REDDUCING OPIOID MISUSE:

Psychological Approaches to the Management of Pain

THE PREVALENCE AND COST OF PAIN
Nearly 50 million Americans have significant chronic or severe pain, according to the most recent analysis from the National Institutes of Health (NIH, 2015). Patients suffering from chronic pain frequently require additional healthcare services, such as more provider visits, visits to the emergency department, and hospital stays due to limitations in major life domains, including work, social, recreational, and self-care activities. Researchers estimate that Americans spend between $560 and $635 billion annually on direct and indirect costs associated with treating and managing chronic pain (Gaskin & Richard, 2011; IOM, 2011; Gatchel, McGeary, McGeary, & Lippe, 2014). This estimate combines the incremental cost of health care ($261–$300 billion) and the cost of lost productivity ($297–$336 billion) attributable to pain.

THE BIOPSYCHOSOCIAL NATURE OF PAIN
Historically, the primary use of pharmacological interventions for pain control grew out of early biomedical conceptions of pain. Now widely considered outdated, the biomedical perspective of pain assumes that all illness and disease can be reduced to biological causes in the body, and therefore necessitate treatments that are biological in character (e.g. medications or surgery). Throughout the 20th century, however, due in part to the rise of modern psychology, the medical community has shifted away from this reductionist view of health and illness. Psychological research has paved the way for the current biopsychosocial understanding of pain, which maintains that pain is a subjective experience that is influenced by a complex interaction among physiological, psychological, and social factors (Gatchel, McGeary, McGeary, & Lippe, 2014).

Psychological scientists have made important contributions to advancing the biopsychosocial understanding of pain, including how social determinants like socioeconomic status (SES) can amplify or diminish perceptions of pain. There is an increasing body of research demonstrating cultural differences in the experience of pain (Kroeber, 1948; Scrimshaw, Engle & Zambrana, 1983; Liu, Zeltzer, & Tsao, 2013), as well as gender differences in the frequency and degree to which pain is reported (Burns, Elfant & Quartana, 2010). In addition, research demonstrates that emotional factors are deeply interconnected with the experience with pain. Studies show that depression, guilt, anxiety, and anger worsen the experience of pain (Berna et al., 2010; Serbic, Pincus, Fife-Schaw & Dawson, 2016). Studies have documented a reciprocal relationship between negative emotions and pain, and in addition to the psychological factors
that are known to correlate with pain, pain-specific psychological factors such as catastrophizing have emerged as significant predictors of outcomes for pain (Gilliam et al., 2010; Darnall, 2016). Broadly defined as a negative mental set brought to bear in the context of actual or anticipated pain studies indicate that pain catastrophizing is a powerful determinant of outcomes for pain, particularly in perioperative settings (Sullivan, 2001; Severeijns, et. al, 2004; Darnall, 2016). This research illustrates that the degree to which pain is felt and how debilitating it is depends, in large part, on context and how it is interpreted by the patient.

CLINICAL ISSUES IN TRADITIONAL PAIN MANAGEMENT AND PATHWAYS TO OPIOID MISUSE

Despite the large body of research demonstrating the integral role psychological and social aspects of pain have in the overall pain experience and likelihood of successful control (Burns, 2000), pharmacological interventions remain the most commonly used method to control pain. Opioids, including hydrocodone (Vicodin®), oxycodone (OxyContin®, Percocet®), morphine, codeine, and fentanyl are commonly prescribed by physicians to treat pain, which can be safe and effective when prescribed for short periods of time and monitored carefully. Although highly effective in reducing pain, the largest risk of prescription opioid use is the potential for misuse that can ultimately lead to addiction (NIDA, 2018). As shown in a 2017 survey conducted by SAMHSA, 11.1 million Americans had misused prescription pain relievers and 1.7 million people had a prescription pain reliever use disorder (CDC, 2018). Despite little evidence to support their efficacy, the prescription of opioids for chronic pain in particular has increased dramatically in recent years. This trend has coincided with dramatic increases in opioid abuse, addiction, and overdose throughout the nation (Chou et al. 2015).

