Navigating Chronic Pain in the Therapy Room: A Critique of the Current Medical Landscape in Canada that Fails Those Living with Chronic Pain

By

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Abstract

Chronic pain affects one in five Canadians personally. With the government of Canada recognizing the need to shift chronic pain management toward an integrated approach, this capstone suggests that therapists should take a forefront role in chronic pain management to help those millions of people affected. This capstone is designed as a literature review to explore what chronic pain exactly is, how it looks, and who it affects specifically in Canada. It is then designed to review the current state of healthcare in Canada from perspectives of the public, and of physicians and professionals working within it. The research focuses on chronic pain management in Canada from a biopsychosocial lens and seeks to give power to each of these perspectives. The major finding of this capstone is that Canada's physicians and other medical professionals are not only under equipped to provide adequate chronic pain treatment by virtue of their professional expectations, but that their professional roles and education may actually be rooted in colonial views that may perpetuate harm to chronic pain experiencers. I conclude that the education and competence of counselling therapists make them well suited additional supports for chronic pain experiencers, and that this may benefit individuals and lower the burden on our healthcare system equally. In light of this conclusion, this capstone proposes guidelines to help counselling therapists navigate conversations about chronic pain with their clients and with other helpful professionals, so that they may best serve clients in a wholistic way. It also makes suggestions for future research and advocacy for publicly funded psychotherapy.

Keywords: chronic pain, Canadian healthcare, counsellor scope of practice

Dedication and Acknowledgement

I dedicate this capstone project to my cohort of classmates who have been immensely supportive throughout this master's degree. As a result of being placed in cohort 19B, I have had the opportunity to work and grow along side some of the most thoughtful people I have ever met. Throughout this degree, each member of this cohort has brought something special to our group. My worldview was opened largely thanks to their willingness to share and engage in vulnerable and meaningful conversations. My classmates were also sources of hope, encouragement, and clarification when I was doubtful or unmotivated to continue, particularly in writing this capstone. To them, I am very grateful.

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Chapter 1: Introduction

Imagine waking up after a restless sleep only to be in pain, day after day, with no sense of hope that the pain might go away, nor that anyone really wants to listen. Afterall, you've been to the doctor to try to get help, and even the doctor hardly listened. In addition to your physical pain, you feel depressed. You try to accomplish your daily activities, but they are limited due to a fear of exacerbating your pain. You may also be embarrassed to be one of 20% of Canadians living with chronic pain (Dassieu et al., 2021). You know the stigma that surrounds you; you're a burden to taxpayers' dollars, you're just faking it to get social assistance, you're lazy, you're drug-seeking.

You might also know that despite being in chronic pain, your chance of receiving respectable, evidence based, integrated, and timely care in Canada is low. Sadly, you might know that chronic pain management is not even taught in some medical schools (Lechowicz et al., 2019), and you just do not know where to turn to feel better.

This, unfortunately, may be the daily reality for many Canadians, and not only does it reflect the barriers to care on an individual basis, but it reflects a problem with national social significance too. Despite limitations of care, chronic pain management and support for those living with chronic pain has consumed large economic costs for the government of Canada, with estimates of up to 40.3 billion dollars spent annually in 2019 with a projected growth rate of 17.5% looking into 2030 (Health Canada, 2021).

In 2020, a Canadian Pain Task Force was developed to report on the landscape of chronic pain in the country (Health Canada, 2021)—the first time such reporting had ever been done on the topic at that scale, and poignantly, just in time to include data from the Covid-19 pandemic. Not only did this task force recognize pain (including chronic pain) as a trauma response (which may have, on a large scale, fundamentally changed our social understanding of the matter), but it also called out the inadequate availability to medical resources (i.e. limited family doctors, and imaging equipment), and financial barriers to specialized treatment. In addition to this, they also shed light on the massive existence of stigma that surrounds those living with chronic pain, as well as the disproportionately higher prevalence of chronic pain among marginalized groups.

With so many people being negatively affected by chronic pain (in various ways) with arguably inadequate responses from medical professionals (at no fault necessarily to the individual practitioners), the same task force called for the national implementation of "innovative approaches" (p.10) — approaches looking toward professionals with more wholistic understandings of chronic pain. Accordingly, this capstone discusses how chronic pain can be addressed in the therapy room by professionals who use talk therapy as an approach to chronic pain treatment compared to those working in western medicine approaches currently.

Overview of the Topic

Chronic pain may very well have entered the therapy room decades ago, but now in the current landscape of our medical system as addressed above, there exists, in the mental health field in general (namely in counselling therapy), a first line responsibility to our clients to help them navigate and manage their chronic pain as best we can within the limits of our capacity and competence.

Some researchers and clinicians have already led the charge in this regard. Of notable mention would be Dr. Rachel Zoffness, a practising health and pain psychologist, who has researched, authored, and practiced evidence-based approaches for managing chronic pain with Cognitive Behavioural Therapy (CBT). Dr. Zoffness views and treats chronic pain from a cognitive lens. She largely focuses on the development of neural pathways, and people's ability to re-wire their practiced pain response—she believes in the re-wiring of a non-pain response (Zoffness, 2019).

To understand physical pain etiology, she uses the gate theory of pain. The gate theory of pain, proposed by Welzack and Wall in 1965, suggests that acute pain (as opposed to chronic pain) is a result of physical tissue damage (i.e., a thermal burn to the skin, a bacterial infection in the lungs, a compression of a vertebral disc) that is sensed through our nociceptor cells, sent afferently to regions within the spinal cord, and when the pain signals reach a certain threshold, the pain gate is opened. The signal then tells our brain what kind, to what degree, and where the pain is, and then our brain sends efferent signals downstream to either remove our hand from the hot stove, prompt an immune response in our lungs, or grab our back and bend over to find relief. While there is such thing as acute-chronic pain, where instances of acute pain occur over and over essentially making the pain chronic. The majority of chronic pain, according to some (Doidge, 2015), develops from a sort of *pain response hijacking* where our brain has learned and practiced the pain response so much, that it exists in a consistent in-pain-mentality. Those who experience this pain response hijacking, are not faking their pain, in fact studies show actual activation of pain areas despite no obvious acute tissue damage (Zoffness, 2021, as cited in Flynn & Moore, 2021). This etiology and mechanism of chronic pain will be further discussed in chapter two.

Of interest and importance, is the fact that while sometimes the etiology of chronic pain may be mysterious, the same pain areas in our brain that detect physical pain, also light up on fMRIs in response to non-physical pain (i.e., the exposure to an emotionally/spiritually/mentally traumatic event, or even the thought of a loved one experiencing such a traumatic event)

(Maddux & Winstead, 2020). Moreover, the experience of emotional pain can certainly manifest in physical ways. Takotsubo cardiomyopathy, known colloquially as Broken Heart Syndrome, is an example of when the heart muscle becomes suddenly stunned or weakened, and researchers know that it typically occurs following severe emotional distress, such as the passing of a loved one (American Heart Association, 2022).

Purpose Statement

So, while researchers and clinicians like Dr. Zoffness are already leading the way in evidence-based approaches to chronic pain management in the therapy room, the purpose of this capstone is to build upon that in a forward looking way. This capstone firstly suggests that as the future of healthcare in Canada looks toward models of professional integration (Health Canada, 2021), therapists will likely take a forefront role in chronic pain management, and with this suggestion, a guide for navigating this role would be helpful.

Generally, this capstone aims to guide new, and working counselling therapists in conversations with clients who may feel lost in the hopelessness of their chronic pain, and potentially lost in the medical system that may have left them neglected, dismissed, or marginalized. Moreover, this capstone aims to guide therapists in conversation with other helpful professionals, so that when working in integrated settings, and in private practice, we may best serve clients in a wholistic way—in partnership with other helpful professionals, not in struggle with them. With these objectives, the body of this capstone will serve to answer the primary research question, “How can therapists, in Canada, best navigate conversations about chronic pain?”. In search of this answer, several secondary questions will be explored in the literature review. They will strive to answer what is broadly known about chronic pain, what the therapist’s role is in chronic pain management, and they will build a therapist's guideline for working with clients experiencing chronic pain all within the context of the stressed Canadian medical system.

The intended audience of this capstone is new and student counselling therapists, but the content may also be valuable to working therapists, and other helpful professionals (i.e. nurses, physicians, occupational therapists, etc.,) as a written conceptualization of professional role designation. By extension, this capstone may be of interest to educators in the counselling field as a call to establish chronic pain as a larger teachable subject along the same importance as grief, or addictions for example.

Theoretical/Conceptual Frameworks and Contribution to the Field

This discussion of chronic pain will be rooted in a bio-psycho-social conceptual framework that not only defines pain from such a lens, but also considers each of these domains when conceptualizing clients in therapy. Within this framework, is an understanding of trauma, and how pain is often, if not always rooted in it, and maintained by it through mechanisms of our central nervous system, through our practiced thoughts and behaviours, and through the intersections of our social context. The purpose of this work then, is both pragmatic but also trauma informed; it is not just to study the pain of clients, or to conceptualize the etiology of their pain. The purpose is to build a body of work dedicated to helping clients feel better and escape from their chronic pain in a safe and compassionate way, especially when, perhaps, they may have turned to every other treatment to no avail.

In this way, the work is rooted in transformative research, with the aim of building on the current literature to present practical guidelines for professionals in the field of counselling psychotherapy. Transformative research challenges current understandings, traditions, and norms with the goal of creating new thought patterns and paradigms (Trevors et al., 2012). The intention with this research is that it will demonstrate the need for counselling therapists to take on a primary role in treating chronic pain. With the immense stress on primary care and health care in general in Canada, this is an excellent opportunity to shift the understanding of professional roles and reorganize responsibility to where it might be best suited, or at least suited as well.

Furthermore, this work will support the need for further research on the experience and existence of chronic pain within marginalized populations. As will be demonstrated, a significant amount of the research on chronic pain comes from quantitative studies on groups of people who may already be connected to pain management services (i.e. people who are already attached patients at medical pain clinics), and this often excludes people who use substances, who may struggle with their mental health or have diagnosed mental health disorders, who may be subject to homelessness, who may live rurally or on reserve, or who for any other reason may be disenfranchised by the western medical system in Canada (i.e. transness, Indigeneity, socioeconomic status, education, language, newcomer status, etc.) (Turepel Lafond, 2021; Geddes, 2017; Public Health Agency of Canada, 2018; Rapid Response Service, 2017). This is an identified gap in the research that will be discussed further.

Positionality Statement

I come to this research not without bias. My bias is personal in two ways and is what inspired my writing on this topic in the first place. Firstly, I come to this research having worked in health care for ten years and having witnessed both the burnout of physicians and the lack of satisfaction from patients receiving care—namely care for their chronic unmanaged (or mismanaged) pain. I have heard stories from both sides of the chronic pain coin, the side of those who do not have the capacity to listen anymore and whose only option is to pass their patients on to the next willing professional, and the side of those who feel unheard and dismissed. A particular statement that prompted my interest in writing about this issue, came from a primary care physician who refused to diagnose someone with fibromyalgia, a chronic pain disease, because "it's not real".

My experience and conversations with other health care professionals influenced the way I collected research for this project. Particularly, it influenced the key words I used in search engines, and it also influenced the literature that I chose to review. As I understand, the conversation about chronic pain in general largely exists in the medical and academic worlds which both have enormous colonial and paternalistic influences. Because I also grew up, and am still immersed in those worlds, I cannot disregard the biases that come from them and that are exposed in my paradigms. It will be apparent in this capstone project that much of my information is still within the confines of these worlds; however, I have intentionally sought out information, that may be otherwise considered non-academic, from non-dominant voices, to legitimize this work as truly transformative research. This is also an effort to decolonialize the treatment of chronic pain all together—to bring the topic of chronic pain into the therapeutic relationship, to normalize it, to de-stigmatize it, and to discuss it using accessible language.

