Health Psychologist & Pain Researcher

Pain. It is the most common symptom of Chiari and syringomyelia and probably the most difficult to deal with. The pain from these conditions can be particularly difficult to treat and can affect every aspect of a person's being: physical, mental, emotional, and spiritual. Some people seek help from pain clinics, some choose to fight on their own; but no matter how we deal with it, for many the pain is there every single day.

What are the psychological implications of battling pain every day?

Dr. Frank Keefe, Professor of Psychiatry and Behavioral Sciences at Duke University, is a licensed psychologist who specializes in pain research. He has published numerous papers on the subject, acts as an editor for several professional journals, and serves on scientific advisory panels dealing with chronic pain. We put Dr. Keefe in The Spotlight (via email) to shed some light on the subject...

What is Health Psychology?

K: Health Psychology is a field within psychology that seeks to advance the contributions of psychology to the understanding of health and illness through basic and clinical research, education, and service activities and encourages the integration of biomedical information about health and illness with current psychological knowledge.

How did you become interested in Health Psychology in general and pain research in particular?

K: As a graduate student in psychology and in my early career I was active in doing some of the early research on biofeedback, so health psychology was a logical direction for my interests. My interests in pain stemmed from a problem I experienced with a herniated disk in my lower back that led to a back surgery and a long and painful recovery.

Being diagnosed with a serious illness - which may result in permanent damage and/or chronic pain - can be quite a shock; what are some of the psychological aspects of dealing with an event like that?

K: Three important aspects are individuals’ thoughts, feelings, and coping strategies. In the realm of thoughts, expectations (e.g. about self, others, and the future), beliefs (e.g. belief in personal abilities to control pain) are very important. In the realm of feelings, some persons struggle with feelings of anxiety, guilt, and depression that can interfere with their abilities to adjust to the illness. In the realm of coping, over time most people develop a range of coping strategies such as learning how to pace their activities, set reasonable goals, use distraction methods, and calm themselves when pain is severe.

Are there specific treatment techniques which have been shown to be effective in helping people adjust to chronic disease?

K: Training in pain coping skills has been shown in a number of studies to reduce pain and reduce disability.

What are some of the signs that someone trying to deal with a chronic illness should seek professional help?

K: In terms of psychological changes, one should be concerned if an individual has persistent problems with withdrawing from others, weight loss, difficulty concentrating, memory problems, sleep problems, irritability, and pronounced feelings of discouragement and depression.

Post-Traumatic Stress Disorder (PTSD) research has shown that early intervention with a relatively few number of counseling sessions can be effective in reducing later symptoms of PTSD; do you see an equivalent with the early shock of diagnosis and surgery?

K: Would most people benefit from some type of early intervention before surgery? This is a very interesting idea, but one that has not received much research attention. It is quite logical to assume, though, that early intervention before surgery might be effective.

How can an individual best adjust to living with a chronic disease, especially with reduced function and capabilities?

K: Develop a variety of active coping strategies that enable them to deal with the challenges of the disease. Avoid relying solely on passive coping methods such as bedrest or avoiding daily situations that might be challenging. Find ways around obstacles so that you are able to remain involved in a varied lifestyle.

Are there any predictors - such as family support, locus of control, etc. - for whether people will successfully adjust to living with a chronic disease?

K: Converging lines of evidence suggest that one of the most consistent predictors is a sense of confidence in one’s abilities to manage the disease.

How do you define pain?

K: Pain has been defined as an unpleasant sensory and emotional experience that is due to tissue damage.
The Work Setting of a Health Psychologist: Health psychologists participate in health care in a multitude of settings including primary care programs, inpatient medical units, and specialized health care programs such as pain management, rehabilitation, women’s health, oncology, smoking cessation, headache management, and various other programs. They also work in colleges and universities, corporations, and for governmental agencies.

Clinical Activities: Assessment approaches often include cognitive and behavioral assessment, psychophysiological assessment, clinical interviews, demographic surveys, objective and projective personality assessment, and various other clinical and research-oriented protocols. Interventions often include stress management, relaxation therapies, biofeedback, psychoeducation about normal and pathophysiological processes, ways to cope with disease, and cognitive-behavioral and other psychotherapeutic interventions. Healthy people are taught preventive health behaviors. Both individual and group interventions are utilized. Frequently, health psychology interventions focus upon buffering the effect of stress on health by promoting enhanced coping or improved social support utilization.

