# A Relational Ethics Approach to Understanding and Addressing Pain in Correctional Settings: An Interpretive Description

by

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## Abstract

**Background:** The assessment and management of pain in forensic settings are complicated by contextual factors, including past experiences with pain, adverse childhood experiences, and mental illness and addiction. Nurses in correctional settings have few tools to rely upon to fully understand and respond to the pain that people who are incarcerated experience. Given the complexities of pain, nurses working in forensic environments require a nuanced and contextualized understanding of the pain experience to provide safe, effective, and ethical clinical interventions.

**Purpose:** The first purpose of this research was to understand the pain experiences of incarcerated men. The second purpose was to demonstrate how to co-position relational ethics with interpretive description (ID).

**Methods:** The first research question guiding this study was: what is the experience of pain of men who are incarcerated? The second research question was: how can relational ethics be explicitly co-positioned in ID research? To answer these question, relational ethics theory was co-positioned alongside ID and guided the overall research design. Twelve male participants from a correctional facility in Alberta, Canada were interviewed. Transcripts of the interviews were analyzed to identify patterns and themes.

**Findings:** The findings of this study provide an understanding of how men experience pain during periods of incarceration and reveal how pain is experienced in relationship to being dependent on the correctional health and justice staff, institutional processes, peer relationships, one's own knowledge of one's body and pain etiology, and a toxic hypermasculine culture.

**Conclusion:** Nurses hold substantive power in the nurse-patient relationship which must be understood to ensure that effects of such power differentials are mitigated. Relational ethics

provides a space to understand patients' anger, frustration, repetitive requests for help, drug diversion, peer relationships, depression, helplessness, and sense of injustice as they exist as part of the pain experience amongst people who are incarcerated. Interventions to develop individual and site-specific pain management interventions are located within the nurses' understanding of these contextual factors.

Keywords: *pain*, *correctional health*, *interpretive description*, *relational ethics*

## Preface

This thesis is an original work by D Stewart MacLennan. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, Project Name “Pain During Incarceration,” No. Pro00080896, 5/7/2019.

Each paper in this dissertation is formatted in APA 7 format. Versions of each paper in this dissertation are amended to meet the formatting requirements when submitted for publication consideration.

## Dedication

I dedicate this dissertation to my supportive family, especially my angel nephew, Bruce.

**Acknowledgements**

This dissertation would not have been possible without the wisdom, encouragement, and guidance of Dr. Diane Kunyk and Dr. Gerri Lasiuk. Words cannot express my gratitude for their wise supervision during my doctoral program.

I would also like to thank faculty members at the University of Alberta who have contributed to my development as a nursing scholar.

Last, I wish to thank all of the participants involved in my research study. Without their participation, none of this would have been possible.

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# Chapter 1: Introduction

This chapter is an overview of my doctoral research, including an introduction to pain and some of the clinical and ethical challenges associated with its assessment and management in correctional settings. It includes a statement of the problem, the research questions, the purpose and significance of the research, a description of the design, and the definitions of key terms; and it concludes with a description of the organization of the dissertation.

## Background of the Problem

Pain is a complex and multidimensional human experience (Melzack & Scott, 1957). Acute pain is a signal of tissue damage and usually resolves as the tissues heals. If they are not appropriately managed, however, approximately 20% of acute pain conditions become chronic or result in other negative sequalae (Lynch et al., 2008; Sinatra, 2010). Research has demonstrated that the management of acute pain continues to be suboptimal (Benhamed et al., 2022; Sessle, 2011; Sinatra, 2010) as a result of "uncertain diagnoses and societal stigma, but also because of shortcomings in the availability of effective treatments and inadequate patient and clinician knowledge about the best ways to manage pain" (Institute of Medicine [IOM], 2011, p. 1). When pain persists beyond three months, the World Health Organization (2022) has defined it as chronic. Chronic pain is now recognized as a distinct disease entity in the most recent version of the *International Classification of Diseases* (World Health Organization, 2022). This is significant because it acknowledges the often invisible experience of millions of people globally who live with chronic pain (Health Canada, 2021).

Pain—both acute and chronic—affects people of all ages and is one of the most common reasons for seeking healthcare and for work-related disability (IOM, 2011). Around the world, an estimated 20% of adults have reported having some pain, and another 10% are diagnosed with

chronic pain each year (Lynch et al., 2008). Recently, in the *Global Burden of Disease Study*, the GBD 2016 Disease and Injury Incidence and Prevalence Collaborators (2017) identified pain and pain-related diseases as the leading cause of disability and disease burden globally. Here in Canada, large population-based surveys have revealed that one in five persons live with chronic pain (Schopflocher et al., 2011; Steingrimsdottir et al., 2017). Two thirds of these individuals have reported their pain as moderate (52%) to severe (14%), and 50% have lived with chronic pain for longer than 10 years (Schopflocher et al., 2011).

Pain imposes a significant personal, social, and economic burden on affected individuals, families, communities, and health systems (Health Canada, 2021). It impinges on virtually all aspects of life, including physical function and activities of daily living, disturbs sleep, and decreases the health-related quality of life (Duenas et al., 2016; Haraldstad et al., 2017). Pain is also associated with disrupted social relationships, school and work absences, and lowered productivity (Duenas et al., 2016; Leadley et al., 2012). Epidemiological and functional imaging studies have demonstrated that shared neural mechanisms underpin a bidirectional relationship between chronic pain and a range of mental-health problems, including depression, anxiety, substance-use disorders, and risk for suicide; as well as cigarette smoking (Hooten, 2016; Racine, 2018). In addition, chronic pain negatively affects cognitive functions such as attention, memory, processing, executive functioning, decision making, psychomotor efficiency, and reaction time (Khera & Rangasamy, 2021).

Although pain is universal, it is also highly subjective (Health Canada, 2021; IOM, 2011). Biological, psychological, social, and contextual factors that are unique to the individual interact and influence the development and experience of pain (Gatchel & Maddrey, 2004; Gibson & Farrell, 2004; Koyama et al., 2005). This biopsychosocial model of pain (Gatchel et al., 2007)

shifts attention away from a sole focus on the biomedical aspects of pain, and its assessment and management take into consideration the whole person. Consideration of physical, psychological, social, spiritual, and environmental factors enables a more fulsome understanding of the pain experience (IOM, 2011; Painaustralia, 2019). As Mills et al. (2019) asserted, pain experiences of people are understandable only in relation to their context. These complex interactions make the assessment and management of pain challenging in any clinical setting (Matthias et al., 2010), but doubly so for nurses and other clinicians who work in correctional settings (Hantke et al., 2016).

Correctional settings are unique, and the provision of optimal healthcare is often at odds with security concerns (Hantke, 2016; Walsh et al., 2014). The nurse-philosopher Sally Gadow (2003) went so far as to suggest that healthcare and corrections are ethically incompatible and oppositional systems in which "health professionals legitimately, deliberately, and necessarily work against the values of the system in which they practice" (p. 162). This creates a paradox of custody and caring that overshadows nursing practice in correctional settings, which are fraught with competing concerns for personal, institutional, and community safety contextualized by "recurring themes of power and control" (Peternelj-Taylor, 1999, p. 10).

At the same time, the healthcare needs of incarcerated persons are both many and complex (Hantke et al. 2016). More than a quarter million persons are incarcerated in Canadian correctional facilities each year, including 14,000 youth (Perrault, 2014a, 2014b). Approximately 10% of adults in custody are women (Perreault, 2014a), 5% are girls (Perreault, 2014b), and 25% identify as Indigenous (Perrault, 2014a, 2014b). Over half of individuals in sentenced custody are younger than 35 years, and the median age of those in remanded custody is between 28 and 33 years of age (Perreault, 2014a). Although the incarcerated population is comparatively young

and the incidence of health problems increases with age (World Health Organization, 2021), these individuals have a preponderance of other risk factors associated with poor health (Mills et al., 2019). Prior pain experiences, adverse childhood experiences, mental-health problems, and opioid addiction all influence the perceived severity of pain and augment negative pain behaviours (Rzeszutek et al., 2016). These factors are prevalent among incarcerated persons and can shape their pain experience (Sachs-Ericsson et al., 2017; Waller et al., 2020; You & Meagher, 2016).

Compared with the general Canadian population, the health of incarcerated persons is poor with respect to the social determinants of health, mortality in custody, mental health, substance use, communicable diseases, and sexual and reproductive health (Kouyoumdjian et al., 2016). This is consistent with situations in other Western countries, including the United Kingdom (Condon et al., 2007; Rennie et al., 2009), Australia (Australian Institute of Health and Welfare, 2019), and the United States (American Academy of Family Physicians, 2017; Wilper et al., 2009). Because access to pain management is a human right (Brennan et al., 2019; International Pain Summit of the International Association for the Study of Pain, 2011; Lohman et al., 2010), this renders the experience of pain among incarcerated persons as much an ethical concern as one of health and healthcare.

The ethical principle of equivalence (Hantke et al., 2016; Niveau, 2007) obliges nurses in correctional settings to provide a standard of care similar in quality to that afforded patients in other settings. Despite this, nurses' ability to effectively assess and manage pain in correctional settings faces challenges from the well-documented difficulties associated with pain management generally, including the lack of standardized guidelines and protocols for pain assessment and management (Rababa et al., 2021), limited access to pain specialists and analgesics (Al-Mahrezi,

2017), their own lack of knowledge (Rababa et al., 2021), and concerns about addiction and overdosing (Zuccaro et al., 2012). In addition, researchers have conducted few studies on pain and pain management among incarcerated persons (Hantke et al. 2016; Walsh et al., 2014). This means that nurses in correctional settings have little empirical evidence and few tools to help them to fully understand and effectively respond to the pain that persons who are incarcerated experience.

**Statement of the Problem**

Research on pain among incarcerated populations is limited (e.g., Croft & Mayhew, 2015; Hantke et al., 2016; Sondhi & Garrett, 2018; Walsh et al., 2014), and the studies that exist have focused on palliative and end-of-life care (e.g., Burles et al., 2021; Lum, 2003; McParland & Johnston, 2019; Schaefer et al., 2022), aging in prison (e.g., Bor, 2022; Skarupski et al., 2018; Stojkovic, 2007; Williams et al., 2014), and the management of cancer related pain (e.g., Aziz et al., 2021; Lin & Mathew, 2005; Manz et al., 2021). Researchers have paid little scholarly attention to date to the relationship between biopsychosocial factors and pain during incarceration. This is an obvious gap, and understanding this phenomenon would contribute to nursing knowledge, inform effective and ethical clinical interventions, and identify avenues for future research.

**Purpose and Significance of the Study**

This dissertation has two purposes. The first purpose is to develop an understanding of the pain experience of incarcerated men, and the second is to demonstrate how to co-position relational ethics with ID. The findings have the potential to advance nursing knowledge and inform effective, individualized, and ethical care in correctional settings.

## Research Questions

To achieve this study's purposes, I addressed two research questions: (a) What is the pain experience of men who are incarcerated? and (b) How can relational ethics be explicitly co-positioned in ID research? The answers to the first question extend nursing knowledge to inform the practice of nurses working with incarcerated persons who experience pain. The answers to the second question advance disciplinary knowledge by explicating the methodological basis for co-positioning theory, specifically relational ethics, in ID research on pain in correctional settings. This created the methodological basis for investigating the research question.

## Research Design

In this study I employed ID (Thorne, 2016; Thorne et al., 1997) to understand the experience of pain of men who are incarcerated. ID was appropriate because it offered a theoretically flexible approach, consistent with nursing's ontological and epistemological aims, to developing applied disciplinary knowledge (Thorne et al., 1997).

Thorne et al. (1997) argued that "what is known, whether by formal research or clinical interpretation, should be considered foundational forestructure to a new inquiry" (p. 173). Given the ethical implications of nursing in forensic settings and the complexities of pain management, I co-positioned relational ethics (Bergum & Dossetor, 2020) with ID. The core tenets of relational ethics are mutual respect, engagement, embodied knowledge, environment, and uncertainty (Bergum & Dossetor, 2020), which are compatible with ID (Thorne, 2016; Thorne et al., 1997), feminist care ethics (Gilligan, 1982; Noddings, 1984), and the *Code of Ethics for Registered Nurses* (Canadian Nurses Association [CNA], 2017). As I elaborate in chapter 6, relational ethics situates ethics within relationships and enables a nuanced understanding of the

complexity of pain amongst individuals who are incarcerated, of forensic nurses' ethical duty to respond competently and effectively, and of the development of fitting clinical recommendations to inform pain-management practices in correctional settings.

**Definition of Terms**

The following are the definitions of key terms that I use in this dissertation.

*Correctional or forensic setting* refers to any secure facility that is mandated to hold individuals who are awaiting trial (remanded into custody) or those who are serving custodial sentences. For the purposes of this study, the terms *prison* and *correctional setting* are equivalent.

*Nociception* is the neural process of encoding and processing noxious or painful stimuli, such as heat, cold, pressure, and so on (Dubin & Patapoutian, 2010; Loeser & Treede, 2008).

*Nociceptor* refers to a peripheral neuron that is sensitive to and capable of encoding noxious stimuli (Dubin, & Patapoutian, 2010; Loeser & Treede, 2008).

*Pain* is an unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage (International Association for the Study of Pain [IASP], 2020).

*A person or individual who is an incarcerated/incarcerated person* refers to an individual who is, through the application of law, detained in a correctional facility. The term *inmate* is the equivalent term in law to refer to the same person. The term *person who is incarcerated* is preferred in health sectors. In this dissertation, the study population included only men.

**Organization of the Dissertation**

This dissertation is structured as paper based according to the *Master's and Doctoral Thesis Guidelines Thesis Guidelines* (University of Alberta, Faculty of Nursing, Graduate Education Committee, 2022). It includes an introductory chapter, chapters that will be submitted as independent though interrelated papers for publication, and a concluding chapter. The intent of the paper-based dissertation was to produce a minimum of three manuscripts that merit publication in peer-reviewed journals. Only one of the manuscripts must be a research paper that includes method, findings, discussion, and conclusion sections. The remainder of the "manuscripts may be reviews, philosophical, empirical, or methodological papers" (p. 2).

Chapter 1 is an introduction to the topic of pain and some of the clinical and ethical challenges associated with its assessment and management in correctional settings. I have stated the problem, purpose and significance of the study, the research questions, a description of the design, and the definitions of key terms. To provide background to the study, in Chapter 2 I review some of the extant literature on the biopsychosocial nature of pain and the challenges of its assessment and management, the forensic environment and its potential influences on the pain experience, and ethical considerations in nursing and healthcare in correctional settings. Chapters 1 and 2 are introductory chapters, and I will not publish them outside this dissertation.

Chapters 3 and 4 are structured as research papers that contain all of the elements of a traditional dissertation in a condensed format. Chapter 3 focuses on dependency, one of two overarching themes that emerged from the broader research project. I prepared Chapter 3 for submission to the *Journal of Forensic Nursing*. Chapter 4 focuses on the second overarching themes of pain and toxic hypermasculinity and was prepared for submission to the *Journal of Correctional Health Care*. Chapters 5 and 6 are methodological in nature. Chapter 5 establishes

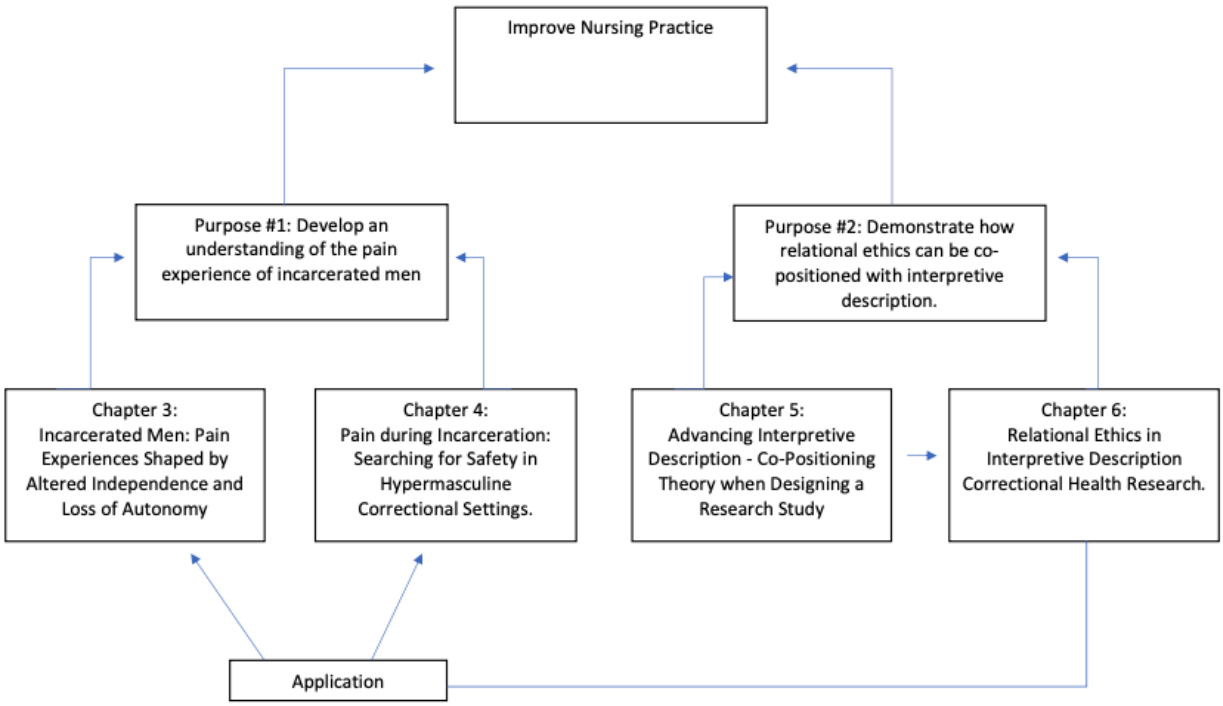
the methodological foundations required to include theory in interpretive description research studies and was formatted for submission to the journal *Qualitative Health Research*. Chapter 6 builds on the methodological foundations established in Chapter 5 to demonstrate how I co-positioned relational ethics in an ID research study to understand the complex and nuanced understanding of pain amongst individuals who are incarcerated. I prepared Chapter 6 for submission to the journal *Nursing Inquiry*.

My rationale for these chapters is that several authors have called for a clinically useful and ethically grounded understanding of how people experience pain in correctional settings (e.g., Walsh et al., 2014). Although ID offers a flexible approach to designing qualitative research projects to inform clinical practice, Thorne (2016) cautioned against using theory in designing unless it is absolutely required to do so. I contend that researching pain experience amongst incarcerated people is one such situation in which the use of theory (i.e., relational ethics) is warranted to create the needed disciplinary knowledge.

Chapter 7 is the concluding chapter, as required for paper-based dissertations. This chapter is an overall summary of the dissertation and highlights the potential knowledge contributions of this work. I include a postscript in chapter 7 to demonstrate how the findings of the research study are applicable in a practice situation. See Figure 1 for a visual description of how the chapters of this dissertation fit together to contribute to the development of nursing practice knowledge.

**Figure 1**

*Organization of this Dissertation*



## References


Al-Mahrezi A. (2017). Towards effective pain management: Breaking the barriers. *Oman Medical Journal, 32*(5), 357–358. https://doi.org/10.5001/omj.2017.69

American Academy of Family Physicians. (2017). *Incarceration and health: A family medicine perspective (position paper)*. https://www.aafp.org/about/policies/all/incarceration.html

Australian Institute of Health and Welfare. (2019). *The health of Australia's prisoners 2018.* https://www.aihw.gov.au/getmedia/2e92f007-453d-48a1-9c6b-4c9531cf0371/aihw-phe-246.pdf.aspx?inline=true

Aziz, H., Ackah, R. L., Whitson, A., Oppong, B., Obeng-Gyasi, S., Sims, C., & Pawlik, T. M. (2021). Cancer care in the incarcerated population: Barriers to quality care and opportunities for improvement. *JAMA Surgery, 156*(10), 964–973. https://doi.org/10.1001/jamasurg.2021.3754

Benhamed, A., Boucher, V., & Emond, M. (2022). Pain management in emergency department older adults with pelvic fracture: still insufficient. *Canadian Journal of Emergency Medicine*, *24*(3), 245-246. https://doi.org/10.1007/s43678-022-00299-9

Bergum, V., & Dossetor, J. B. (2020). *Relational ethics: The full meaning of respect.* University Publishing Group.

Bor, J. S. (2022). The aging of the US prison population: A public health crisis. *Health Affairs, 41*(5), 622–627. https://doi.org/10.1377/hlthaff.2022.00280

Brennan, F., Lohman, D., & Gwyther, L. (2019). Access to pain management as a human right. *American Journal of Public Health, 109*(1), 61–65. https://doi.org/10.2105/AJPH.2018.304743

Burles, M., Holtslander, L., & Peternelj-Taylor, C. (2021). Palliative and hospice care in correctional facilities: Integrating a family nursing approach to address relational barriers. *Cancer Nursing, 44*(1), 29–36. https://doi.org/10.1097/NCC.0000000000000754

Canadian Nurses Association. (2017). *The code of ethics for registered nurses*. /https://www.crns.ca/wp-content/uploads/2018/11/Code-of-Ethics-2017-Edition.pdf

Condon, L., Hek, G., Harris, F., Powell, J., Kemple, T., & Price, S. (2007). Users' views of prison health services: A qualitative study. *Journal of Advanced Nursing, 58*(3), 216–226. https://doi.org/10.1111/j.1365-2648.2007.04221.x

Croft, M., & Mayhew, R. (2015). Prevalence of chronic non-cancer pain in a UK prison environment. *British Journal of Pain, 9*(2), 96–108. https://doi.org/10.1177/2049463714540895

Dubin, A. E., & Patapoutian, A. (2010). Nociceptors: The sensors of the pain pathway. *The Journal of Clinical Investigation, 120*(11), 3760–3772. https://doi.org/10.1172/JCI42843

Duenas, M., Ojeda, B., Salazar, A., Mico, J. A., & Failde, I. (2016). A review of chronic pain impact on patients, their social environment and the health care system. *Journal of Pain Research*, 9, 457-467. https://doi.org/10.2147/JPR.S105892

Gadow, S. (2003). Restorative nursing: Toward a philosophy of postmodern punishment. *Nursing Philosophy*, *4*(2), 161–167. https://doi.org/10.1046/j.1466-769x.2003.00133.x

Gatchel, R. J., & Maddrey, A. M. (2004). The biopsychosocial perspective of pain. In J. M. Raczynski & L. C. Leviton (Eds.), *Handbook of clinical health psychology: Vol. 2. Disorders of behavior and health* (pp. 357–378). American Psychological Association. https://doi.org/10.1037/11589-011

Gatchel, R. J., Peng, Y. B., Peters, M. L., Fuchs, P. N., & Turk, D. C. (2007). The biopsychosocial approach to chronic pain: Scientific advances and future directions. *Psychological Bulletin, 133*(4), 581–624. https://doi.org/10.1037/0033-2909.133.4.581

GBD 2016 Disease and Injury Incidence and Prevalence Collaborators. (2017). Global, regional, and national incidence, prevalence, and years lived with disability for 328 diseases and injuries for 195 countries, 1990-2016: A systematic analysis for the Global Burden of Disease Study 2016. *Lancet, 390*(10100), 1211–1259. https://doi.org/10.1016/S0140-6736(17)32154-2

Gibson, S. J., & Farrell, M. (2004). A review of age differences in the neurophysiology of nociception and the perceptual experience of pain. *The Clinical Journal of Pain, 20*(4), 227–239. https://doi.org/10.1097/00002508-200407000-00004

Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Harvard University Press.

Hantke, V., Wolff, H., & Williams, B. A. (2016). The pains of imprisonment: Challenging aspects of pain management in correctional settings. *Pain Management, 6*(2), 133–136. https://doi.org/10.2217/pmt.15.62

Haraldstad, K., Christophersen, K-A., & Helseth, S. (2017). Health-related quality of life and pain in children and adolescents: A school survey. *BMC Pediatrics*, 17, 174. https://doi.org/10.1186/s12887-017-0927-4

Health Canada. (2021). *Chronic pain in Canada: Laying a foundation for action.* https://www.canada.ca/content/dam/hc-sc/documents/corporate/about-health-canada/public-engagement/external-advisory-bodie/canadian-pain-task-force/report-2021-rapport/report-rapport-2021-eng.pdf

Hooten, W. M. (2016). Chronic pain and mental health disorders: Shared neural mechanisms, epidemiology, and treatment. *Mayo Clinic Proceedings, 91*(7), 955-970. http://dx.doi.org/10.1016/j.mayocp.2016.04.029

Institute of Medicine. (2011). *Relieving pain in America: A blueprint for transforming prevention, care, education, and research*. The National Academies Press. https://www.ncbi.nlm.nih.gov/books/NBK91497/

International Association for the Study of Pain. (2020, July 16). *IASP announces revised definition of pain*. https://www.iasp-pain.org/PublicationsNews/NewsDetail.aspx?ItemNumber=10475

International Pain Summit of the International Association for the Study of Pain. (2011). Declaration of Montréal: Declaration that access to pain management is a fundamental human right. *Journal of Pain & Palliative Care Pharmacotherapy, 25*(1), 29–31. https://doi.org/10.3109/15360288.2010.547560

Khera, T., & Rangasamy, V. (2021). Cognition and pain: A review. *Frontiers in Psychology, 12*, 673962. https://doi.org/10.3389/fpsyg.2021.673962

Kouyoumdjian, F., Schuler, A., Matheson, F. I., & Hwang, S.W. (2016). Health status of prisoners in Canada: Narrative review. *Canadian Family Physician, 62*(3), 215–222.