I also come to this research as an experiencer of chronic pain myself. The last nine years of my life have been filled with physiotherapy and doctor's appointments, muscle relaxants and NSAIDS. The cause of my acute pain originally was mechanistic, an injury from playing high level rugby—but over the years the source of my pain became increasingly ambiguous. I could hardly walk some days, yet I often felt dismissed when I would ask for professional help. It took eight years before anyone considered medical imaging on my back, and it took nearly as long to see a specialist. Even then though, I was told just to rest, and strengthen my abdominal muscles.

These therapies were not wrong, but they only took into consideration a third of the issue. Having only understood my issue from a biological perspective, I did not realize that what I was experiencing was largely psychologically influenced, and socially influenced as well. I was catastrophizing my pain, and I had major pain related fear of activity—two common experiences of those who have chronic pain as you will see in the following chapter. More than just being scared to play rugby, I started avoiding daily tasks like putting on socks, because I was scared that it would trigger a flare up. Furthermore, because I was not able to socialize how I had in the past, or play the sport that I loved, I was experiencing comorbid symptoms of depression, and anxiety. I was lost in the depths of chronic pain, not for lack of effort to escape, but I simply did not understand, nor was I ever taught, a more nuanced and wholistic appreciation of my chronic pain.

Definition of Terms

Acute pain: Pain that lasts less than three months and is a symptom. Acute pain has an identified cause, which is often a biological response to an injury. It is associated with skeletal muscle spasm and sympathetic nervous system activation. (Grichnik &Ferrante, 1991).

Clinical empathy: the ability of a physician to understand a patient's illness experience, communicate this understanding and act collaboratively to create a treatment plan (Gertsman et al., 2023).

Comorbid or *comorbidity*: The presence of more than one distinct condition, disease, or illness (used interchangeably) in an individual (Valderas et al., 2009)

Chronic pain: Any pain lasting longer than three months (Dydyk and Conermann, 2023).

Fibromyalgia: A chronic disorder that causes pain and tenderness throughout the body, as well as fatigue and trouble sleeping. Scientists do not fully understand what causes it, but people with the disorder have a heightened sensitivity to pain (National Institute of Arthritis and Musculoskeletal and Skin Disease, 2021).

Pain: “An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage” (p.1976). It usually serves an adaptive role, but it may have adverse effects on function and social and psychological well-being. It is always a personal experience that is influenced to varying degrees by biological, psychological, and social factors. Different from nociception, it is not inferred solely from activity in sensory neurons. It is learned through life experiences. Pain is expressed in many ways, and an inability to communicate does not negate the possibility that a human or nonhuman animal experiences pain (Raja et al., 2020).

Outline of Chapter Two and Three

The chapters that follow will explore the experience and treatment of chronic pain specific to non-cancerous, non-post surgical chronic pain in Canada in the context of limited access to government funded medical primary care**.** The reason for this, as you will see, is partially because cancerous and post surgical pain are different beasts all together, perhaps better suited for a more robust literature review and discussion. For the purpose of this project, with the goal of orienting this work toward guidelines for non-medical treatment with counselling therapists, it was elected to disqualify cancerous and post surgical pain from the conversation.

Chapter two will first provide an in-depth literature review that defines the Canadian medical context, and characterizes chronic pain in detail, including an analysis of the impact of chronic pain on people’s daily life. An examination of the current theories of pain and chronic pain will be examined. Cultural considerations of the topic will be evaluated.

Furthermore, chapter two will review current treatment protocols and role dissemination within the health care system, and a more detailed description of mental health and psychotherapy specific practises. Concern for non-dominant, decolonial practices in the treatment of chronic pain will be addressed.

Belief in clients’ stories will be a thread throughout this capstone, but this will come to full light in the third chapter. This subtheme is utterly important in improving the care provided to people who experience chronic pain. I have chosen to include it as a theme of particular interest because it serves as an antidote to the feeling of dismissal that is all too common in the stories of chronic pain sufferers.

Chapter three will emerge essentially as a call to action for therapists to accept chronic pain into their practice. This will include guidelines on how to navigate chronic pain conversations, and how to connect with helpful others including medical professionals. Chapter three will also provide recommendations for future research to further develop the effectiveness of chronic pain psychotherapy in Canada.

Chapter 2: Literature Review

Purpose and Structure of Review

To begin this literature review, I was unsure where to organize my research first because I was diving into a topic that seemed to sit heavily in the medical sciences. I knew however, that this stance was limiting. Somehow, I had to change my understanding and schema of chronic pain altogether. I wanted to understand a new language of pain that was useful for lay people and for therapists working directly with them. Knowing that the voices of those who live with chronic pain are often dismissed and/or quieted, I started to build a repository of anecdotal histories to help colour the landscape of chronic pain before jumping into the academic literature geared toward medical professionals, using terms like calcitonin gene-related peptide (Yang et al., 2019) nonchalantly.

I spoke to friends and family about their experiences of chronic pain. This ranged from athletes living with constant low back pain, to older adults living with arthritis, women living with endometriosis, and people with generalized full body pain post motor vehicle accident. What I found was that most people in some way had a story about chronic pain, whether it was a nagging joint issue that kept them up at night, or leg pain that would not let them sit longer than twenty mins at work. Most everyone I knew was dealing with pain, and they were just expecting it to continue as part of their daily life. Often, these people had sought a solution through medical professionals, who, to no fault of their own, could not be of much help, and would say to “try voltaren”, or “the pain you are experiencing doesn’t have a mechanical cause, so there’s nothing we can do about it”. Once I had a few stories in my repository, and the pain conversation was coloured, I turned outside my personal circle for more information.

Reddit is not usually an academic source, but I value its relevance in providing an online public opinion before jumping into the literature for support. I turned to Reddit's chronic pain conversations, and like a montage, the subreddits piled up. Several subreddits asked whether life was worth living with chronic pain. Another common subreddit thread was titled with the acronym "AITA" which stands for "Am I The Asshole for" and these were articled by family members and friends who were wondering if they were wrong for leaving their partners because of their chronic pain, or for not caring about their friends' chronic pain anymore. Other subreddits were for medical professionals asking how to talk to patients with chronic pain. Overwhelmingly, although the chronic pain Reddit page had over 100 thousand followers, it was clear that living with chronic pain, even online, was a very isolating, lonely, and disheartening place.

Still, while my repository was filling with public opinion and information, I was not ready to take on the traditional academic side of chronic pain without more context. So, again, as seemingly apt in 2024, podcasts and lectures on Youtube were up next. This is where a lot of the context of the chronic pain conversation started to clear up, and I was still giving a voice to those who experience pain. Some of the podcasts included the Like Mind Like Body Podcast by Curable, The Integrative Medicine Podcast, The Root Cause Medicine Podcast, the Canadian Medical Association Journal Podcast, but largely I was looking for any podcast or Youtube episode about chronic pain, pain and psychotherapy, or pain science in general. With pain experiencers and specialists having discussions together on podcasts, and with educators catering to learners on Youtube, it suddenly seemed like there was some cross-over between those who feel pain and those who study it. This crossover was exciting, so I followed it, and soon, the useful language of chronic pain started to become recognizable and chronic pain literature even seemed accessible.

With this foundation of public opinion, and the lay language of podcasts and Youtube lectures, a proper academic literature review was then undertaken. The literature review started with a general search including the key words, “chronic pain + treatment + psychotherapy + medicine in Canada” and information was pulled from major online databases like Statistics Canada, Google Scholar, PudMed, JSTOR, PsychInfo, and ProQuest. When appropriate, I specifically sought out studies that were completed in, or could be translated to the Canadian medical context, although this proved to be difficult. For any quantitative studies, I tried to find those with representative samples of adult Canadian populations, but this also proved difficult. This, and other limitations of the review, will be discussed in chapter three. Lastly, I specifically wanted to obtain information from diverse cultural perspectives within Canada, so I added additional searches like, “Indigenous understanding of chronic pain”, “multicultural analysis of chronic pain treatment” and, “chronic pain + LGBTQ+”.

The scope of this literature review was kept broad to parallel the breadth of the issue at hand. The sources reviewed and presented span multiple decades to articulate how the understanding of chronic pain has and is changing over the years. Chronic pain is an issue that also crosses several academic and occupational jurisdictions; general medicine, pharmacology, psychology, psychotherapy, and physiotherapy to name a few. To define the role of psychotherapists in the treatment and management of chronic pain on a large scale as the reader will see in chapter three, the purpose of this literature review is to hold the breadth of this issue in hand while generally building a nuanced understanding of chronic pain. It will illustrate the general characteristics of people living with chronic pain (noncancerous, non post surgical chronic pain) in Canada and it will illustrate what comorbid factors might affect those living with chronic pain. It will also discuss how chronic pain is situated within the larger recent Canadian medical context. Current treatments for chronic pain will be explored from a multidisciplinary perspective, and then the literature intersecting chronic pain treatment and hope will be further explored. Lastly, the current literature exploring the cultural and social necessity for counsellors to be involved in an integrative approach to chronic pain will be also explored.

Understanding Chronic Pain in Canada

As a reminder from chapter one, acute pain and chronic pain are often defined by units of time—chronic pain being defined as pain existing for at least three months that is medically related to causation and prognosis (King, 2013). This is a very colonial and empirical understanding of pain (Moosa-Mitha, 2022); however, we know from multicultural studies that the subjective experience, and therefore definition of chronic pain, is much more nuanced and complicated.

Historically, pain was understood in a nociceptive sense. As detailed in chapter one, the concept of pain was taught as a biological concept where certain pain receptors sensed pain (i.e. heat, pressure, chemical, etc. on the skin) and then sent messages to the brain to report danger. This nociceptive pain does not explain chronic pain well, where there can be an absence of that dangerous stimulus, however. Neuroceptive pain is a modernly accepted understanding of what chronic pain really is.

Neuroception itself was defined by Stephen Porges in relation to the Polyvagal Theory where the term was introduced to “emphasize the neural circuits that function as a safety-threat detection system capable of distinguishing among situations that are safe, dangerous, or life threatening" (Porges, 2003, p. 39). Chronic pain, while it can also exist in the presence of nociceptive pain, is when our neural circuits distinguish something inappropriately as dangerous or life threating and can be considered "invalid neuroception" (Porges, 2003, p.40). Norman Doidge (2015) articulates the learned neural phenomenon of chronic neuroceptive pain in his book, *The Brain's Way of Healing*, when he says that "chronic pain is plasticity gone wild" (p. 6). He illustrates that within the brain of a chronic pain experiencer, when a learned threat is detected (a learned pain), a disproportionately large number of neurons are activated compared to the actual valence of the threat.

Hashmi and colleagues (2013) had a goal of measuring how, where, and how much the brain changed for people who eventually developed chronic back pain compared to those who did not. The longitudinal cross study of people's subjective experience of fluctuations of pain used fMRI detected brain activity over four testing dates within one year, and it showed that people who developed chronic back pain showed more pain related activation in their amygdala and medial prefrontal cortex compared to those who did not develop chronic back pain. This finding perhaps indicates a structural difference in the way chronic pain is processed, but also indicates the inclusion of emotional memory (via the amygdala) and perhaps chronic pain's effect on functions like creativity, planning, empathy, action, etc. (via the prefrontal cortex) (Doidge, 2015).

The psychological aspect of chronic pain encompasses cognitive elements such as thoughts and beliefs (for instance, thinking "I'm damaged; I won't recover"), past experiences, and expectations. It also involves emotional aspects like anxiety, anger, and depression, along with coping behaviors such as withdrawal and avoidance of movement (fear response) as will be discussed later (Zoffness, 2019).