Research: Health psychologists are on the leading edge of research focusing on the biopsychosocial model in areas such as HIV, oncology, psychosomatic illness, compliance with medical regimens, health promotion, and the effect of psychological, social, and cultural factors on numerous specific disease processes (e.g., diabetes, cancer, hypertension and coronary artery disease, chronic pain, and sleep disorders). Research in health psychology examines: the causes and development of illness, methods to help individuals develop healthy lifestyles to promote good health and prevent illness, the treatment people get for their medical problems. the

Why do people’s perceptions of pain differ?
K: Because higher nervous centers of the brain that are responsible for thoughts, feelings, and behaviors can influence whether pain signals reach the pain [centers].

Is it possible to objectively compare different types of pain and are some types of pain more difficult to manage psychologically than others?
K: Pain is a subjective phenomenon so direct comparison is not possible. Psychological pain management approaches have been found effective with both chronic pain syndromes (e.g. headaches, low back pain) and disease-related pain conditions (e.g. arthritis, cancer pain).

It seems like it is important for many people with chronic pain to have others believe they are in pain; why is this affirmation important?
K: Because individuals with chronic pain often have to rely on others. If the significant others who need to provide support question the validity of the person’s pain, then they will not be as effective in providing support.

What is the link between pain and depression?
K: A subgroup of individuals having persistent pain develop a major problem with depression. This is estimated to be about 30% of individuals seen in pain clinics. In general, persons with pain who are depressed experience higher levels of pain and disability.

How has the thinking on pain management evolved over the years?
K: A revolution has occurred in thinking about how to treat chronic pain. Rather than viewing chronic pain as a simple sensory event, health professionals now recognize that it is a multidimensional problem that needs to be considered from a biological, psychological, and social perspective. This change has influenced how chronic pain is managed.

Do you think that doctors are too reluctant to prescribe pain medicines? If so, what can be done to change this?
K: Pain specialists are not reluctant to prescribe pain medicines, in my experience.

Is every case of pain management unique or are certain techniques being proven more effective than others?
K: Every case is unique and requires a careful assessment before a treatment plan is implemented.

Can psychological intervention alone reduce the perception of pain?
K: These interventions are rarely used alone for chronic pain. Laboratory studies of experimental pain, though, have shown that psychological interventions can reduce the perception of controlled experimental pain stimuli.

Psychologically, do people who try to manage pain on their own fare better or worse than people who seek help from pain specialists?
K: This is hard to answer since those who seek care usually have a more severe and disabling problem.

Where is your research currently focused and where is it headed?
K: Our research currently focuses on the effects of involving spouses/partners and caregivers in training in pain coping skills. We are currently analyzing the results of a study testing the effects of a partner-guided pain coping skills training intervention for cancer patients who are at end of life.

Do you think there will be major advances in the near future on managing chronic pain?
K: Yes, particularly in two areas: 1) early intervention, 2) tailoring treatments to the unique needs of the patient.

What advice do you have for someone facing a lifetime of pain?
K: Take stock of how you are doing periodically. Be honest and realistic with yourself. If you are having problems implement and monitor a systematic plan for dealing with those problems. Seek help from others to implement your plan.

What advice do you have for the family trying to support someone in pain?
K: Acknowledge that your family member is having pain and is suffering. Help them build upon and expand their coping strengths, rather than solely focusing on coping limitations.

What motivates you as a scientist?
K: The belief that our research might reduce pain and suffering in persons struggling with disease-related pain.

Frank Keefe, Ph.D.
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Qualifications:
- Licensed Psychologist in Massachusetts, North Carolina, and Ohio
- Professor in Anesthesiology, Professor Psychology: Social & Health Sciences, Duke University
- Past President of the APA Health Psychology Division
- Consultant to the American Pain Society
- Section Editor for the journal Pain
Medical problems, the effectiveness with which people cope with and reduce stress and pain, biopsychosocial connections with immune functioning, and factors in the recovery, rehabilitation, and psychosocial adjustment of patients with serious health problems.

**Education:**

- Post-doctoral Fellow, Harvard Medical School, 1976-78
- M.S., Ph.D Clinical Psychology, Ohio University, 1973, 1975
- B.A. Psychology, Bowdoin College, 1971

**Research Interests:**

- Pain coping skills training
- Self-management approaches to pain management
- Disease related pain

**Selected Publications:**


**Current Grants:**

- Spouse-guided pain management training for cancer pain. Principal Investigator. (NCI)
- Tailoring Cognitive Behavioral Treatment for Cancer Patients with Pain. Principal Investigator. (NCI)
- Gender, Coping, and the Arthritis Pain Experience. Principal Investigator. (NIAMS)