Koyama, T., McHaffie, J. G., Laurienti, P. J., & Coghill, R. C. (2005). The subjective experience of pain: Where expectations become reality. *Proceedings of the National Academy of Sciences of the United States of America, 102*(36), 12950–12955. https://doi.org/10.1073/pnas.0408576102

Leadley, R. M., Armstrong, N., Lee, Y. C., Allen, A., & Kleijnen, J. (2012). Chronic diseases in the European Union: The prevalence and health cost implications of chronic pain. *Journal of Pain & Palliative Care Pharmacotherapy, 26*(4), 310–325. https://doi.org/10.3109/15360288.2012.736933

Lin, J. T., & Mathew, P. (2005). Cancer pain management in prisons: A survey of primary care practitioners and inmates. *Journal of Pain & Symptom Management, 29*(5), 466–473. https://doi.org/10.1016/j.jpainsymman.2004.08.015

Loeser, J. D., & Treede, R-D. (2008). The Kyoto protocol of IASP basic pain terminology. *Pain*, *137*(3), 473–477. https://doi.org/10.1016/j.pain.2008.04.025

Lohman, D., Schleifer, R., & Amon, J. J. (2010). Access to pain treatment as a human right. *BMC Medicine, 8*, 8. https://doi.org/10.1186/1741-7015-8-8

Lum K. L. (2003). Palliative care behind bars: The New Zealand prison hospice experience. *Journal of Pain & Palliative Care Pharmacotherapy, 17*(3-4), 131–140.

Lynch, M. E., Campbell, F., Clark, A. J., Dunbar, M. J., Goldstein, D., Peng, P., Stinson, J., & Tupper, H. (2008). A systematic review of the effect of waiting for treatment for chronic pain. *Pain, 136*(1-2), 97–116. https://doi.org/10.1016/j.pain.2007.06.018

Manz, C. R., Odayar, V. S., & Schrag, D. (2021). Disparities in cancer prevalence, incidence, and mortality for incarcerated and formerly incarcerated patients: A scoping review. *Cancer Medicine, 10*(20), 7277–7288. https://doi.org/10.1002/cam4.4251

Matthias, M. S., Parpart, A. L., Nyland, K. A., Huffman, M. A., Stubbs, D. L., Sargent, C., & Bair, M. J. (2010). The patient-provider relationship in chronic pain care: Providers' perspectives. *Pain Medicine, 11*(11), 1688–1697. https://doi.org/10.1111/j.1526-4637.2010.00980.x

McParland, C., & Johnston, B. M. (2019). Palliative and end of life care in prisons: A mixed-methods rapid review of the literature from 2014-2018. *BMJ open, 9*(12), e033905. https://doi.org/10.1136/bmjopen-2019-033905

Melzack, R., & Scott, T. H. (1957). The effects of early experience on the response to pain. *Journal of Comparative and Physiological Psychology, 50*(2), 155-161. https://doi.org/10.1037/h0047770

Mills, S., Nicolson, K. P., & Smith, B. H. (2019). Chronic pain: A review of its epidemiology and associated factors in population-based studies. *British Journal of Anaesthesia, 123*(2), e273–e283. https://doi.org/10.1016/j.bja.2019.03.023

Niveau, G. (2007), Relevance and limits of the principle of "equivalence of care" in prison medicine. *Journal of Medical Ethics, 33*(10), 610–613. https://doi.org/10.1136/jme.2006.018077

Noddings, N. (1984). *Caring: A relational approach to ethics and moral education.* University of California Press.

Painaustralia. (2019*). The cost of pain in Australia*. https://www2.deloitte.com/content/dam/Deloitte/au/Documents/Economics/deloitte-au-economics-cost-pain-australia-040419.pdf

Perrault S. (2014a). *Admissions to adult correctional services in Canada, 2011/2012.* https://www150.statcan.gc.ca/n1/pub/85-002-x/2014001/article/11918-eng.htm

Perrault S. (2014b). *Admissions to youth correctional services in Canada, 2011/2012.* https://www150.statcan.gc.ca/n1/pub/85-002-x/2014001/article/11917-eng.htm

Peternelj-Taylor, C. (1999). Forensic psychiatric nursing: The paradox of custody and caring. *Journal of Psychosocial Nursing and Mental Health Services, 37*(9), 9-11. https://doi.org/10.3928/0279-3695-19990901-06

Rababa, M., Hayajneh, A. A. & Bani-Iss, W. (2021). Association of death anxiety with spiritual well-being and religious coping in older adults during the COVID-19 pandemic. *Journal of Religion and Health, 60*, 50–63. https://doi.org/10.1007/s10943-020-01129-x

Racine, M. (2018). Chronic pain and suicide risk: A comprehensive review. *Progress in Neuro-Psychopharmacology and Biological Psychiatry, 87*, 269-280. https://doi.org/10.1016/j.pnpbp.2017.08.020

Rennie, C., Senior, J., & Shaw, J. (2009). The future is offender health: Evidencing mainstream health services throughout the offender pathway. *Criminal Behaviour and Mental Health, 19*(1), 1-8. https://doi.org/10.1002/cbm.723

Rzeszutek, M., Oniszczenko, W., Schier, K., Biernat-Kałuża, E., & Gasik, R. (2016). Temperament traits, social support, and trauma symptoms among HIV/AIDS and chronic pain patients. *International Journal of Clinical and Health Psychology, 16*(2), 137–146. https://doi.org/10.1016/j.ijchp.2015.10.001

Sachs-Ericsson, N. J., Sheffler, J. L., Stanley, I. H., Piazza, J. R., & Preacher, K. J. (2017). When emotional pain becomes physical: Adverse childhood experiences, pain, and the role of mood and anxiety disorders. *Journal of Clinical Psychology, 73*(10), 1403-1428. https://doi.org/10.1002/jclp.22444

Schaefer, I., DiGiacomo, M., Heneka, N., Panozzo, S., Luckett, T., & Phillips, J. L. (2022). Palliative care needs and experiences of people in prison: A systematic review and meta-synthesis. *Palliative Medicine, 36*(3), 443–461. https://doi.org/10.1177/02692163211068278

Schopflocher, D., Taenzer, P., & Jovey, R. (2011). The prevalence of chronic pain in Canada. *Pain Research & Management, 16*(6), 445–450. https://doi.org/10.1155/2011/876306

Sessle, B. J. (2011). Unrelieved pain: A crisis. *Pain Research & Management, 16*(6), 416–420. https://doi.org/10.1155/2011/513423

Sinatra, R. (2010). Causes and consequences of inadequate management of acute pain. *Pain Medicine, 11*(12),1859–1871. https://doi.org/10.1111/j.1526-4637.2010.00983.x

Skarupski, K. A., Gross, A., Schrack, J. A., Deal, J. A., & Eber, G. B. (2018). The health of America's aging prison population. *Epidemiologic Reviews, 40*(1), 157–165. https://doi.org/10.1093/epirev/mxx020

Sondhi, A., & Garrett, T. (2018). Non-cancer pain clinic in three English prisons: Understanding prisoner needs and prescribing practice in relation to chronic non-cancer pain (CNCP). *International Journal of Prisoner Health, 14*(4), 268–275. https://doi.org/10.1108/IJPH-11-2017-0052

Steingrimsdottir, O. A., Landmark, T., Macfarlane, G. J., & Nielsen, C. S. (2017). Defining chronic pain in epidemiological studies: A systematic review and meta-analysis. *Pain, 158*(11), 2092–2107. https://doi.org/10.1097/j.pain.0000000000001009

Stojkovic S. (2007). Elderly prisoners: A growing and forgotten group within correctional systems vulnerable to elder abuse. *Journal of Elder Abuse & Neglect, 19*(3-4), 97–117. https://doi.org/10.1300/J084v19n03_06

Thorne, S. (2016). *Interpretive description: Qualitative research for applied practice*. Routledge. https://doi.org/https://doi.org/10.4324/9781315545196

Thorne, S., Kirkham, S. R., & MacDonald-Emes, J. (1997). Interpretive description: A noncategorical qualitative alternative for developing nursing knowledge. *Research in Nursing & Health*, *20*(2), 169–177. https://doi.org/10.1002/(sici)1098-240x(199704)20:2<169::aid-nur9>3.0.co;2-i

University of Alberta, Faculty of Nursing, Graduate Education Committee. (2022). *Master's and doctoral thesis guidelines (traditional & paper-based).* https://www.ualberta.ca/nursing/media-library/forms/grad/thesis-guidelines-traditional--paper-based_2022-05-04.pdf

Waller, R., Smith, A. J., O'Sullivan, P. B., Slater, H., Sterling, M., & Straker, L. M. (2020). The association of early life stressors with pain sensitivity and pain experience at 22 years. *Pain, 161*(1), 220–229. https://doi.org/10.1097/j.pain.0000000000001704

Walsh, E., Butt, C., Freshwater, D., Dobson, R., Wright, N., Cahill, J., Briggs, M., & Alldred, D. (2014). Managing pain in prison: Staff perspectives. *International Journal of Prisoner Health, 10*(3), 98–208. https://doi.org/10.1108/IJPH-08-2013-0037

Williams, B. A., Ahalt, C., Stijacic-Cenzer, I., Smith, A. K., Goldenson, J., & Ritchie, C. S. (2014). Pain behind bars: The epidemiology of pain in older jail inmates in a county jail. *Journal of Palliative Medicine, 17*(12), 1336–1343. https://doi.org/10.1089/jpm.2014.0160

Wilper, A. P., Woolhandler, S., Boyd, J. W., Lasser, K. E., McCormick, D., Bor, D. H., & Himmelstein, D. U. (2009). The health and health care of US prisoners: Results of a nationwide survey. *American Journal of Public Health, 99*(4), 666–672. https://doi.org/10.2105/AJPH.2008.144279.

World Health Organization. (2021). *Ageing and health*. https://www.who.int/news-room/fact-sheets/detail/ageing-and-health

World Health Organization. (2022). *ICD-11: International classification of diseases, 11th revision.* https://www.who.int/standards/classifications/classification-of-diseases

You, D. S., & Meagher, M. W. (2016). Childhood adversity and pain sensitization. *Psychosomatic Medicine, 78*(9), 1084–1093. https://doi.org/10.1097/PSY.0000000000000399

Zuccaro, S. M., Vellucci, R., Sarzi-Puttini, P., Cherubino, P., Labianca, R., & Fornasari, D. (2012). Barriers to pain management: Focus on opioid therapy. *Clinical Drug Investigation, 32*(Suppl 1), 11–19. https://doi.org/10.2165/11630040-000000000-00000

# Chapter 2: Literature Review

This narrative review (Demiris & Oliver, 2019) summarizes relevant literature to inform the development of this research, as required for paper-based dissertations if subsequent papers do not include relevant literature (University of Alberta, Faculty of Nursing, Graduate Education Committee, 2022). The chapter begins with a discussion of the biopsychosocial nature of pain and some of the challenges in its definition, assessment, and management. I then examine topics related to pain and influences on the pain experience in the forensic context and consider the ethical implications of nursing and healthcare in correctional settings. I conclude with the argument that a qualitative research approach underpinned by relational ethics is a feasible way to study pain within the ethically complicated forensic setting.

## Experiences of and Challenges in the Definition and Treatment of Pain

### *Defining Pain*

Researchers have long recognized pain as a complex perceptual process (Melzack & Scott, 1957); it is "a biopsychosocial phenomenon that arises from the interaction of multiple neuroanatomic and neurochemical systems with a number of cognitive and affective processes" (Garland, 2012, p. 561). Although the nociceptive transduction that causes pain is universal, factors such as comorbid mental illness, access to relief, past experiences of pain, and the degree of social support influence suffering and pain behaviours (Gatchel & Maddrey, 2004; Gibson & Farrell, 2004; Koyama et al., 2005). These complex interactions result in difficulties in defining and measuring pain as a solitary construct.

A precise definition of pain has been elusive over the last 70 years (Aydede, 2017; Loeser & Melzack, 1999; Loeser & Treede, 2008; Merskey, 2007; Raja et al., 2020; Tesarz & Eich, 2017; Williams & Craig, 2016). The vigorous debate amongst pain experts compelled the IASP

(2020) to revise its definition multiple times. In 2020, Dr. S. Raja and a 14-member international task force that the IASP commissioned redefined pain as "an unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage" (p. 1977). The definition is supplemented by the following six key notes (p. 1979):

- Pain is always a personal experience that biological, psychological, and social factors influence to varying degrees.
- Pain and nociception are different phenomena, and pain cannot be inferred solely from activity in sensory neurons.
- Individuals learn the concept of pain from life experiences.
- It is important to respect a person's report of an experience as pain.
- Although pain usually serves an adaptive role, it can have adverse effects on function and social and psychological well-being.
- Verbal description is only one of several behaviors to express pain; the inability to communicate does not negate the possibility that a human or a nonhuman animal experiences pain.

The updated IASP (2020) definition of pain and the associated key notes resolved problems with earlier definitions and highlighted the personal nature of pain experiences, recognized that biopsychosocial factors impact the pain experience, acknowledged that pain serves an adaptive role and can adversely affect biopsychosocial well-being, and introduced the possibility of measuring pain beyond verbal description alone. The last point is especially significant in pediatric settings, where the pain that nonverbal children and infants experience is new space that must be acknowledged, measured, and addressed (Craig & MacKenzie, 2021; Stevens 2021).

The impact of the most recent IASP (2020) conceptualization of pain has yet to be explored in relation to persons who are incarcerated. For example, how does the social context of imprisonment affect the pain experience? Additional research is required to fully understand the impact of the modernized IASP definition of pain in correctional nursing practice.

### *Nociception, Past Experiences, and Biopsychosocial Factors That Shape Pain*

I have thematically organized this section according to the first three key notes associated with the IASP's (2020) revised definition of pain. I briefly discuss the differences between pain and nociception and how past pain experiences shape current pain responses. Last, I describe how biopsychosocial factors can influence the unique pain experiences of people who are incarcerated.

**Nociception.** At the beginning of the last century, the neurophysiologist Charles Sherrington coined the term *nociceptor* to describe receptors in the skin, viscera, and skeletal muscles that detect potentially noxious/painful stimuli (i.e., stimuli that can cause tissue injury including extremes of temperature, mechanical, and chemical insults; Levine, 2007). Although pain is a consequence of nociception, the effects of pain through nociceptive stimulation cause suffering and subsequently shape pain experiences and behaviours (Loeser, 2000). It is not the nociceptor activity per se that prompts people to seek healthcare services; rather, it is suffering and maladaptive pain behaviours that typically motivate people to seek relief (Loeser, 2000). Nociception is reliably produced in most people, but personal pain experiences can vary considerably (Gatchel et al., 2007; Melzack & Scott, 1957). For example, the trauma of fracturing a bone or a tissue injury caused by an infected wound reliably produces a pain response in most people (including those who are incarcerated), however, as I elaborate below, each individual's subjective pain experience is unique. In this dissertation, my interest is not

nociceptive pain signaling per se, but rather the broader phenomenon of the personal pain experience.

**Past Experiences of Pain.** Prior exposure to pain shapes subsequent pain experiences (Eidelman-Rothman et al., 2016). For instance, the early-life pain of neonatal circumcision is associated with stronger psychological and behavioural reactions to subsequent painful stimuli among males, such as receiving vaccinations (Eidelman-Rothman et al., 2016; Lidow, 2002; Taddio et al., 1997). This phenomenon is also observable in dentistry, where people who have had prior dental pain have reported greater anxiety and pain in subsequent dental procedures compared with counterparts who did not experience past pain (Kent, 1985). The findings among cancer patients (Johnsen et al., 2016), women who have experienced genital mutilation (Abdulcadir & Catania, 2021), and those with chronic pancreatitis (Phillips et al., 2022) are similar.

In a large European study, Dierkhising et al. (2013) found that 38.6% of incarcerated youth had past experiences of physical assault or abuse; 62.5% of those youth reported having their first episode of painful physical injury before the age of five. Most of these youth subsequently entered adult correctional facilities. This aligns with Canadian reports of childhood trauma among incarcerated youth (Marini et al., 2014; Yoder et al., 2017) and suggests a high incidence of childhood pain amongst people who are incarcerated. Although the research on the impact of past pain on the pain that people experience during incarceration is limited, it is feasible that they have more pain-related anxiety and perceived pain intensity than the general population does.

**Biopsychosocial Factors.** Pain is not static and can worsen or improve depending on changes in the biological, social, and psychological factors in a person's life (Adams & Turk,

2018). In the following discussion I focus on the biopsychosocial factors prevalent in correctional settings that can influence the pain experience. I draw from research on the factors that shape pain experiences in the general population and suggest that these same factors affect the pain of people who are incarcerated.

***Adverse childhood experiences.*** In 1998, Felitti et al. published the findings of the first *Adverse Childhood Experiences (ACE) Study*. They found direct and graded relationships among seven categories of childhood adversity and a range of health-risk behaviours and health problems in adulthood. Participants with childhood histories of psychological, physical, or sexual abuse and violence against their mothers and/or who lived with household members who were mentally ill, suicidal, or imprisoned were more likely as adults to experience alcoholism, addiction, and depression and to attempt suicide. They were also more likely to smoke, use psychoactive substances, self-rate their health as poor, engage in risky sexual behavior, be physically inactive, and/or be obese. Exposure to childhood adversity is also associated with higher rates of ischemic heart disease, cancer, chronic lung disease, skeletal fractures, and liver disease. Researchers widely believe that the diverse and profound effects of adverse childhood experiences on adult health are related to the effects of cortisol release in the hypothalamic-pituitary-adrenal (HPA) axis and glutamate concentrations in the hippocampus (Felitti et al., 1998; Poletti et al., 2016; Sachs-Ericsson et al., 2017; Schalinski, 2016; You & Meagher, 2016).

Adverse childhood experiences are reportedly a “universal experience” among incarcerated people (Wolff et al., 2014, p. 67). People with past histories of childhood adversity are approximately four times more likely than the general population to be incarcerated during adulthood (Reavis et al., 2013; Roos et al., 2016). In a meta-analysis of 29 nonoverlapping studies, Bodkin et al. (2019) found the prevalence of childhood abuse in 69% of those in

Canadian prisons. In addition to a strong association with mental illness, the chronic neurobiological dysregulation that adverse childhood experiences cause is also associated with the development of chronic pain, increased risk for somatization, altered pain intensity ratings, and pain catastrophizing (Generaal et al., 2016; Pieritz et al., 2015; Sachs-Ericsson et al., 2017; Waller et al., 2020; You & Meagher, 2016). Given the association between adverse childhood experiences and their impact on pain perception, it is important not to ignore such experiences in seeking to understand the pain of people who are incarcerated.

***Mental Illness.*** The rate of severe mental illness in Canada's prisons ranges from 61% to 71% (Simpson et al., 2013). The high rates of adverse childhood experiences explain only a portion of the incidence of mental illness among individuals who are incarcerated (Reavis et al., 2013). It is important to note that there has long been a tendency to criminalize people with mental illness, which further increases the prevalence of serious mental illness among people who are incarcerated (Chaimowitz & Canadian Psychiatric Association, 2012). Although researchers do not completely understand the genesis of this phenomenon, it is likely associated with the double stigmatization of being both "bad and mad" and the societal fear and abjection of those with serious mental illness (Austin et al., 2009; Holmes et al., 2006; Pont et al., 2012). Furthermore, the deinstitutionalization of psychiatric hospitals in Canada and the United States in the middle of the 20$^{th}$ century contributed to the overincarceration of people with mental illness (McCandless et al., 2015; Shelton, 2002; Torrey et al., 2014). Torrey et al. (2014) reported that 10 times more people with serious mental illness were in prisons than in psychiatric hospitals.

Mental illness directly affects how an individual perceives painful stimuli. Researchers have theorized that the neurobiology associated with certain mental illnesses either increases or

decreases an individual's perceptions of pain (Engels et al., 2014; Stubbs et al., 2016). Schizophrenia, for instance, is marked by neuropathology that occurs in the prefrontal and medial temporal regions of the brain. Some researchers reported that people with schizophrenia, independent of antipsychotic medication use, perceive pain less frequently and less intensely and require fewer analgesics (Engels et al., 2014; Stubbs et al., 2016). Similarly, people with psychopathic traits, particularly those who show antisocial and aggressive behaviours, have a higher level of tolerance for physical pain (Brislin et al., 2022).

Disorders such as major affective disorders, anxiety disorders, and stress disorders bidirectionally impact pain through neurobiological pathology, such as in the dysregulation of the HPA axis or in neuroinflammation (Fasick et al., 2015; Goesling et al., 2013; Humo et al., 2019). Goesling et al. (2013) suggested that the shared neurobiology among pain and depression, anxiety, and stress disorders increases the perception of pain intensity. For instance, approximately 30% of people with major affective disorders, anxiety, and stress-related illnesses and up to 80% of people with posttraumatic stress disorder have a co-occurring pain disorder (Vigo et al., 2016). This variability in pain perception becomes particularly relevant in correctional settings because it limits the applicability of standardized pain-measurement tools or drug-prescription guidelines for people without mental illness.

***Opioid Use Disorder.*** Researchers have reported that chronic opioid use impacts affective areas in the brains of rats (Robles et al., 2017). This was an important discovery because it indicates a direct neurobiological link between the effects of chronic opioid use and altered HPA function. Alterations in the HPA axis are associated with both the presence of pain disorders and altered pain perceptions (Goesling et al., 2013). Accordingly, pain intensity can increase and pain tolerance decrease among individuals who take opioid agents for a prolonged

period (Garland et al., 2013). In contrast, opioid antagonist agents, which oppose opioid receptor stimulation, decrease pain intensity scoring and augment pain coping (Unterwald et al., 1995).

With an approximate 10%–20% prevalence rate of opioid misuse among individuals who are incarcerated, the simultaneous downward spiralling of chronic pain and opioid misuse is troubling (Bi-Mohammed et al., 2017; Garland et al., 2013; Griffin et al., 2016; Milano, 2006; Raggio et al., 2017). Reingle Gonzalez et al. (2015) reported a positive relationship between chronic pain and opioid use (prescribed and nonprescribed) amongst people on probation in the United States. Within this group, the people who had chronic pain and misused opioids were more likely to be rearrested. Furthermore, 18% of the people on probation had chronic pain and opioid-use disorders, and their recidivism rates were higher (Reingle Gonzalez et al., 2015). Thus, chronic pain and substance-use disorder interventions can improve the recidivism outcomes in this population.

## The Meanings of Pain: Nursing in Correctional Settings

### *The Purpose of Correctional Facilities*

A primary function of prisons is to isolate from society those charged with or convicted of crimes. The purpose of this isolation is twofold: to protect the safety and security of communities and to serve as a reprimand and deterrent for violating certain laws (Armstrong & Jefferson, 2017). The work of correctional nurses often comes second to the overarching commitments of the justice system to protect society and maintain institutional safety (Austin et al., 2009; Peternelj-Taylor, 2004). Correctional nursing practice must adapt to complex and highly regimented security structures, and correctional nurses must become security minded and maintain their own personal safety while they provide patient care.

### *Tensions Around Personhood in Correctional Settings*

Dual loyalties to the competing priorities of custody and care create an ever-present tension for correctional nurses (Appelbaum, 2008; Austin, 2001; Austin et al., 2009; Lazzaretto-Green et al., 2011; Peternelj-Taylor, 1999). This dual loyalty extends beyond a mere turf war between correctional and healthcare staff. The nursing profession calls on its practitioners to view those who are incarcerated as persons before all else. In correctional environments, incarcerated persons are often viewed as *others*, which diminishes their humanity and sanctions the primacy of security structures over care (Jacob et al., 2009; Peternelj-Taylor, 2004). Correctional nurses' attempt to heed the call of their profession to consider those who are incarcerated as human beings and "may excite the wrath of other nurses or, more likely, the correctional staff, who might see such attempts at engaging the other empathically as their downfall" (Peternelj-Taylor, 2004, p. 140). Regardless, nurses cannot abandon their professional obligations to patients in correctional settings because provincial and federal legislation mandates that those who are incarcerated receive health services. This means that correctional institutions have become an important venue for the delivery of healthcare services to a large segment of vulnerable people (Peternelj-Taylor, 2004).

### *Pain and Punishment*

Pain is also a form of punishment that is associated with prison. Historically, the bodies of convicted individuals were entities unto whom physically painful penalties were inflicted (Foucault, 1975/2012) so that they could atone for their crimes (Jones, 1945; Mishra, 2016). This atonement was meant to correct the social disruption that their offences caused and that the offenders received "as much pain and sufferings as inflicted by him [*sic*] on his [*sic*] victims" (Mishra, 2016, p. 74). Although this eye-for-an-eye approach exacted retribution, it is

incommensurate with the ethics of nursing and with the principles for the ethical treatment of pain (Gadow, 2003).

Contemporary reformative theories of criminal justice have altered the nature of punishment from "an art of unbearable sensations" to "an economy of suspended rights" (Foucault, 1975/2012, p. 11). This shift in the philosophies of criminal justice prohibits the use of pain as a tool for punishment and enables nurses to assess and treat pain as it occurs among people who are incarcerated. In fact, Foucault (1975/2012) argued that the very presence of health professionals, chaplains, psychologists, and teachers in correctional settings is to "reassure legal institutions that the body and pain are not the ultimate structures of its punitive action" (p. 11). This social commitment to human rights obliges nurses to identify and oppose instances in which pain serves as punishment.