According to Dr. Rachel Zoffness (2019), research indicates that adverse emotions, catastrophic thoughts, and maladaptive coping behaviors can actually intensify pain, worsen symptoms, and perpetuate a cycle of fear, inactivity, distress, and pain. Put differently, stress, anxiety, depression, catastrophic thinking, negative predictions, a focus on pain, social withdrawal, insufficient exercise, and avoidance of activity all contribute to the aggravation of chronic pain.

Moreover, from a social understanding of pain, a 2020 study by Yu and colleagues showed that there is an association between socio economic factors and those living with pain (described in the study as full body pain). Education and occupation were considered in this study, however, access to healthcare, family dynamics, friendships, cultural influences, community surroundings, contextual elements, and other socioenvironmental factors might be considered. Many of these will be discussed in the sections below. It should be noted that this 2020 study was reported on a population of Chinese participants and not Canadians, and that the finding may not necessarily be valid in a Canadian context.

Characteristics of People Living with Chronic Pain

Sense of Restricted Lifestyles

People experiencing or suffering from chronic pain often have elevated subjective levels of stress (Yaghmaian and Miller Smedema, 2019). Perhaps because of this stress, perhaps due to physical limitations, one characteristic of chronic pain experiencers is having restricted lifestyles which limit their participation in major life roles and activities (i.e. being a good friend, being an active parent, contributing to the workplace, etc.). Having a decreased sense of participation like this has been associated with decreased reports of well-being, self-esteem, and self-efficacy as well (Yaghmaian and Miller Smedema, 2019). For men and male identifying people, their sense of masculinity may also be threatened when chronic pain restricts them from performing the role of the "breadwinner", and/or from participating in activities that make them feel strong (Clarke et al., 2013, as cited in Samulowitz et al., 2018).

Fear Avoidance and Rumination

As maintained by Jay and associates (2016), individuals grappling with chronic musculoskeletal pain frequently encounter fear of movement and engage in avoidance behavior, as previously mentioned—this is also known as pain catastrophizing. Pain catastrophizing was defined in The Fear Avoidance Model 1983 by Lethem and colleagues (as cited in Pomarensky et al., 2022). According to Lethem and colleagues, fear avoidance is a normal, protective response in situations of acute injury, but in cases of chronic pain, these beliefs may relate to fear of movement or reinjury. With fear of movement or reinjury, pain upon movement becomes catastrophically threatening, and fear-avoidance beliefs lead to a detrimental behavioral cycle of avoidance behavior that subsequently causes deconditioning, decreased function, and increased disability (Pomarensky et al., 2022). Heightened vigilance also becomes a concern (Jay et al., 2016). For someone experiencing chronic low back pain for instance, they may develop a fear of bending over at the waist because it could trigger a painful neuroceptive signal; they therefore avoid activities of daily life that require this motion, and eventually their hip/back flexibility is decreased to the point where they start experiencing further musculoskeletal problems.

Interestingly, in semi structured interviews with adults experiencing chronic low back pain, people with elevated pain catastrophizing often see rumination as uncontrollable and harmful but simultaneously believe it helps them to solve problems or feel prepared for future threats (Schutze et al., 2017).

Chronic Pain at the Intersections of Social Marginalization

In Canada, chronic pain is a gendered issue, with female identifying individuals reporting higher rates of conditions such as fibromyalgia, arthritis, and migraine headaches (Meana et al., 2004). A study by Meana and colleagues (2004) addressed gendered discrepancy with a binary and found that women with chronic pain represented eighteen percent of the population and men with chronic pain fourteen percent at the time. Health Canada (2021) did not provide the same gendered percentage differentiation, but they did agree that women are more affected by chronic pain personally. It should be noted that perhaps a confounding factor of this information is that women are also more likely to report chronic pain than men (Greenspan, 2007; Samulowitz et al., 2018). Still, it is curious to what degree chronic pain diagnoses are influenced by andronormativity in medicine (Samulowitz et el.,2018), where the healthy norm is a male body, and therefore women who deviate from that norm are diagnosed or othered.

Meana and colleagues (2004) acknowledge that the gendered discrepancy was not tied exclusively to sex, however. The researchers accept that females in Canada (and worldwide) also generally experience lower incomes, possess less formal education, and exhibit double the prevalence of depression. Each of these factors demonstrate strong comorbid correlations with chronic pain. In 2024, two decades after the Meana and colleagues' study, we know that these factors generally remain gendered in the same way.

Researchers in 2017 (Landefeld et al.) discussed another marginalized group that was and is disproportionately affected by chronic pain, namely and especially those experiencing homelessness with a history of posttraumatic stress disorder and abuse. Other researchers (as cited in Hart-Johnson et al., 2012) also found that chronic pain sufferers have a significantly higher prevalence of physical and sexual abuse history than the general population. In a similarly marginalized population, most women living with HIV reported major and persistent chronic pain as well. A study was done on this population in metro Vancouver that showed that while the chronic pain was pervasive in the group, it was often undiagnosed (and therefore untreated) (Ly et al., 2024). This pattern of undertreatment is found elsewhere in the literature as well. Samulowitz and colleagues (2018) underscored that women's pain medication treatment is less adequate than the treatment given to men.

Other studies have shown that torture survivors among refugee claimants and asylum seekers (which numbered approximately 143,000 new claimants in Canada in 2023 as per the Immigration and Refugee Board of Canada (2023)) experience increased proportions of reported chronic pain compared to the general population (Amris & Williams, 2015; Teodorescu et al., 2015). We can infer from Amris and Williams (2015) that torture survivors may have numerous psychological and social problems that complicate their chronic pain care, including uncertainty about civil status, unstable accommodation, isolation from family, friends, and culture and means of support and access to work. Pottie and colleagues (2011) would argue the same. Still, while responses to pain vary across ethnic groups, there are wide disparities in provision of care and treatment decisions between ethnic groups, leading to increased pain-related suffering in ethnic minorities in general (Meints et al., 2019).

Perhaps the most discussed marginalized group in the Canadian literature is collectively Indigenous peoples of Canada where extreme health inequities are reported (Kim, 2019; Logan Mccallum & Boyer, 2018). Linked to historical and ongoing effects of colonization, and to intergenerational history of medical trauma by professionals in the Canadian medical system (Geddes, 2017), Indigenous individuals demonstrate higher incidence of chronic pain and pain-related disabilities of all types (Latimer et al., 2018; Latimer et al., 2018b). Indigenous people are also less likely to seek or access treatment, in part because their pain is more likely to be misunderstood or minimized (Latimer et al., 2018; Latimer et al., 2018b; Logan Mccallum & Boyer, 2018; Moosa-Mitha, 2023; Wallace et al., 2021). Below is a recount from a participant in Wallace and colleagues' (2021) qualitative thematic report that conveys the experience of their chronic pain being disbelieved and dismissed as an Indigenous person by medical professionals:

> For me, I'm having a hard time to ask for help to any doctors because of how they treat me, like [they] say I just want to get pain medication just to get high and all that, and I'm really in pain and I'm telling them and they don't believe me and that, and I'm having a really hard time right now. It is hard for me to ask because of all the things I went through with the doctors and that. They treat me like…I'm just after the drugs to get high and that. They don't believe me, that I'm in pain. I'm trying really hard to ask for help and it's really hard for me to ask for help because of how I was treated before. (p.6)

Likewise, Wallace and colleagues (2021) interviewed individuals who self identified as LGBTQ2S, and members of this group also experienced inadequate and ineffective healthcare for their chronic pain. One participant said, "Nothing has been working for pain management. I've tried massaging, I've tried IMS, I've tried acupuncture, I tried medicinal marijuana, I've tried like stronger medication…nothing is making it better" (as cited in Wallace et al., 2021, p. 6). Kay (2023) and Craig and colleagues (2020) indicate that there are multiple barriers to receiving health care in general for LGBTQ2S people, but particularly in the trans community where higher rates of chronic pain exist compared to their cisgender counterparts (Dragon et al., 2017).

Undiagnosed and Invisible: Example of Fibromyalgia

In 2021, Health Canada expressed that “chronic pain is largely invisible” (p. 3), and this invisibility is likely embodied by the many Canadians with or seeking diagnoses of fibromyalgia—a largely invisible chronic pain disease (Mengshoel et al., 2018). Fibromyalgia has historically been a controversial disorder, and its recognition as a legitimate category of illness has been challenged. Consequently, people with fibromyalgia often receive delayed and ineffective care, which can significantly impact quality of life (Mengshoel et al., 2018). According to Yaghmaian and Miller-Smedema (2019), to attain a sense of authority and control over their health, it is crucial for people coping with fibromyalgia (predominantly women) to feel empowered and justified in seeking necessary resources within healthcare settings. It has been acknowledged that, in general, women advocating for themselves in medical environments are often perceived as burdensome and emotionally unstable (Samulowitz et al., 2018) however, so when combined with the challenge of dealing with a highly stigmatized condition, women with fibromyalgia may be reluctant to advocate for their right to health information and care. This reluctance is amplified by the prevailing social perception that medical professionals are unquestionable experts (Yaghmaian & Miller-Smedema, 2019).

Moreover, women with fibromyalgia may experience pressure to conform to specific behaviors, appearances, and presentations to fulfill their healthcare needs. In 2003, Werner and Malterud (as cited in Yaghmaian & Miller-Smedema, 2019) described this as engaging in the "rules of the game" (p.163). These researchers discovered that women with medically ambiguous conditions, such as fibromyalgia, go to great lengths to avoid appearing either extremely sick or healthy, weak or strong. Instead, they put considerable effort into presenting themselves as "somatically ill while simultaneously avoiding appearing mentally unbalanced" (p. 163), leaving limited emotional and physical space for real healing and treatment (Yaghmaian & Miller-Smedema, 2019).

Comorbid Problems Faced by Those Experiencing Chronic Pain

Another problem faxed by chronic pain experiencers is the drain that comes with navigating medication usage. Not only are prescriptions expensive in general, but prescriptions for pain (opioids for example) also come with stigma and health risks like addiction. While this is a concern for chronic pain experiencers, prescribers are also concerned. An outcome of the opioid crisis is that certain primary care doctors presently work in an atmosphere marked by apprehension, worrying about potential complaints to their regulatory bodies, or limitations on their practice due to mishandling of opioids (Roussy, 2019). Consequently, some primary care physicians have opted to cease opioid prescriptions, and others have discontinued their treatment of patients to whom they had previously prescribed opioids entirely (Roussy, 2019). This has repercussions for individuals dealing with chronic pain and those grappling with opioid use disorder (OUD), leaving both groups without viable alternatives (Clarke et al., 2019). From Reddit threads, some Canadians are “feeling defeated” (vampire-cowboy, 2019) by their lack of access to necessary opioid medications, and/or that they need to find pain medication elsewhere (iama-canadian-ehma, 2019).

Of course, with the increase in opioid toxicity (Health Canada, 2024), and the projected number of opioid related deaths in Canada for June 2024 to reach between approximately 1,500 and 2,100 deaths (Health Canada, 2024), the correlation between those experiencing chronic pain and the use of and/or search for pain medications is a serious matter. Van Rijswijk and colleagues (2019) discuss this in a systematic review that showed a significant association between depression and anxiety disorders and the development of problematic opioid use in chronic pain patients. The Canadian Opioid Guidelines (2017, as cited in Clarke et al., 2019) estimate the prevalence of OUD in patients with chronic noncancer pain who were prescribed an opioid to be 10% (as cited in Clarke et al., 2019). It should also be noted that from January to September 2023, of the opioid related deaths in Canada, 72% of these were male individuals (Health Canada, 2023). As chronic pain was described earlier as a gendered issue with women representing the majority of those impacted, male individuals may be at higher risk to opioid related deaths within this group. It should also be noted that men who work (or have worked) in the trades are a particular population of concern at the intersection of opioid related death and chronic pain (Pain BC, 2021).

