIs are rarely severe and include nausea, headache, diarrhea, dry mouth and insomnia. Side effects are usually worse when first starting the medicine and subside as the body adapts to the medicine.

Tricyclic antidepressants (TCA), including amitriptyline (Elavil) and nortriptyline (Pamelor), have fallen out of favor with the development of the newer types of

antidepressants. TCAs have numerous side effects and can be lethal in overdose.

There are a variety of other medications that are used in the treatment of depression. Other medications work on additional neurotransmitters in the brain. These other medications can be used as first line agents, substitutions, or additions to other medications. Some medications include: mirtazapine (Remeron), bupropion (Wellbutrin), venlafaxine (Effexor), duloxetine (Cymbalta) and desvenlafaxine (Pristiq). Side effects are similar to the SSRIs.

Electroconvulsive therapy is a less commonly used intervention. Utilized in more severe cases of depression, it involves evoking a seizure by passing an electric current through the brain. Before the seizure is induced the patient is given anesthesia and a muscle relaxant so there is no convulsing with the seizure. Typically the patient goes through 6-12 treatments over several weeks. The effects of this therapy are more immediate in onset, effects are felt in days as opposed to the weeks it takes for medicines to have an effect.

Phototherapy is used when an individual is affected by seasonal affective disorder and involves sitting in a room with a special type of bright light.

Alternative therapies, especially St. John's Wort and SAMe, have become popular over the last decade. Methionine (SAMe) may be effective in treating depression. There is not a lot of data on treatment with this substance. The short-term side effects include stomach upset and anxiety. Some evidence suggests Methionine may increase your risk for cardiovascular disease. Much more research is needed on SAMe before it can be recommended widely.

St. John's Wort is the most widely studied alternative substance for depression. Effectiveness has been shown in medical studies when compared with standard antidepressants. Caution must always be used when using alternative therapies because they are not as well studied or as well regulated as medications.

Health Care Responsibility

1. Understand your disease. Know the answers to the questions listed below and fill out the depression worksheet.
2. On an annual basis, make sure you are screened for depression. This is accomplished by getting an annual physical exam where you are screened for depression. Also, on an annual basis, complete the depression-tracking tool.

This allows you to monitor for trends in your mood.

3. If you feel you are depressed, report it to your doctor.
4. If placed on an antidepressant or if you are receiving therapy make sure that you track the progress of your disease using the depression-tracking tool in the appendix. Fill it out every week and share the results with your health care provider, so your treatment can be tailored.

Questions to ask your health care provider

Do I have depression? Depression is often not looked for by the health care system.

Talk to your doctor about testing for depression.

Are there any medical conditions or medicines that could be causing my depression?

Many conditions need to be ruled out prior diagnosing depression. Many things can mimic depression including thyroid disease, diabetes, organ failure (liver, heart or kidney), cancer, vitamin deficiencies, or medications.

How severe is my disease? Will it progress or will I see some improvement?

Should I be receiving counseling? Many people respond favorably to counseling as a treatment for depression. A branch of psychotherapy, called cognitive therapy, operates by the counselor helping the patient understand how to adjust their thinking in response to life situations.

What type of follow up do I require? Should I see a psychiatrist?

Should I be on medicine? How should I take the medicine? Chemical imbalances in the brain are common in patients with clinical depression. Many medicines can alter the chemical makeup of the brain and result in a reduction of depression.

How long will it take for the medicine to work? Most antidepressant medicines take four to six weeks to notice any effect. Individuals being treated for depression should stay on antidepressants for at least 6-12 months but many stay on them forever.

What side effects should I look out for on this medicine? There are a variety of medicines used to treat depression and each medicine has a different side effect profile.

Do I need routine follow up with a health care provider? When initiating antidepressant therapy most doctors will want to see you on a regular basis. As one becomes stable on the medicines the patient should be seen at least annually.

How long will I be on the medicine? Will we be able to wean this medicine? Patients need to stay on antidepressant therapy for at least six months but usually 9-12 months.

If this is the first episode of depression the patient is often weaned off the medicine to see if they can remain stable off antidepressant therapy. If the depression relapses the patient is usually kept on the medicine indefinitely.

Are there any herbal supplements that may be beneficial for depression? St. John's Wort and SAMe are common medicines used to treat depression. They may or may not be right for you.

References

1. World Health Organization. Depression. Available from: http://www.who.int/mental_health/management/depression. Accessed on 5/29/2009
2. Linde, K, Ramirez, G. Mulrow, CD, et al. St. John's Wort for depression-an overview and meta-analysis of randomized clinical trials. *British Medical Journal* 313: 253-258.

Depression Worksheet

1. Do I have depression? _____
2. Do I have just depression or could another medical or psychiatric problem be causing my symptoms?

3. How did you diagnosis my disease?

4. How severe is my disease/Will it progress or can I expect any improvement?

5. Should I be receiving counseling? _____
6. What type of follow up do I require /Do I need to see a psychiatrist/psychologist?

7. What medicines/treatments/supplements are we using to treat my symptoms and what are the side effects? How fast should I expect improvement? How long will I remain on these medicines?

8. Are any non-drug treatments recommended for me such as exercise or herb therapy?

Depression Tracking Tool

Rate each question on a scale from 0-5 with the following scale

- 0 – This trait does not exist
- 1 – This trait is very mild
- 2 – This trait is mild
- 3 – This trait is moderate
- 4 – This trait is moderate/severe
- 5 - This trait is severe

This screening tool should be done at least annually - performed before the annual exam. It should also be performed every two weeks during treatment for depression to monitor for progress. During treatment there should be a gradual decline downward of the total score.

Question/Date					
Depressed Mood					
Appetite Changes					
Low Energy					
Agitation/Irritability					
Poor Concentration					
Sleep Difficulties					
Loss of Interest					
Total Score					

Question/Date					
Depressed Mood					
Appetite Changes					
Low Energy					
Agitation/Irritability					
Poor Concentration					
Sleep Difficulties					
Loss of Interest					
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