Theories of criminal justice, particularly those that prescribe a social response to behaviours that offend the laws and sensibilities of the collective society, inform correctional settings. These theories recognize the capacity of humans to cause injuries and to act unjustly and subsequently prescribe approaches to reduce, prevent, or redress such behaviours. Theories of punishment are predicated on the concepts of denunciation, deterrence, atonement, and rehabilitation (Grupp, 1971). The intent of incarceration is to protect society by isolating it from threats and to provide spaces to enact mechanisms of denunciation, deterrence, atonement, and rehabilitation. In modern prisons, rehabilitation supersedes atonement; however, the pain of social isolation and exclusion—what Sykes (1958/2007) called the *pains of imprisonment*—persists but should be minimized wherever possible.

### *Persisting Punishment*

The historical conflation of pain with punishment and imprisonment continues to be a challenge for nurses in correctional facilities. Although it is important not to use pain as a method of punishment, Nahmias and Aharoni (2018) indicated that "most people are not satisfied with punishment involving merely impersonal incarceration" (p. 144). This "relentless punitive spirit," commonly referred to as the *punishment imperative* (Clear & Frost, 2015, p. 1), is insidious in prisons and is reflected in "virtually every aspect of the punishment system, from the way people were processed before trial to the way people were confined after conviction" (p. 2). Feinberg (1965) contended that punishment serves a certain expressive function. Specifically, "punishment is a conventional device for the expression of attitudes of resentment and indignation and of judgments of disapproval and reprobation" (p. 400) on the part of the punisher or in the name of the victim on whom the crime was committed.

Correctional nurses are vulnerable to being enmeshed in the subtle—and not so subtle—discourse of punishment in prisons because they are inseparable from the world around them. Their own abjection, hatred, or desire for retribution toward incarcerated individuals can lead to a punitive orientation in correctional settings and negatively impact their ability to make ethical decisions as they struggle with their identity as nurses and persons (Holmes et al., 2006; Jacob et al., 2009). Nurses' own reactions can also influence the ethos of correctional healthcare settings and shape how people who are incarcerated engage (or disengage) within these settings. Nurses' attitudes toward people who are incarcerated can affect the trust required to establish honest and productive nurse-patient therapeutic relationships and impact the delivery of meaningful, appropriate, and ethical pain-related healthcare services in correctional environments (Holmes et al., 2006; Jacob et al., 2009; Jacob & Holmes., 2011). Additionally,

despite society's seemingly moving beyond a purely retributive approach to criminal justice, vestigial remnants of such an approach to criminal justice further create the context for the correctional settings in which people who are incarcerated experience pain.

### *Distrust, Manipulation, and Pain*

Accurate assessment of pain is dependent on patients' honesty and ability to describe the nature, quality, quantity, and other characteristics of their pain. It would be naïve to believe that all patients are truthful in reporting their pain. The current opioid crisis in North America has highlighted the ease with which healthcare providers have readily prescribed opioid analgesics for exaggerated or entirely feigned pain symptoms (Miller et al., 2017). This does not necessarily imply that prescribers deceived by patients are merely gullible. Instead, this can be explained by "truth bias," which Miller et al. (2017) described as "the tendency to judge messages as truthful more often than we judge them as deceptive" (p. 972). In correctional settings, however, some nurses might "distrust . . . in advance" (Austin et al., 2009, p. 837), which suggests a potential distrust bias. If truth bias yields an overdiagnosis and unwarranted treatment of painful conditions, it is possible that distrust bias leads to underdiagnosis and undertreatment of painful conditions in correctional settings.

Current research on pain and incarceration is limited and focuses primarily on issues related to drug misuse or diversion, reports on prevalence of pain, and types and frequency of drugs prescribed for pain management. Drug diversion involves the transfer of any legally prescribed controlled substance from the individual for whom it was prescribed to another person for any illicit use (Berge et al., 2012). For instance, Lin and Mathew (2005) found that prescribers' concerns regarding drug diversion and distrust of incarcerated persons were barriers to effective cancer-pain management. Walsh et al. (2014) remarked that "many prisoners are

abusers of opioids, rendering analgesic prescribing in this population challenging. In addition, diversion of opioids by prisoners is a significant problem" (p. 199). This echoes Lin and Mathew's (2005) observation that clinicians' fear of drug diversion creates a barrier to effective cancer-pain management among incarcerated people. Despite fears of drug diversion in prison settings, Walsh et al. suggested that prescribers "may be placed under significant pressure to prescribe opioids" (p. 199), given the contextual realities of the prison setting. Potential complaints to regulatory colleges, legal challenges, and threats to clinicians' safety can also impact treatment decisions that favour the prescription of opioids. These questions highlight the potential impacts of incarceration on clinicians' decision making with regard to prescribing opioids or other types of analgesics.

Correctional environments directly affect pain and its subsequent management. Walsh et al. (2014) reported that some correctional healthcare staff members are aware of the effect of incarceration on pain. Both structural components of incarceration (such as hard mattresses and pillows) and seclusive elements of imprisonment are factors that increase reports of pain and exacerbate its emotional and psychological sequelae. Walsh et al. contended that effective "prisoner patient pain management is clearly challenged by the perception of prisoners by staff and the common view that fictitious pain is frequently reported to obtain analgesics for secondary gain rather than actual pain relief" (p. 205). Nurses are warned during their orientation and reminded through security structures that people who are incarcerated "may use manipulation and intimidation to assert power and control" (Dhaliwal & Hirst, 2016, p. 9). This assumption of distrust and manipulation can cast a shadow of doubt upon the legitimacy of incarcerated patients' health concerns (Austin et al., 2009; Dhaliwal & Hirst, 2016). For instance, prescribers in correctional settings often suggest that patients' reported intensity of a symptom

such as pain is exaggerated, “usually in an attempt to obtain more medication” (Foster et al., 2013, p. 187). This assumption of manipulation coexists with the belief that “correctional nurses must develop boundaries to prevent becoming victims of manipulation” (Dhaliwal & Hirst, 2016, p. 9). This attitude toward boundary setting and presumed distrust has a significant impact on the nurse-patient relationships and patients’ health outcomes. Specifically, nurses might overlook legitimate requests for healthcare by assuming that a person who is incarcerated is simply “faking it” (Foster et al., 2013, p. 187).

Incarcerated persons’ presumed lack of credibility becomes evident in prescribing practices when some drugs become prohibited and healthcare staff require that they provide evidence of their suffering (Walsh et al., 2014). These findings, however, do not necessarily imply that nurses and other healthcare staff are acting unethically by inadequately assessing and managing pain in correctional settings. On the contrary, it is important to understand nurses’ legitimate concerns regarding drug diversion within the context of correctional environments. For instance, drug diversion is associated with both intentional and unintentional drug overdose. In addition to suicide, incarcerated persons might have previously used intentional overdoses to escape custody during transfer to hospital (Walsh et al., 2014). Walsh et al. (2014) therefore concluded that “support is required for staff working in this difficult caring culture to ensure that prisoner patient care is not affected by the culture to the detriment of patients legitimately requiring pain relief” (p. 205).

The conflation of pain and punishment, the different meanings of pain during incarceration, distrust in the nurse-patient relationship, and living as an *abject other* can seriously impact people’s experience during periods of incarceration. For example, how can the verbal or nonverbal expressions of pain from people who are incarcerated be respected if the nurse-patient

relationship is marked by distrust? How does the pain of imprisonment (Sykes 1958/2007) and other pains of punishment shape how individuals "learn the concept of pain" (Raja et al., 2020, p. 1980) when they are incarcerated? What are the adverse effects on physical function and social and psychological well-being as the adaptive role of pain changes in the dual personas of prisoner and patient?

### *The Problem With Pain in Correctional Settings*

As I previously noted, several factors that influence pain and pain perception, such as past experiences with pain, adverse childhood experiences, mental illness, and opioid addiction, are highly prevalent among people who are incarcerated. These factors, along with other contextual realities of correctional settings such as distrust, fear, and abjection, further shape the experience of pain during periods of incarceration.

Pain is complex and difficult for health practitioners to assess and treat in any setting; however, its complexity is particularly salient and fraught with ethical problems in correctional settings (Hantke et al., 2016). In correctional settings, people who are incarcerated depend on nurses to provide health services or to access health services external to the facility, including consultations with specialists, rehabilitation, surgery, and emergency care. This dependency places nurses in a position of power over their patients. Concerns related to the various meanings of pain in corrections coupled with the conflation of pain and punishment requires careful attention to healthcare ethics.

## Ethics in Correctional Nursing Practice

In this section I consider the ethical dimensions of the pain that people experience during periods of incarceration. In line with previous researchers, I argue that a purely objective normative ethic is insufficient to fully inform practice dilemmas situated in the particularities of

the correctional setting (Appelbaum, 1997; Austin et al., 2009). Within these particularities are especially important contextual factors that shape correctional nurses' day-to-day ethical decision making.

**Ethical Approaches in Correctional Healthcare Settings**

In the past, the goals or consequences of imprisonment were seemingly incommensurable with the values and objectives of healthcare practices. Gadow (2003) remarked that

> imprisonment causes deliberate harm, while health care aims to prevent harm and improve well-being. If liberty is good and health includes freedom from gratuitous pain, healthcare and corrections work in ethically different directions. . . . Correctional systems exist in order to punish, that is, to harm. (p. 162)

Although this offers some insight into the conceptualization of a relational narrative in correctional nursing practice, I believe that Gadow mischaracterized the aims of imprisonment. Although one goal of incarceration is to punish through isolation, most contemporary justice systems also aim to deter others in society from committing crimes and offer rehabilitation opportunities to enable individuals who have been incarcerated to facilitate reintegration into society following their release from prison (e.g., Correctional Service of Canada, 2021). It is more important to note that imprisonment itself does not cause deliberate harm, except that from social isolation itself. The push and pull between those who advocate for tough-on-crime and the soft-on-crime policies (Zinger, 2016) that governments ultimately enact is influenced by sociopolitical ideology. Beginning around 2005, the reduction of rehabilitative programming, the legislation of mandatory minimum sentences, and the reduction or elimination of alternatives to incarceration shifted public policy toward a more punitive and retributive system of justice (Zinger, 2016). Regardless of the political discourse, nurses and other healthcare professionals are duty bound to provide healthcare to people who are incarcerated and must adhere to their professional values and ethics to ensure moral healthcare practices in correctional settings.

The universal nature of bioethics, situated firmly in rationality and objectivity, involves moral theories of justice to establish a rules-based or principled approach to ethics (Bergum & Dossetor, 2020). The principle of bioethics is the promotion of equality and fairness, individuality, and autonomy, governed by the commitment to cause no harm and to do good (Bergum & Dossetor, 2020). Although there is utility in seeking out universal, objective, and rational approaches to healthcare ethics, the current state of moral knowledge does not promote this possibility (Bergum & Dossetor, 2020).

Traditional bioethical approaches offer little guidance to resolve day-to-day ethical dilemmas in correctional healthcare practice settings (Austin et al., 2009). Given the dual imperatives for care and custody, nurses have a dual loyalty to those who are incarcerated and those who incarcerate. The involuntary nature of confinement and punishment shakes the very possibility of autonomy. The incorporation of healthcare data, particularly related to psychiatric evaluation, into court cases and using them for prosecutorial purposes disturbs the principle of nonmaleficence (Appelbaum, 1997). Beneficence can be tainted when practitioners must use their professional knowledge to advance novel interrogation techniques or develop contemporary modes of torture.

Criticizing the universalism of medical ethics, Pellegrino (1993) remarked that "principles…are too abstract, too rationalistic, and too removed from the psychological milieu in which moral choices are actually made" (p. 1161). Gadow (1999) further contended that a universal ethics washes away the contextual human reality in which ethical dilemmas exist, ignores emotional reactions, and conflicts with patient care as social objectives. These observations are particularly relevant in correctional environments where the current principle-

based theories are seemingly less tenable. As I noted previously, the very possibility of ethics in forensic practice can be called into question.

If a rational and objective approach is insufficient to guide ethical decision making in correctional practice, a subjective approach might be more fitting. As Bergum and Dossetor (2020) suggested, ethical decisions require "both objective abstract knowledge and subjective concrete knowledge" (p. 49). Within this spirit, Austin et al. (2009) described the possible utility of a relational ethics approach to understand and detect subjective ethical healthcare practices in correctional healthcare settings. Relational ethics enables the exploration of subjective elements that influence ethical decision making within the space of the nurse-patient relationship.

Relational ethics, as an applied ethic, enables clinicians to consider ethical relationships in correctional healthcare settings beyond the traditional principle-based approach. Rather than focusing on a universally correct response, relational ethics is a pluralistic, action ethic that offers clinicians a mode to seek a fitting ethical response (Pollard, 2015; Tomaselli et al., 2020). Relational ethics offers a theoretical basis to account for the possibility that a clearly correct and morally satisfying ethical response might sometimes not be possible. Faced with complex and challenging situations, clinicians who use a relational ethics framework consider the possibility that the "best thing to do" might actually involve doing the "least-worst thing" (Austin et al., 2009, p. 844). Ethical action involves action consistent with the core elements of this applied ethic, including engaged interaction, mutual respect, embodied knowledge, uncertainty or vulnerability, and interdependent environment (Austin, 2001; Bergum & Dossetor, 2020; Kunyk & Austin, 2012; Pollard, 2015).

Daily, nurses in correctional healthcare settings face significant ethical questions related to the pain that people experience during periods of incarceration. Ethical nursing practice cannot

wait for an ever-elusive universal healthcare ethic for correctional practice settings. Nurses must act because their patients and society have required them to do so. They must act because they have responded to their social contract by promising action. This promise between patient and practitioner creates a relational space in which nurses can "put flesh on the bones of personhood" (Bergum & Dossetor, 2020, p. xix). Within this relational space, a richer subjective understanding of patients takes shape through the exploration of trust and distrust, culture, ethnicity, gender, vulnerability, and strength. Within this relational space, power, equity, and equality enable consideration and recalibration, if needed (Austin et al., 2009). It is also a space in which the answers to difficult day-to-day pain-related practice decisions might rest. Relational ethics offers nurses in correctional practice an applied action ethic capable of yielding sufficient insight into the complexities of the pain that people who are incarcerated experience to promote clinical action consistent with upholding their promise to patients and society.

Departure from the nonemotional, generalizable, and decontextualized safety of normative or universal ethics leads to legitimate concerns about ethical relativism (Austin, 2008). An unstructured, emotional, and contextualized ethic might permit improper rationalizations of pain and imprisonment and ultimately lead to abuse, torture, and injury. For instance, one can rationalize that restricting access to analgesics is a morally appropriate punishment for people who sustain injuries during the commission of criminal acts. This want for punishment might be considered fitting because it might align with the social expectations of punishment, accountability, and natural consequences. For many, it might be socially satisfying. However, this ideological positioning fails to account for the particularities of individual circumstances that mitigate decision making. Ultimately, "the fear is that without a firm theoretical foundation, we may fall into moral chaos" (Bergum & Dossetor, 2020, p. 34).

Mindful of the concerns about ethical relativism, it is useful to recall that a relational ethics approach to healthcare ethics provides a relational context in which "ethical action is experientially and culturally embedded within healthcare" and situated within its relational context (Bergum & Dossetor, 2020, p. 34). A relational approach to ethics does not disavow knowledge of normative ethics to rely solely on knowledge derived from a subjective ethic. Instead, both are essential in that relational ethics does not provide a licence to freely explain away corrupt or unethical action (Austin, 2008).

The type of knowledge that the use of relational ethics yields as a theoretical framework for recognizing, describing, and interpreting the nursing care of people who are incarcerated and are experiencing pain enables the exploration of pain during incarceration within the context of ethical nursing practice. These specific outcomes can provide nurses with knowledge to inform ethical decision making in the day-to-day care of such patients.

**Summary**

The revised IASP (2020) definition of pain and its associated six key notes are the basis for consideration of the unique experience of pain of people who are incarcerated. Although past physical pain experiences and preexisting biopsychosocial factors shape the pain experience, no researchers have examined the impact of imprisonment on the experience of pain. Imprisonment involves a unique set of biopsychosocial factors that lead to a sinister and punitive-oriented meaning of the concept of pain. Factors such as social isolation, nurse-patient relationships marked by distrust and power imbalances, prison security structures and processes, among other tensions that result from being both a prisoner and a patient can be sufficiently potent to severely reshape people's experience of pain during periods of incarceration.

The conflation of pain and punishment, issues related to distrust, and the degree of power that nurses hold over patients who are incarcerated create conditions that require careful attention to ethical practice. The background literature highlighted that the development of knowledge of pain in correctional nursing practice must include a strong ethical anchor. Given the subjective nature of personal pain experiences and the power imbalances in the nurse-patient relationship, relational ethics (Dossetor & Bergum, 2020) offers a way to identify fitting responses to the day-to-day ethical dilemmas related to understanding and responding to the pain that people who are incarcerated experience.

## References

Abdulcadir, J., & Catania, L. (2021). Conceptualizing sexual pain in women with female genital mutilation/cutting. *Archives of Sexual Behavior*, *50*(5), 1871–1874. https://doi.org/10.1007/s10508-020-01691-1

Adams, L. M., & Turk, D. C. (2018). Central sensitization and the biopsychosocial approach to understanding pain. *Journal of Applied Biobehavioral Research*, *23*(2), e12125. https://doi.org/10.1111/jabr.12125

Appelbaum, P. S. (1997). Ethics in evolution: The incompatibility of clinical and forensic functions. *The American Journal of Psychiatry, 154*(4), 445. https://doi.org/10.1176/ajp.154.4.445

Appelbaum, P. S. (2008). Ethics and forensic psychiatry: Translating principles into practice. *Journal of the American Academy of Psychiatry and the Law, Online, 36*(2), 195–200. https://www.jaapl.org/cgi/content/abstract/36/2/195

Armstrong, S., & Jefferson, A. M. (2017). Disavowing 'the' prison. In D. Moran & A. Schliehe (Eds.), *Confined places, secure spaces: The spatialisation of studies of confinement* (pp. 237-267). Palgrave Studies in Prisons and Penology. Palgrave Macmillan. https://doi.org/10.1057/978-1-137-56057-5_9

Austin, W. (2001). Relational ethics in forensic psychiatric settings. *Journal of Psychosocial Nursing and Mental Health Services*, *39*(9), 12–17. https://doi.org/10.3928/0279-3695-20010901-04

Austin, W. (2008). Relational ethics. In L. M. Given (Ed.), *The Sage encyclopedia of qualitative research methods* (pp. 748–749). Sage.

Austin, W., Goble, E., & Kelecevic, J. (2009). The ethics of forensic psychiatry: Moving beyond principles to a relational ethics approach. *Journal of Forensic Psychiatry & Psychology*, *20*(6), 835–850. https://doi.org/10.1080/14789940903174147

Aydede, M. (2017). Defending the IASP definition of pain. *The Monist*, *100*(4), 439–464. https://doi.org/10.1093/monist/onx021

Berge, K. H., Dillon, K. R., Sikkink, K. M., Taylor, T. K., & Lanier, W. L. (2012). Diversion of drugs within health care facilities, a multiple-victim crime: Patterns of diversion, scope, consequences, detection, and prevention. *Mayo Clinic Proceedings*, *87*(7), 674–682. https://doi.org/10.1016/j.mayocp.2012.03.013

Bergum, V., & Dossetor, J. B. (2020). *Relational ethics: The full meaning of respect.* University Publishing Group.

Bi-Mohammed, Z., Wright, N. M., Hearty, P., King, N., & Gavin, H. (2017). Prescription opioid abuse in prison settings: A systematic review of prevalence, practice and treatment responses. *Drug and Alcohol Dependence*, *171*, 122–131. https://doi.org/10.1016/j.drugalcdep.2016.11.032

Bodkin, C., Pivnick, L., Bondy, S. J., Ziegler, C., Martin, R. E., Jernigan, C., & Kouyoumdjian, F. (2019). History of childhood abuse in populations incarcerated in Canada: A systematic review and meta-analysis. *American Journal of Public Health, 109*(3), e1–e11. https://doi.org/10.2105/AJPH.2018.304855

Brislin, S. J., Perkins, E. R., Ribes-Guardiola, P., Patrick, C. J., & Foell, J. (2022). Pain processing and antisocial behavior: A multimodal investigation of the roles of boldness and meanness. *Personality Disorders*. Advance online publication. https://doi.org/10.1037/per0000556

Chaimowitz, G., & Canadian Psychiatric Association (2012). The criminalization of people with mental illness. *Canadian Journal of Psychiatry, 57*(2), 1. https://www.cpa-apc.org/wp-content/uploads/Criminalization-of-People-with-Mental-Illness-Revision-1-2018-EN-web-Final-v2.pdf.

Clear, T. R., & Frost, N. A. (2015). *The punishment imperative: The rise and failure of mass incarceration in America* (reprint ed.). NYU Press.

Correctional Service of Canada. (2021). *Correctional programs for men.* https://www.csc-scc.gc.ca/002/002-0002-en.shtml#icpm

Craig, K. D., & MacKenzie, N. E. (2021). What is pain: Are cognitive and social features core components? *Paediatric and Neonatal Pain, 3*(3), 106–118. https://doi.org/10.1002/pne2.12046

Demiris, G.; Oliver, D.P. (2019). Defining and Analyzing the Problem, in Behavioral Intervention Research in Hospice and Palliative Care; Elsevier: Amsterdam, The Netherlands, pp. 27–39

Dhaliwal, K., & Hirst, S. (2016). Caring in correctional nursing. *Journal of Forensic Nursing*, *12*(1), 5–12. https://doi.org/10.1097/jfn.0000000000000097

Dierkhising, C. B., Ko, S. J., Woods-Jaeger, B., Briggs, E. C., Lee, R., & Pynoos, R. S. (2013). Trauma histories among justice-involved youth: Findings from the National Child Traumatic Stress Network. *European Journal of Psychotraumatology, 4*(1), 20274. https://doi.org/10.3402/ejpt.v4i0.20274

Eidelman-Rothman, M., Goldstein, A., Weisman, O., Schneiderman, I., Zagoory-Sharon, O., Decety, J., & Feldman, R. (2016). Prior exposure to extreme pain alters neural response to pain in others. *Cognitive, Affective, & Behavioral Neuroscience*, *16*(4), 662–671. https://doi.org/10.3758/s13415-016-0422-7

Engels, G., Francke, A. L., van Meijel, B., Douma, J. G., de Kam, H., Wesselink, W., Houtjes, W., & Scherder, E. J. (2014). Clinical pain in schizophrenia: A systematic review. *The Journal of Pain, 15*(5), 457–467. https://doi.org/10.1016/j.jpain.2013.11.005

Fasick, V., Spengler, R. N., Samankan, S., Nader, N. D., & Ignatowski, T. A. (2015). The hippocampus and TNF: Common links between chronic pain and depression. *Neuroscience and Biobehavioral Reviews*, 53, 139–159. https://doi.org/10.1016/j.neubiorev.2015.03.014

Feinberg, J. (1965). The expressive function of punishment. *Monist*, *49*(3), 397–423. https://doi.org/10.5840/monist196549326

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine, 14*(4), 245–258. https://doi.org/10.1016/s0749-3797(98)00017-8

Foster, J., Bell, L., & Jayasinghe, N. (2013). Care control and collaborative working in a prison hospital. *Journal of Interprofessional Care, 27*(2), 184–190. https://doi.org/10.3109/13561820.2012.730073

Foucault, M. (2012). *Discipline & punish: The birth of the prison* (A. Sheridan, Trans.). Vintage. (Original work published in 1975)

Gadow S. (1999). Relational narrative: The postmodern turn in nursing ethics. *Scholarly Inquiry for Nursing Practice, 13*(1), 57–70.

Gadow, S. (2003). Restorative nursing: Toward a philosophy of postmodern punishment. *Nursing Philosophy*, *4*(2), 161–167. https://doi.org/10.1046/j.1466-769x.2003.00133.x

Garland E. L. (2012). Pain processing in the human nervous system: A selective review of nociceptive and biobehavioral pathways. *Primary Care, 39*(3), 561–571. https://doi.org/10.1016/j.pop.2012.06.013

Garland, E. L., Froeliger, B., Zeidan, F., Partin, K., & Howard, M. O. (2013). The downward spiral of chronic pain, prescription opioid misuse, and addiction: Cognitive, affective, and neuropsychopharmacologic pathways. *Neuroscience and Biobehavioral Reviews, 37*(10, Pt. 2), 2597–2607. https://doi.org/10.1016/j.neubiorev.2013.08.006

Gatchel, R. J., Peng, Y. B., Peters, M. L., Fuchs, P. N., & Turk, D. C. (2007). The biopsychosocial approach to chronic pain: Scientific advances and future directions. *Psychological Bulletin, 133*(4), 581–624. https://doi.org/10.1037/0033-2909.133.4.581

Gatchel, R. J., & Maddrey, A. M. (2004). The biopsychosocial perspective of pain. In J. Raczynski, & L. Leviton L. (Eds). *Healthcare psychology handbook. Vol II, Disorders of behavior and health* (pp. 357–378). American Psychological Association. https://doi.org/10.1037/11589-011

Generaal, E., Vogelzangs, N., Macfarlane, G. J., Geenen, R., Smit, J. H., de Geus, E. J. C. N., Penninx, B. W. J. H., & Dekker, J. (2016). Biological stress systems, adverse life events and the onset of chronic multisite musculoskeletal pain: A 6-year cohort study. *Annals of the Rheumatic Diseases*, *75*(5), 847–854. https://doi.org/10.1136/annrheumdis-2014-206741

Gibson, S. J., & Farrell, M. (2004). A review of age differences in the neurophysiology of nociception and the perceptual experience of pain. *The Clinical Journal of Pain, 20*(4), 227–239. https://doi.org/10.1097/00002508-200407000-00004

Goesling, J., Clauw, D. J., & Hassett, A. L. (2013). Pain and depression: An integrative review of neurobiological and psychological factors. *Current Psychiatry Reports*, *15*(12). https://doi.org/10.1007/s11920-013-0421-0

Griffin, M. L., McDermott, K. A., McHugh, R. K., Fitzmaurice, G. M., Jamison, R. N., & Weiss, R. D. (2016). Longitudinal association between pain severity and subsequent opioid use in prescription opioid dependent patients with chronic pain. *Drug and Alcohol Dependence*, *163*, 216–221. https://doi.org/10.1016/j.drugalcdep.2016.04.023

Grupp, S. E. (1971). *Theories of punishment*. Indiana University Press.

