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Mental Health Quick Notes

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Chronic Pain and Depression

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This month the RSA newsletter will focus on the relationship between chronic pain and depression. Readers should be able to better identify the different definitions of pain, understand the pain/depression connection, identify the incidence of pain and depression, define Fibromyalgia and look at options.

Some 50 million U.S. residents live with chronic pain, experts estimate (Health SciTech, 2006). Pain forces an estimated 36 million people to miss work every year and results in roughly 70 million doctor visits per year. Yet scientists know very little about how pain works. They can't even agree on a definition. One thing is certain - we all agree it's a huge problem. "Pain is a silent epidemic in the United States," says Kathryn Weiner who is the director of the American Academy of Pain Management (Weiner, 2006).

Individuals who suffer with chronic pain, when compared to those with other medical conditions, suffer dramatic reductions in physical, emotional or psychological and social well-being. Their health related quality of life is lowered. Depression is one of the most common problems experienced by individuals with chronic pain.

What is pain?

If you suffer with chronic pain, you'll probably find little consolation in the fact that doctors and scientists don't understand it very well, and that just popping an aspirin is clearly far from a cure-all. In fact, experts can not even agree on what pain is. According to Weiner (2006) "Pain is complex and defies our ability to establish a clear definition. Pain is far more than neural transmission and sensory transduction. Pain is a complex mixture of emotions, culture, experience, spirit and sensation. It is an unpleasant sensation and the emotional response to that sensation." This definition shows that pain is a combination of the physical effects along with the emotional response.

There are several ways to define pain, however, and knowing which you have is important for considering how to treat it.

Pain is divided by many between acute and chronic.

Acute pain is what you get when you hit your thumb with a hammer. You can also achieve it with a twisted knee or a burn. It is an immediate response to a situation, that resolves within a reasonable time.

Chronic pain is long-term (more than six months), continuous and far more frustrating. It can result from physical injury, an infection or degenerative condition.

Scientists also distinguish between **evoked** pain (the hammer on your thumb) and the **spontaneous** variety, for which there is no obvious external cause. "Acute pain is usually evoked (caused by something), but chronic pain can be evoked or spontaneous," Lawson (2006) explains. "Chronic pain often includes spontaneous pain, and spontaneous pain may be ongoing, unpleasant, often burning pain, or it can be an intermittent sharp, stabbing or shooting pain, or both."

Pain and Depression Connection

Meanwhile, scientists are getting closer to understanding the nature of pain by analyzing the types of nerve fibers involved in its transmission, how the signals get to your brain, and how the information is processed. Nerves in the body serve to warn us when something is acutely dangerous, such as a hot surface, or when our body needs rest or repair. Thousands of pain-sensing nerve endings can be packed into tiny spaces, for example, in your fingers or between the vertebrae of your back. There are several types of nerves that sense cold, warmth, pressure, pain and more. The nerves that sense and transmit pain are called nociceptors. When the cause of pain gets stronger, they fire more rapidly and intensely.

Depression is the imbalance in the brain's neurotransmitters: serotonin, norepinephrine and dopamine. Both serotonin and

norepinephrine are believed to play a role in chronic pain. This helps us to see how an imbalance in these neurotransmitters could trigger depressive symptoms, and vice versa.

Incidence of pain and depression

Physical symptoms are common in individuals suffering from significant or severe depression. Approximately 60% of individuals with depression report pain symptoms when they initiate psychotherapy (Magni, 1985).

According to the Johns Hopkins Pain Management Center, depression is not simply a co-morbid condition, but also interacts and worsens chronic pain.

Reich (1983) conducted studies of people going to clinics for pain evaluation, where he examined how many people had psychiatric conditions. The study showed that the frequency of people with serious levels of depression and chronic, low back pain were 3 to 4 times greater than in the general population. This study showed that anywhere from 8 to 50% of these individuals have reported depression at the time they made their appointment for a pain evaluation.

Physical symptoms are common in patients suffering from serious depressions. The presence of a depressive disorder has also been demonstrated to increase the risk of developing chronic muscular pain (Leino and Magni, 1993).

Years ago, people who were in pain were told to rest. Take for example a basketball player who injures an ankle and cannot play; golfers who must rest their swinging arm; or walkers or runners who have to stay off their feet. These cases - the basketball players, the golfers or the runners - would miss their activity of choice. When we are prevented from performing pleasurable activities and exercise, we do not get

Chronic Pain Cont.

that emotional lift, "runner's high" or positive feelings.

Furthermore, imagine that an individual's pain prevents him or her from attending work, social events, and routine activities of daily life. What if an individual can no longer drive a car? Such losses can significantly influence our moods, thus creating depression. If an individual's pain results in a loss of independence or mobility that decreases his or her participation in social activities, the risk of developing depression can be significantly increased (Williamson and Schulz, 1992). We also now know that when you rest - you become de-conditioned, which may actually contribute to chronic pain.

Fibromyalgia

Fibromyalgia is a syndrome characterized by widespread pain and generalized tender points. Those who have Fibromyalgia often have a history of major depressive disorders, and it is proposed that a genetic predisposition towards depression triggers Fibromyalgia, according to Raphael (2004).

Conversely, it has long been suspected that Fibromyalgia patients are at increased risk for depression. Some researchers are convinced that Fibromyalgia is a psychiatric disorder, even suggesting that the term "Fibromyalgia" be replaced by terms such as "affective spectrum disorder" or "somatoform pain disorder."

In a study of women in the New York-New Jersey area, Raphael concluded that "Fibromyalgia is a depression spectrum disorder, in which Fibromyalgia and major depressive disorder are characterized by shared, familiarly mediated risk. This pattern of results leads us to reject the hypothesis that depression is a reaction to the stress of living with Fibromyalgia." This study tells us that depression and

Fibromyalgia have shared risk factors and may be different components on the same scale.

Treatment

Only your family doctor or sub-specialist can give proper advice for individual conditions. However, individuals suffering with pain syndromes are encouraged to:

- Educate yourself and seek the advice of multiple experts.
- Not rely on outdated advice. Be knowledgeable about pain and depression.
- After consulting with a doctor, consider exercise as an important aspect to treatment.

When seeking a professional to work with in the treatment of depression and/or pain, look for someone who:

- Is knowledgeable about pain or depression.
- Listens well.
- Makes you feel at ease.
- Encourages you to ask questions.
- Seems honest and trustworthy.
- Allows you to disagree.
- Is willing to talk with family, if needed.
- Has a positive attitude towards your situation.

Gonzales (2007), writes about the mind-body connection for those suffering from chronic pain and depression. Gonzales believes that pain affects the body as well as one's thinking patterns leading to short tempers, and decreases in memory and concentration. **Psychotherapy** can help these problems by using psychological approaches, which can modify thinking, helping individuals to achieve a better sense of control in their lives. This ultimately can help reduce depression

and anxiety, improve memory and concentration, as well as self-esteem.

After an initial assessment, the following treatment modalities are commonly used when dealing with pain. Therefore, in your search for treatment be sure to question the therapeutic approach of your treating professional.

1. Biofeedback
2. Relaxation and meditation
3. Cognitive Behavior Therapy
4. Behavior Modification
5. Stress Reduction

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