Increasing evidence suggests that relying solely on pharmacologic approaches for treating chronic pain are both ineffective and un-safe—particularly opioid-based treatments and treatments for specific age populations or conditions. Therefore, it is critical for policies to promote a shift from traditional pharmacological methods of pain management to interdisciplinary models of care that incorporate non-pharmacologic options for treatment.

THE ROLE OF PSYCHOLOGISTS IN UNDERSTANDING AND TREATING PAIN

Since the 1960’s, psychologists have played significant roles in many domains of research and practice critical to understanding the prevention, causes, and treatment of pain.

Psychological scientists conduct essential research on non-pharmacological treatments for pain control. This research is translated into practice by individual psychologists, who provide evidence-based, psychological interventions for pain control—which is the recommended first-line approach for the treatment of chronic pain (CDC, 2016). Psychological methods to control pain typically involve the active participation of patients, who are encouraged to redefine their role in the pain management process from passive recipients of pain to being active, capable individuals who can aid in the control of pain. Psychological interventions for pain control include:

Cognitive behavioral therapy (CBT), which may involve basic education to help individuals in pain better understand that cognitions and behavior affect the pain experience. CBT interventions for pain frequently involve other behavioral components, including coping skills training and relaxation skills.

Acceptance and commitment therapy (ACT), which emphasizes the importance of increasing psychological flexibility to decrease suffering and facilitate patient progress towards living a more valued and fulfilling life. ACT promotes acceptance of pain and targets ineffective pain control strategies.

Although psychological interventions for pain have been shown effective for both acute and chronic pain conditions, patients rarely have access to these treatments alongside or in conjunction with pharmacologic options. This represents a significant clinical treatment gap that must be met in order to successfully change the course of our nation’s evolving opioid epidemic.

THE COMPLEXITY OF TREATING CHRONIC PAIN AND NEED FOR INTERDISCIPLINARY PAIN MANAGEMENT

The biopsychosocial approach views chronic pain as an illness rather than a disease, thus recognizing the need for treatment approaches aimed at the management—rather than the cure—of chronic pain (Roditi & Robinson, 2011). Unlike acute pain, which is short in duration (typically six months or less), chronic pain usually begins with an acute episode, but does not decrease with the passage of time. Subsequently, chronic pain often coincides with other mental and behavioral health issues that can complicate treatment and exacerbate pain (Burns et al., 2008).

Decades of research document a strong association between depression and chronic pain (Fishbain, et al., 1986; Blair et al., 2003), which often reflect feelings of hopelessness that can accompany many years of unsuccessful pain management (Dickens, McGowan, & Dale, 2003). Chronic pain has also been linked with other forms of psychopathology, including anxiety disorders, substance use disorders, and other psychiatric problems (Nash, Williams, Nicholson, & Trask, 2006; Vowles, Zvolensky, Gross, & Sperry, 2004). Poor mental health can lead to the development of a host of maladaptive pain behaviors which may produce, reinforce, or worsen the pain experience.

The complexity of chronic pain demonstrates the need for patient-centered pain management programs, which are oriented toward reducing the intensity of the pain, increasing physical activity, decreasing reliance on medications, improving psychosocial functioning, reducing perception of disability, returning to full work status, and reducing the use of health care services (Vendrig, 1999). Pain management programs typically involve the interdisciplinary expertise of physicians, psychologists and physical therapists, with consultation from specialists in neurology, rheumatology, orthopedic surgery, internal medicine, and physical medicine.

As part of pain management programs, psychologists have important roles in working with other health care providers and patients to identify those at risk for chronic pain after the onset of pain or injury, set treatment goals, adhere to treatment plans, monitor progress, and address psychosocial barriers to care. Psychologists frequently provide initial evaluation of psychological distress, pain behaviors, and psychosocial impairment, which left untreated can undermine patients’ self-management (Damush, Wu, Bair, Sutherland, & Kroenke, 2008). A key feature of interdisciplinary pain management programs is a focus on treating co-morbid mental health conditions, which can improve mental health and ameliorate the chronic pain experience.