Hantke, V., Wolff, H., & Williams, B. A. (2016). The pains of imprisonment: Challenging aspects of pain management in correctional settings. *Pain Management. 6*(2), 133–136. https://doi.org/10.2217/pmt.15.62

Holmes, D., Perron, A., & O'Byrne, P. (2006). Understanding disgust in nursing: Abjection, self, and the other. *Research and Theory for Nursing Practice*, *20*(4), 305–316. https://doi.org/10.1891/rtnp-v20i4a006

Humo, M., Lu, H., & Yalcin, I. (2019). The molecular neurobiology of chronic pain–induced depression. *Cell and Tissue Research,* 377(1), 21–43. https://doi.org/10.1007/s00441-019-03003-z

International Association for the Study of Pain. (2020, July 16). *IASP announces revised definition of pain*. https://www.iasp-pain.org/PublicationsNews/NewsDetail.aspx?ItemNumber=10475

Jacob, J. D., & Holmes, D. (2011). Working under threat: Fear and nurse-patient interactions in a forensic psychiatric setting. *Journal of Forensic Nursing*, *7*(2), 68–77. https://doi.org/10.1111/j.1939-3938.2011.01101.x

Jacob, J. D., Gagnon, M., & Holmes, D. (2009). Nursing so-called monsters. *Journal of Forensic Nursing*, *5*(3), 153–161. https://doi.org/10.1111/j.1939-3938.2009.01048.x

Johnsen, A. T., Petersen, M. A., Snyder, C. F., Pedersen, L., & Groenvold, M. (2016). How does pain experience relate to the need for pain relief? A secondary exploratory analysis in a large sample of cancer patients. *Supportive Care in Cancer*, *24*(10), 4187–4195. https://doi.org/10.1007/s00520-016-3246-7

Jones, R. D. (1945). Theories of punishment. *Probation,* 4(13), 155–156. https://doi.org/10.1177/026455054500401307

Kent, G. (1985). Memory of dental pain. *Pain*, *21*(2), 187–194. https://doi.org/10.1016/0304

Koyama, T., McHaffie, J. G., Laurienti, P. J., & Coghill, R. C. (2005). The subjective experience of pain: Where expectations become reality. *Proceedings of the National Academy of Sciences of the United States of America, 102*(36), 12950–12955. https://doi.org/10.1073/pnas.0408576102

Kunyk, D., & Austin, W. (2012). Nursing under the influence: A relational ethics perspective. *Nursing Ethics,* 19(3), 380–389. https://doi.org/10.1177/0969733011406767

Lazzaretto-Green, D., Austin, W., Goble, E., Buys, L., Gorman, T., & Rankel, M. (2011). Walking a fine line : Forensic mental health practitioners' experience of working with correctional officers. *Journal of Forensic Nursing*, *7*(3), 109–119. https://doi.org/10.1111/j.1939-3938.2011.01107.x

Levine, D. N. (2007). Sherrington's "The Integrative action of the nervous system": A centennial appraisal. *Journal of the Neurological Sciences, 253*(1-2), 1–6. https://doi.org/10.1016/j.jns.2006.12.002

Lidow M. S. (2002). Long-term effects of neonatal pain on nociceptive systems. *Pain, 99*(3), 377–383. https://doi.org/10.1016/S0304-3959(02)00258-0

Lin, J. T., & Mathew, P. (2005). Cancer pain management in prisons: A survey of primary care practitioners and inmates. *Journal of Pain & Symptom Management, 29*(5), 466–473. https://doi.org/10.1016/j.jpainsymman.2004.08.015

Loeser, J. D. (2000). Pain and suffering. *The Clinical Journal of Pain*, *16*(2). S2–S6. https://doi.org/10.1097/00002508-200006001-00002

Loeser, J. D., & Melzack, R. (1999). Pain: An overview. *The Lancet, 353*(9164), 1607–1609. https://doi.org/10.1016/S0140-6736(99)01311-2

Loeser, J. D., & Treede, R-D. (2008). The Kyoto protocol of IASP basic pain terminology. *Pain*, *137*(3), 473–477. https://doi.org/10.1016/j.pain.2008.04.025

Marini, V. A., Leibowitz, G. S., Burton, D. L., & Stickle, T. R. (2014). Victimization, substance use, and sexual aggression in male adolescent sexual offenders. *Criminal Justice and Behavior, 41*(5), 635–649. https://doi.org/10.1177/0093854813507567

McCandless, L. C., Stewart, L. C., Rempel, S. E. S., Venners, S. A., & Somers, J. M. (2015). Criminal justice system contact and mortality among offenders with mental illness in British Columbia: An assessment of mediation. *Journal of Epidemiology and Community Health, 69*(5), 460-466. https://doi.org/10.1136/jech-2013-203705

Melzack, R., & Scott, T. H. (1957). The effects of early experience on the response to pain. *Journal of Comparative and Physiological Psychology, 50*(2), 155-161. https://doi.org/10.1037/h0047770

Merskey, H. (2007). The taxonomy of pain. *Medical Clinics, 91*(1), 13–20. https://doi.org/10.1016/j.mcna.2006.10.009

Milano, C. (2006). Narcotics abuse in correctional facilities: Is pain medication being used inappropriately? *American Journal of Nursing, 106*(2), 22.

Miller, L. E., Eldredge, S. A., & Dalton, E. D. (2017). "Pain is what the patient says it is": Nurse–patient communication, information seeking, and pain management. *American Journal of Hospice and Palliative Medicine*, *34*(10), 966–976. https://doi.org/10.1177/1049909116661815

Mishra, S. (2016). Theories of punishment: A philosophical aspect. *Imperial Journal of Interdisciplinary Research, 2*(8). http://www.onlinejournal.in/IJIRV2I8/014.pdf.

Nahmias, E., & Aharoni, E. (2018). Communicative theories of punishment and the impact of apology. In C. W. Surprenant (Ed.), *Rethinking punishment in the era of mass incarceration* (pp. 144–159). Taylor & Francis.

Pellegrino E. D. (1993). The metamorphosis of medical ethics. A 30-year retrospective. *JAMA, 269*(9), 1158–1162. https://doi.org/10.1001/jama.1993.03500090094039

Peternelj-Taylor, C. (1999). Forensic psychiatric nursing: The paradox of custody and caring. *Journal of Psychosocial Nursing and Mental Health Services, 37*(9), 9-11. https://doi.org/10.3928/0279-3695-19990901-06

Peternelj-Taylor, C. (2004). An exploration of othering in forensic psychiatric and correctional nursing. *The Canadian Journal of Nursing Research, 36*(4), 130–146.

Phillips, A. E., Bick, B. L., Faghih, M., Yadav, D., Drewes, A. M., Singh, V. K., Olesen, S.S., on behalf of the Pancreatic Quantitative Sensory Testing (P-QST) Consortium. (2022). Pain sensitivity and psychiatric comorbidities in chronic pancreatitis patients with and without pain: Past experience matters. *Gastro Hep Advances, 1*, 796-802. https://doi.org/10.1016/j.gastha.2022.04.013

Pieritz, K., Rief, W., & Euteneuer, F. (2015). Childhood adversities and laboratory pain perception. *Neuropsychiatric Disease and Treatment, 11*, 2109–2116. https://doi.org/10.2147/NDT.S87703

Poletti, S., Locatelli, C., Falini, A., Colombo, C., & Benedetti, F. (2016). Adverse childhood experiences associate to reduced glutamate levels in the hippocampus of patients affected by mood disorders. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, *71*, 117–122. https://doi.org/10.1016/j.pnpbp.2016.07.007

Pollard, C. (2015). What is the right thing to do: Use of a relational ethic framework to guide clinical decision-making. *International Journal of Caring Sciences, 8*(2), 362–368.

Pont, J., Stover, H., & Wolff, H. (2012). Dual loyalty in prison health care. *American Journal of Public Health, 102*(3), 475–480. https://doi.org/10.2105/AJPH.2011.300374

Raggio, A. L., Kopak, A. M., & Hoffmann, N. G. (2017). Opioid use disorders and offending patterns among local jail inmates. *Corrections*, *2*(4), 258-268. https://doi.org/10.1080/23774657.2017.1310003

Raja, S. N., Carr, D. B., Cohen, M., Finnerup, N. B., Flor, H., Gibson, S., Keefe, F. J., Mogil, J. S., Ringkamp, M., Sluka, K. A., Song, X. J., Stevens, B., Sullivan, M. D., Tutelman, P. R., Ushida, T., & Vader, K. (2020). The revised International Association for the Study of Pain definition of pain: Concepts, challenges, and compromises. *Pain, 161*(9), 1976–1982. https://doi.org/10.1097/j.pain.0000000000001939

Reavis, J. A., Looman, J., Franco, K. A., & Rojas, B. (2013). Adverse childhood experiences and adult criminality: How long must we live before we possess our own lives? *The Permanente Journal, 17*(2), 44-48. https://doi.org/10.7812/TPP/12-072

Reingle Gonzalez, J. M., Walters, S. T., Lerch, J., & Taxman, F. S. (2015). The relationship between drug use, drug-related arrests, and chronic pain among adults on probation. *Journal of Substance Abuse Treatment*, *53*, 33–38. https://doi.org/10.1016/j.jsat.2014.12.00

Robles, D., Gomtsian, L., Navratilova, E., & Porreca, F. (2017). Role of opioid-sensitive descending pain modulatory pathways in affective and sensory components of chronic pain in rats. *The FASEB Journal, 31*(S1). https://doi.org/10.1096/fasebj.31.1_supplement.985.16

Roos, C. M., Zhang, B., Palmer, A. K., Ogrodnik, M. B., Pirtskhalava, T., Thalji, N. M., Hagler, M., Jurk, D., Smith, L. A., Casaclang-Verzosa, G., Zhu, Y., Schafer, M. J., Tchkonia, T., Kirkland, J. L., & Miller, J. D. (2016). Chronic senolytic treatment alleviates established vasomotor dysfunction in aged or atherosclerotic mice. *Aging Cell, 15*(5), 973–977. https://doi.org/10.1111/acel.12458

Sachs-Ericsson, N. J., Sheffler, J. L., Stanley, I. H., Piazza, J. R., & Preacher, K. J. (2017). When emotional pain becomes physical: Adverse childhood experiences, pain, and the role of mood and anxiety disorders. *Journal of Clinical Psychology, 73*(10), 1403–1428. https://doi.org/10.1002/jclp.22444

Schalinski, I. (2016). Hair cortisol analysis as a marker of past adverse experiences in adult patients with severe mental illness. *Psychoneuroimmunology, 71*(Suppl.), 73. https://doi.org/10.1016/j.psyneuen.2016.07.189

Shelton, D. (2002). Failure of mental health policy-incarcerated children and adolescents. *Pediatric Nursing, 28*(3), 278.

Simpson, A. I., McMaster, J. J., & Cohen, S. N. (2013). Challenges for Canada in meeting the needs of persons with serious mental illness in prison. *Journal of the American Academy of Psychiatry and the Law Online, 41(*4), 501–509.

Stevens, B. (2021). Revisions to the IASP definition of pain: What does this mean for children?. *Paediatric and Neonatal Pain, 3*(3), 101–105. https://doi.org/10.1002/pne2.12047

Stubbs, B., Koyanagi, A., Thompson, T., Veronese, N., Carvalho, A. F., Solomi, M., Mugisha, J., Schofield, P., Cosco, T., Wilson, N., & Vancampfort, D. (2016). The epidemiology of back pain and its relationship with depression, psychosis, anxiety, sleep disturbances, and stress sensitivity: Data from 43 low- and middle-income countries. *General Hospital Psychiatry*, 43, 63–70. https://doi.org/10.1016/j.genhosppsych.2016.09.008

Sykes, G. (1958/2007). *The society of captives: A study of a maximum security prison*. Princeton University Press. (Original work published 1958)

Taddio, A., Katz, J., Ilersich, A. L., & Koren, G. (1997). Effect of neonatal circumcision on pain response during subsequent routine vaccination. *The Lancet, 349*(9052), 599–603. https://doi.org/10.1016/S0140-6736(96)10316-0

Tesarz, J., & Eich, W. (2017). A conceptual framework for "updating the definition of pain". *Pain, 158*(6), 1177–1178. https://doi.org/10.1097/j.pain.0000000000000878

Tomaselli, G., Buttigieg, S. C., Rosano, A., Cassar, M., & Grima, G. (2020). Person-centered care from a relational ethics perspective for the delivery of high quality and safe healthcare: A scoping review. *Frontiers in Public Health*, 8, 44. https://doi.org/10.3389/fpubh.2020.00044

Torrey, E. F., Zdanowicz, M. T., Kennard, A. D., Lamb, H. R., Eslinger, D. F., Biasotti;, M. C., & Fuller, D. A. (2014*). Treatment of persons with mental illness in prisons and jails: A state survey.* https://www.ojp.gov/ncjrs/virtual-library/abstracts/treatment-persons-mental-illness-prisons-and-jails-state-survey

University of Alberta, Faculty of Nursing, Graduate Education Committee. (2022). *Master's and doctoral thesis guidelines (traditional & paper-based).* https://www.ualberta.ca/nursing/media-library/forms/grad/thesis-guidelines-traditional--paper-based_2022-05-04.pdf

Unterwald, E. M., Rubenfeld, J. M., Imai, Y., Wang, J., Uhl, G. R., & Kreek, M. J. (1995). Chronic opioid antagonist administration upregulates mu opioid receptor binding without altering mu opioid receptor mRNA levels. *Molecular Brain Research, 33*(2), 351–355. https://doi.org/10.1016/0169-328X(95)00143-G

Vigo, D., Thornicroft, G., & Atun, R. (2016). Estimating the true global burden of mental illness. *The Lancet. Psychiatry, 3*(2), 171–178. https://doi.org/10.1016/S2215-0366(15)00505-2

Waller, R., Smith, A. J., O'Sullivan, P. B., Slater, H., Sterling, M., & Straker, L. M. (2020). The association of early life stressors with pain sensitivity and pain experience at 22 years. *Pain, 161*(1), 220–229. https://doi.org/10.1097/j.pain.0000000000001704

Walsh, E., Butt, C., Freshwater, D., Dobson, R., Wright, N., Cahill, J., Briggs, M., & Alldred, D. (2014). Managing pain in prison: Staff perspectives. *International Journal of Prisoner Health, 10*(3), 98–208. https://doi.org/10.1108/IJPH-08-2013-0037

Williams, A., & Craig, K. D. (2016). Updating the definition of pain. *Pain, 157*(11), 2420–2423. https://doi.org/10.1097/j.pain.000000000000061

Wolff, N., Huening, J., Shi, J., & Frueh, B. C. (2014). Trauma exposure and posttraumatic stress disorder among incarcerated men. *Journal of Urban Health, 91*(4), 707–719. https://doi.org/10.1007/s11524-014-9871-x

Yoder, J. R., Whitaker, K., & Quinn, C. R. (2017). Perceptions of recidivism among incarcerated youth: The relationship between exposure to childhood trauma, mental health status, and the protective effect of mental health services in juvenile justice settings. *Advances in Social Work, 18*(1), 250–269. https://doi.org/10.18060/21305

You, D. S., & Meagher, M. W. (2016). Childhood adversity and pain sensitization. *Psychosomatic Medicine, 78*(9), 1084–1093. https://doi.org/10.1097/PSY.0000000000000399

Zinger, I. (2016). Human rights and federal corrections: A commentary on a decade of tough on crime policies in Canada. *Canadian Journal of Criminology and Criminal Justice*, *58*(4), 609–627. https://doi.org/10.3138/cjccj.2016.e06

# Chapter 3: Incarcerated Men: Pain Experiences Shaped by Altered Independence and Loss of Autonomy


## Abstract

**Background:** Individuals who experience pain while incarcerated depend on regulations, security structures and processes, and staff for pain-relieving modalities. This dependence produces a unique situation that influences how people experience pain during incarceration.

**Purpose:** The intent of this research is to develop an understanding of the pain experiences of men who are incarcerated.

**Methods:** The author employed ID co-positioned with relational ethics to guide this inquiry. Twelve incarcerated males participated in a single one-hour interview that a nurse practitioner (NP)–researcher conducted. Inductive analysis identified relevant themes.

**Findings:** The participants reported substantial loss in their ability to access pain-relieving medications, products, and services independently. Their dependence on correctional staff, as well as inherent power imbalances, resulted in a situation in which they interpreted 'good care' as feeling respected as a human being. Inversely, the participants perceived the lack of action from healthcare staff as being treated poorly, which contributed to their sense of indignity, disrespect, and injustice. The participants used what was available to them, mainly exercise equipment, to gain autonomy over their pain.

**Discussion:** Nurses must engage with incarcerated patients meaningfully to better understand and respond to the contextual factors that influence their pain experience. The participants identified their dependence on nurses and the resulting power imbalance between nurses and themselves as barriers to access to pain relief.

**Conclusion:** Responsiveness by and engagement with nurses is crucial to altering their patients' perceptions of injustice or helplessness and can improve the pain experiences of men who are incarcerated. Nurses must also focus on fostering pain-management approaches that they can use without limitations within correctional settings. Relational ethics enables nurses to approach patient care holistically to develop fitting responses to preserving the dignity and humanity of men who are incarcerated.

## Incarcerated Men: Pain Experiences Shaped by Altered Independence and Loss of Autonomy

In response to critiques that cognitive and social dimensions of pain experiences were missing from the classic definition, Treede (2018) asked rhetorically, "Can a person alone on a desert island not experience pain?" (p. 2). Treede was questioning whether pain could exist in a vacuum; however, being alone on a desert island is not a vacuum. Rather, the absence of other people and the lack of social structures and services create a complex social dimension that can shape pain experiences. In fact, pain, regardless of where it is, could be life threatening if it interferes with the ability to harvest foods or provide shelter. Thus, feeling pain on a desert island can take on very different meanings than one might expect in other social settings.

Similarly, the feeling of pain during incarceration involves contextual factors that are important to identify and understand so that nurses can provide high-quality pain assessments and design contextually specific pain interventions. Dr. Sykes (1958/2007) described the intent of modern prisons as the isolation of individuals from broader society, which leads to deprivations that he called the "pains of imprisonment" (p. 63). These pains are much different than the pain from nociception. I argue that the pains of imprisonment, the deprivations that Sykes described, might be the very elements that shape the experience of nociceptive pain of people who are incarcerated. For example, deprivation of liberty limits where people can act independently to have their pain assessed and managed. This deprivation of goods and services can limit access to over-the-counter analgesics, pain-easing devices, or other means of reducing pain.

In 2020 the IASP revised its earlier definition and emphasized that pain is a personal experience and different from nociception (Raja et al., 2020). People who are incarcerated

become embodied within the physical and social worlds of correctional settings; hence the perception and meaning of pain within the confined spaces of prisons and jails. From a post-Cartesian perspective, the biological aspects of pain cannot be separated from an individual's social context (Merleau-Ponty, 1945/2012). One mechanism for nurses to improve the pain experiences of people who are incarcerated may be to understand and alter the social environment whenever possible. The aim of this study is to understand how men who are incarcerated experience pain and to develop clinically useful recommendations for nurses who offer care.

**Background Literature**

Although the prevalence of the pain of people who are incarcerated is not well understood, studies have indicated that their prevalence of pain might be higher than that of the general population. For example, in a US randomized trial in which Wang et al. (2012) tested interventions to engage people in primary care after incarceration, they noted that, in a sample of 200 US participants, 48% of the 200 participants reported a history of chronic pain. In a UK prevalence study, Croft and Mayhew (2015) reported chronic noncancer pain in 20% of the prison population and 43% of people who were incarcerated with a known opioid-use disorder. In Canada the prevalence of back pain is unknown; however, in a study of the chronic health conditions of male inmates sentenced to federal institutions, Stewart et al. (2015) explained that 19.7% of the 2,273 respondents reported back pain.

Pain is a personal experience that biopsychosocial factors and past pain experiences shape; it is different from nociception and can cause adverse social and psychological outcomes (Raja et al., 2020). Past traumatic experiences, particularly childhood abuse, leads to the chronic neurobiological dysregulation associated with the development of chronic pain, altered pain

intensity rations, pain catastrophizing, and an increased risk for somatization (Pieritz et al., 2015; Poletti et al., 2016; Sachs-Ericsson et al., 2017; Waller et al., 2020; You & Meagher, 2016). Bodkin et al. (2019), in a meta-analysis of 29 studies, found that the prevalence of childhood abuse was 69% amongst people in Canadian prisons. Mental illness, estimated to occur in 61%-71% of people who are incarcerated (Simpson et al., 2013), can also impact individual pain experiences. This is concerning, because approximately 30% of people with major affective-, anxiety-, and stress-related disorders and up to 80% of people with posttraumatic stress disorder have co-occurring pain disorders (Vigo et al., 2016).

In the prison context, pain has other unique conceptual definitions that are uniquely associated with the punitive nature of incarceration and its specific deprivations (known as the pains of imprisonment) and produces biopsychosocial factors that can also have adverse social and psychological outcomes (Crewe, 2011; Shammas, 2017). I found no research articles in which researchers discretely studied the impact of imprisonment on the pain experiences of incarcerated people.

Although the precise epidemiology of pain amongst people who are incarcerated is not known, indications are that pain, particularly chronic pain, can occur at levels greater than in those of the general population (Wang et al, 2012). People who are incarcerated can have altered pain experiences because of biopsychosocial factors, including a history of childhood abuse and mental illness. This knowledge gap has resulted in a critical need to develop subjective understandings of the pain experiences of people who are incarcerated.

**Methods**

This study is guided by relational ethics (Bergum & Dossetor, 2020) and interpretive description (Thorne, 2016; Thorne et al., 1997) to develop an understanding of the experience of

pain of incarcerated men in forensic settings. ID is congruent with nursing values (Canadian Nurses Association, 2017) and its ontological and epistemological aims (Thorne et al., 1997). It therefore offers an appropriate method to address research questions of interest to the discipline and profession of nursing. Relational ethics provides a unique lens through which to understand patient contexts, however "dark and dangerous" (Austin et al., 2009, p. 884) they are. This does not suggest that I accept or defend hateful, violent, or morally repugnant actions or behaviours; rather, I employed this perspective to develop a holistic and nuanced understanding of the patient situation with the aim of informing ethically responsive clinical care. For these reasons, I co-positioned a relational ethical lens within this ID research project. I considered the inclusion of relational ethics necessary to collect adequate data, ensure an ethically oriented analysis of the data, and develop meaningful clinical recommendations.

### *Ethical Oversight*

I received ethics approvals from the University of Alberta Health Research Ethics Board, Alberta Health Services, and the Correctional Services Division of Alberta. I informed all of the participants of the intent of the study, the limits of confidentiality, and the potential risks and benefits associated with participation. I received written consent from all participants.

**Setting.** I collected data in a remand facility in Alberta, Canada, where the provincial health ministry is mandated to provide health services to people who are incarcerated and operates as a contracted service within correctional institutions. The average daily census for the remand facility is approximately 135 males and fewer than five females. The facility typically has fewer than one or two transgender people at any given time. Nurses (registered nurses, registered psychiatric nurses, and licensed practical nurses), psychologists, a social worker, an addiction counsellor, and a physician provide healthcare services. Nursing staff are available for

16 hours each day (between 7:00 a.m. and 11:00 p.m.). The centre's physician is available to take phone calls from the nursing staff during regular business hours (8:00 a.m.–4:00 p.m.) and sees patients in a four-hour clinic each week. An on-call physician or NP is available for phone consultations when the centre's physician is not available.

When people who are incarcerated need to see health professionals, they complete a health service request (HSR), and a registered nurse performs an assessment and/or a review of the patients' files. The nurse then triages patients and reviews them with a physician or NP over the telephone to determine whom the physician needs to see in person. In an emergency, nurses activate the emergency medical response system for immediate transportation to hospital for evaluation and clinical management. A small infirmary at the remand centre can accommodate five or six people. Staff in this infirmary typically care for people who have fractures, orthopedic devices (e.g., cast or crutches), or sleep-apnea machines. Nurses complete basic interventions in the infirmary, such as the administration of IV fluids, antibiotics, and oxygen, as well as more frequent clinical assessments of people with substance withdrawal, patients who are recovering from recent surgery, or those who have had a recent brain or head injury such as a concussion.

**Sample.** I employed self-selection to generate a list of potential participants from the correctional facility because it allowed potential participants to freely choose to partake in a research study (Sharma, 2017) and thus limited any perceived coercion associated with other recruitment approaches. Using convenience sampling, I selected study participants from the self-identified volunteers (Robinson, 2014). The inclusion criteria were that the participants had to be male, aged 18 to 65 years old, have self-reported acute or chronic pain, and speak English. The exclusion criteria were an acute psychosis or other cognitive impairment at the time of the interview and those deemed to pose a threat to the interviewer, institution staff, or other people

who were incarcerated. Because this facility has few women or transgender people, I excluded from them this study to protect their identities.

**Recruitment.** I posted a study information letter (Appendix A) for nurses and correctional staff in highly visible areas within the correctional centre and recruitment posters (Appendix B) and participant information letters (Appendix C) in the common areas in each housing unit. Potential participants identified themselves to staff in their housing unit, and the staff gave me these names; I then met with the volunteers and screened their eligibility. I enrolled individuals in the study if they met the inclusion criteria and consented to participate; the research interview directly followed screening and enrollment. I offered the participants no honoraria.