Examination of the Canadian Medical Context

Beliefs and Stigma About Chronic Pain

Although it may be an opinion from our southward neighbours in the United States, Tina Doshi, assistant professor of anesthesiology and critical care medicine at the Johns Hopkins University School of Medicine says that "We are in a society that really devalues people who have chronic pain," (as cited in Hurt, 2023, para. 3). She says, "We talk about … things like no pain, no gain, or pain as weakness…and we perceive it as some sort of character flaw in these patients who are suffering from chronic pain." (Hurt, 2023). With limited research done specifically on Canadian physicians, another American study showed that only fifteen percent of family physicians agreed with the statement "I enjoy working with patients who have chronic pain" (as cited in Evans et al., 2011). These same American physicians believed that working with chronic pain patients was "time consuming, demanding, difficult" (p.703) and that these patients are "manipulative, deceitful, exploitive, non-adherent, abusive, drug-seeking, or impossible to please" (p.703).

This sentiment resonates across the border to Canada as well. Glauser (2019) discusses how in large, Canadian physicians feel unable to help patients overcome complex challenges like chronic pain. What's more is that Canadian physicians also meet every chronic pain patient with stereotypes just like the American physicians above. Moosa-Mitha (2023) discusses how for refugee newcomers and Indigenous individuals, seeking care in a colonial context is alienating—a doctor tells you where and why you feel pain (and why you don't)—and this, according to Moosa-Mitha, can be life threatening; it can be violence.

Davis (2016) might argue that through the contemporary medical model, the reason for physicians feeling unable to help and thus causing a sense of threat to the patient is driven by the idea that physicians exist to fix patients, playing the role of the hero. Davis contends that individuals with uncontrollable and chronic conditions threaten medical professionals' socialized need to play this role. Pain can be particularly enigmatic, and individuals experiencing pain are unjustly blamed for their symptoms or told they don't have symptoms at all. (Davis, 2016)

Burnout and the fall of Canadian Healthcare

Perhaps there is a frustration among Canadian physicians then, and Glauser (2019) suggests that primary care providers who treat patients with chronic pain appear to be exhibiting signs of burnout, and this comes as no surprise, nor as a fault to the individual physicians. The Canadian Medical Association wrote, in 2022, that the health system was collapsing. Many articles have been released to suggest the same sentiment of distress. Hospitals in rural communities across Canada are short staffed, and often require temporarily closure of emergency departments and intensive care units. A patient in Victoria placed an ad in the newspaper pleading for a doctor – any doctor – to renew prescriptions for her 82-year-old husband after their family practitioner retired (Canadian Medical Association, 2022). Additionally, a family physician published his own perspective in the Ottawa Citizen – an open letter apologizing to patients for the broken health care system. He said, “I am sorry that I cannot take more patients. I am struggling with my present load. I am overwhelmed at times myself. I’m sorry you are in pain, or worried, or have many unanswered questions, or unmet expectations” (Abdulla, 2022, para 8).

To make things worse, Canadian physicians who work under a fee for service model are incentivized to allot fifteen minutes to examine a patient, obtain a history, and plan for care, as is the case for some physicians in British Columbia (British Columbia Ministry of Health, 2024). When a patient comes in with chronic pain but is only afforded fifteen minutes to discuss the issue, often family physicians are advised to complete the assessment over multiple appointments, and often they are pushed to refer to someone who has more time (i.e. a specialist) (Norris, 2023). Furthermore, these models do not remunerate family physicians for the extra work before and after appointments, like research, completing paperwork, and consulting with others in team-based care settings. For these reasons, it is reasonable to infer that fee for service models might not actually be the most ethical or helpful for patient centered care (Norris, 2023). The model may also be reactive to patient’s needs opposed to being proactive in their care.

The goal of the First Nations Health Authority in British Columbia for example, on the other hand is obtaining “health through wellness” (para. 2) according to Dr. Sean Wachtel (2018), which seems much more proactive and patient-centered comparatively. The goal, especially for those with chronic pain, is to help people stay healthy and well rather than treating illness after the fact. Wachtel agrees that physical health should always be nurtured by eating well, exercising regularly, and getting enough sleep. He says that a person's resilience to pain, or our pain threshold, can also be affected by our social supports, cultural strengths, and spiritual health—which is true according to the research presented in the section *Chronic Pain at the*

Intersections of Social Marginalization. Diverse Indigenous cultures and spiritual practices offer wellness approaches aimed at addressing the discrete parts of our being. These approaches include consuming traditional foods, participating in cultural activities, using traditional medicines, acknowledging and treating intergenerational trauma, nurturing intergenerational resilience, and strengthening and taking pride in cultural identity - for example, by joining a drumming circle, learning one's ancestral language or art forms, or participating in community ceremonies (Wachtel, 2018). Wachtel says that a person who is physically, emotionally, mentally, and spiritually healthy often has a higher pain threshold, requires fewer medicines, and recovers more quickly from illness and injury.

Integrative Health Clinics

Perhaps because integrative approaches to pain management are very promising (Davidson et al., 2003; Flor, 2014; Petersen et al., 2014; Martucci & Mackey 2018) many professionals are incorporating integrated perspectives into their care. Medical clinics in Canada are showing more interest in integrative approaches to treatment of chronic pain than ever before (Choinière et al., 2020). According to a 2020 cross sectional study of integrative pain clinics in Canada, the prevailing issue, though, is that the accessibility to publicly funded clinics of the sort is still very much limited (Choinière et al.). Individuals do have the option of seeking private pay care, which would significantly reduce the wait time, but the financial barrier is still a massive individual burden. Furthermore, most (80%) of these clinics operate in urban centers, leaving remote communities unserved. Prince Edward Island and all the territories remain without any such clinics (Choinière et al., 2020).

Non-Medical Treatment Approaches for Chronic Pain

Psychotherapeutic Approaches

The integrative clinics mentioned above are backed by research. Sources confirm that individuals can exert some control over pain by taking charge of emotions, thoughts, beliefs, attentional processes, and coping behaviors using treatments like Cognitive Behavioral Therapy (CBT), biofeedback, and Mindfulness-Based Stress Reduction (MBSR) strategies (Cherkin et al, 2016; Kerns et al, 2011; Nahin et al, 2016; Sturgeon, 2014). These interventions have a robust evidence-base. Additionally, providing patients with pain education may reduce pain and disability, increasing understanding of pain while reducing fear of movement and activity-avoidance (Louw et al., 2013; Louw et al., 2016).

One study (Jay et al., 2016) showed that work related fear-avoidance beliefs can be significantly reduced by ten weeks of physical-cognitive-mindfulness training (PCMT) in individuals with chronic pain. This operates on the idea that gentle exercise, in addition to a psychotherapy, is helpful. The exercise reminds bodies that movement is possible, and it can be pain free. Exercising to the point of pain is ineffective though (Fraser, 2022). The PCMT intervention mentioned above consisted of a) slow joint mobility exercises for the pain-affected area; (b) four different strength training exercises with elastic bands; (c) cognitive behavioral therapy including psychoeducation about the fear of movement, the positive effects of movement, and de-catastrophizing pain; and (d) mindfulness group sessions (Jay et al., 2016).

Telephone Cognitive Behavioural Therapy (tCBT) is also an acceptable and effective treatment for patients with chronic widespread musculoskeletal pain (Fraser et al., 2019). In the gap that leaves remote communities without care, perhaps this is a feasible option.

Recently, Emotion Awareness and Expression Therapy (EAET) has been showing significant results in the treatment of diverse chronic pain symptoms. In 2020, a randomized comparison trial by Yarns and colleagues in the United States showed that EAET proved more effective in pain reduction than CBT in older adults with chronic musculoskeletal pain. The underlying concept of EAET suggests that stress and maladaptive coping to emotional stimuli lead to chronic pain by altering brain structure and function. Thus, reducing stress and addressing trauma and psychological conflicts through the acknowledgment and processing of avoided emotions, along with promoting healthy social behaviors, can impact brain centers involved in both pain and emotion processing, ultimately relieving pain.

Even more recently, Pain Reprocessing Therapy (PRT) has been shown to be effective in significantly relieving people's chronic pain symptoms in randomized clinical trials (Ashar et al., 2022). This treatment is centered on changing individuals' beliefs about the causes and threat value of pain—essentially resting on the tenants of inappropriate neuroception as described earlier. Although it's evidence base is just emerging, there is strong support for this psychotherapy among authors in the field (Alan Gordon, author of *The Way Out* and Dr. Howard Schubiner, author of *Unlearn Your Pain*, are both proponents of PRT).

Weisberg (2022) discusses a value based behavioural therapy for chronic pain. This approach is based on acceptance and commitment therapy according to Weisberg, and the central messages of the approach include a) normalizing pain, sadness, and anxiety; b) normalizing pain avoidance and comfort seeking; c) discussing how pain is not necessarily damaging or dangerous; and d) discussing that the working stage of therapy and goal attainment might be uncomfortable. Clients working in this model are given the permission to grieve what they may have lost or had to change because of their chronic pain (Weisberg, 2022).

Other Non-Medical Approaches to Chronic Pain

Of course, other disciplinary approaches to treating chronic pain exist as well. Some physical practitioners incorporate Traditional Chinese Medicine into their treatment of chronic pain, although often this is paired with a western approach (Shah, 2021). Meditation practices are also commonly suggested for treatment of chronic pain, although the evidence for its effectiveness is lacking. In a 2017 systemic review of randomized controlled trials, Hilton and colleagues found there was only slight evidence that mindfulness meditation is associated with a (small) decrease in pain compared with all types of controls. Statistically significant effects were found for the decrease of depression symptoms and increase in quality of life, however.

Analysis of the Methodological Approaches Within the Literature

Conducting randomized controlled trials on treatments for chronic pain requires excellent exclusion criteria that ultimately homogenizes a sample for better controlled results (Salmasi et al., 2022). Unfortunately, subjective symptomology in the diagnosis of chronic pain makes this difficult. Where one person may have had pain for more than three months and have a positive medical exam that shows a mechanical reason for that pain; the next person may show a negative result for that same test and also feel pain in the same area. By bio-centric standards, these two individuals are not comparable. Yet, they are both experiencing subjective chronic pain, so should they both be included in chronic pain studies as homogenous test subjects? The reliability and accuracy of some methodological approaches that include both these participants may be skewed by this phenomenon. Of course, the epidemiology and other associated factors that lead to chronic pain development also play a role in its symptom manifestation (Mills et al., 2019); so, when inclusion/exclusion criteria do not or cannot control these factors, the accuracy and reliability of the research can be affected due to heterogenous inclusion (Katz, 2020).

In the same vein, randomized controlled trials on treatments for chronic pain also require that the diagnosis of chronic pain is valid and reliable, but we know that there is a lack of consistent diagnosis across the board due to dismissive medicine, limited access to specialists, and the overall lack of dimensionality that comes with a time-dependant diagnosis. Omole and Bigham (2023) are Canadian physicians who agree that, as an example, endometriosis is very often diagnostically overlooked for many Canadians in chronic pain, and they assume that there are many more cases of endometriosis in the population than reported.

In the qualitative study which interviewed adults regarding their pain catastrophizing (Schutze et al., 2017), what limited this study, and several studies not included in the dissemination of this capstone, was that only Caucasian subjects were involved, and the subjects were already involved with treatment from a medical specialist. This population is certainly not representative of the many thousands of diverse Canadians who experience chronic pain. Not only do we know Indigenous folk show a higher incidence rate of chronic pain in the general population as shown by Latimer and colleagues (2018a), but by excluding all non-white subjects from a study (even if not done purposefully), and by excluding those who are on waitlists for or who are not able to access medical specialists, the studied population shows an inappropriate distribution of race, ethnicity, and privilege in a manner inconsistent with a realistic distribution of chronic pain sufferers (Katz, 2020).

