

Chapter 1

Introduction to Comorbid Mental Health and Chronic Pain

The prevalence and cost of chronic pain is a growing concern in the United States. During the past decade, increasing research focus on exploring treatment for chronic pain has led to important implications for current coordination of medical and psychological management to treat individuals suffering with chronic pain. There are relatively few research articles that are not diagnosis- or syndrome-specific, with even fewer random clinical trials (RCTs) or meta-analytic studies. In their research, Elliott and colleagues (1999) have indicated that at least 45 percent of Americans will seek treatment or care for chronic pain at some point in their lives, making a total of over 50 million people in the United States. The Centers for Disease Control and Prevention reported that in 2005, 133 million Americans were experiencing chronic illness, equivalent to almost 1 out of every 2 adults. Nearly a quarter of people with chronic conditions also reported experiencing limitations to daily activity due to their illness, and also experienced clinical mental health concerns. Currently, children suffering from chronic illnesses that were considered fatal in the past now live well into adulthood, thanks to advances in medical care. While these advances are promising, they can result in prolonged lifespans and chronic pain (Martinez, 2009). In response to such findings, in 2010 the Joint Commission on Accreditation of Healthcare Organizations established a requirement for physicians to consider pain as a fifth vital sign, in addition to pulse, blood pressure, core temperature, and respiration (Gatchel, Peng, Peters, Fuchs, & Turk, 2007). Survival from chronic health conditions brings new challenges for individuals throughout their lifespan, including physical, psychological and social adjustment difficulties.

Health Care Costs

Chronic pain is associated with a wide range of illness, injury, disease, and mental health issues, and it is sometimes the primary concern in and of itself. With some

conditions, pain and the associated symptoms arise from a discrete cause, such as postoperative pain or pain associated with a malignancy. In other situations pain constitutes the primary problem, such as neuropathic pains or headaches. Millions suffer from acute or chronic pain every year and the effects of pain take a tremendous toll on our country in terms of health care costs, rehabilitation, and lost worker productivity, as well as in terms of the emotional and financial burden placed on patients and their families. The costs of pain can result in longer hospital stays, higher rates of re-hospitalization, more emergency room visits, more unnecessary medical visits, and a reduced ability to function that leads to lost income and insurance coverage. As such, patients' unrelieved chronic pain often results in an inability to work and maintain health insurance.

According to a recent Institute of Medicine Report titled *Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research*, pain is a significant public health problem that costs society at least \$560–\$635 billion annually, an amount equal to about \$2,000 for every person living in the United States. This includes the total incremental cost of health care due to pain ranging from \$261 to \$300 billion, and losses of productivity and associated issues ranging from \$297–\$336 billion.

Chronic Pain and Function

Pain is a complex sensational experience resulting from brain signals and damage or irritations to the nervous system, and is encompassed by cognitions, sensory-motor input, emotions, and hormone systems (Gatchel, 2004). Pain can be caused by chronic medical conditions, neuropathic trauma, injury, and accidents (American Society of Anesthesiologists, 2010). Acute pain is short term and temporary. Chronic pain is long term with symptoms exceeding three months (Lewandowski, 2006). The comorbidity of mental health and physical problems resulting from pain is well established in the research (Gatchel, 2004). Common comorbidity includes anxiety, depression, adjustment disorder, obsessive-compulsive disorder (OCD), histrionic personality disorder, and borderline personality disorder (BPD). The trigger is the pain and uncertain prognosis of the diagnosed condition, specifically around progression of the disease, recurrence, reduced lifespan, end-of-life issues, treatment and side-effects, cognitive, physical, and behavioral impairments, and functional limitations (Ownsworth, 2009). Pain often results from chronic illness, injury, degeneration, and many related triggers in a chronic population. People who experience chronic pain often experience a decrease in quality of life including: overall physical and emotional health; psychological and social well-being; fulfillment of personal expectations and goals; economic burden and financial stability; functional capacity to carry out daily routines; and activities of daily living. Additionally, destruction of family and social life, problems with treatment adherence and support systems, and decreased participation in sports or leisure activities have been found to increase the risk of clinical anxiety and depression, resulting in greater functional impairment and poor quality of life (Gatchel *et al.*, 2007). This functional impairment and reduction in quality of life often leads to a variety of mental health concerns including

demoralization and a reduction in effective participation in treatment as well as life in general.

Medical Interventions

There are a variety of medical interventions that are frequently implemented in the treatment of chronic pain. The American Society of Anesthesiologists Task Force (2010) conducted a literature review of treatment techniques for chronic pain and noted research support for the following nine interventions: ablative techniques, acupuncture, blocks (e.g., joint and nerve or nerve root), botulinum toxin injections, electrical nerve stimulation, epidural steroids with or without local anesthetics, intrathecal drug therapies, minimally invasive spinal procedures, and trigger point injections. The recommendations for use vary depending on the epidemiology of the chronic pain condition in question.