**Participants.** I screened 17 volunteers for this study. Two volunteers decided not to participate after I completed the screening because they understood that the purpose of the study was to have their pain assessed and treated. Three volunteers did not meet the inclusion criteria (i.e., two were not experiencing pain, and one was medically unable to participate). I enrolled the remaining 12 volunteers who participated in this study. I pooled all of the data for analysis but made no attempt to analyze the data according to age, comorbidities, or ethnicity. The participants' ages ranged from 20 to 47 years. I assigned pseudonyms to each participant to preserve their anonymity.

### *Data Collection and Analysis*

The data that I collected for this study were comprised of individual interviews about the participants' experience of pain during incarceration. The interviews were 45- to 70-minutes long, and I audio-recorded and later transcribed them. Follow-up interviews were not possible because of the rapid turnover in the institution, during which people are often transferred to other

correctional facilities (other remand centres or sentenced facilities) and/or have unpredictable release dates because of active court proceedings (such as bail hearings, withdrawal of charges, plea deals, etc.).

This is precisely the type of data that are required to guide clinicians and administrators in finding fitting responses to day-to-day practice problems in correctional settings through the use of a relational ethics approach. From a relational ethics perspective (Bergum & Dossetor, 2020), doing what is right means finding an appropriate response within the contextual realities of each situation irrespective of relational harmony or dysfunction. Austin (2008) described a fitting response as one "that is suitable, balanced, and harmonious and that takes into account the immediacy and complexity of the particular situation and our moral responsibility within it" (p. 749). The key elements of relational ethics include mutual respect, engagement, embodied knowledge, attention to the environment, and uncertainty/vulnerability (Austin, 2008; Bergum & Dossetor, 2020).

The participants' interviews included a mix of open and closed-ended questions:

1. Where is your pain? Where else do you have pain?
2. Tell me what your pain feels like.
3. How much pain do you have?
4. When did you first notice your pain? When is it better? Worse?
5. Where did you first notice your pain? What were you doing when the pain started?
6. What other symptoms are you having besides your pain?
7. What makes your pain better? Worse?
8. How has being in jail influenced your pain?

9. How is your pain part of your day-to-day routine? How would your life be different if you had no pain?
10. What do you think about your pain? What worries you the most about your pain?

I used additional prompts to elicit specificity, detail, and depth to explore the participants' pain experiences. After each interview, I recorded my reflections and observations in a journal. I completed the interviews in batches of two or three per site visit and later transcribed them and analyzed the resultant text to identify themes. Data analysis was concurrent with data collection. This enabled me to include additional questions in subsequent interviews to obtain more information about recurring themes. For instance, I noted in the early interviews that the participants seemed to feel less pain when they were confined to their cells. In subsequent interviews I asked them what it was like to have pain in their cells compared to when they were amongst their peers.

My data analysis occurred in three phases: sorting and organizing, making sense of patterns, and transforming patterns into findings (Thorne, 2016). I sorted and organized the data concurrently with the data collection. I then uploaded the transcripts into Quirkos®, a data-management software program, to code preliminary segments of raw data into categories. The initial categories included the type and location of pain; the presence of an addiction; drug diversion; relationship with the environment; relationships with other people who were incarcerated; relationship with healthcare staff, corrections staff, and social supports; their hope for a better life; mental health, frustrations, uncertainty, vulnerability, mutual respect, embodied knowledge, engagement, and attention to the environment. I subsequently merged several codes; for instance, environment and relationship to the environment were identical, and mutual respect

and engagement were better characterized as subthemes in relationships with healthcare staff, correctional staff, and other people who were incarcerated.

Next, I began to make sense of patterns that I observed within the data. I used inductive reasoning first to identify major themes in each interview and then across the entirety of the dataset. I relied on my experience as an NP in correctional health to identify patterns of relevance to correctional nursing practice. Throughout the process, I reflected on the entirety of the data and within the context of relational ethics. This iterative process enabled me to reliably identify clinically relevant and ethically oriented themes. Although some of the patterns fit well into preexisting disciplinary assumptions, I remained open to recognizing and accepting patterns or themes that opposed those assumptions.

Last, I moved into the analytical phase to transform the patterns into findings. I considered how the findings aligned with professional practices and contributed to existing nursing knowledge within correctional settings. I then presented my preliminary findings at an international conference to gauge the potency of a meaningful contribution to the development of clinically useful practice knowledge for nurses who work in correctional settings.

### *Rigour*

I employed Thorne's (2016) approach to ensure rigour through each phase of this research project; specifically, epistemological integrity, representative credibility, analytic logic, and interpretive authority. I used the following strategies:

- Epistemological integrity: Because of the dark relationship between pain and human rights in correctional settings, I considered relational ethics in each phase of the research project design. I describe the defence of this approach elsewhere. Because the aim of the project was to understand the pain experience of people who are

incarcerated, they were the primary sources of data rather than surrogate sources such as nurses or corrections officers.

- Representative credibility: I journaled throughout the data collection and analysis to explore maximal variations within the emerging themes.
- Analytical logic: I wrote memos to track my analytical decision making. In addition, I discussed the findings with my co-investigators and presented the preliminary findings at an international conference.
- Interpretive authority: I used exemplary quotations from the participants to describe the experience of being in pain during incarceration.

## Findings

### *Introducing Participants*

The study dataset was comprised of transcripts of 12 one-hour interviews with people who were currently incarcerated and experiencing pain. All participants were between the ages of 20 and 47 years and reported chronic pain that lasted more than 3 months. Eight attributed their pain to at least one traumatic injury. Ten participants reported addictions to alcohol (1), opioids only (2), methamphetamines only (3), and both methamphetamine and opioids (4). All participants had past histories of incarceration.

In keeping with the intersubjectivity of relational ethics, I briefly introduce the participants in this study below and use pseudonyms.

Scott, a former boxer, had a constant burning pain in his shoulder that started “years ago.” Despite having had many x-rays and medical assessments, he did not understand what caused his pain. He was initially prescribed a strong opioid analgesic for his pain but soon began

to use heroin and then fentanyl. He was in his early 30s and had been in and out of jail for most of his adult life.

William was in his late twenties and had pain in his lower back and teeth. He worked as a labourer but was not able to find employment since he acquired a criminal record. William had an addiction to multiple substances, including fentanyl. He was sober for one year and was able to afford housing and purchase a truck, which he lost during his most recent relapse. He was able to stay out of jail during his sobriety but had had multiple incarcerations.

Marcus was in his early 30s and had a long-standing back injury that required surgical intervention. He also had dental pain and a history of headaches. Before he began to feel pain, he was involved in several violent episodes and continued to struggle with emotional regulation. He had a diagnosis of polysubstance use disorder involving opioids, amphetamines, and other stimulants. At the time of our meeting, he had not used any psychoactive substances for 34 days and wanted to remain sober.

Noah worked as a stuntman during his 20s and 30s, which resulted in numerous broken bones that required surgical repairs. He lived with chronic pain to multiple body parts, including his knees and wrist. Noah attempted to control his pain using relaxation strategies, yoga, and martial arts. He had an addiction to stimulants and reported that opioids were “not his drug of choice.”

Donald was the oldest participant at the age of 47, although he looked older than his stated age. He had had several periods of incarceration throughout his life. As a young man, he was known for his strength and ability to fight. He injured his shoulder playing softball and now had pain that caused him to worry about how he would work as a labourer once he was released. He had an alcohol-use disorder.

Thomas was in his early 20s and had back and shoulder pain as a result of an all-terrain vehicle accident when he was 16 years old. He did not want to take medications because he considered it annoying; he also worried that he would need to say no to friends who might ask him to divert and sell his medication. Despite his pain, he had a fitness routine that included burpees, stretches, and other activities that did not strain his shoulder or back.

Logan was in his late 30s, had longstanding back and neck pain, and needed to stand on several occasions during our interview. He had experienced the loss of family members, homelessness, and relationship strain with his family members. He had difficulty regulating his anger and had been involved in many violent altercations.

Sam was in his early 40s and had pain in his right leg that was a remnant of compartment syndrome over 20 years ago. After his surgery, he was prescribed oxycontin and subsequently developed an opioid-use disorder. He had been on methadone for a long period of time and had multiple relapses but was currently not on methadone. He had been incarcerated for most of his adult life and had served both federal and provincial sentences.

Finn was in his mid-40s and had pain in his pelvis and ankles as a result of fractures several years ago. Finn used substances and preferred opioids and methamphetamine, which he viewed as a coping mechanism. He had been in and out of jail for various lengths of time over the past 20 years. He was very familiar with and skilled at following the rules and upholding the values of jail culture.

Neil was in his early 30s and had back pain. He enjoyed riding dirt bikes and sustained multiple injuries eight years before when he had fallen “over a couple of cliffs” and the bike had landed on him. He was reluctant to seek healthcare and did so only when his wife insisted. He was focused on obtaining a more comfortable mattress and footwear, in the belief that they

would reduce his pain and increase his mobility. He started using crystal methamphetamine at age 13, avoided opioids, and worked in a skilled trade. He had had multiple brief periods of incarceration since his youth.

Dan was 20 years old and had facial pain from a police gunshot during his apprehension. His recent surgery resulted in some disfigurement, swallowing problems, and pain. He had engaged in criminal behaviours and drug use since early adolescence. Dan felt that he had a duty to his friends and others to tell his story to encourage them to change their behaviours to avoid being shot.

Luke was in his late 30s and had been in jail since he was 18. He had dental and lower-back pain and an addiction to crystal methamphetamine. He did not want opioids to treat his pain, but he wanted to know what was happening to his body so that he could continue to work out.

I paid attention to the impacts of co-positioning relational ethics in this ID research study and describe the results by using a narrative format that depicts the patterns and themes therein. The first theme, dependence on staff and institutional processes, describes ways that participants were dependent on staff, institutional processes, and the security culture of the facility. The second theme, dependence on oneself and other people who were incarcerated, focuses on how people who are incarcerated use what is available, including peer relationships, within the correctional setting to alter their own pain experiences.

### *Dependence on Staff and Correctional Processes*

**"Put in a Request."** The participants described the HSR process as very cumbersome and, in some instances, even futile. When Neil attempted to speak directly to a nurse about his need for an analgesic for his back pain, the nurse told him that he would "need to put it on

paper." Luke recalled repeatedly attempting to speak directly to the nurse on his unit. He lamented that the response from the nursing staff was frequently "Put in a request; we'll deal with it then. Put in a request; we'll deal with it then. Put in a request; we'll deal with it then."

Although the HSR process is common to many correctional settings, it can create a barrier to healthcare and negatively affect relationships with nurses and other healthcare providers. Like Neil and Luke, other participants reported that, in addition to submitting a written HSR, they attempted to talk directly to healthcare staff. Thomas remarked that, to get help, "You always need to be on it," which for him meant using different mechanisms to check on the status of his request. The participants often interpreted the actual or perceived inaction of the healthcare team as being ignored. Sam felt deflated when he described his experience of seeking an appointment with a physician to talk about his pain: "I put in requests to talk to the doctor about pain management, and I didn't even get the request back." Most of the participants appreciated having their requests acknowledged in a timely manner because, as Noah noted, "You know where you stand." Scott remarked, "It's almost like it is like 'fucking screw you,' you know? You're a criminal. . . . You don't deserve proper whatever, like, treatment." For others, like Finn, the process seemed hopeless, and when they did not receive an immediate response, they gave up. Describing his ankle pain, Markus said, "I've only addressed it [i.e., submitted an HSR] once this time, and they said no, so I just left it. Fuck it. I'm not gonna whine and beg, and you know what I mean? I'll grit my teeth."

"***Never Are You Able to Do Anything, Which on Its Own Is Torture.***" Scott stated that correctional staff were "not creating the pain, but they're creating the atmosphere of not being able to do anything about it." He noted that when he is incarcerated he was unable to manage his pain independently by going to a pharmacy, hospital, or emergency department,

which he did when he was in the community: “There is always something you can do.” In contrast, in a correctional setting, “you are locked in your cell and do nothing.” He further lamented, “Never are you able to do anything, which on its own is torture.”

Finn described his dental pain at night when no nurse was on duty: “If you push a call button and be like, ‘Hey, boss, can you bring me some medication?’ they won't. You're fucked all night.” Marcus also had dental pain and recounted his experience of having to wait until 7:00 a.m. when he was able to leave his room. He stated, “I can't deal with this pain. It's horrible. It's horrible. I'm getting dental pain, and there's nothing I can do about it.” If he had not been incarcerated, Marcus would have gone “to the store and grab[bed] something like Orajel® or something and just numb it instantly. . . . But they said they don't do that here anymore.” All of the participants reported that feeling pain when no nurses were available engendered a sense of helplessness and injustice.

Noah also expressed frustration at being in pain during the night and knowing that there was nothing that he could do to relieve it. Although the situation was a result of the unavailability of healthcare services at night, he was tormented knowing that the correctional officer “right outside the door is somebody that has the means of getting rid of that sort of pain. And they just leave somebody in that pain.” Corrections officers, however, are precluded by policy from providing any form of analgesia, whether it is prescribed or over the counter. Like others, Scott stated, “It's not even like you have an option. I've even pressed the button and asked for a nurse or something ’cause it was so bad, and [the correctional officers] are just like, ‘Wait till the morning, right?’ and ‘See the nurse in the morning.’” Noah was resigned to “not being able to do anything about it [the pain]. You just accept the fact that you can't do anything.”

A few participants interpreted their inability to get help during the night as a social injustice. Noah recalled a situation when "nobody would do anything about" the pain that his cellmate was experiencing, despite his having "pushed on that button probably eight or ten times." Rather than coming to his aid, the officers became frustrated with the cellmate's requests, and "after the third time, they're yelling at him, or they're threatening to lock him up for twenty-four hours if he buzzed again." Noah contended, "That's not right."

These comments stand in contrast to those of other participants who understood the policy structures of the institution and recognized the limits of what nurses and officers can do. For instance, Finn observed, "Some guys . . . just can't clue into that. . . . Anybody that's gonna threaten a nurse or an officer over pain meds where they can't give 'em to you anyway, it's not right."

***"Though We Are Criminals, We Are Still Human."*** William opined that because correctional officers and nurses "look at us like criminals, they don't help us with the pain." He further remarked, "They don't treat us with enough compassion to actually get the proper medication or help we need. . . . Even though we are criminals, we are still humans." Similarly, Sam stated:

> They don't care if you suffer, and that's— . . . how the fuck is— . . . that's inhumane, man, you know what I mean? I feel bad if I get into a fight and hurt somebody, so, you know, I don't understand why they don't understand when we're hurt, you know, and constantly in hurt. Doesn't make sense to me, and it just makes me angry, makes me hate them, you know?

Neil described a positive exchange with a healthcare provider, after which he felt "good, . . . like he [the healthcare worker] cared, right? And that, I think, makes all the difference in the world. You know, treat you like a human; treat you like a person." Luke had had positive experiences with three "excellent nurses" and noted that they "care about us as people; they treat us as people, normal people, . . . instead of convicts or people who do crime." Like Luke, Noah

was grateful for nursing staff who promptly assessed and treated his wrist pain. For Noah, it was "little things like that, right? Hey, we've screwed up; we're in here for a reason. Some of us are idiots, . . . but we're not second-rate humans or anything. So I respect that, I really do."

***"If You Don't Have Proof, . . . They Don't Believe You."*** The relationship between healthcare staff and people who are incarcerated is often fraught with distrust and suspicion. People who are incarcerated are acutely aware that healthcare staff will question and closely monitor their behaviour with regard to analgesic use. As Logan noted, "If you get too many Tylenols in a row, they'll cut you off for substance abuse." This meant that "you gotta skip a couple days just so you don't appear to be abusing your drugs" which could lead to labelling "as a drug addict." He warned, "You got to be careful. You gotta walk that line." Candidly, Finn noted, "We're criminals, and you can't— . . . there's limits to how you can trust us, right? There's [also] limits in how much you can trust officers and nursing staff." This quotation is representative of how people who are incarcerated generally view nurse-patient and officer-patient relationships.

William hoped to start taking a long-acting opioid agonist (methadone or suboxone) to manage his co-occurring pain and addiction. To do that, he would need to prove that he had used opioids in the community "to make sure you're not faking it." The timing was crucial for William because he worried that the substances that he used in the community would not be detectable in his urine drug screens after a week had elapsed. William, like all other participants, knew that he needed empirical evidence to support the veracity of his self-reported pain.

As Finn stated, "If you don't have some proof, you know, in x-rays or medical history or something, of your pain, they don't believe you. They're probably thinking 'He's lying to me.'" Asked if he believed that the nurses trusted him, Finn responded, "For the most part, yeah. But

they know I'm a criminal too." Luke observed that unit officers sometimes noticed the pain that incarcerated people felt and alerted the nurses. He interpreted this as nurses and correctional officers working together to provide additional evidence to be able to say, "Hey, this guy's legit."

All of the participants acknowledged that nurses who work in correctional settings have a challenging job. Marcus noted, "Some guys are fucking jerks in here; you know what I mean? It can make a person feel uncomfortable." He believed that this influences whether nurses respond to patient requests or not. Some participants contended that face-to-face interactions are important so that the nurses become familiar with them as persons and establish trust within the nurse-patient relationship. Most of the participants suggested that one reason to speak with nurses directly is that it affords the nurses an opportunity to assess the veracity of an HSR. Finn remarked that, because he had seldom asked for medications in his 20-year history of being in and out jail, nurses could trust him. He further elaborated, "They're not gonna, you know, trust me with their bank card. I'm thinking they're gonna trust me for what I say what's wrong with me."

### *Depending on Oneself and Other People Who Are Incarcerated*

**"In Pain by Myself, I [Would] Have to Sit There and Think About Every Moment of It."** Dan's injuries originated with a recent gunshot wound, the scar from which was visible to others. He described being on a unit "with all my friends, with very close friends," many of whom he grew up with and with whom he had been "through the same stuff our whole lives." The presence of Dan's close social supports in prison distracted him which enabled him to escape his pain. Without his friends, Dan believed that he would be "in pain by myself. I [would] have to sit there and think about every moment of it. I [would] have to feel every moment of it."

Like Dan, Neil believed that he had no significant threats to his personal safety and that the "worst thing for my type of pain is just, like, to go and sit in a corner by myself or whatever. The best thing for me is just to be up and walking around." According to about half of the participants, peer relationships provided some degree of distraction from their pain.

The participants who felt threated amongst their peers tended to be hypervigilant about their safety and to feel more relaxed within the protected confines of their cells. For example, William reported, "Sometimes it [the pain] goes up and down because my mind will be focusing on something else [e.g., identifying threats to personal safety], so I won't feel it as much." Although this was a temporary distraction from his pain, William's hypervigilance r could be exhausting, and he noted, "I feel more confined or comfortable in my cell than I do when I'm out in the group. . . . You're always wondering, 'Hey, is somebody gonna come swinging from behind?'" Although being locked in a cell is confining, it offers some protection and can be considered the lesser of two evils. A cell with a roommate whom William trusted was a "comfort zone," and he could "sit there, chill, and talk." However, as Logan said, "All you really get is your comfort zone, . . . and that depends on who you're in there [the cell] with."

**"We're Not Animals; We're Still Gonna Help Each Other Out."** Finn described his participation in drug diversion to obtain nonnarcotic acetaminophen and ibuprofen to relieve his pain symptoms. For most participants, this enabled them to demonstrate civility toward other people who were incarcerated. Finn remarked that he "could get ten guys to go up to the bubble [the officer's station to request as-needed medication from the nurse] and ask for Tylenol or Motrin and bring them back" to him. He further elaborated, "The extra couple of pills is a hell of a lot when a guy needs it and he can't get it himself." This is evidence that people who are incarcerated use their immediate social environments to aid one another. As Finn explained,

"Just 'cause we're in jail, we're not animals; we're still gonna help each other out." Although most of the participants indicated that they would help peers in this way, the diversion of specific medications, particularly those that treat pain and have psychoactive properties, was contextually different.

Some participants were uncertain whether they would accept a prescription for a narcotic or highly sought-after analgesic agent the nursing staff offered it. Finn questioned whether he "would take 'gabbies' [slang term for *gabapentin*], because everyone will want to try to buy them." He explained that having to say no to a peer who is asking for one's medication complicates prison relations. Thomas also noted, "There is always that one person that wants to try to get high off them, . . . and it's just annoying 'cause it's your friend." William believed that nurses are legally precluded from giving "that stuff in jail because . . . people will ask for it just so they can get high."

Other participants described their resent of those who obtained prescriptions for psychoactive substances under false pretenses. They then consumed these substances for personal use, sold them for profit, or traded them for food or other canteen items. As William related, "People that are actually feeling the pain and the sickness . . . don't get what they're required because people are trying to abuse it in jail." Other participants agreed that this contributed to nurses' and the staff's inability to differentiate between requests for an analgesic and requests for drugs for illicit purposes. Sam suggested that nurses and physicians should receive additional training to identify more accurately those with "legitimate pain" from those who are "taking nurses for a ride."

**"Doing What You Can With What You Have."** Scott felt alone and frustrated by his inability to access pain-relieving medication or equipment independently. However, like most of

the other participants, he searched for other mechanisms to cope with pain during periods of incarceration. Donald, like Scott, had a shoulder injury and stated, “Yes, there is pain, but a lot of it can be controlled with the mind.” A few of the participants reported that martial arts helped them to control their bodies’ experience of pain. For example, Scott tried to “be active . . . and have more access to the gym, more access to the, you know, weight pit and all that kind of stuff.” Marcus stated that “walking around and trying to shake it off” and taking part in yoga sessions relieved his pain symptoms.

Logan was initially unsure of what he could do to improve his pain symptoms during incarceration. He had received some teaching from the healthcare staff about stretches and other exercises to manage his pain. The health teaching made him feel certain that he was not “doing things to cause myself further harm.” More than half of the participants were cautious not to exacerbate their pain. As Logan explained, if he was “not one hundred percent sure” that something was safe, he “avoid[ed] it.” Logan and some of his peers had limited knowledge about what was happening in their bodies and about rehabilitation approaches that they could use to reduce their pain. For example, Scott reported that he did not “know what's wrong with it or what I'm supposed to do.” Furthermore, “They took x-rays; they said there's something wrong with it. They never really told me what was wrong with it.” He conceded that he was limited in knowing what to do to “make it better or to try not to make it worse,” because he had “no clue.”

Peers often offered guidance and suggested exercise activities to help others to remain active and resolve their pain. Self-care activities are some of the few actions that people who are incarcerated can do to reduce their pain. For these participants, the cell became their gym, and their cellmates became their exercise partners. As Thomas stated, “We do anything that we can really do in our cell.”

People who are incarcerated rely primarily on each other to learn various exercises and activities that impacted their experience of pain. Although peer suggestions on exercises to try, such as martial arts, yoga, or specific weightlifting exercises, might have a positive effect, I noted that some beliefs regarding rehabilitation can cause harm. For instance, Thomas routinely advised other incarcerated people to "not be afraid to work that area. And, if it does hurt, just push through it; and slowly you'll just start to get stronger in that area." Thomas's advice could have been dangerous, because he noted that "running through the pain" when he had a spinal compression fracture made his back pain worse. Although this is the only example of potentially dangerous self-rehabilitation advice in the data that I collected, it is a potent reminder of the consequences of receiving rehabilitation advice from people who do not have appropriate education and/or training in this area.

## *Discussion*

This aim of this research was to understand men's experience of pain during incarceration to inform correctional nursing practice. The study findings show that the pain of men who are incarcerated is related to an altered level of independence and the loss of autonomy in certain situations. This informs the clinical decision making of correctional healthcare staff who have a subjective understanding of men's experience of pain during incarceration. The core themes, depending on correctional processes and power and distrust in the nurse-patient relationship are used to guide this discussion section.

### Depending on Correctional Processes.

It was not lost on the participants that nurses controlled the assessment and management of their pain. Most talked about other interactions with nurses, such as during medication-administration times, to ask about upcoming appointments, updated clinical information,

prescribers' decision making, and the assurance that their health requests were not forgotten. The correctional nurses became both facilitators and agents of healthcare and, simultaneously, barriers to healthcare.

In this study the nurses had more direct interactions with the men who were incarcerated than they did with other healthcare professionals. Although institutional policies might permit nurses to dispense pain medication such as acetaminophen or ibuprofen for a short time and for certain conditions, access to diagnostic tests, rehabilitative therapy, orthotic devices and splints, and prescription pharmacotherapeutics is available only through an NP or physician (College & Association of Registered Nurses of Alberta, 2020). The current facility has a limited number of weekly in-person appointments to see the centre NP or physician. However, nurses often review patient situations with the NP or physician, make recommendations, and then relay the outcomes of their interactions to the patients. Thus, not only do nurses become relational conduits between patients who are incarcerated and healthcare providers, but both patients and providers also heavily rely upon them for accurate health history and physical-examination data. Despite the contextual power of correctional nurses, their points of view on how pain management should unfold can become silenced and their power impotent when they face the higher degree of power and authority of NPs and physicians. This can be a tenuous space potentially fraught with everyday practice dilemmas that influences nurses' experiences of moral distress (Austin et al., 2005).