Generally, for the purpose of this capstone, another significant limitation of the chronic pain literature is that there is a scarcity of Canadian based data on this issue (Johnson-Jennings et al., 2014). A lot of population research (i.e. prevalence and demographic research), and treatment research comes from the United States, and in some ways our population can be compared. (The Hofstede scale finds us similar on six of their cultural dimensions scales (Country Comparison

Tool, 2023).) But evidently our healthcare systems operate and function much differently. With the trickle-down effect from the stress within the Canadian medical system, no other population sample would reflect what is going on here (Logan, 2022).

Promoting an Approach to Chronic Pain Treatment with Counsellors at the Center of Care

The Importance of a Decolonial Approach

The importance of being believed by health practitioners was felt deeply through many personal accounts of people living with chronic pain in Canada. There is strong evidence to support that individuals are not being listened to and not being believed (Moosa-Mitha, 2023; Meana et al., 2004; Wallace et al., 2021; Crooks & Chouinard, 2006). Some individuals report a lack of supportive behaviors and, in some cases, antagonistic actions like name-calling and blaming from medical practitioners (Gertsman et al., 2023). Moosa-Mitha (2023) describes how a decolonial approach to treating chronic pain may be beneficial to improve this level of belief. In her words, in the colonial view, many practitioners hold the belief that patients, especially those who are queer, people of colour, and/or disabled, are “too much body, not enough mind” (20:34), and this supremacy-based belief is partially what drives practitioner disbelief. The stereotypes of these patients are that the patients are too emotional, they are aggressive, they are not “detached observers of their own bodies” (21:15) which therefore makes them unreliable historians and consequently dismissible. Moosa-Mitha argues that for patients, even if they cannot articulate their pain in a colonial way, there is an incredibly strong connection between knowing and being, and practitioners should recognize this.

Similarly, in a study asking participants to evaluate physician empathy, participants hypothesized that both internal factors (such as burnout and biases) and external factors (including the medical setting, the specialty, the patient load, and the ableist culture within medicine) predisposed physicians to engage with them without trust and understanding (Gertsman et al., 2023). According to the literature, (Gertsman et al., 2023; Samulowitz et al., 2018), individuals processed these encounters in ways that diminished their trust in physicians and the healthcare system, affecting their self-image and hope for the future of their care.

Alternatively, empathetic behaviors, such as attentive listening, honest and supportive communication, and collaborative care plan development, and overall validation generated a positive self esteem and hope in patients (Gertsman et al., 2023). This hope, in turn, motivated patients to take charge of their health through lifestyle improvements, treatment adherence, judicious healthcare service utilization, and self-education. In summary, the cascading effects of clinical empathy enhanced participants' health and well-being by positively influencing their self-image, self-efficacy, mental health, and perception of symptoms and pain (Gertsman et al., 2023).

Further, a comparable study showed that helplessness (perhaps the antithesis of hope) was consequential in the prediction of pain severity, pain-related interference, mental and physical health-related quality of life, and depressed mood (Craner et al., 2016). It can be inferred then that hope and being believed, which feeds hope, are imperative for the treatment of chronic pain symptoms across disciplines.

Review of Counsellor Preparedness to Treat Chronic Pain

In terms of western and modern medical treatment of chronic pain in the United States, it is worth knowing that only about sixty percent of patients with chronic low back pain experience minimally significant decrease in pain after spinal surgery (Halicka et al., 2022). Although this may be slightly different in the Canadian context, the number would likely not be drastically dissimilar in Canada. On the report of Meana and colleagues (2004), studies suggest that behavioral interventions tend to exhibit greater efficacy compared to medical treatment controls in ameliorating pain, reducing disability, and augmenting levels of physical activity. Furthermore, these interventions may impart valuable skills to patients and foster sustained self-care practices post treatment. The adoption of a biopsychosocial framework for the management of chronic pain is advocated by others (Pomarensky et al., 2022). Uniquely, this encompassing approach also entails the evaluation and exploration of psychosocial determinants, and notably, the prioritization of therapeutic alliances (Pomarensky et al., 2022).

As we know, when it comes to chronic pain, it is important to examine and (safely) address history of abuse in patients. For medical professionals who are taught in a colonial education system, who are limited by their payment models, who are critically burned out and under-resourced, and generally are not trained to value the therapeutic alliance, this can all lead to physicians either not asking about psychosocial determinants at all or doing it in a way that makes patients uncomfortable sharing that information (Hart-Johnson et al., 2012). Counselling therapists, especially those who are explicitly trauma trained, are adept in asking about abuse and eliciting a comfortable environment for their clients to feel safe enough to disclose potentially difficult pieces of their history.

Not only are counsellors equipped to build trust and safety, and focus on therapeutic alliance, but they may not be as limited by the unique factors that challenge medical professionals in Canada. In counselling therapy, there is consistent effort to question colonial views that affect biases and patient/client centered care for example. This is further explored in chapter three.

Chapter Summary

Chronic pain constitutes an intricate and multifaceted subjective experience through which many Canadians suffer. Population and individual characteristics of those who suffer with chronic pain were examined. As analyzed, their suffering though, may be exacerbated by the general dismissiveness of the Canadian medical system, and many of the practitioners trained in it. Through analysis of the Canadian medical system in recent years (during and since the covid-19 pandemic), it is apparent that several factors are inhibiting chronic pain sufferers from obtaining good quality care from the traditional avenues of hospitals, emergency rooms, pain specialists and family doctors. Stereotyping queer, coloured, and disabled bodies based on colonial views is perhaps largely at the root of a lot of medical gaslighting and dismissal expressed by many; however, added to the fact that many physicians are working within a system poorly designed to incentivize due diligence and quality care, the state of healthcare in Canada for chronic pain is truly astounding. Right now, affordable treatment strategies seemingly range from long wait times to see specialists and obtain imaging, at the most optimistic, to potentially undesirable development of an opioid use disorder at the extreme. Limitations of the literature were identified that highlight how the study and acknowledgement even of chronic pain in Canada requires more attention. It is also immensely clear that chronic pain necessitates a comprehensive approach that extends beyond the conventional confines of the biomedical model. A biopsychosocial model was promoted as a potential source for ameliorating this systematic issue. It was identified that 1) believing in the stories and pain of those suffering and 2) helping them create a sense of hope, are both imperative moving forward. We now proceed to chapter three where these elements will be analyzed further. A proposed set of therapist guidelines on how to work with clients experiencing chronic pain in an ethical and evidence-based way will be provided. Chapter three will also conceptualize therapists as primary providers in pain care, and it will suggest how to work in cooperation with other interdisciplinary support team members who may include those working from medical models.

Chapter 3: Chronic Pain Guidelines for New and Working Counsellors

Discussion and Applied Practices

The following chapter discusses the implications of the literature review. The discussion will be organized in a way that addresses the problem identified—that Canadians generally are not provided the chronic pain care that they require due to the ineffective traditional allocation of professional responsibility to those in medical healthcare (i.e. that we generally accept chronic pain care to be the responsibility solely of medical professionals). The purpose of the discussion is to show that counsellors may be underutilized in the care of those with chronic pain especially considering the dilapidated state of healthcare in Canada currently. In addition to a summary of the findings and exploration of chronic pain and those who suffer from it, this discussion will also argue the counsellor's role in chronic pain management and suggest ways to navigate conversations with chronic pain clients. Limitations of the literature review and factors that may have contributed to its interpretation will also be discussed. Lastly, recommendations for practice and ethical considerations will also be presented.

Review of What We Know About Chronic Pain

First, from the literature, we know that chronic pain is neuroceptive, meaning that it is the brain's response to a seemingly threatening stimulus and not the body's response to a threatening stimulus. Chronic pain is when our neural circuits distinguish something inappropriately as dangerous or life threatening even though the stimulus may not necessarily be so. It was found that neuroceptive pain and nociceptive pain can exist together. We also know that chronic pain encompasses cognitive elements such as thoughts and beliefs about the pain, and that many chronic pain sufferers experience pain catastrophizing and fear based avoidance of particular movements or actions. Furthermore, as demonstrated by the high prevalence of chronic pain amongst torture survivors, and victims of abuse, we know that chronic pain may be the physical manifestation of or symptoms of emotional trauma. Physical pain, therefore, and non-physical pain, are deeply connected.

Secondly, from the literature we know who is more likely affected by chronic pain in Canada. This is helpful when conceptualizing chronic pain clients. We know that chronic pain affects about one in five people in the population, and that those affected are more likely to find themselves at the intersections of other types of marginalization, including, as mentioned above, those with a history of mental health issues and trauma, as well as the intersections of gender, citizenship status, socioeconomic status, cultural background, and sexuality and gender identity. For this reason, chronic pain is largely invisible—those who are most affected have substantially less power in our society, and so, it is reasonable to infer that their pain is easily overlooked. This is not only evidenced by anecdotal stories of chronic pain sufferers, but also by the admission of power holders (physicians for example) about their subconscious stereotyping and negative biases toward patients with chronic pain.

Additionally, the literature showed that chronic pain sufferers may share certain characteristics. For one, generally, they may feel as though they are forced to live restricted lives. For diverse reasons as found in the literature, their participation in life activities is typically decreased or at least less than they would like. As discussed, this can lead to lower reports of well-being, low self-esteem, and low self-efficacy as well.

Another commonality found in the literature was that of cognitive distortions among chronic pain sufferers. Several studies reported this trend, and discussed the distortions either as tendencies to catastrophize, as fear avoidance, or as rumination about pain.

A last consideration for counsellors when conceptualizing chronic pain clients is the potential for higher rates of OUD in this population, and of course the risks that come with that. It might be beneficial to safety check about the use of opioid drugs when working with those with chronic pain. Of course, this needs to be done in a respectful way.

Therapist's Role in Chronic Pain Management

While safety checking about the use of opioid drugs is one important role for therapists working with chronic pain suffers, the role and scope of therapists working with this population should be better defined. This capstone seeks to prove that indeed counsellors should play an evidence-based role in this care. The literature shows that, as is, medical Canadian healthcare may not be best prepared or able to handle the burden of those with chronic pain both on a systematic level and on an individual level. On the systematic level, provincial healthcare models (for reasons mostly due to limited access to primary care and limited infrastructure) simply cannot meet the demands of one in five Canadians needing chronic pain care. This is because the approximately 7.8 million people in Canada with chronic pain typically need access to primary care, access to timely medical imaging, and access to chronic pain specialists for diligent treatment which simply is not possible. To illustrate this point, we can first discuss the limited access to primary care. In all provinces, primary care is the first point of contact with the health care system (Health Canada, 2019). Although the situation is being remedied by arguably more enticing payment models for physicians, like in British Columbia as of last year, access to primary care is still limited, with more than one in five people still lacking access to a family doctor according to the Kirkey (2024) at the National Post. In terms of the medical imaging infrastructure carrying the needs of those with chronic pain, the average wait time for a publicly funded MRI in British Columbia for example, is 72 days, although ten percent of people wait closer to 160 days (Canadian Institute for Health Information, 2024). (In Nova Scotia, ten percent of people wait almost an entire year for an MRI (Canadian Institute for Health Information, 2024).)

On the individual level, the literature exposed, as previously discussed, that many physicians may hold, potentially subconscious, biases against those with chronic pain. They therefore may be unwilling (overtly or covertly) to treat chronic pain patients at all, let alone with due diligence, respect, and overall, belief.

