# **Psychological Effects of Arthritis Pain**

## **Key Points:**

- Arthritis can affect mental health through pain, inflammation, and lifestyle changes, which can lead to symptoms of anxiety and depression.
- Conversely, mental health can impact arthritis through pain perception, reduced response to arthritis treatment, lifestyle changes such as poor adherence to treatment regimens, and inflammation.
- Screening for mental health conditions in all patients with arthritis and discussing a treatment plan- which may include referrals to counseling and psychiatry- can improve their pain, Disease Management, and overall well-being.

Any form of arthritis- whether rheumatoid arthritis, psoriatic arthritis, ankylosing spondylosis, lupus, gout, juvenile arthritis, fibromyalgia, or osteoarthritis- is associated with a negative impact on mental health. The two are so intricately linked that a mental health decline can also lead to worsening symptoms of arthritis. Knowing this, primary care providers should be screening for anxiety and depression in patients who suffer from arthritis. This, in turn, leads to more questions: Should mental health treatment be a part of overall disease management? Yes, we believe so at The Villages Health.

### Impact of Arthritis on Mental Health:

According to the CDC, 1 in 5 patients with arthritis have anxiety symptoms, compared to 1 in 9 without arthritis. Additionally, depression symptoms double among those with arthritis compared to those without.

The Arthritis Foundation states that pain contributes to anxiety and depression by causing physical and emotional stress which, in turn, insights neuro chemical changes which worsened mental health. Although living with chronic pain would be reason enough to provoke symptoms of anxiety and depression, it is not the only contributing factor. Lifestyle choices may also play a significant role in the mental health of arthritis patients. People with arthritis often have limited mobility due to pain and decreased functional mobility of the joints, as well as generalized fatigue. This causes patients with anxiety to exercise less and become more socially withdrawn or isolated. As exercise and socialization play important roles in regulating mood, the absence of them can often lead to worsening symptoms of anxiety and depression.

There is also an interesting inflammatory theory in relation to the impact of arthritis on mental health. A study published in the Journal of Clinical Psychiatry monitored CRP levels in just over 10,000 people who responded to the national health and nutrition

examination survey. This study found that CRP levels were 31% higher in people with depression. [3] Many other studies show depression to be an inflammatory state with an increase in cytokines.

### **Impacts of Mental Health on Arthritis:**

According to the CDC, patients with symptoms of anxiety and depression have a reduced response to arthritis treatment and a reduced quality of life. Mental health treatment can improve pain, regardless of other pain management treatments. Why would this be so- the answer, once again - is multifactorial.

According to the Arthritis Foundation, pain and inflammation both likely play a role. Pain is subjective; it is understood that people experience pain differently depending on many factors, including, but not limited to, sleep, mood, and stress level. Therefore, depression and anxiety can make pain worse. People experiencing pain as well as anxiety or depression are also less likely to adhere to a treatment regimen. Therefore, treatment of their mental health condition can improve their perception of pain and improve their adherence to treatment thus improving overall outcomes.

### **Treating the Whole Patient:**

All patients diagnosed with any form of arthritis or chronic inflammatory disorder should be screened for symptoms of anxiety or depression. This can include asking them simple screening questions based on DSM criteria for depression and anxiety disorders, or we can instruct patients to fill out formal screening tools, such as the PHQ-9 and the GAD-7. We should discuss the link between arthritis and mental health with patients and advise them to seek help if symptoms arise. We can also encourage exercise and social interaction. Depending on the functional impact of the arthritis and the type the patient has, this could include going to the gym, walking with friends, yoga, or even low-impact exercises such as swimming or water aerobics. Although exercise is important for maintaining functional ability, and in many cases is part of the treatment regimen of arthritis, the added benefit of improved mood should be enough encouragement.

Finally, physicians can create a treatment plan with their patient's that could include referrals to medical specialists. Depending on the physician's specialty, management of anxiety and depression may be out of the scope of practice. Facilitating a referral to a psychiatrist should be considered if the physician is not able to discuss the benefits and risks of antidepressant therapy.

Referrals should also be considered in treatment-resistant cases. Counseling should be considered for all patients with a diagnosis of anxiety or depression. Physicians can provide resources, such as arthritis education and local support groups, to encourage self-management and improve a patient's coping skills. As always with mental health

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conditions, screen for suicidal ideation and intent, taking appropriate action when needed as well as providing all mental health patients with local resources and phone numbers.

Finally, arthritis alone is a painful and often debilitating disease. However, as physicians we need to make sure we are treating the person as a whole and recognize the link between arthritis and mental health conditions. In doing so, we may be able to better understand the entire picture, leading to better treatment results and patient satisfaction. In those patients that screen positive for anxiety and depression, a treatment plan should always be put in place to include medication, referrals, counseling, support groups, and/or lifestyle recommendations.

#### References:

- 1. The Arthritis-Mental Health Connection. CDC. October 12, 2021.
- 2. Arthritis and Mental Health. The Arthritis Foundation.
- 3. Cepeda MS, Stang P, Makadia R. Depression Is Associated with High Levels of C-Reactive Protein and Low levels of Frsctional Exhaled Nitric Oxide: Results From the 2007-2012 National Health and Nutrition Examination Surveys. Journal Clinical Psychiatry. December 28, 2016.
- 4. Felger JC, Lotrich FE. Inflammatory cytokines in depression: neurobiological mechanisms and therapeutic implications. Neuroscience. 2013; 246:199-229.