The tension between custody and care is often a problem that healthcare professionals encounter in correctional settings (Dhaliwal & Hirst, 2016; Peternelj-Taylor, 1999; Willmott, 1997). However, the findings remind us that care priorities are also prescribed in the roles of correctional officers, including ensuring access to nutrition, exercise, hygiene, and personal

safety. Several participants suggested that officers also play a significant role in legitimizing the pain of people who are incarcerated and in helping incarcerated people to access pain relief when nurses are absent. However, institutional policy prevents officers from dispensing non-narcotic pain analgesics which accentuate the perceived punitive nature of correctional personnel and introduce distrust and suspicion into the relationships between correctional officers and incarcerated people. The environmental realities of prison structures create situations in which people who are incarcerated and in pain might perceive correctional officers as uncompassionate and unwilling to respond to their distress and interpret it as their failure to recognize and respond appropriately to the humanity of people who are incarcerated. However, I also recognize that correctional officers might do nothing because, like nurses, they are not permitted to do anything.

A sense of helplessness, particularly in the attempt to manage pain during the night, is a prevalent theme in my research. The participants also acutely realized that incarceration restricts how they may manage their own pain, which imbued an additional sense of helplessness amongst participants. The participants who did not know the cause of their pain lamented that, despite having undergone tests and physical examinations, they simply had not received adequate education to understand their symptoms and related physical limitations. This uncertainty held them back from engaging in rehabilitative exercises if they were not certain that it was safe to do. Further, access to a pharmacy or a healthcare provider (such as hospital or ER) was limited, and so too was their ability to access over-the-counter or prescription medications. In addition to the feeling of helplessness, this situation engendered a sense of injustice.

***Depending on Correctional Processes and Pain.*** The deprivation of liberty and access to goods and services can contribute to a sense of helplessness, lead to rumination and an

increase in perceived injustice. Helplessness and rumination are two of three dimensions of pain catastrophizing, the other of which is magnification (Sullivan et al., 1995). Perceived injustice is a multidimensional construct in which the focus of pain is on the severity of loss, irreparability of loss, blame, and sense of unfairness (Sullivan et al., 2008).

Pain catastrophizing accounts for approximately 7% to 30% of variance in pain rating scores across a variety of acute and chronic pain subtypes (Sullivan et al., 2001). The reduction of helplessness reduces pain catastrophizing as well as pain-related disability and improves pain scores and physical health outcomes (Quartana et al., 2009; Suso-Ribera et al., 2017). Higher levels of pain catastrophizing are also associated with increased pain interference, cravings, anxiety symptoms, and mood alterations in adults with concurrent chronic pain and addiction (Kneeland et al., 2019). Severe perceived injustice is associated with poorer clinical outcomes, is a predisposing factor for PTSD, and can contribute to malingering (Margiotta et al., 2017). Anger could thus be an important factor to observe during the clinical examination of patients who have pain because it mediates "the relationship between perceived injustice and pain intensity, depressive symptoms, and disability" (Scott et al., 2013 p. 1691). Further, mediated by pain behaviors, the association between perceived injustice and the overprescription of opioids is strong (Carriere et al., 2017).

It is therefore plausible that alterations to the structural and/or organizational processes of the correctional setting mitigates the factors that negatively influence the overall pain experience of people who are incarcerated. In part because of the multidimensional nature of pain, multidisciplinary pain teams in a variety of settings have successfully improved overall pain-related patient outcomes. A multidisciplinary approach to pain management relies on cognitive behavioural therapy and integrates rehabilitation. Several researchers have indicated that patients

involved in such multidisciplinary pain programs are more likely to have improved sleep and depression scores, less pain intensity, improved quality of life, and decreased pain catastrophizing (Miró et al., 2018; Pagé et al., 2017). This approach addresses pain intensity to some degree; but, more important, it targets the consequential effects of pain (Wilson, 2017). Most of the pain that I encountered in the prison setting was chronic in nature.

Given the pain-management restrictions of people who are incarcerated and the impact of pain on their perceptions of helplessness and injustice, it is important to detect and understand subsequent pain symptoms within these frameworks. Multidisciplinary pain-management teams in correctional settings can be an effective influence on the pain that people who are incarcerated experience. It might also be reasonable for some patients to keep their own supply of analgesic medication during the night. How to act optimally in such situations depends on the whole of each individual patient's situation to develop practical, safe, and morally fitting interventions.

This research study has demonstrated that men who are incarcerated attempt to regain autonomy over their pain management wherever possible. Exercise can serve as a mechanism to improve pain through rehabilitation while it fosters effective peer relationships that also distract from pain. Further, simply being with peers during incarceration can also have a cathartic and humanizing effect. Nurses should continue to encourage positive peer relationships amongst people who are incarcerated by providing them with individual and group education to better understand their pain symptoms and demonstrate safer rehabilitation approaches.

### Trust and Power in the Nurse-Patient Relationship.

***Recognizing and Mitigating Nurses' Power.*** The men who were incarcerated during this study acknowledged that they were not only criminals, but also humans who deserved compassionate healthcare. This finding highlights the power imbalances between people who are

incarcerated and nurses and other correctional personnel. Nurses and other healthcare professionals are obliged to provide healthcare to people regardless of location or circumstance (Canadian Nurses Association, 2017). As Austin et al. (2009) remarked, in forensic settings distrust and suspicion of one another occur at the outset of the nurse-patient relationship. In the correctional setting, nurses have immense power over their patients and determine all facets of their care, including access to healthcare services, medications, and orthopedic and medical devices. This power imbalance is so severe that, to avoid potential ethical pitfalls, nurses must continuously be aware of how this inequality impacts their clinical decision making and be intentional in deconstructing this power imbalance within the nurse-patient relationship. Recognizing and taking steps to mitigate power imbalances is a core principle that overarches each element of relational ethics (Bergum & Dossetor, 2020). Rapprochement and engaged interactions enable nurses to recognize and attempt to mitigate this power imbalance.

***Rapprochement and Engaged Interactions.*** Most of the participants in this study described a "good" nurse as someone who provides care and treats others humanely. Poor nursing practice, from the viewpoint of the participants, involves care that lacks compassion, the recognition of suffering, or the ability to consider the human beneath the criminal label. Compassion and attention to human suffering are constitutive components of nursing and the basis of ethical nursing practice (Canadian Nurses Association, 2017). It is antithetical to good nursing practice to devalue, whether intentionally or not, the human character of patients. Nurses demonstrate good nursing care, from the participants' perspectives, in their day-to-day interactions with their patients. Given the conflations between pain, suffering, and incarceration, engaging patients in clinically meaningful ways becomes paramount in fostering a sense of humanity amongst those who are incarcerated. Thus, it is imperative that correctional health

nurses engage in nursing care that recognizes the humanity of people who are incarcerated and experiencing pain.

Ethics researchers Carnevale et al. (2017) examined the application of a relational ethics approach to pediatric populations with complex care needs. They "emphasize that the moral dimension should be viewed as processual; continually ongoing and mediated through relationships" (p. 280). This approach also holds true for nurses who address the pain management of patients in correctional settings, given the significant relational complexity in the forensic environment. Correctional nurses are well equipped to use the required communication skills to enter and maintain relational dialogues with patients who feel pain during their incarceration. For this rapprochement, correctional nurses must move beyond "episodic decision-making" (p. 280) and move toward ongoing clinical engagement and follow-up.

Despite many attempts to engage with nurses by using alternate techniques, the participants reported that most nurses redirected their verbal requests to the HSR process. Although this process serves the health system well from an organizational perspective and includes documentation of patients' requests and associated actions, it is also impersonal and creates a relational distance between nurses and their patients. From a relational ethics perspective, the HSR process transfers clinical-engagement responsibilities from nurses to their patients. This is not equivalent to patients' booking appointments to see healthcare providers in community settings, because the HSR process does not guarantee an appointment to see nurses or other healthcare providers, and some of the participants contended that their requests were ignored. As a result, most of the participants used multiple approaches to communicate their healthcare needs to nurses, including speaking directly to them when they were physically present for other purposes such as dispensing medications. In many respects, these multiple

attempts at pain management can be interpreted as desperation to seek pain relief and validation as a human being. The clinical disengagement of nurses in any setting is unethical because it limits clinicians' understanding of patient situations and influences patients' health outcomes. Patients' disengagement impacts their willingness to request health services for pain and other problems, including urgent attention to prevent the serious health outcomes that arise from infections or malignancies.

Moreover, as Austin (2001) pointed out, preemptive distrust marks relationships in correctional settings. However, strong therapeutic relationships between patients and providers are important to improve clinical outcomes, including pain management. For instance, Walsh et al. (2019) found that patient-rated satisfaction and physicians' empathy in a pain clinic improve clinical outcomes, strengthen the adherence to treatment plans, increase patients' engagement, and result in fewer complaints and lawsuits. Adaptive coping responses for people with chronic pain improve within the context of strong therapeutic relationships. Within these relationships patients can better understand their pain symptoms, feel validated and valued, and overcome pain-related hopelessness (Chou et al., 2018; Náfrádi et al., 2018). Losin et al. (2017) further suggested that enhancing patients' feeling of similarity and trust within therapeutic relationships can reduce the intensity of pain.

***Navigating Distrust.*** Creating and maintaining therapeutic relationships is often difficult; it can be especially challenging to cultivate and maintain them in correctional healthcare settings. Each participant highlighted the relational challenges and practice difficulties that correctional nurses encounter. These relational challenges, however, are more than threats of harm or injury to nurses; they also include the understanding that nurses fall prey to the lies and manipulation of people who are incarcerated and feign pain symptoms to ensure that they will be

prescribed psychoactive substances for personal use or secondary gain through drug diversion. Most participants in this study resented peers who feigned pain for secondary gain because it often made it difficult to convince nurses and other healthcare providers that their symptoms were in fact real.

As a simple solution, most of the participants suggested that nurses and other healthcare professionals receive some type of additional training to reliably identify people who have pain and ensure the prescription of proper treatment. The challenge, however, is that pain is a subjective experience, which makes it difficult to assess and measure, and it relies mainly on the accuracy of patients' self-reporting. Although self-reported validity tests and performance validity tests reliably detect malingering, they are less effective in detecting fabricated pain symptoms (Boskovic et al., 2017; Nicholson & Martelli, 2007). Akca et al. (2020) used a verifiability approach and a self-report symptoms inventory to distinguish the veracity of pain reports from people who malinger, exaggerate, or are truthful. The results indicate that untruthful reports are generally lengthier; however, it is not possible to develop a conclusive or predictive model without further research.

The participants explained that some people feign pain symptoms to obtain a psychoactive substance for personal use (either for occasional use or as part of an addiction), receive economic gain, or purchase food and other canteen items. The additional tension for the participants was that each had his own personal history of addiction and feared that it could result in nurses' unwillingness to believe their pain reports. Addictions and pain during periods of incarceration add a layer of complexity, and people who are incarcerated sometimes go to great lengths to prove the legitimacy of their pain symptoms. For people who are incarcerated and have pain, especially in the presence of an addiction, the preemptive distrust from healthcare

and correctional staff creates an environment in which proof of disease and/or injury becomes currency to legitimize their pain symptoms. These situations demonstrate an inverse role responsibility in which patients feel obliged to demonstrate actively that nurses can trust their pain reports. Although researchers have acknowledged and accepted that developing therapeutic relationships with people who are incarcerated is challenging, the power imbalance that favours nurses places the onus on them to work actively to build trust within the nurse-patient relationship. Nurses must not rely on their own intuition about patients' trustworthiness, nor should they merely accept patients' reports as truthful when they assess pain. Rather, nurses must understand patients' situations to develop a nuanced grasp of their motivations and behaviours. Thus, they should approach patients who feel pain with genuine openness and fully engage with them to better understand their vulnerabilities (i.e., addiction, enduring pain) and uncertainties (i.e., about whether the staff will believe their pain or how they will receive pain relief). Understanding these contextual factors will provide nurses with patient-specific knowledge that contributes to greater mutual respect between nurses and patients and possibly uncovers potential opportunities to advance patient care in a more meaningful way.

According to the findings of this study, an approach that nurses can use to open a relational dialogue with patients is to pose questions such as "Some people who have pain when they are incarcerated really worry that their drug addiction will impact their nursing care. What are your thoughts on this?" This question signifies to patients that nurses are open to discussions about their pain within the context of addiction. It is certainly possible that if addiction is the reason that they feign pain symptoms, then uncovering and treating addiction brings meaning to the nurse-patient relationship that began with a lie. Numerical pain-rating measures and standardised symptom-analysis questioning, though clinically useful in establishing a diagnosis,

are largely insufficient to elicit adequate information to fully understand patients' situations. However, such questions can be a starting point for further questioning to gain a deeper understanding of patients' situations. For example, the typical "score your pain from 0 to 10, 0 being *no pain at all* and 10 being *the worse pain in your life*" prompts patients to produce a score, a number. However, this score alone often fails to provide any details of why a person selected a number, nor does it explain the personal significance of a pain score that is numerically reported. Subsequent questioning such as "How does a pain score of X affect how you live on your current unit?" or "What types of treatments have you received in the past that were effective for a pain score of six?" have the capacity for nurses' stronger clinical recognition of patients' circumstances.

**Limitations**

This study offers preliminary insights into men's experience of pain during incarceration. Although the findings are useful to guide decision making in nursing practice, they certainly do not represent the myriad ways that people experience pain during incarceration. In addition, it was necessary in this study to co-position relational ethics in each phase of this research project. This means that the study outcomes are limited and that it is important to understand them from a relational ethics perspective. Specifically, the outcomes of this research are tentative, situated within the relational complexities of people who feel pain during periods of incarceration, and oriented toward sound moral decision making.

The generalizability of this qualitative study is limited. First, in this research project I studied only men's experiences of pain during periods of incarceration. Additional study is required to understand other genders' experience of pain during incarceration. Second, the participants included only people who were incarcerated in a Canadian provincial correctional

facility, who might differ from people who are serving sentences of more than two years or are in other jurisdictions. Although I collected sufficient data for the purposes of this research project, the sample size was 12 participants. A larger study that included a more diverse population might yield additional clinical recommendations.

**Conclusion**

The study findings include suggestions for nurses to foster the development of robust and clinically useful therapeutic relationships with people who are incarcerated to gain a better appreciation of their pain as a human experience. In this research project I co-positioned relational ethics with an ID research approach, which produced tentative truth claims to inform ethical clinical decision making within the subjectivity of the pain that people who are incarcerated experience. These outcomes promote clarity and guidance in correctional nurses' development of clinical relationships with patients, meaningful pain interventions, and reconceptualization of how to approach the care of people who are incarcerated and report pain symptoms. These findings also offer nurses insights into the subjective pain experiences of people who are incarcerated and suggest patient-specific interventions.

Fundamental to ethical nursing practice is the view of patients as human beings who are equal participants. Although well intended and organizationally convenient, processes such as the submission of HSRs create a relational distance between nurses and their patients in correctional settings and often preclude clinical engagement. Without this engagement, nurses are unable to understand the important and necessary contextual factors to develop respectful and therapeutically meaningful relationships that facilitate the conceptualization and enactment of care decisions. Within the complexities of correctional practice, nurses must engage with patients and have the time and space in their workloads to do so. Nurses hold significant power in the

nurse-patient relationship that they must understand to mitigate the effects of such power differentials.

Further, I recommend that nurses take responsibility for improving pain education, both specifically to individual patients and at the population level. At the individual level, nurses should educate patients on the etiology of their pain as well as any risks for further pain-related complications and potential injuries. At the population level, nurses should develop peer- and professional-led pain-rehabilitation exercises, common pain-education programs, and initiatives that promote pain-related self-care approaches to enhance patient autonomy in correctional settings.

## References

Akca, Y. E., Slootmaekers, L., & Boskovic, I. (2020). Verifiability and symptom endorsement in genuine, exaggerated, and malingered pain. *Psychological Injury and Law*, *13*(3), 235–245. https://doi.org/10.1007/s12207-020-09375-w

Austin, W. (2001). Relational ethics in forensic psychiatric settings. *Journal of Psychosocial Nursing and Mental Health Services*, *39*(9), 12–17. https://doi.org/10.3928/0279-3695-20010901-04

Austin, W. (2008). Relational ethics. In L. M. Given (Ed.), *The SAGE encyclopedia of qualitative research methods* (pp. 749-749). Sage. https://www-doi-org.login.ezproxy.library.ualberta.ca/10.4135/9781412963909.n378

Austin, W., Goble, E., & Kelecevic, J. (2009). The ethics of forensic psychiatry: Moving beyond principles to a relational ethics approach. *Journal of Forensic Psychiatry & Psychology*, *20*(6), 835–850. https://doi.org/10.1080/14789940903174147

Austin, W., Lemermeyer, G., Goldberg, L., Bergum, V., & Johnson, M. S. (2005). Moral distress in healthcare practice: The situation of nurses. *HEC Forum, 17*(1), 33–48.

Bergum, V., & Dossetor, J. B. (2020). *Relational ethics: The full meaning of respect*. University Publishing Group.

Bodkin, C., Pivnick, L., Bondy, S. J., Ziegler, C., Martin, R. E., Jernigan, C., & Kouyoumdjian, F. (2019). History of childhood abuse in populations incarcerated in Canada: A systematic review and meta-analysis. *American Journal of Public Health, 109*(3), e1–e11. https://doi.org/10.2105/AJPH.2018.304855

Boskovic, I., Bogaard, G., Merckelbach, H., Vrij, A., & Hope, L. (2017). The verifiability approach to detection of malingered physical symptoms. *Psychology, Crime & Law*, *23*(8), 717–729. https://doi.org/10.1080/1068316X.2017.1302585

Canadian Nurses Association, (2017). *The code of ethics for registered nurses*. https://www.crns.ca/wp-content/uploads/2018/11/Code-of-Ethics-2017-Edition.pdf.

Carnevale, F. A., Teachman, G., & Bogossian, A. (2017). A relational ethics framework for advancing practice with children with complex health care needs and their parents. *Comprehensive Child and Adolescent Nursing*, *40*(4), 268–284. https://doi.org/10.1080/24694193.2017.1373162

Carriere, J., Martel, M. O., Kao, M.-C., Sullivan, M., & Darnall, B. (2017). Pain behavior mediates the relationship between perceived injustice and opioid prescription for chronic pain: A collaborative health outcomes information registry study. *Journal of Pain Research*, *10*, 557–566. https://doi.org/10.2147/jpr.s128184

Chou, L., Ranger, T. A., Peiris, W., Cicuttini, F. M., Urquhart, D. M., Sullivan, K., Seneviwickrama, M., Briggs, A. M., & Wluka, A. E. (2018). Patients' perceived needs for medical services for non-specific low back pain: A systematic scoping review. *PLOS ONE*, *13*(11). https://doi.org/10.1371/journal.pone.0204885

College and Association of Registered Nurses of Alberta. (2020). *Medication administration standards*. https://nurses.ab.ca/docs/default-source/document-library/standards/medication-management-standards.pdf?sfvrsn=4265098d_12

Crewe, B. (2011). Depth, weight, tightness: Revisiting the pains of imprisonment. *Punishment & Society*, *13*(5), 509–529. https://doi.org/10.1177/1462474511422172

Croft, M., & Mayhew, R. (2015). Prevalence of chronic non-cancer pain in a UK prison environment. *British Journal of Pain, 9*(2), 96–108. https://doi.org/10.1177/2049463714540895

Dhaliwal, K., & Hirst, S. (2016). Caring in correctional nursing. *Journal of Forensic Nursing*, *12*(1), 5–12. https://doi.org/10.1097/jfn.0000000000000097

International Association for the Study of Pain. (2020). *IASP announces revised definition of pain*. https://www.iasp-pain.org/PublicationsNews/NewsDetail.aspx?ItemNumber=10475

Kneeland, E. T., Griffin, M. L., Taghian, N., Weiss, R. D., & McHugh, R. K. (2019). Associations between pain catastrophizing and clinical characteristics in adults with substance use disorders and co-occurring chronic pain. *The American Journal of Drug and Alcohol Abuse*, *45*(5), 488–494. https://doi.org/10.1080/00952990.2019.1581793

Losin, E. A., Anderson, S. R., & Wager, T. D. (2017). Feelings of clinician-patient similarity and trust influence pain: Evidence from simulated clinical interactions. *The Journal of Pain*, *18*(7), 787–799. https://doi.org/10.1016/j.jpain.2017.02.428

Margiotta, F., Hannigan, A., Imran, A., & Harmon, D. C. (2017). Pain, perceived injustice, and pain catastrophizing in chronic pain patients in Ireland. *Pain Practice*, *17*(5), 663–668. https://doi.org/10.1111/papr.12501

Merleau-Ponty, M. (2012). *Phenomenology of perception* (D. Landes, Trans.). Routledge. (Original work published 1945)

Merskey, H. (2007). The taxonomy of pain. *Medical Clinics, 91*(1), 13–20. https://doi.org/10.1016/j.mcna.2006.10.009

Miró, J., Castarlenas, E., de la Vega, R., Galán, S., Sánchez-Rodríguez, E., Jensen, M. P., & Cane, D. (2018). Pain catastrophizing, activity engagement and pain willingness as predictors of the benefits of multidisciplinary cognitive behaviorally-based chronic pain treatment. *Journal of Behavioral Medicine*, *41*(6), 827–835. https://doi.org/10.1007/s10865-018-9927-6

Náfrádi, L., Kostova, Z., Nakamoto, K., & Schulz, P. J. (2018). The doctor-patient relationship and patient resilience in chronic pain: A qualitative approach to patients' perspectives. *Chronic Illness*, *14*(4), 256–270. https://doi.org/10.1177/1742395317739961

Nicholson, K., & Martelli, M. F. (2007). Malingering: Overview and basic concepts. In G. Young, A.W. Kane, & K. Nicholson (Eds.), *Causality of psychological injury* (pp. 375-409). Springer. https://doi.org/10.1007/978-0-387-36445-2_17

Pagé, M. G., Romero Escobar, E. M., Ware, M. A., & Choinière, M. (2017). Predicting treatment outcomes of pain patients attending tertiary multidisciplinary pain treatment centers: A pain trajectory approach. *Canadian Journal of Pain*, *1*(1), 61–74. https://doi.org/10.1080/24740527.2017.1325715

Peternelj-Taylor, C. (1999). Forensic psychiatric nursing: The paradox of custody and caring. *Journal of Psychosocial Nursing and Mental Health Services*, *37*(9), 9-11. https://doi.org/10.3928/0279-3695-19990901-06

Pieritz, K., Rief, W., & Euteneuer, F. (2015). Childhood adversities and laboratory pain perception. *Neuropsychiatric Disease and Treatment, 11*, 2109–2116. https://doi.org/10.2147/NDT.S87703

Poletti, S., Locatelli, C., Falini, A., Colombo, C., & Benedetti, F. (2016). Adverse childhood experiences associate to reduced glutamate levels in the hippocampus of patients affected by mood disorders. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, *71*, 117–122. https://doi.org/10.1016/j.pnpbp.2016.07.007

Quartana, P. J., Campbell, C. M., & Edwards, R. R. (2009). Pain catastrophizing: A critical review. *Expert Review of Neurotherapeutics*, *9*(5), 745–758. https://doi.org/10.1586/ern.09.34

Raja, S. N., Carr, D. B., Cohen, M., Finnerup, N. B., Flor, H., Gibson, S., Keefe, F. J., Mogil, J. S., Ringkamp, M., Sluka, K. A., Song, X.-J., Stevens, B., Sullivan, M. D., Tutelman, P. R., Ushida, T., & Vader, K. (2020). The revised International Association for the Study of Pain definition of pain: Concepts, challenges, and compromises. *Pain*, *161*(9), 1976–1982. https://doi.org/10.1097/j.pain.0000000000001939

Robinson, O. C. (2014). Sampling in interview-based qualitative research: A theoretical and practical guide. *Qualitative Research in Psychology*, *11*(1), 25–41. https://doi.org/10.1080/14780887.2013.801543

Sachs-Ericsson, N. J., Sheffler, J. L., Stanley, I. H., Piazza, J. R., & Preacher, K. J. (2017). When emotional pain becomes physical: Adverse childhood experiences, pain, and the role of mood and anxiety disorders. *Journal of Clinical Psychology, 73*(10), 1403–1428. https://doi.org/10.1002/jclp.22444.

Scott, W., Trost, Z., Bernier, E., & Sullivan, M. J. (2013). Anger differentially mediates the relationship between perceived injustice and chronic pain outcomes. *Pain, 154*(9), 1691–1698. https://doi.org/10.1097/AJP.0000000000000095

Shammas, V. L. (2017). Pains of imprisonment. In K. R. Kerley (Ed.), *The encyclopedia of corrections* (pp. 1–5). John Wiley & Sons. https://doi.org/10.1002/9781118845387.wbeoc020

Sharma, G. (2017). Pros and cons of different sampling techniques. *International Journal of Applied Research*, *3*(7), 749–752.

Simpson, A. I., McMaster, J. J., & Cohen, S. N. (2013). Challenges for Canada in meeting the needs of persons with serious mental illness in prison. *Journal of the American Academy of Psychiatry and the Law Online, 41(*4), 501–509.