Pharmacotherapy

Pharmacologic management is often included in the treatment regimen of chronic pain conditions. Pharmacotherapy for the treatment of chronic pain includes the use of anticonvulsants, antidepressants, benzodiazepines, *N*-methyl-*D*-aspartate (NDMA) receptor antagonists, nonsteroidal antiinflammatory drugs (NSAIDs), opioid therapy (e.g., oral, transdermal, transmucosal, intranasal, and sublingual), skeletal muscle relaxants, and topical agents (American Society of Anesthesiologists, 2010).

Physical therapy

The use of physical or restorative therapies for the treatment of chronic pain, particularly with back pain, has also been popular. A review of available research on the use of physical or restorative therapies for the treatment of chronic pain conducted by the American Society of Anesthesiologists (2010) indicated promising results. Randomized controlled trials that incorporated a variety of these therapies, such as with fitness classes, exercise therapy, and physiotherapy, were effective for treating low back pain. American Society of Anesthesiologists and American Society of Regional Anesthesia members recommended that physical or restorative therapies be implemented in the treatment strategy for patients with low back pain, as well as for other chronic pain conditions.

Cognitive Behavioral Therapy

Cognitive factors play an important role in the experience of chronic pain (Gatchel *et al.*, 2007). Cognitive Behavioral Therapy (CBT) interventions are based on the view that an individual's beliefs, evaluation, and interpretation about his or her health condition, in addition to pain, disability, and coping abilities, will impact the degree of both physical and emotional disability of the pain condition. CBT-based techniques currently vary widely in the literature, and can include distraction, imagery,

motivational self-talk, relaxation training, biofeedback, development of coping strategies, goal setting, and changing maladaptive beliefs about pain.

Morely, Eccleston, and Williams (1999) conducted a meta-analysis of randomized trials of Cognitive Behavioral Therapy (CBT) for treating clients with chronic pain. Their findings concluded that the use of CBT treatment to replace maladaptive patient cognitions and behaviors with more adaptive ones is effective for a variety of pain conditions. More recently, Linton and Nordin (2006) reported a 5-year follow-up of a randomized controlled trial of CBT intervention for clients suffering from chronic back pain. Their results indicated that CBT interventions (compared to the control group) resulted in significantly less pain, a more active life, higher perceived quality of life, and better overall health. In addition, significant economic benefits were associated with the clients who had completed CBT treatment.

Multimodal interventions

Multimodal interventions include the use of more than one type of therapy for the treatment of patients with chronic pain. Multidisciplinary interventions bring together multimodality approaches within the context of a treatment program that consists of more than one discipline. After a review of the literature on the treatment of chronic pain, the American Society of Anesthesiologists Task Force on Chronic Pain Management (2010) concluded that in comparison to conventional treatment programs, multidisciplinary treatment programs are more effective in reducing the intensity of pain reported by patients with chronic pain. Based on the research, the Task Force recommends that multimodal interventions should be part of the treatment plan for patients with chronic pain, and implemented within multidisciplinary teams if available.

Current psychological treatment modalities and levels of care

There currently appear to be three levels of care for clients suffering from chronic pain in the United States. The first level of care is primary medical treatment. This tends to be carried out in hospitals and interventions are based upon medical treatments for pain. This level involves assessment, surgery, acute-care, recovery, and is staffed primarily with medical teams and supplementary work with physical therapists and occupational therapists. Psychological interventions at this level typically operate in more of an ancillary fashion, and include assessment and interventions designed to assist the individual with planned medical procedures. The second level of care is more diverse in service options. At this level of care, hospitals, emergency rooms, outpatient medical programs, and specialty pain programs typically provide treatment. Psychological interventions at this level typically include time-limited individual therapy, biofeedback training, supportive group work, and psychoeducation to families and clients. Many pain programs incorporate psychological work at this level through ancillary treatment or manualized program options designed to support the work of the medical interventions. Research does not indicate any standard manualized approach that is either accepted or used across programs. Inpatient programs and specialty pain programs appear to have their own psychological treatment manuals

and standards of care for clients, but the content varies to a great degree. Some distinct commonalities are found, however: cognitive behavioral work with clients, relaxation training, biofeedback, and a growing emphasis on mindfulness. The third level of care is general outpatient work with clients. This level may include working with medical teams, rehabilitation and restorative therapies, work force training, and potentially worker's compensation claims. The client may have exhausted medical interventions and be faced with learning to accept their status and changes in functioning and quality of life. Psychological interventions at this level tend to include individual therapy, biofeedback training, supportive group work, and psychoeducation to clients and families.

It is clear that the medical model is the primary intervention strategy for levels one and two. Psychological interventions are typically considered to be supportive and ancillary in nature. When faced with the reality of having pain be a part of their lives with little or no hope for positive change or a cure, demoralization is a common reaction for many clients. The field of psychology has few treatment manuals and integrated treatment options for clients as they move to the third level of care. It is also quite clear that a client with comorbid mental health, chronic pain, and chemical use problems has few if any integrated treatment options available to them. This manual aims to provide practitioners with one of the first comprehensive guides to treating clients at levels two and three – and which can be applied across modalities and multiple levels of care.