Chapter 1 Summary

Introduction

In support of the need for involvement of psychological treatment in chronic musculoskeletal pain cases, Tseli et al. [1] performed a systematic review of prognostic factors for long term physical functioning following multidisciplinary rehabilitation. They found that pain chronicity and intensity did not predict physical functioning following multidisciplinary treatment. Instead, better outcome was predicted by low levels of pre-treatment emotional distress and low levels of cognitive and behavioral risk factors, as well as high levels of protective cognitive and behavioral factors. The biopsychosocial approach [3] is commonly used to both conceptualize and guide treatment in psychotherapy with pain disorders. Meints & Edwards [4] explained “the biopsychosocial approach describes pain and disability as a multidimensional, dynamic interaction among physiological, psychological, and social factors that reciprocally influence one another, resulting in chronic and complex pain syndromes.” (p. 169)

In a detailed review of psychosocial factors contributing to chronic pain outcomes, Meints and Edwards [4] provided information that can serve to outline the potential targets of psychological treatment. In relation to affective factors, it is noted that pre-morbid psychological dysfunction is a risk factor for the development of chronic pain symptoms. The next area discussed by Meints and Edwards [4] is trauma. They noted there are strong prospective links between early-life trauma (i.e., physical, psychological, and sexual abuse) and the later development of chronic pain. However, to the current author’s knowledge, there has been no theoretical discussion involving brain mechanisms on the possible manner early-life trauma or other psychological factors contribute to chronic pain. In total, it appears that early-life trauma is seen as a static mechanism used primarily as a risk factor as opposed to being considered a dynamic, but ongoing and persistent, mechanism that may be modifiable with appropriate psychological treatment. This will later be discussed in more detail. Examples of clearly static and non-modifiable psychosocial mechanisms related to chronic pain are gender and race that Meints and Edwards [4] also discuss.

Another area covered by Meints and Edwards [4] involves social/interpersonal factors. The studies reviewed focused on either non-pain-related global social support or pain-related social responses. They note it is clear that interactions between chronic pain patients and their significant others can both facilitate and impair adjustment. It appears that the main proposed manner in which the social area has been addressed involves couple’s interventions interpersonally and via occupational or vocational counseling related to the work situation. Thus, there is a lack of discussion of how important social and work relationships can be addressed in individual psychotherapy despite the role social relationships play in chronic pain syndromes. Sturgeon and Zatura [9] suggested more explicit focus on addressing interpersonal distress and enriching one’s relationships are underexplored areas of chronic pain treatment.

This book presents a brain-based model with the potential for explaining brain mechanisms involved with chronic pain and a discussion of psychological treatment targets that have received little to no attention. I first provide insights as to pain management from the perspective of a practicing psychologist involved in pain treatment for many years. There is an introduction to an applied treatment model based on the brain theory, followed by a discussion of cortical pain processing based on previous research. This is followed by an explanation of a brain model based on cerebral cortical columns and how this relates to the prior pain research. The second part of the book discusses in detail the applied Clinical Biopsychological Model (CBM). Following a discussion of how the model explains psychotherapy process variables and its relationship to current treatment approaches, there is a discussion related to identifying and treating influential negative emotional memories with the goal of reducing the psychological and physical impact of those memories. There is next an explanation of the two meta-traits (i.e., plasticity and stability) of the Five Factor Theory of personality based on the CBM and how the new viewpoints translate into specific recommendations on the most effective ways for pain patients to behaviorally interact with those in their social network. Information on loss-related depression will be discussed within an opponent-process framework with proposals on how this important area may be identified and addressed. The final section of the book provides the treatment manual with detailed information on assessment, conceptualization, and treatments. It is hoped that the book provides useful information to neuroscientists and clinicians related to chronic pain conditions, with emphasis on the belief that psychotherapy is the only treatment that can address important cerebral cortical processes in associated depression and anxiety.