Stewart, L. A., Nolan, A., Sapers, J., Power, J., Panaro, L., & Smith, J. (2015). Chronic health conditions reported by male inmates newly admitted to Canadian federal penitentiaries. *Canadian Medical Association Open, 3*(1), E97–E102. https://doi.org/10.9778/cmajo.20140025

Sullivan, M. J., Adams, H., Horan, S., Maher, D., Boland, D., & Gross, R. (2008). The role of perceived injustice in the experience of chronic pain and disability: Scale development and validation. *Journal of Occupational Rehabilitation, 18*(3), 249–261. htps://doi.org/10.1007/s10926-008-9140-5

Sullivan, M. J., Bishop, S. R., & Pivik, J. (1995). The pain catastrophizing scale: Development and validation. *Psychological Assessment*, *7*(4), 524. https://doi.org/10.1037/1040-3590.7.4.524

Sullivan, M. J., Thorn, B., Haythornthwaite, J. A., Keefe, F., Martin, M., Bradley, L. A., & Lefebvre, J. C. (2001). Theoretical perspectives on the relation between catastrophizing and pain. *The Clinical Journal of Pain*, *17*(1), 52–64. https://doi.org/10.1097/00002508-200103000-00008

Suso-Ribera, C., García-Palacios, A., Botella, C., & Ribera-Canudas, M. V. (2017). Pain catastrophizing and its relationship with health outcomes: Does pain intensity matter? *Pain Research and Management*, *2017*, 1–8. https://doi.org/10.1155/2017/9762864

Sykes, G. M. (2007). *The society of captives: A study of a* maximum security prison. Princeton University Press. https://doi.org/10.2307/j.ctv14164hw (Original work published 1958)

Thorne, S. (2016). Interpretive description: Qualitative research for applied *practice*. Routledge. https://doi.org/https://doi.org/10.4324/9781315545196

Thorne, S., Kirkham, S. R., & MacDonald-Emes, J. (1997). Interpretive description: A noncategorical qualitative alternative for developing nursing knowledge. *Research in Nursing & Health*, *20*(2), 169–177. https://doi.org/10.1002/(sici)1098-240x(199704)20:2<169::aid-nur9>3.0.co;2-I

Treede, R.-D. (2018). The International Association for the Study of Pain definition of pain: As valid in 2018 as in 1979, but in need of regularly updated footnotes. *PAIN Reports*, *3*(2). https://doi.org/10.1097/pr9.0000000000000643

Vigo, D., Thornicroft, G., & Atun, R. (2016). Estimating the true global burden of mental illness. *The Lancet. Psychiatry, 3*(2), 171–178. https://doi.org/10.1016/S2215-0366(15)00505-2

Waller, R., Smith, A. J., O'Sullivan, P. B., Slater, H., Sterling, M., & Straker, L. M. (2020). The association of early life stressors with pain sensitivity and pain experience at 22 years. *Pain, 161*(1), 220–229. https://doi.org/10.1097/j.pain.0000000000001704

Walsh, S., O'Neill, A., Hannigan, A., & Harmon, D. (2019). Patient-rated physician empathy and patient satisfaction during pain clinic consultations. *Irish Journal of Medical Science (1971–)*, *188*(4), 1379–1384. https://doi.org/10.1007/s11845-019-01999-5

Wang, E. A., Hong, C. S., Shavit, S., Sanders, R., Kessell, E., & Kushel, M. B. (2012). Engaging individuals recently released from prison into primary care: A randomized trial. *American Journal of Public Health, 102*(9), e22–e29. https://doi.org/10.2105/AJPH.2012. 300894

Willmott, Y. (1997). Prison nursing: The tension between custody and care. *British Journal of Nursing*, *6*(6), 333–336. https://doi.org/10.12968/bjon.1997.6.6.333

Wilson, I. R. (2017). Management of chronic pain through pain management programmes. *British Medical Bulletin*, 1–10. https://doi.org/10.1093/bmb/ldx032

You, D. S., & Meagher, M. W. (2016). Childhood adversity and pain sensitization. *Psychosomatic Medicine, 78*(9), 1084–1093. https://doi.org/10.1097/PSY.0000000000000399

# Chapter 4: Pain During Incarceration: Searching for Safety in Hypermasculine Correctional Settings


## Abstract

**Background:** Hypermasculine prison culture produces hierarchies based on individuals' ability to assert dominance through strength and violence. Pain can impact physical strength and agility, thereby limiting the ability to elevate or maintain social status within such hierarchies. People who are incarcerated subjectively experience pain through a complex perceptual interplay that involves numerous biopsychosocial factors. Hypermasculine prison settings can influence the experience of pain during incarceration.

**Purpose:** In this research the author explored the pain experiences of men who were incarcerated.

**Methods:** ID (Thorne, 2016) co-positioned with relational ethics (Bergum & Dossetor, 2020) informed the study design. Twelve males participated in a one-hour interviews, which the author transcribed verbatim. He conducted inductive analysis to identify relevant themes. The data analysis occurred in three phases: sorting and organizing, making sense of patterns, and transforming patterns into findings.

**Findings:** Correctional settings are characterized by a social culture of toxic hypermasculinity, which influences the pain experiences of people who are incarcerated. Individuals who experience pain are more vulnerable to self-isolation in situations in which pain threatens their ability to defend themselves and their previously established social status within the prison hierarchy. Those who feel secure in subordinate hierarchical positions and have effective peer relationships perceive greater safety in communal settings, which is a distraction from pain.

**Discussion:** Positive peer relationships and the associated perceptions of safety influence the experience of pain of people who are incarcerated. Conversely, feeling unsafe leads to isolation, which can have serious psychological consequences, including the development of clinical depression.

**Pain During Incarceration: Searching for Safety in Hypermasculine Correctional Settings**

Individuals' masculine identity can be threatened when severe and prolonged pain causes disability or inability. This can limit the power and strength that they need to take on traditional masculine roles and responsibilities. For example, Spencer (2012) noted that chronic pain impacts individuals' self-perceptions of masculinity, which decreases with poor health and can lead to states of despair, loss, and depression. However, very little is known about the health consequences of experiencing pain within toxic hypermasculine environments such as prisons.

Toxic masculinity is associated with antiquated ideas about manhood that existed in barbaric and highly oppressive societies (MacDonald & Dobrowolsky, 2020). Toxic masculinity is marked by "dominance, aggression, strength, sexual conquest, and [the] rejection of any traits or behaviours associated with femininity" (MacDonald & Dobrowolsky, 2020, p. 17). Correctional settings often have toxic masculine characteristics, including racism, homophobia, and violence (Kupers, 2005; Salter 2019). The gendered orientation of correctional settings shapes men's experience of incarceration and can also shape the experience of pain during periods of incarceration.

Although toxic masculine characteristics are antithetical to the value orientation of contemporary health professions, nurses and other health professionals have a duty to provide ethical and high-quality health services to people who live in these ways. Thus, an understanding of the experience of pain in correctional settings is crucial knowledge for healthcare providers who wish to develop meaningful pain-related health interventions to improve clinical outcomes. In this paper I report the findings of an ID research study that I conducted in a correctional facility in Western Canada. The aim of the study was to better understand the experience of pain during incarceration, guided by ID (Thorne, 2016) co-positioned with relational ethics (Bergum

& Dossetor, 2020). I report on how the hypermasculine environment in the correctional setting affects the pain experience of incarcerated men and discuss the clinical implications for nursing practice.

**Background Literature**

Restricted power and autonomy create a unique prison community in which hierarchy and social order have different meanings than one might expect in free society. The hierarchical structures of correctional settings compel adherence to a normative prison code. For men who are incarcerated, this often means conforming to prison culture and taking on roles and personas to "adapt socially to fit with others" (de Viggiani, 2012, p. 272). Einat and Eina (2000) explained *prison culture* as follows:

> the norms and values of the inmate code form the core of an inmate subculture, providing its members with informal means to gain power and status and, thereby, a way to mitigate their sense of social rejection and compensate for their loss of autonomy and security. (p. 309)

These normative codes and inmate subcultures influence how incarcerated men satisfy the basic, psychological, and self-fulfillment needs based on Maslow's hierarchy (1943).

Most prison cultures are marked by violence and characterized by status hierarchies (Michalski, 2017) and toxic masculinity (Evans & Wallace, 2007; Kupers, 2005; Robinson, 2011; Toch, 1998). Thus, the ability to thrive—to move towards self-fulfillment or self-actualization—within a hypermasculine prison structure is to have power and status over others. Those who are the strongest, toughest, and most feared and violent have power (Michalski, 2015). Survival is based on the creation and maintenance of an excessively manly persona (Jewkes, 2005) and the ability to "conform to a rigid hypermasculine posturing of prison culture" (Kupers, 2001, p. 115).

For people who are not in the upper echelons of the prison hierarchy, respect becomes an important currency. Respect in this context is self-serving in that it offers protection from those who are more powerful. Respect is not based on a moral commitment to one another but rather on "veneration" and "fear, awe, and other such sentiments" (Crewe, 2009, p. 249). Crewe (2009) explained that the most successful and liked incarcerated people in his study were those "who showed loyalty, sincerity, and respect for personal space and property, who dealt skillfully with prison staff, did not create problems for others, exhibited stoicism in the face of provocation, and upheld high levels of personal hygiene" (p. 250).

In correctional settings, the requirements for satisfying Maslow's (1943) hierarchy of needs differ from those in free and democratic societies. Social relationships among incarcerated males are characterized by unique sociocultural environments marked by hypermasculinity, violence, and status hierarchy (Michalski, 2017; Ricciardelli, 2013). In correctional settings, self-esteem and prestige directly correlate with the degree of dangerousness and ability to hold power over others. To be respected means to be venerated by people who occupy lower rungs in the hierarchy. Whether they genuinely feel it or not, people of low rank in correctional settings must demonstrate respect to the hierarchy and to individuals with elevated ranks within the hierarchy. This forms a quasi-autocratic subculture among people who are incarcerated. In the communal space of the correctional environment, the behaviours of others are highly visible; and thus, acts of respect must also be visible. Similarly, pain behaviours and expressions of pain occur publicly. They reveal disability and place individuals at risk of predation, exploitation, and violence.

Some evidence has suggested that masculinity and masculine environments affect men's experience of pain. For example, Spencer (2012) reported on the pain experiences of mixed

martial arts fighters and noted that during training they internalize maxims such as “learning to live with and through pain to attain victory” and “pain is weakness leaving the body” (p. 128), which contribute to their sense of toughness and masculinity. Similarly, Cancio (2018) noted that among American Mexicans, machismo—a cultural understanding of masculinity—necessitates that men provide for their families. Injury and disability limit men’s ability to provide for their families and create a sense of emasculation, an existential crisis that can contribute to depression and feelings of worthlessness.

The prevalence of pain amongst men who are incarcerated varies considerably according to the extant literature, but researchers have indicated that it might occur at higher rates than in the general population. For example, Wang et al. (2012) completed a randomized trial to test interventions in which the participants engaged in primary care after they were released from prison. In this study 48% of the respondents reported chronic pain during their health-history interviews. In a UK prevalence study, Croft and Mayhew (2015) reported chronic noncancer pain in 20% of the prison population. In Canada, in a study of 2,273 respondents incarcerated in federal institutions, 19.7% reported chronic back pain (Stewart et. al., 2015). Pain is a personal experience that biopsychosocial factors and past pain shape (Raja, 2020). It is different from nociception and has adverse social and psychological outcomes (IASP, 2020; Raja, 2020). To date, little research exists on the impact of imprisonment on the pain experiences of incarcerated people. This points to the urgent need to develop new knowledge to understand how incarceration further influences the pain experiences of the people who are incarcerated.

## Methods

I designed this study with an ID research (Thorne, 2016) approach co-positioned with relational ethics (Bergum & Dossetor, 2020). I am a NP in Correctional Health and used my disciplinary orientation as the epistemological basis for this research.

### *Ethical Oversight*

I received ethics approval from the University of Alberta Research Ethics Board, Alberta Health Services, and the Correctional Division of Alberta.

### *Setting*

This study took place in a remand facility in Western Canada with a daily census of approximately 135 men. Fewer than 5% of incarcerated people identify as other genders. This facility is not staffed by nurses from 11:00 p.m. to 7:00 a.m. daily. The facility contracts health services from Alberta Health Services, a provincial health authority.

### *Recruitment and Participant Selection*

I posted recruitment posters (Appendix A), participant information letters (Appendix B), and study information letters (Appendix A) throughout the remand facility for incarcerated men and correctional staff, respectively. For this study I employed a convenience-sampling strategy (Robinson, 2014). Correctional staff recorded the names of self-selected volunteers and gave me the list for eligibility screening.

### *Participant Selection*

I screened each volunteer in person. Men between the ages of 18 and 65 years old with acute or chronic pain were eligible to participate in this study. I excluded volunteers who did not speak English, did not have pain, posed a safety or security threat, or were experiencing

psychosis or other cognitive impairment. I also did not provide honoraria to the study volunteers and participants.

Seventeen individuals volunteered and screened, 12 of whom I admitted to the study. Three volunteers did not meet the study criteria, two of whom did not have pain and one of whom was medically unstable. Two volunteers withdrew after I had completed the screening because they mistakenly believed that the study would include the assessment and treatment of their pain.

### *Data Collection and Analysis*

I conducted a one-hour audio-recorded interview immediately following the screening and the participants' provided consent. To preserve confidentiality, I assigned pseudonyms to the participants. I pooled the data for analysis and excluded characteristics such as age, ethnicity, and comorbidities. Congruent with the research approach, I present brief narrative introductions of the study participants below.

I asked symptom-analysis questions to characterize the participants' pain. Prompting and probing questions informed a deeper understanding of their pain experiences. Because of the rapid turnover in remand facilities, follow-up interviews were not possible. I documented my early reflections on each interview in a journal. I transcribed the audio data verbatim after each interview and uploaded the transcripts to Quirkos ® for data management.

I collected and analyzed the data concurrently which enabled me to identify early patterns and allowed me to pose additional questions in subsequent interviews to explore recurring themes. Once I had collected all of the data, I conducted a formal data analysis in three phases: sorting and organizing, making sense of patterns, and transforming patterns into findings (Thorne, 2016). I used an indicative reasoning approach, grounded in my disciplinary knowledge

and relational ethics, to locate patterns within the data relevant to correctional nursing practice. I then organized the patterns thematically, iteratively analyzed them within the correctional nursing context, and transformed them into findings that would inform correctional nursing practice.

### *Rigour*

I preserved the epistemological integrity of this study by ensuring that I collected primary data from men who were experiencing pain during incarceration, rather than using secondary sources. To further protect the integrity of the research from bias, I adhered to relational ethics in each phase of the research project. Memos helped me to track my analytical decision, and I journaled during the concurrent data analysis and data collection to explore maximum variation in the themes. Direct quotations and rich narrative descriptions have retained the voices of the participants to achieve interpretive authority.

## Findings

### *Introducing the Participants*

I analyzed data from 12 men who experienced pain during incarceration. The participants' ages ranged from 20 to 47 years. Ten of the 12 participants reported an addiction: one to alcohol, two to opioid use only, three to methamphetamines only, and fours to both opioids and stimulants. All of the participants reported pain that lasted more than three months. Eight participants reported pain from traumatic accidents, and the remaining four did not attribute their pain to any specific injury. Because I co-positioned relational ethics in this research study, I required additional contextual data on each participant to better develop an understanding of how they subjectively experienced pain during incarceration. I have embedded these contextual data in this Findings section.

### *Losing Power and Pain*

**"They [Can] Bully You for Shit if They Know You're in Pain."** Frustrated by his pain, Donald recalled "freaking out" earlier in the day when everyone on the unit was forced into their cells for lock-up. Donald knew that his behaviour negatively affected the liberties of others and that "the tone of the unit changed." He was concerned about the potential consequences of causing others to be locked up and even more concerned that during the incident others became aware of the painful injury that he had been concealing. Donald, aged 47 and looking older than his stated age, was acutely aware that his ability to fight and exert dominance over others was now compromised, which threatened his position in the prison hierarchy. Donald had spent most of his adult life in prison, either remanded awaiting trial or serving multiple custodial sentences of between 6 months and 2 years. He understood prison culture well, and other incarcerated people knew him because of his past ability to fight. Donald stated that other people who are incarcerated "figure they [can] bully you for shit if they know you're in pain." Distraught, he worried that others' knowledge of his neck injury made him vulnerable: "What happens if I get in a big fight? [Will someone] put me in a headlock? Rip me? Then I get wheelchaired because of a bag of chips or a disagreement?" His security, which derived from the sense of confidence that this power gave him among his peers, had been threatened. His uncertainty created an existential crisis, and Donald had to redefine his roles and relationships within the prison context to assure his safety.

Although Donald's peers had just discovered his pain, about half of the participants in this study shared his concern about being the subject of violence and vulnerable to severe injury. For example, Logan's pain had been visible to others for several months, and he knew that his injuries and the resulting chronic pain limited his ability to protect himself. Logan, who was in

his late 30s, found it difficult to regulate his anger; and others knew him because of his engagement in many violent altercations. He conceded that he "must become subservient to the social structures that are in place." He further elaborated that his pain caused him to "turn into a bitch, pussy up, and bow down. You can't be strong. I'm always worried if somebody walks behind me, somebody's going to fucking boot-fuck the shit out of me and put me in a wheelchair." Sam, too, tried to conceal his pain from others because he feared the possibility of "getting beat up, getting jumped, getting hurt." This, in turn, "heightens the pain . . . . It's actually scary." Sam had been incarcerated multiple times over many years and had a reputation for being unpredictable and violent, particularly when he was frustrated or angry. As he explained, "A lot of the guys that know me, they know when to stay away from me." Despite his established history of dominance, he worried that if he was in a fight, he would function at only "50% of what I was, or 40% being able to control my movements and being able to take care of myself." As a result, he relied on his past reputation to maintain his dominance. He worried that if his pain was revealed, "I could get taken advantage of. . . . It's always there in the back of my mind. I'm not like I was before."

**Losing power.** About half of the participants recognized that their pain rendered them less able to demonstrate physical strength through violence. Unlike other participants, Sam had thus far been able to conceal his pain from others and maintain a façade of being dangerous and a capable fighter. He isolated himself to reduce the likelihood of "needing to fight," thereby protecting his status in the prison hierarchy. Marcus, who had continuous pain from a severe back injury that required surgery, had historically been involved in multiple violent altercations because of self-reported poor emotion regulation and impulse control. It was general knowledge on their units that Logan, Donald, Marcus, and Neil experienced pain; and these men also

resorted to self-isolation. For example, Logan described himself as normally extroverted and outgoing, but, because of his pain, he "became an introvert." Logan remarked that "I could be more external, but I can't. I'm familiar. Familiarity breeds contempt." Noah, a man in his 30s who felt pain throughout his body after he broke multiple bones in multiple injuries while he performed stunts, found safety by being transferred to another facility where he was less well known. He explained, "That's why I'm doing everything I can, why I requested I be kept here."

Like the pain of others in this subgroup, Logan's pain caused him to change how he engaged with others in the correctional setting. All of these men recognized that their peers noticed their past intimidating behaviours and violent activities, which helped them to achieve dominance within the prison ranks. Now that they were living with significant pain, all five participants understood that their status was threatened, and they isolated themselves to limit their social interactions and reduce the chance of having to prove their strength or of "being found out" (Sam). Being unable to defend themselves because of pain led to high levels of uncertainty about their safety.

Projecting a hypermasculine image to achieve dominance over others had served these participants well during past incarcerations. Correctional settings can be volatile and violent, and those at the top of the hierarchy rely on the appearance and function of their bodies to demonstrate physical strength and power. Living with pain during incarceration undermined their confidence in their body's ability to exert hypermasculine characteristics, such as fighting or engaging in physically demanding activities. This realization not only threatened their identity and status, but also caused stress that exacerbated the intensity of their pain and further eroded their sense of power, status, and safety.

### *Followers and Pain: Being With Others*

**The "Inmate Code" and Respect.** Whereas maintaining a hypermasculine persona was important to some participants, it was not an option for the followers. Unlike the leaders, the followers described how they navigated the social milieu of the correctional setting in a very different way. These participants focused on keeping the peace by showing respect for the leaders, capitalizing on preexisting social relationships, and adhering to the so-called "inmate code" (Einat & Einat, 2000, p. 309).

Dan, for example, had recently been shot, and the resultant disfiguring wound was highly visible, as was his pain. One of the youngest participants, Dan was incarcerated among many close friends with whom he "grew up . . . and went through the same stuff our whole lives." He was the first of his group whom the police had shot, which caused much concern among his friends. Being shot motivated Dan to help his peers to improve their lives. He told others that "the cops are shooting to kill, man"; with this message he wanted "to impact a lot of people's lives. Like, I want my pain to impact other people's lives. Like, I want everybody else to know."

Dan's experience of being shot by the police changed the content of his conversations with his friends during incarceration. He stated that "we used to talk about going out and stealing trucks together and stuff like that, and doing crime. And now we talk about going to treatment together and [getting] sober together, and doing something with our lives." The presence of Dan's close social supports in prison served as a distraction and enabled him to escape his pain. Dan remarked that, without his friends, he would be "in pain by myself. I [would] have to sit there and think about every moment of it. I [would] have to feel every moment of it."

Although he had friends, Dan described himself as an introvert before his injury: "[I]was quite the loner before [the shooting]." He acknowledged that his social network had the added

benefit of protection from bullying and violence. Dan's desire to improve his life and the lives of his friends gave meaning to his pain. His pain and the severity of his injuries shaped his experience of pain during incarceration and the content and the nature of his discourse with his peers. He used his experience of being shot to become a trusted advisor to others and to strengthen the network of people who would protect him. Although this role gave personal meaning to Dan's life, it is evident that he also benefited from these social interactions that distracted him from his pain and positioned him to be protected from violence and abuse.

Like Dan, other participants observed that feeling safe allowed them to move around the unit more freely. Being able to move around freely impacts the experience of pain. As Neil, a man in his 30s who sustained multiple injuries when a dirt bike landed on after he fell off a cliff, pointed out, "The best thing for me is just to be up and walking around and move as much as I can." Similarly, Luke, in his late 30s, who had back pain and had been in and out of jail for nearly 20 years, contended that "being around good people, or just friends, helps my pain. If I'm alone and isolated, I feel my pain worse, and then I start feeling mental pain." Dan pointed out, "I don't have any enemies. . . . I'm a really loyal person." Though he identified others as "lifelong friends," his relationships with these people were different from those with his friendships outside prison. Dan remained guarded and noted that, "when it comes to my heart, my, like, emotional stuff, there's only a couple of people I trust around here to talk to."

For about two thirds of the participants, the concept of friendship was different from what they would have expected in noncorrectional settings. Luke, for instance, struggled when he described his peers as friends: "I can work with friends. I wouldn't even really call them friends, but they are friends, because they're—my friends." Dan offered advice and guidance instead of "muscle," as well as loyalty, in exchange for personal protection and distraction from his pain.

For all of the participants who discussed friendship, "being friends" had transactional implications during periods of incarceration. Thomas, a man in his mid 20s, had neuropathic pain after an all-terrain vehicle accident and indicated that he would likely benefit from gabapentin, a common substance in correctional settings, because it had worked well for him when he was not in jail. Thomas was reluctant to request it while he was incarcerated because "I don't really know if I want to take gabbies because everyone will want to try to buy them." Thomas elaborated that "it's just annoying . . . cause it's your friends."

Scott, a former boxer with a long history of repeated short-term incarceration, reported that he felt less pain when he was not in his cell"

> I don't know. Maybe it's 'cause when I'm outside my cell there's other things going on, card games, other people, whatever, and then I block it out of mind. But when I'm in my cell it's more—I focus more on my pain. I notice it.

Finn, a man in his mid-40s with pain chronic pain in his pelvis and ankles from fractures that he had sustained several years ago, also felt less pain when he was among other people, and he did not fear injury from an assault "'Cause I hold myself proper, I've got proper etiquette; you know what I mean? Like, I don't lie, I don't steal, I don't cheat." He further elaborated, "All those values, . . . they are gold here." This suggests that demonstrating a high level of respect for others is the expectation during incarceration. Finn warned that "you can't hide from your bad shit. You can't have a poor attitude in here and just go on living the good life. If you can't get along with others, you end up down the hall in protective custody."

**Safety and Pain.** Finn, Dan, Luke, and Scott felt comfortable in their social settings and were confident that their demonstrations of respect for others protected them reliably and sufficiently from violence. They trusted themselves to be able to demonstrate respect and to adhere to the inmate code. Collectively, they had little worry about being injured when they were

among others during communal activities. This created the necessary conditions for them to shift their focus from possible threats to their personal safety and pain.

The comfort of being with others and the resulting distraction from pain stood in contrast to the five participants, Marcus, Willian, Logan, Donald, and Neil, who felt more threatened in communal settings. Although this group got along well with others, they were concerned about the effects of their own impulsivity. For instance, Marcus noted that "when I was younger, I did things just off the top of my head." Now that he was living with chronic pain, he "think[s] twice about what's happening and what [he] is going to do." Marcus, and all of the other participants in this subgroup, found that pain interfered with their ability to control their impulsivity. William noted that his pain caused him additional stress in a communal setting; he explained that the pain "bugs me, because, like, you need to— . . . you always want to know what's going on around you." William, who had low back pain from an injury when he worked as a labourer, further explained that pain "sometimes makes it so I don't think properly, or I can't focus." He feared that the distraction from his hypervigilance might cause him to get "into a fight or do something stupid."

Innates' characteristics, such as the inability to follow rules, impulsivity, a lack of judgement, and the inability to engage easily in social situations, might have caused some participants to be unable to consistently maintain the required decorum and comportment prescribed in the inmate code. Some participants needed to be "very focused" and even "hypervigilant" about their surroundings to feel safe. Although in some situations hypervigilance is warranted because of legitimate safety threats, in this case hypervigilance refers to the ability to monitor and control one's own words, actions, and behaviours. Participants such as William could not trust others because they could not trust themselves, which led to few, if any, genuine

social relationships. Hypervigilance about one's surroundings is complex. Pain is a distraction from hypervigilance and results in judgement errors and a heightened risk of bodily injury. However, although hypervigilance is exhausting, it serves as a distraction from pain. William pointed out that his pain "goes up and down because my mind will be focusing on something else, so you won't feel it as much. But then it goes right back up. . . . It's all mind screwy."

