There is a direct link between our brain and body and how we feel. Changes in the brain, such as stroke, can impact how we react to what has happened to us and how we react to others. Chemical changes in the brain caused by the stroke can make it difficult to manage emotions and anger, and damage to different parts of the brain can lead to trouble regulating our emotions. A decrease of certain chemicals in the brain can lead to depression. Depression can happen to up to half of those who have had a stroke. Depression can cause a patient to have a poor recovery. Often, both the patient and the family want to deny or minimize depression because they don’t want to be labeled as ‘depressed’, but treatment for depression can lead to a better life.

**Recognizing Depression**

Post Stroke Depression, called PSD can be classified into two categories: Major Depression and Minor Depression. Major depression due to stroke is characterized by:

- Feeling down or depressed all day, nearly every day
- Difficulty sleeping
- Loss of interest in life activities and decreased joy when engaging in activities
- Feeling slower than usual
- Crying spells, irritability and agitation
- Thoughts of hurting oneself

When the difficulties interfere with daily life, including decreased participation in rehabilitation, difficulty returning to work because of poor mood, or trouble managing household responsibilities because of sadness, it is classified as major depression. People with minor depression have many of the same feelings as those with major depression, but the poor mood does not interfere with completing life’s daily activities.

**Emotional Lability, called EL, is sign of difficulty controlling emotional responses.** Patients with EL may have uncontrollable laughing or crying spells, feel tearful for no apparent reason, or laugh at things that should not be funny. EL is also sometimes called Pseudobulbar Affect.

**What Can Contribute to Depression**

Many things can increase the chance of becoming depressed after a stroke:

- Physical disability and the presence of cognitive difficulties such as memory loss
- Conflict with family or caregivers who may tell the patient what to do while trying to take care of them lead to depression
- Social isolation and reduced social support can increase the likelihood of PSD
- Sleep difficulties and post-stroke fatigue
- Co-existing anxiety, such as panic attacks, can make depression worse
Treating Depression and Emotional Lability

Research suggests that individuals who have untreated depression that exists months after a stroke have more difficulty taking care of themselves. The most effective treatment plans include a variety of approaches to the problem.

1. **Healthy lifestyle** - Follow your nutritionist’s advice for a healthy diet and talk to your physician about a safe exercise routine. Both will improve how you feel and in turn reduce the effects of depression.

2. **Find support** - Joining a support group can provide a safe place to talk about the changes in your life since the stroke, and to learn some of the ways other stroke survivors have solved their problems. Here at Houston Methodist Hospital, we offer a Stroke Support group where patients and their loved ones meet once a month to learn about post-stroke issues and provide support for each other. There is also a group called the Behavioral Regulation and Individual Neurorehabilitation (BRAIN) group that meets once a week to help individuals address cognitive and emotional difficulties that occur after stroke, and to provide support for each other.

   Outside of the Houston area, ask your doctor for information about stroke support groups in your area. Or for online stroke support go to:

   - www.strokeboard.net
   - www.strokenetwork.org

3. **Education** - It’s important that family members of a stroke survivor receive education on the risk factors and symptoms of depression following stroke. Your family may not understand that you are depressed and attempt to treat you the way that they always have. The appearance of someone who had a stroke as unmotivated or not wanting to initiate activities, whether at work, during leisure time or when socializing, may make families assume that their loved one is not trying. But this is actually often a direct result of damage to certain areas of the brain from the stroke. Understanding that you are not doing anything on purpose and that the depression is caused by the stroke will help families understand what you are going through.

4. **Individual Therapy** - Individual therapy from a psychologist or social worker, called ‘neuropsychotherapy’, can help with emotional regulation difficulties and can help increase a sense of self-control. Behavior management of unwanted actions, such as anger outbursts, can improve mood and quality of life. Ask your doctor if a referral for therapy may help with your symptoms.

5. **Medications** - In addition to these treatment options, talk with your physician or nurse practitioner about medications that can address your difficulties. There are medications available for depression and for emotional lability that may improve your mood and your emotional control. Interventions for sleep difficulties and fatigue can also have the added benefit of reducing depression symptoms.

Although depression is common after a stroke, it can be treated and give you a brighter outlook for your future and your recovery.

For more stroke information visit
houstonmethodist.org/stroke
Or call 832.667.5867