Is It All in the Head? The Psychological Effects of Chronic Pain and the Effectiveness of Modern Therapies

Chronic pain is one of the most common complaints among Americans today. Chronic pain can be defined as long-term pain that can last for months and even years, has no apparent cause, and serves no evident biological purpose. The most common examples of chronic pain include: low-back pain; headache; recurrent facial pain; cancer pain; and arthritic pain. Chronic pain can cause multiple psychological problems that may lead to anxiety, depression, and a feeling of hopelessness. Some researchers believe that these psychological problems may increase pain in individuals because the perception of pain is greater. In this research, we analyzed various previous studies designed to determine the impact of treatment of psychological distress on the relief of some, if any, chronic pain. Therapies to relieve pain, such as visualization, massage therapy, aroma therapy and acupuncture, were investigated to determine the most effective therapies. Studies have shown that a significant percentage of patients who undergo visualization and the previously mentioned techniques report at least some sense of relief. Although some treatments may not work for all patients, behavioral therapies, used in conjunction with other pain-relieving therapies, may be an essential technique in relieving the psychological effects of chronic pain.

INTRODUCTION

The purpose of this project was to investigate the link between chronic pain and the brain. We sought to answer the question: does stimulating the brain and senses using different techniques help relieve chronic pain? We examined the following techniques: massage therapy; aroma therapy; acupuncture; and virtual reality.

METHODS

We used secondary survey techniques to determine whether the above techniques would be effective. Since the sensation of pain derives from signals sent to the brain, stimulating the brain and/or senses can be an effective method to relieving chronic pain. Also, because the psychological effects of chronic pain, such as stress, depression and worry, can make pain worse, treating such conditions is a possibility in relieving pain.

RESULTS

Visualization

Patients who benefited from this therapy initially included those with: subacute or chronic pain (eg, myofascitis, fibromyalgia, arthritis); posttraumatic pain; postsurgical pain; or headache (eg, migraine, tension, chronic daily, posttraumatic).

Acupuncture

According to one study conducted by the National Institutes of Health

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> (NIH) "there are a number of pain-related conditions for which acupuncture may be effective as an adjunct therapy, an acceptable alternative, or as part of a comprehensive treatment program." These conditions include, but are not limited to: addiction, stroke rehabilitation, headache, menstrual cramps, tennis elbow, fibromyalgia (general muscle pain), low back pain, and carpal tunnel syndrome.

Aroma Therapy

Clinical trials are in the early stages but evidence to date suggests that aromatherapy can be used as a complementary therapy for managing chronic pain. For example, 63% of participants in a California study reported positive results. Also, although the use of aromatherapy is not restricted to nursing, at least one US state board of nursing has recognized the therapeutic value of aromatherapy and voted to accept it as part of holistic nursing care.

Massage Therapy

Studies show that massage for chronic pain helps restore normal movement by releasing trigger points, removing waste products, and stretching shortened muscles. In a study in California, 75% of participants reported some relief of pain.

FURTHER STUDIES

Clinical investigators have tested chronic pain patients and found that they often have lower-than-normal levels of endorphins in their spinal fluid. Some researchers believe that accupunc-

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ture stimulates nerve endings activating the endorphin systems. Investigators are studying the effect of stress on the experience of chronic pain. Chemists are synthesizing new proteins and discovering painkilling virtues in drugs not normally prescribed for pain.

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