So, while the Canadian medical system, and those working in it, may not be well equipped to care for the needs of those with chronic pain, the question remains: why are counsellors better suited for the job? Well, for one, the same subconscious bias held by some physicians may be less experienced by counsellors in general. Canadian counsellors are held to a code of ethics that articulates the need for self-reflection in the context of examining social power influences. The 2020 CCPA Code of Ethics explicitly states the duty for counsellor self-reflection three times. The most recent Canadian Medical Association (CMA) Code of Ethics (2018) does not explicitly state this requirement at all. It should be noted that the CMA code does of course communicate good and responsible principles of justice, integrity, and respect for all persons; but the distinct difference of including self-reflection in the CCPA code is noteworthy.

Additionally, counsellors are trained to assess for and build treatment plans around a wholistic and contextualized conceptualization of a client, whereas it can be argued that physicians do not always do the same. Most counsellors are astutely trained to practice trauma-informed care, and again, the CCPA Code of Ethics (2020) states that counsellors have an ethical responsibility to “seek awareness and understanding of client identities, identification, and historical and current contexts” (p. 11). When it is clear from the literature that chronic pain is strongly affected by our historical and current contexts, it seems that the best care is provided when these are taken into consideration for treatment planning. Besides this, compared to the average allotted time for a medical appointment, counselors typically provide more time per session than medical professionals for important client exploration (Centre for Addiction and Mental Health, 2024).

Lastly, it is abundantly clear from the literature that several different psychotherapies including CBT, MBSR, PCMT, tCBT, EAET, PRT, and value based behavioural therapy are evidence-based and effective for the treatment of chronic pain (Kerns et al, 2011; Nahin et al, 2016; Sturgeon, 2014; Cherkin et al, 2016; Jay et al., 2016; Fraser et al., 2019; Lumley & Shubiner, 2019; Ashar et al., 2022; Weisberg, 2022). According to this capstone project, counsellors with competency in any of these approaches can and should be included in the care of those with chronic pain.

Navigating Chronic Pain Conversations in Canada

Thus, through education, and a combination of therapeutic approaches, therapists can be well suited helpers in the field of chronic pain. Although traditionally chronic pain is in the scope of care for primary care physicians and medical pain specialists (Brett and MacDougall, 2021), therapists can feel comfortable knowing that the literature supports their involvement in chronic pain care. This gives therapists the green light to navigate conversations about chronic pain with their clients.

Knowing that the green light exists then begs the question, without specialized training in the area, how can therapists begin to navigate conversations about chronic pain with their clients? A set of therapist guidelines for navigating chronic pain conversations will be presented in the section, *Recommendations for practice*, however, I suggest that, above all else, the core competencies of a counsellor are appropriate and sufficient for navigating chronic pain. In a Rogerian way, the same conditions of congruence, unconditional positive regard, and accurate empathic understanding are sufficient to navigate chronic pain just as they are really any issue. This should not be lost on new nor experienced clinicians with chronic pain clients. Nonetheless, while the core competencies may be a sufficient starting point, a discussion regarding competence will be explored further in this chapter.

Interpretation of the Results and Limitations of the Literature Review

The results of the review are consistent with existing research concerning evidence-based psychotherapy approaches to issues that are commonly medically treated. Multiple sources confirm similar results, suggesting that psychotherapy is of benefit where healthcare systems may fail (Vasiliadis et al., 2021; Gauthier et al., 2019).

While the results of the literature review are clearly stated, it should be noted that results interpretation biases, and limitations to the review exist. The major interpretation bias is my own personal experience with chronic pain. As someone who has experienced being dismissed in the Canadian healthcare system, experienced long wait times, and experienced exacerbation of my chronic pain in times of stress, this may have created a confirmation bias in the research. In the same way, my experience of symptomatically benefitting from chronic pain education and behavioural therapies (including a particular visualization technique suggested in PRT) may also have created a confirmation bias supporting the use of these therapies as well.

This review is limited by the fact that medical methods of care for chronic pain were not explored in detail. Brett and Macdougall (2021) have detailed the Canadian landscape of medical care for chronic pain and noted that it does vary province to province. They suggest that one "hub-and-spoke" (p. 8) model and four "stepped care" (p. 8) models exist for the medical delivery of chronic care in Canada. Because these models of care were not reviewed, it is possible that a selection bias exists in that the literature was not exhaustive enough to report accurate interpretations of the results. If true, this may have led to an over estimation of the results.

This review is further limited to the study of non-cancerous, non-postoperative chronic pain in adults only, and it is widely accepted that this does not include a large portion of chronic pain sufferers (Brett & Macdougall, 2021). The work of a literature review with a wider scope, to include these populations, would be immensely difficult, and perhaps lead to different results.

Recommendations For Practice

Considering the discussion above, and in favour of this work being rooted in transformative research, the section below describes several recommendations for practice in counselling therapy with clients experiencing chronic pain.

Guideline One: Focuses of Psychotherapy

Any of the following focuses are evidence-based in the treatment of chronic pain and do not require extensive continuing education. These focuses are accessible to new counsellors and experienced counsellors alike. Appendix 1 will provide several infographics concerning these focuses. While other focuses may be appropriate, all the following focuses are supported in the literature by two or more sources.

Psychoeducation about the origins and development of chronic pain may be beneficial for clients (Jay et al., 2016; Ashar et al., 2022 ; Lumley & Shubiner, 2019; Weisberg, 2022 ; Louw et al., 2016). Figure A1 provides a quick guide to psychoeducation about chronic pain that can be shared with clients. A focus on cognitive therapy for pain catastrophizing and rumination may also be beneficial (Jay et al., 2016; Ahar et al., 2022). Figure A2 provides a CBT approach to the benefits of noticing and changing cognitive distortions surrounding the chronic pain. A trauma informed biopsychosocial approach (Lumley & Shubiner, 2019; Weisberg, 2022; Pomarensky et al., 2022) may also be beneficial. Moreover, permission to grieve, empathy, active listening, and supportive communication (Weisberg, 2022; Gertsman et al., 2023) can also be focuses of chronic pain therapy. Figure A3 is an activity to help clients explore the loss associated with chronic pain. Lastly, fostering hope is a helpful focus of chronic pain therapy (Lumley & Shubiner, 2019; Gertsman et al., 2023).

Guideline Two: Communication with Other Professionals and Boundaries of Competence

Communication with others in the field will be important. This will include physicians, nurses, pharmacists, physical therapists, and others. An understanding of each professional's scope of practice might be beneficial for referrals and for professional consultation. This is based on the CCPA's (2020) ethical principle of nonmalificence, which translates to *do no harm*. This principle relates directly to the concept of professional boundaries of competence. Acknowledging that there are over 1000 theoretical models and approaches to counselling that have been identified in the literature (Garfield, 2006, as cited in Martin et al., 2015) and an even greater number of therapeutic strategies and techniques, it is not reasonable to expect that a counsellor could ever master them all, nor could they master a competence in working with all ages, populations, and issues. Recognizing and respecting the boundaries of one's education, supervised training, and expertise is essential. This involves acknowledging when it is necessary to refer clients elsewhere (Martin et al., 2015).

Furthermore, while acknowledging boundaries of competence is crucial, before referring, a shared language and conceptualization of chronic pain across disciplines might be useful. Often in medicine, assessment tools are used to conceptualize someone's chronic pain. According to the online resource, Pathways, for use by physicians across BC, two common chronic pain assessments are 1) The Brief Pain Inventory which helps to describe and characterize the intensity of pain, and 2) The Pain Disability Index. Appendix 1 will include figures of each of these assessments. It may be useful for counsellors to understand their use and benefit, and perhaps learn how to administer such an assessment when appropriate. Both assessments help to contextualize the pain and articulate how it affects the client's life. Not only could this be helpful to explore in counselling, but being able to speak to it when consulting with medical professionals might be helpful for collaboration.

Guideline Three: Advocacy for Accessible Counselling

While the limitations of Canada's healthcare system were explored, the system still possesses one major advantage over the distribution of psychotherapy (by most counsellors) in Canada, that is affordability. Covered under public funding, primary and specialty health care could arguably be favoured by Canadians simply because they do not have to pay out of pocket. The answer to this query was not addressed in this literature review. The third guideline (recommendation) for practice though, is the advocacy for coverage of chronic pain counselling through provincial health care plans. In some way, whether it is through raising awareness of the benefits of psychotherapy or through connecting with policymakers and elected representatives to advocate for the inclusion of psychotherapy services in public healthcare funding, this recommendation persists in dedication to helping clients realistically access appropriate, evidence-based and well-suited care.

Recommendation for Future Research

Based on the findings of this review, future research might focus specifically on Canadian populations. Some of the review included literature from other countries/cultures, and although due care was taken to only extrapolate interpretations from studies of similar countries, Canada has a unique climate and not all the literature was completely comparable. Studies done with Canadian populations were sparse.

Further, given the limitations of the review as mentioned above, a more exhaustive review including the medical scope of chronic pain care could be beneficial to perform a direct comparative analysis between the benefits of a purely medical model and a biopsychosocial model. Perhaps more interestingly, a controlled comparative analysis of specific approaches within the medical and biopsychosocial models could be performed (for example an analysis between groups administered pain medication only versus groups administered PRT only).

On the contrary, there may be benefit in performing a less exhaustive review and instead narrowing the review to one type of chronic pain, for example just to fibromyalgia. This could provide useful and specific themes that may benefit this population greatly. The narrowing of this research may be the next logical step in this transformative research.

Conclusions

The aim of this capstone was to help build a guide for new and working counselling therapists to navigate conversations with clients who experience chronic pain and feel confident that this is part of their general scope of practice. The goal was designed not only to prove the benefit of counsellor's perspectives on chronic pain, but also to alleviate some of the stress on the medical system that ultimately punishes the people it is supposed to work for. It was proven that many people feel hopeless, judged, and mistreated by the Canadian medical system as it is right now, and that the system itself does not have a trajectory nor history of resolving this problem. The problem is due to multiple systematic issues including a medical education system imbedded in colonial thought, poor provincial physician payment models that incentivise shorter and interspersed visits, long wait times to see pain specialists and receive imaging, and a general overall sense of exhaustion among Canadian physicians.

The capstone also showed that believing in clients and building a sense of hope is imperative for the relief of chronic pain. It was shown that this can be done through biopsychosocial interventions that include education, trauma-informed approaches, cognitive reframing, and empathetic listening. Leaders in the psychotherapeutic field of chronic pain treatment seem to agree on these interventions unanimously. Other interventions shown to be effective were focused on acceptance and commitment, values inventories, interpersonal skill development to reduce stress, the rescripting of pain stories, and non-avoidance techniques to confront emotional-laden and painful situations.

An important lesson from this study is that the scope of counselling therapy can and should be extended to include chronic pain treatment, but at the same time, the study suggests that a public funding model for this treatment would be valuable. For those chronic pain sufferers who may not have the personal financial resources or benefits to pay for private counselling therapy (which is likely a significant portion of this population), it would be beneficial to both the individuals and the government to support provincial funding for these services. This would undoubtedly reduce barriers to care for Canadians, but also lower the economic burden of chronic pain management in the long run (Vasiliadis et al., 2021). Chronic pain management right now is only covered under public health plans when delivered by physicians, surgeons, and sometimes physiotherapists, chiropractors and massage therapists under supplemental benefit plans which require application and approval by provincial ministries of health and are not offered by all provincial plans (British Columbia Ministry of Health, 2022). Advocacy for this change has been rolling for years, and a goal of this capstone is to provide one more piece of evidence in its support.

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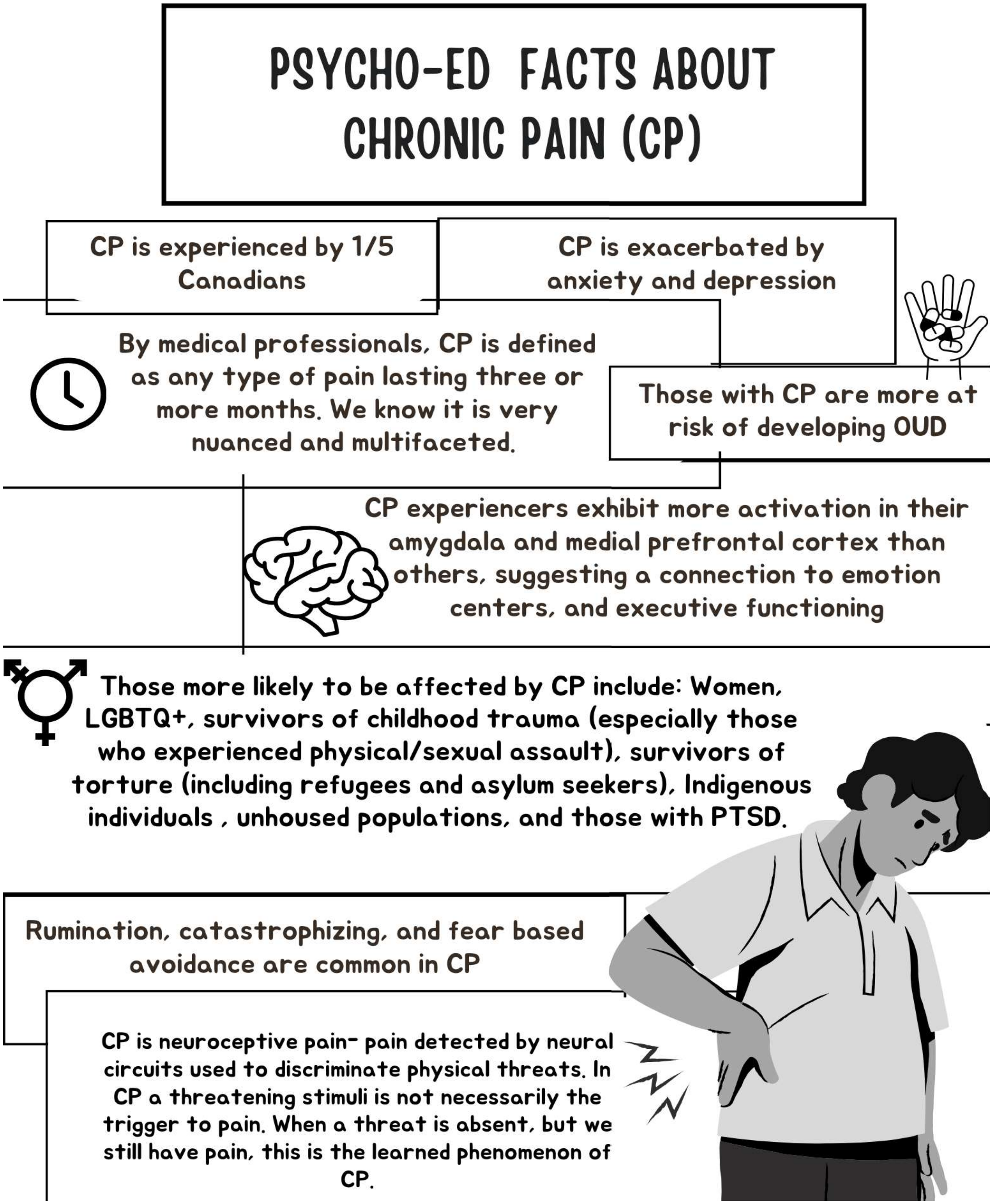
Appendix A

Resources for therapists



PSYCHO-ED FACTS ABOUT CHRONIC PAIN (CP)

CP is experienced by 1/5 Canadians

CP is exacerbated by anxiety and depression

By medical professionals, CP is defined as any type of pain lasting three or more months. We know it is very nuanced and multifaceted.

Those with CP are more at risk of developing OUD

CP experiencers exhibit more activation in their amygdala and medial prefrontal cortex than others, suggesting a connection to emotion centers, and executive functioning

Those more likely to be affected by CP include: Women, LGBTQ+, survivors of childhood trauma (especially those who experienced physical/sexual assault), survivors of torture (including refugees and asylum seekers), Indigenous individuals , unhoused populations, and those with PTSD.

Rumination, catastrophizing, and fear based avoidance are common in CP

CP is neuroceptive pain- pain detected by neural circuits used to discriminate physical threats. In CP a threatening stimuli is not necessarily the trigger to pain. When a threat is absent, but we still have pain, this is the learned phenomenon of CP.

Figure A1. Psychoeducation about chronic pain for therapists: evidence based quick facts.

Decatastrophizing Chronic Pain- Identifying Cognitive Distortions

Cognitive distortions are thoughts that shape how you see the world, how you feel, and how you act. It's normal to have these thoughts on occasion, but they can be harmful when frequent or extreme. This worksheet is to build awareness of your thought patterns. Do you catch yourself falling into any of these thought patterns? If so, provide your example in the column to the right, and see if you can catch yourself using this thought in the future.

Type of cognitive distortion	**Definition of distortion**	**Chronic pain example**	**My example**
Magnification or minimization	Exaggerating or minimizing the importance or impact of events.	If I bend to put socks on, my back will flare up.	
Overgeneralization	Making broad interpretations from a single or few events.	I noticed that I felt pain this morning. I am always in pain.	
Magical thinking	The belief that thoughts, actions, or emotions influence unrelated situations.	If I hadn't hoped for a reason to take work off, I wouldn't have been in the car crash that started my chronic pain.	
Personalization	The belief that you are responsible for events outside of your control.	It must be my fault that I'm so weak.	

Jumping to conclusions	Interpreting or predicting the meaning of a situation with little or no evidence.	Going to the party will definitely flare up my chronic pain.		
Emotional reasoning	The assumption that emotions reflect the way things really are.	I feel bad for not biking with my kid, therefore I'm a bad parent.		
Disqualifying the positive	Recognizing only the negative aspects of a situation while ignoring the positive.	I've had pain 2 days this week. My chronic pain rules my life. -vs- I've had 5 days pain free this week. Things are looking up.		
Should statements	The belief that things should be a certain way.	I should be in better health than I am.		
All or Nothing thinking	Thinking in absolutes such as "always," "never," or "every".	I am never going to get better.		

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Figure A2. Worksheet for clients about chronic pain related cognitive distortions

Permission to Grieve

Adapted from Weisberg (2022) this worksheet is to help you explore your relationship with chronic pain. In filling out this worksheet, you are given permission to grieve what you have lost because of chronic pain. This worksheet can be filled in session with your therapist as a means of navigating conversation, or it can be filled at home for personal exploration.

What is my history with pain?

What have I had to give up because of my pain?

Where would I be and what would I be doing if I didn’t have pain?

What have I had to give up in my life because of my pain?

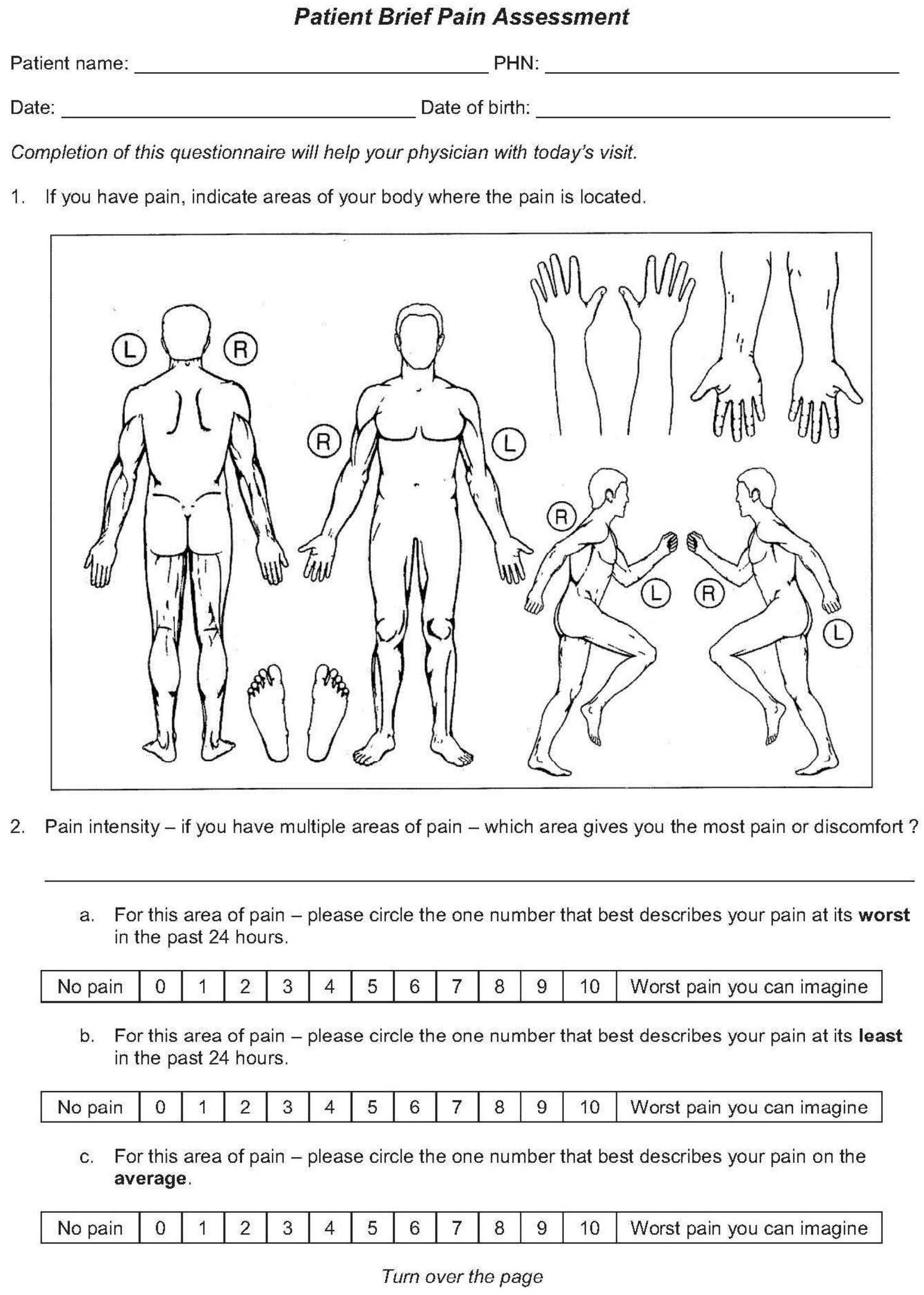
What relationships have changed in my life because of chronic pain, and how have they changed?

Acknowledging my chronic pain makes me feel…

The thing I miss the most about living pain free is…

Weisberg, R. (2022, July 13). Understanding and managing chronic pain & its relationship with Mental Health. YouTube. https://www.youtube.com/watch?v=gRWf9am596c

Figure A3. Worksheet for client to explore grief associated with chronic pain



Patient Brief Pain Assessment

Patient name: ________________________ PHN: ________________________

Date: ________________________ Date of birth: ________________________

Completion of this questionnaire will help your physician with today's visit.

1. If you have pain, indicate areas of your body where the pain is located.

2. Pain intensity – if you have multiple areas of pain – which area gives you the most pain or discomfort ?

____

a. For this area of pain – please circle the one number that best describes your pain at its **worst** in the past 24 hours.

No pain	0	1	2	3	4	5	6	7	8	9	10	Worst pain you can imagine

b. For this area of pain – please circle the one number that best describes your pain at its **least** in the past 24 hours.

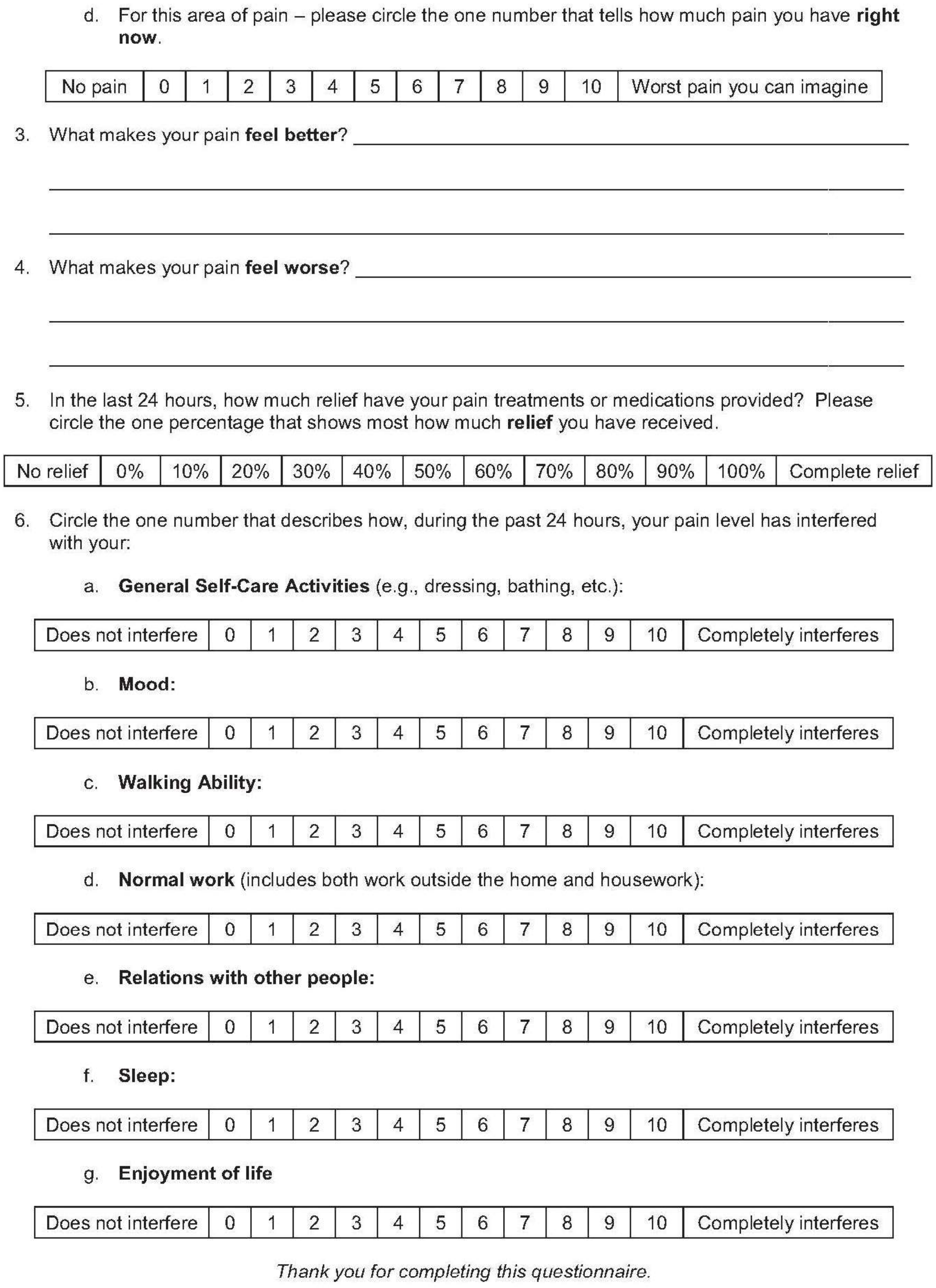
No pain	0	1	2	3	4	5	6	7	8	9	10	Worst pain you can imagine

c. For this area of pain – please circle the one number that best describes your pain on the **average**.

No pain	0	1	2	3	4	5	6	7	8	9	10	Worst pain you can imagine

Turn over the page

Figure A4. First page of the Brief Pain Inventory used by medical professionals to characterize pain and its intensity



d. For this area of pain – please circle the one number that tells how much pain you have **right now**.

No pain	0	1	2	3	4	5	6	7	8	9	10	Worst pain you can imagine

3. What makes your pain **feel better**? ______________________________

____

____

4. What makes your pain **feel worse**? ______________________________

____

____

5. In the last 24 hours, how much relief have your pain treatments or medications provided? Please circle the one percentage that shows most how much **relief** you have received.

No relief	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	Complete relief

6. Circle the one number that describes how, during the past 24 hours, your pain level has interfered with your:

a. **General Self-Care Activities** (e.g., dressing, bathing, etc.):

Does not interfere	0	1	2	3	4	5	6	7	8	9	10	Completely interferes

b. **Mood:**

Does not interfere	0	1	2	3	4	5	6	7	8	9	10	Completely interferes

c. **Walking Ability:**

Does not interfere	0	1	2	3	4	5	6	7	8	9	10	Completely interferes

d. **Normal work** (includes both work outside the home and housework):

Does not interfere	0	1	2	3	4	5	6	7	8	9	10	Completely interferes

e. **Relations with other people:**

Does not interfere	0	1	2	3	4	5	6	7	8	9	10	Completely interferes

f. **Sleep:**

Does not interfere	0	1	2	3	4	5	6	7	8	9	10	Completely interferes

g. **Enjoyment of life**

Does not interfere	0	1	2	3	4	5	6	7	8	9	10	Completely interferes

Thank you for completing this questionnaire.

Figure A4. Second page of the Brief Pain Inventory used by medical professionals to characterize pain and its intensity

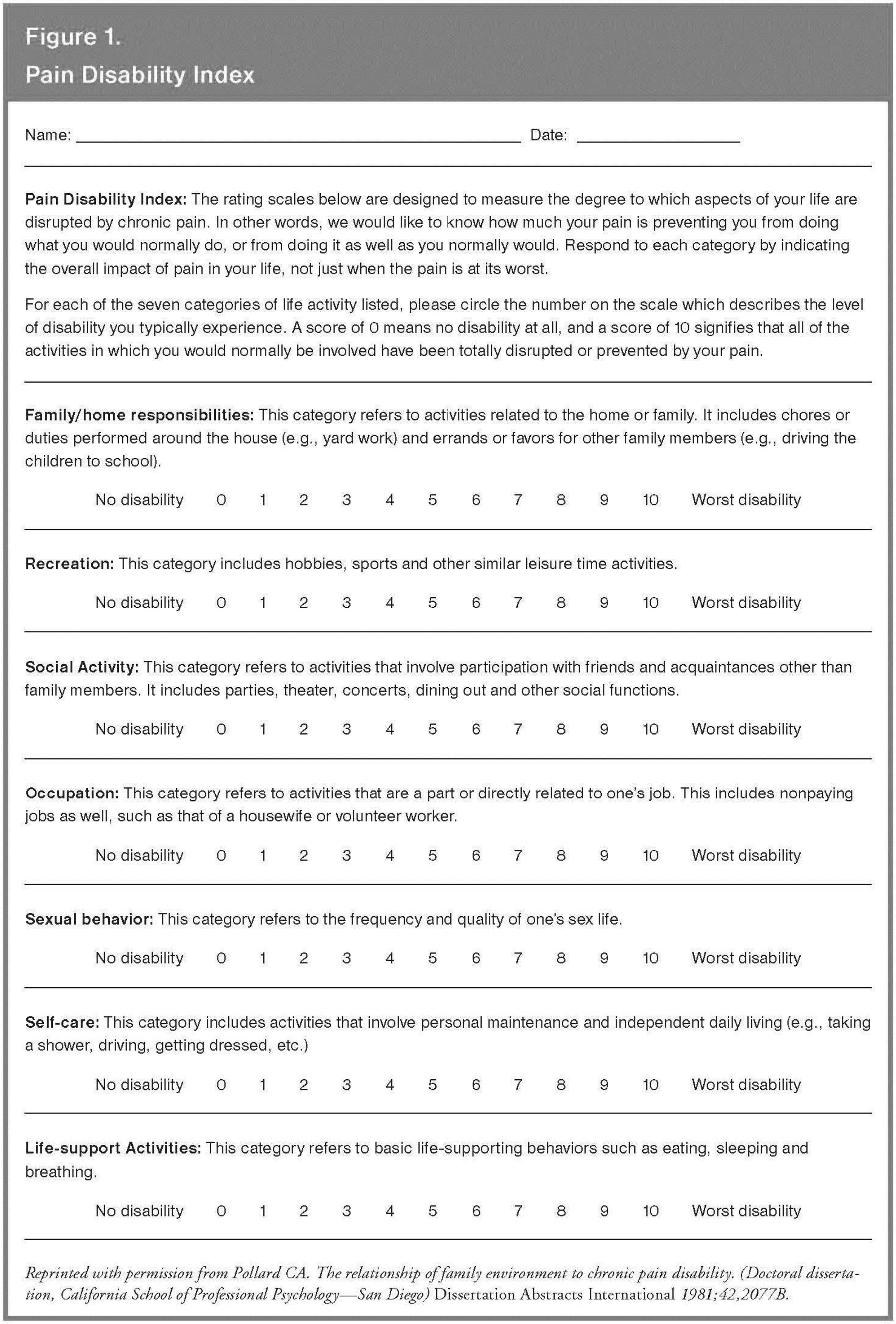


Figure 1.
Pain Disability Index

Name: ______________________________ Date: ______________

Pain Disability Index: The rating scales below are designed to measure the degree to which aspects of your life are disrupted by chronic pain. In other words, we would like to know how much your pain is preventing you from doing what you would normally do, or from doing it as well as you normally would. Respond to each category by indicating the overall impact of pain in your life, not just when the pain is at its worst.

For each of the seven categories of life activity listed, please circle the number on the scale which describes the level of disability you typically experience. A score of 0 means no disability at all, and a score of 10 signifies that all of the activities in which you would normally be involved have been totally disrupted or prevented by your pain.

Family/home responsibilities: This category refers to activities related to the home or family. It includes chores or duties performed around the house (e.g., yard work) and errands or favors for other family members (e.g., driving the children to school).

No disability 0 1 2 3 4 5 6 7 8 9 10 Worst disability

Recreation: This category includes hobbies, sports and other similar leisure time activities.

No disability 0 1 2 3 4 5 6 7 8 9 10 Worst disability

Social Activity: This category refers to activities that involve participation with friends and acquaintances other than family members. It includes parties, theater, concerts, dining out and other social functions.

No disability 0 1 2 3 4 5 6 7 8 9 10 Worst disability

Occupation: This category refers to activities that are a part or directly related to one's job. This includes nonpaying jobs as well, such as that of a housewife or volunteer worker.

No disability 0 1 2 3 4 5 6 7 8 9 10 Worst disability

Sexual behavior: This category refers to the frequency and quality of one's sex life.

No disability 0 1 2 3 4 5 6 7 8 9 10 Worst disability

Self-care: This category includes activities that involve personal maintenance and independent daily living (e.g., taking a shower, driving, getting dressed, etc.)

No disability 0 1 2 3 4 5 6 7 8 9 10 Worst disability

Life-support Activities: This category refers to basic life-supporting behaviors such as eating, sleeping and breathing.

No disability 0 1 2 3 4 5 6 7 8 9 10 Worst disability

Reprinted with permission from Pollard CA. The relationship of family environment to chronic pain disability. (Doctoral dissertation, California School of Professional Psychology—San Diego) Dissertation Abstracts International *1981;42,2077B.*

Figure A6. Pain Disability Index used by medical professionals