## Discussion

This aim of this research was to describe men's experience of pain during incarceration to inform correctional nursing practice. I used an ID approach co-positioned with relational ethics to guide each phase of this research study. The study findings reveal that men who are incarcerated experience pain in relationship to the social environment of the correctional facility, which is marked by hypermasculinity. The data suggest that the participants experienced pain in relationship to their perceived personal safely (or threats of violence). In this section I discuss the impact of the hypermasculine social environment of prisons on the decision making of men who are incarcerated with respect to personal safely and the effect on self-actualization.

### *Personal Safety and Pain During Incarceration*

The pain of some participants threatened their elevated ranks and self-esteem within the prison hierarchy. Their vulnerability put them at risk of losing status and led them to isolate themselves, because they feared violence that would lead to injury and greater disability. This altered their pain intensity levels when they were among others. Their perceptions of the pain intensity lessened when the men were able to distract themselves. The hypervigilance of this group to detect and protect themselves from violence created at least a temporary distraction from their pain. However, hypervigilance is exhausting, and the pain intensity returned immediately after the distraction was over.

As several participants pointed out, to exist in prison with pain is to accept and serve extant prison hierarchies. The language that they used provided some insight into their acceptance of more subordinate places in the hierarchy. For instance, several participants accepted their subordinate roles within the prison hierarchy to benefit from being protected and engaged in social interaction to distract themselves from their pain. Others used harsh, misogynistic language to describe the perceived emasculating effects that their pain had produced, which indicates gender role strain. Although some might have eventually accepted their subordinate roles (or were in the process of doing so), others feigned physical ability because of their reputations, behaved erratically, and attempted to conceal their pain by isolating themselves. Their embodied pain experiences served as a constant reminder of their vulnerability and inability to rely on their bodies for strength and protection. This produced a type of loss, which in some instances is "experienced as a living death" (Spencer, 2012, p. 132) and can lead to significant despair, depression, and even suicide (Keogh, 2015).

In this study some men struggled to adhere to the social conventions within the prison society because of impulse-control issues or poor judgement. These participants did not fully trust their social networks, their own ability to monitor their behaviour, or both. They found some distraction from their pain in group situations but also found that their pain interfered with their ability to regulate their actions in accordance with expected rules and social conventions. This group might have occupied a middle ground between the polar ends of people who feel safe in prisons and those who do not. They felt some degree of uncertainty about their personal safety because they could not fully trust their own ability to reliably maintain the expected loyalty and respect that the prison code required.

Other participants who were able to be respectful and loyal reported an enhanced sense of safety, required less isolation, and thus were better positioned to develop friendships or alliances. In these situations, the distraction of being with others decreased the pain intensity and further alleviated it when they accessed rehabilitation equipment. However, this group of participants observed that their pain intensity increased when they were alone. They socialized during incarceration to become distracted from and better cope with their pain.

It is clear that many people who experience pain during incarceration do so in relation to the toxicities of the violent and hypermasculine setting, some of which they have co-created and continue to perpetuate. The participants who self-isolated did not have the ability to call on other incarcerated people to protect their bodies or reputations. Stated differently, men who are incarcerated, feel pain, and do not have the physical or relational capacity to protect themselves self-isolate to ensure their personal safety. This creates an existential isolation and a sense of loneliness in everyday experiences and is a precursor to depression and other mental-health disorders (Helm et al., 2020). The resulting isolation is also of interest to healthcare professionals because of its associations with major depression, dysthymic disorder, anxiety disorders, and possibly suicide (Teo, 2012). In fact, in a meta-analysis, Holt-Lunstad et al. (2010) found that socially isolating is as harmful as smoking cigarettes and drinking alcohol excessively.

Contemporary research on isolation and loneliness during periods of incarceration has focused primarily on the effects of solitary confinement. However, since Holt-Lunstad et al.'s (2010) meta-analysis, consistent confirmatory findings have shown the increased risk of mental illness across many different populations of socially isolated and lonely people, from young adolescents (Matthews et al., 2016) to older adults (Santini et al., 2020). Early neurobiological research confirmed the association between isolation and depression and anxiety (Han et al.,

2018). It is thus reasonable to assume that the loneliness that social isolation causes during periods of incarceration has similar mental-health morbidity. Additional empirical research is needed to further characterize the strength of this relationship.

In line with Sykes' (1958/2007) thinking on the pain of imprisonment, changing the context of the hypermasculine environment is an approach that nurses can utilize in the care of men who are incarcerated and in pain. However, this is certainly not an easy task and would require that incarcerated persons redefine their perspectives on masculinity and their understanding of how to act when they associate with other people who are incarcerated. Housing all people with pain in a common unit without altering the existing social norms risks creating a hypermasculine hierarchical structure for people who have pain. Further, multiple units are needed to duplicate protective custody and other required separations. It is possible that the only solution is to transfer prisoners who are threatened because of their pain to another facility, although this might not resolve the problem, risk bodily injury if they interact with other incarcerated people, or risk the effects of loneliness if they self-isolate. In this case, none of these options is satisfactory. However, given the current circumstances, perhaps the best option is the one that results in the least injury.

A relational ethics approach guides situations such as this to decide what is the least harmful decision within the context of an individual's circumstance (Austin, 2001; Austin et al., 2009) and in relation to the aims and goals of incarceration. In this case, it is important to balance competing priorities between the care needs of individuals and those of the correctional institution. A decision is required not based merely on what the simplest thing to do is or what has traditionally been done or in deference to the priorities of either the patient or the institution.

It is essential to consider the situation as a whole to identify a solution, even if it is temporary and individualised, that works best for all who are involved.

### *Pain and Self-Actualization in Correctional Settings*

In my analyses I noted a distinction in the pain experiences of two groups of participants: those who occupied higher ranks in the prison hierarchy and those in the lower ranks. Higher-ranking participants or leaders acquired power over their peers through violence and intimidation. Maintaining their rank or status within the prison hierarchy required continuous monitoring and defense against threats to their position. Those of lower rank—the followers—were servants to the prison hierarchy and required to conform to the so-called "inmate code" (Einat & Einat, 2000, p. 309). The leaders protected others, enforced rules, and demanded loyalty and respect, whereas the followers required protection, obeyed the rules of the inmate code, and offered loyalty and respect. This is the culture in which people who are incarcerated experience pain.

These insights, situated within our broader understanding of disciplinary knowledge, can guide clinical decision making that involves a relational ethics approach. In this section I rely on Maslow's (1943) hierarchy of needs, a theory on human motivation, to achieve this end. This theory depicts a hierarchy of foundational human needs that people must satisfy to achieve self-actualization. Physiological needs (food, water, warmth, and rest) are the precursor to safety needs (security, safety) and collectively form the basic needs that are instrumental for humans to develop towards self-actualization. Maslow theorized that people are inherently motivated to fulfill their needs and must progress somewhat linearly through each level of the hierarchy.

In correctional settings, the facilities provide basic needs, including nutrition, shelter, and safety, as core services. These provisions might not sufficiently or fully satisfy the basic needs of

all people in all circumstances. However, the prescription of specialized equipment, diets, and medicines; the creation of protective custody units; the separation of incompatible gang members; and other measures mitigate this insufficiency, whenever possible. Despite the fact that basic needs are provided for, the congregate nature of correctional settings creates a unique type of social environment in which people who are incarcerated must exist and be motivated to fulfil higher-order human needs, including making friends, feeling accomplished, and achieving their full potential. Success in satisfying higher-order human needs is contingent on how they co-exist with others during periods of imprisonment and is shaped by individuals' worldviews and priorities, their ability to relate with others, and their physical and psychological ability.

In this study the participants reported that they felt pain in relation to the degree to which their basic and psychological needs were either met or unmet within the relational contexts of living with others in a communal correctional setting. This finding suggests that pain influences how people perceive, manage, and locate personal safety as a basic need during periods of incarceration. Individuals who felt the safest were motivated to satisfy their psychological needs and achieve higher levels of self-actualization. For example, people who reported feeling safe also reported that they developed relationships with other people who were incarcerated. Although these relationships were transactional in nature and conditional on how they behaved within the normative prison code, they were still relationships. Unstable as they might have been, these relationships enabled those in pain to have social interactions that served as distractions from their pain. Further, feeling safe gives people who are in pain during incarceration an opportunity to access communal rehabilitation equipment and groups. Feeling safe in communal settings is a precursor to participating in the social, educational, and recreational activities for people who are incarcerated. Others who had yet to fulfill their personal safety needs

experienced their pain in isolation because of their fear of significant injury or permanent disability.

Further, feeling safe is requisite to feeling motivated to create a meaningful sense of self and develop the confidence and sense of achievement that results in purpose; respect for others, which leads to morality; and individuality, which leads to inner potential (Maslow, 1943). If the goal of incarceration is rehabilitation for meaningful social reintegration, then it is important to address the perceptions of danger because of pain during periods of incarceration. The objectives of healthcare and justice staff must be to identify and offer meaningful interventions to change the social context or perceived social context of affected people. For instance, the Supporting People After Remand or Conviction model (Smith, 2020) is an intervention that helps people to meet Maslow's (1943) basic needs after admission to correctional facilities. In the intervention group, their well-being and functioning in prison improved. In addition, the intervention promotes integration into society. An approach similar to this model but tailored to people who are in pain modifies the pain experience, possibly reduces the perceived pain intensity, offers meaningful pain distractions, and promotes rehabilitation. From a relational ethics perspective, nurses must recognize that feeling unsafe because of pain results in a significant sense of vulnerability that impedes self-actualization.

Researchers have described the concept of *custody versus care* as differing priorities of the justice system and healthcare practitioners (Adshead, 2000; Peternelj-Taylor, 1999; Willmott, 1997). Similarly, the concept of *dual loyalty* refers to health professionals' struggles to prioritize healthcare ethics in the presence of the competing demands of the criminal justice system (Appelbaum, 2008; Austin et al., 2009). Correctional nurses recognize their dual roles in providing care while they simultaneously preserve the safety and security structures of the

institution (Austin et al., 2009). Although their work is different from that of nurses, correctional officers also "practice care, custody, and control when performing correctional work" (Ricciardelli et al., 2021, p. 13), particularly as it relates to preparing people who are incarcerated for release through rehabilitation programs and ensuring that people do not harm themselves or others.

Pain during incarceration is another area of shared responsibility between nurses and correctional officers. However, unlike nurses, correctional officers have few tools to help people who are incarcerated to cope with pain. Thus, nurses must recognize that, for correctional officers, witnessing the unrelenting pain of a person who is incarcerated can lead to moral distress. Accordingly, nurses must take the lead in developing an understanding of people's experience of pain when they are incarcerated. In this situation, nurses must work with correctional officers to identify people who have pain and co-develop meaningful interventions to their increase safety. Living conditions in prisons, including the prison culture, influence the security operations of prisons but also become a health issue of importance to correctional nursing practice. As a matter of practice ethics, nurses must act and use a relational ethics approach to understand complex contextual factors that this research has made apparent.

**Limitations**

In this study I have offered preliminary insights into men's experience of pain during incarceration. The sample included 12 men from a Canadian provincial correctional facility; future research that includes people of other genders and other types of correctional facilities might reveal additional social variations in which people experience pain during periods of incarceration. Although men at various ranks within the prison hierarchy experience pain during incarceration in different ways, larger studies must confirm these findings.

## Conclusion

A toxic hypermasculine environment exists in correctional settings and impacts people's experience of pain during periods of incarceration. My data reveal that those who have previously held high-ranking positions within the prison hierarchy feel a significant loss of safety when they are in pain. Pain threatens people's ability to protect themselves from violence and causes them to worry about violent repercussions because of their own past behaviours. This can be emasculating and possibly contribute to existential isolation, which can potentially lead to depression or other unwanted mental-health effects.

Similarly, the participants who could not trust themselves to adhere to the inmate code, often because of innate self-control issues, felt similar forms of uncertainty with respect to their personal safety. They described pain as intruding on their ability to focus on their own behaviours in relationships with other people who were incarcerated. Their vigilance created some distraction from their pain, but they described social interactions as exhausting. In response to their loss of safety, these participants isolated themselves from others or sought shelter in other correctional settings where they could start anew.

Those with the ability to manage peer relationships effectively by demonstrating respect and loyalty within the inmate code felt the safest among the participants. This skillfulness in navigating hypermasculine prison culture is a protective factor that affords distraction from pain through social and recreational activities. In contrast to the former group, these participants managed their pain with the support and protection that adhering to the inmate code offers.

This knowledge is important for clinicians in correctional nursing practice who deal with people who experience pain during incarceration in the ways that I have described. Of greatest concern are those who are unable to locate safety within the toxic hypermasculine culture

enacted through an unwritten inmate code. The consequences of these disrupted peer relationships are isolation, fear, increased pain awareness, and inaccessible rehabilitative equipment. It is clear that an individual's experiences in hypermasculine correctional settings influence pain-related outcomes and comorbidities.

Although there might be value in attempting to reorient the ethos that underpins peer relationships amongst people who are incarcerated, it would be a complex undertaking and likely beyond the immediate reach of both the health and justice ministries. Nonetheless, nurses recognize that an unmet need for safety limits the human potential and motivation to self-actualize. This means that rehabilitative efforts, within both the pain and the criminal justice contexts, cannot be actualized until basic safety needs are met. These rehabilitative efforts are instrumental goals of incarceration and cannot be ignored.

## References


Adshead, G. (2000). Care or custody? Ethical dilemmas in forensic psychiatry. *Journal of Medical Ethics*, *26*(5), 302–304. https://doi.org/10.1136/jme.26.5.302

Appelbaum, P. S. (2008). Ethics and forensic psychiatry: Translating principles into practice. *Journal of the American Academy of Psychiatry and the Law, Online, 36*(2), 195–200. https://www.jaapl.org/cgi/content/abstract/36/2/195

Austin, W. (2001). Relational ethics in forensic psychiatric settings. *Journal of Psychosocial Nursing and Mental Health Services*, *39*(9), 12–17. https://doi.org/10.3928/0279-3695-20010901-04

Austin, W., Goble, E., & Kelecevic, J. (2009). The ethics of forensic psychiatry: Moving beyond principles to a relational ethics approach. *Journal of Forensic Psychiatry & Psychology*, *20*(6), 835–850. https://doi.org/10.1080/14789940903174147

Bergum, V., & Dossetor, J. B. (2020). *Relational ethics: The full meaning of respect*. University Publishing Group.

Cancio, R. (2018). Pain and masculinity: A cohort comparison between Mexican American Vietnam and post-9/11 combat veterans. *Men and Masculinities*, *23*(3-4), 725–748. https://doi.org/10.1177/1097184x18761779

Crewe, B. (2009). *The prisoner society: Power, adaptation and social life in an English prison.* Oxford University Press.

Croft, M., & Mayhew, R. (2015). Prevalence of chronic non-cancer pain in a UK prison environment. *British Journal of Pain, 9*(2), 96–108. https://doi.org/10.1177/2049463714540895

de Viggiani, N. (2012). Trying to be something you are not. *Men and Masculinities*, *15*(3), 271–291. https://doi.org/10.1177/1097184x12448464

Einat, T., & Einat, H. (2000). Inmate argot as an expression of prison subculture: The Israeli case. *The Prison Journal*, *80*(3), 309–325. https://doi.org/10.1177/0032885500080003005

Evans, T., & Wallace, P. (2007). A prison within a prison? *Men and Masculinities*, *10*(4), 484–507. https://doi.org/10.1177/1097184x06291903

Han, R. T., Kim, Y.-B., Park, E.-H., Kim, J. Y., Ryu, C., Kim, H. Y., Lee, J. H., Pahk, K., Shanyu, C., Kim, H., Back, S. K., Kim, H. J., Kim, Y. I., & Na, H. S. (2018). Long-term isolation elicits depression and anxiety-related behaviors by reducing oxytocin-induced GABAergic transmission in central amygdala. *Frontiers in Molecular Neuroscience*, *11*. https://doi.org/10.3389/fnmol.2018.00246

Helm, P. J., Medrano, M. R., Allen, J. J., & Greenberg, J. (2020). Existential isolation, loneliness, depression, and suicide ideation in young adults. *Journal of Social and Clinical Psychology*, *39*(8), 641–674. https://doi.org/10.1521/jscp.2020.39.8.641

Holt-Lunstad, J., Smith, T. B., Layton, J. B. (2010). Social relationships and mortality risk: A meta-analytic review. *PLoS Medicine*, 7, e1000316. https://doi.org/10.1371/journal.pmed.1000334

International Association for the Study of Pain. (2020, July 16). *IASP announces revised definition of pain*. https://www.iasp-pain.org/PublicationsNews/NewsDetail.aspx?ItemNumber=10475

Jewkes, Y. (2005). Men behind bars. *Men and Masculinities*, *8*(1), 44–63. https://doi.org/10.1177/1097184x03257452

Keogh, E. (2015). Men, masculinity, and pain. *Pain*, *156*(12), 2408–2412. https://doi.org/10.1097/j.pain.0000000000000328

Kupers, T. A. (2001). Rape and the prison code. In D. Sabo, T. A. Kupers & W. London (Eds.), *Prison masculinities* (pp. 111-117). Temple University Press.

Kupers, T. A. (2005). Toxic masculinity as a barrier to mental health treatment in prison. *Journal of Clinical Psychology*, *61*(6), 713–724. https://doi.org/10.1002/jclp.20105

MacDonald, F., & Dobrowolsky, A. (Eds.). (2020). *Turbulent times, transformational possibilities? Gender and politics today and tomorrow*. University of Toronto Press.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*(4), 370. https://doi.org/10.1037/h0054346

Matthews, T., Danese, A., Wertz, J., Odgers, C. L., Ambler, A., Moffitt, T. E., & Arseneault, L. (2016). Social isolation, loneliness and depression in young adulthood: A behavioural genetic analysis. *Social Psychiatry and Psychiatric Epidemiology*, *51*(3), 339–348. https://doi.org/10.1007/s00127-016-1178-7

Michalski, J. H. (2015). Status hierarchies and hegemonic masculinity: A general theory of prison violence. *British Journal of Criminology*, *57*(1), 40–60. https://doi.org/10.1093/bjc/azv098

Peternelj-Taylor, C. (1999). Forensic psychiatric nursing: The paradox of custody and caring. *Journal of Psychosocial Nursing and Mental Health Services*, *37*(9), 9-11. https://doi.org/10.3928/0279-3695-19990901-06

Raja, S. N., Carr, D. B., Cohen, M., Finnerup, N. B., Flor, H., Gibson, S., Keefe, F. J., Mogil, J. S., Ringkamp, M., Sluka, K. A., Song, X.-J., Stevens, B., Sullivan, M. D., Tutelman, P. R., Ushida, T., & Vader, K. (2020). The Revised International Association for the Study of Pain definition of pain: Concepts, challenges, and compromises. *Pain, 161*(9), 1976–1982. https://doi.org/10.1097/j.pain.0000000000001939

Ricciardelli, R. (2013). Establishing and asserting masculinity in Canadian penitentiaries. *Journal of Gender Studies*, *24*(2), 170–191. https://doi.org/10.1080/09589236.2013.812513

Ricciardelli, R., Pratt, K., & Idzikowski, M. (2021). Care, custody, control, and the preservation of life: The complexity of correctional officer work. *Journal of Crime and Justice*, *44*(1), 1–15. https://doi.org/10.1080/0735648x.2020.1759444

Robinson, O. C. (2014). Sampling in interview-based qualitative research: A theoretical and practical guide. *Qualitative Research in Psychology*, *11*(1)*,* 25–41. https://doi.org/10.1080/14780887.2013.801543

Robinson, R. K. (2011). Masculinity as prison: Sexual identity, race, and incarceration. *California Law Review*, *99*, 1309–1408

Santini, Z. I., Jose, P. E., York Cornwell, E., Koyanagi, A., Nielsen, L., Hinrichsen, C., Meilstrup, C., Madsen, K. R., & Koushede, V. (2020). Social disconnectedness, perceived isolation, and symptoms of depression and anxiety among older Americans (NSHAP): A longitudinal mediation analysis. *The Lancet Public Health*, *5*(1), e62-e70. https://doi.org/10.1016/s2468-2667(19)30230-0

Salter, M. (2019, February 27). The problem with a fight against toxic masculinity. *The Atlantic*, *27*. https://dickkesslerphd.com/wp-content/uploads/2019/03/The-Problem-With-a-Fight-Against-Toxic-Masculinity.pdf

Sharma, G. (2017). Pros and cons of different sampling techniques. *International Journal of Applied Research*, *3*(7), 749-752.

Smith, L. R. (2020). *Supporting people after remand or conviction (SPARC): An innovation in pre-custody care.* Doctoral dissertation, University of Lincoln. https://eprints.lincoln.ac.uk/id/eprint/448

Spencer, D. C. (2012). Narratives of despair and loss: Pain, injury and masculinity in the sport of mixed martial arts. *Qualitative Research in Sport, Exercise and Health*, *4*(1), 117–137. https://doi.org/10.1080/2159676x.2011.653499

Stewart, L. A., Nolan, A., Sapers, J., Power, J., Panaro, L., & Smith, J. (2015). Chronic health conditions reported by male inmates newly admitted to Canadian federal penitentiaries. *Canadian Medical Association Open, 3*(1), E97–E102. https://doi.org/10.9778/cmajo.20140025

Sykes, G. M. (2007). *The society of captives: A study of a maximum security prison*. Princeton University Press. (Original work published 1958)

Teo, A. R. (2012). Social isolation associated with depression: A case report of hikikomori. *International Journal of Social Psychiatry*, *59*(4), 339–341. https://doi.org/10.1177/0020764012437128

Thorne, S. (2016). *Interpretive description: Qualitative research for applied practice*. Routledge. https://doi.org/https://doi.org/10.4324/9781315545196

Thorne, S., Kirkham, S. R., & O'Flynn-Magee, K. (2004). The analytic challenge in interpretive description. *International Journal of Qualitative Methods*, *3*(1), 1–11. https://doi.org/10.1177/160940690400300101

Toch, H. (1998). Hypermasculinity and prison violence. In L. H. Bowker (Ed.), *Masculinities and violence* (pp. 168–178). Sage. https://doi.org/10.4135/9781483328010.n9

Wang, E. A., Hong, C. S., Shavit, S., Sanders, R., Kessell, E., & Kushel, M. B. (2012). Engaging individuals recently released from prison into primary care: A randomized trial. *American Journal of Public Health, 102*(9), e22–e29. https://doi.org/10.2105/AJPH.2012.300894

Willmott, Y. (1997). Prison nursing: The tension between custody and care. *British Journal of Nursing*, *6*(6), 333–336. https://doi.org/10.12968/bjon.1997.6.6.33

# Chapter 5: Advancing Interpretive Description: Co-Positioning Theory in Designing a Research Study


## Abstract

**Background:** In 1997, Sally Thorne, Sheryl Reimer Kirkham, and Janet MacDonald-Emes offered ID as an approach to designing sound, disciplinary-orientated research to develop clinically meaningful and useful outcomes. It is both an alternative approach to the strict adherence to methodological traditions that other disciplines have developed and a methodology to design disciplinary-specific research projects. Additionally, ID refutes orthodoxy that requires theoretical structures as foundational to sound qualitative research.

**Question:** How can theory be explicitly co-positioned in ID research?

**Approach:** This is a theoretical exploration of how theory can be co-positioned with ID in designing and conducting a research project. The author explains the core assumptions of ID and describe the philosophical and pragmatic conditions required to co-position theory in ID research.

**Conclusion:** Although ID research does not require theoretical frameworks, I argue that in some circumstances they are needed to produce meaningful and clinically useful research. Co-positioning theory in ID research projects provides context that is required in highly sensitive, morally ambiguous practice situations.

## Advancing Interpretive Description: Co-Positioning Theory when Designing a Research Study

ID is an appropriate approach to develop clinically useful, disciplinary-specific, subjective knowledge to inform professional practice within a discipline (Thorne et al., 1997). Whereas traditional approaches to empirical research recommend that researchers use *a priori* theory to design their research project, Thorne et al. underscored the importance of researchers' use of the knowledge of their disciplines as the epistemological foundation for the development of discipline-specific knowledge. These authors cautioned that using a theoretical framework to guide a research project introduces value-laden concepts and terms, which risks biasing the intended aim of the study. For this reason, researchers discourage the use of co-positioning theory in ID research.

In this paper I argue that circumstances exist in which *a priori* theory should be co-positioned with ID to address complex questions that arise in nursing practice. In 2016, Thorne remarked that when researchers use *a priori* theory in ID research, it must "explicitly guide design and application decisions in your research" (p. 72). Although I agree with Thorne, she offered little explication of how to co-position theory appropriately with ID. My aim in this paper is to build on Thorne's work by describing how co-positioning theory is useful in ID research. First, I describe how to co-position theory within the existing philosophical assumptions that underpin ID. I then discuss the impact of theoretical co-positioning on methodological decision making.

### Juxtaposing Theory and Interpretive Description Research

The idea of research—the discovery of purported truths about the universe—is deeply rooted in philosophical discourse. Epistemology, a branch of philosophy, is concerned with

theories of knowledge, whereas ontology is the study of existing, existence, and reality (Dahnke & Dreher, 2015). Ontology orients us to the substance of research, and epistemology provides approaches to research (i.e., how to detect, measure, and understand a phenomenon). On this basis, approaches to research require a coherent philosophical underpinning to orient users toward their phenomenon of interest.

In 1997, Thorne et al. proposed ID as a new qualitative approach to developing nursing knowledge. They argued that "what is known, whether by formal research or clinical interpretation, should be considered foundational forestructure to a new inquiry" (p. 173). ID is based on three core philosophical assumptions (Thorne, 2016; Thorne et al., 2004):

- Disciplinary assumption: The broad epistemic grounding in ID is located within clinicians' knowledge of their discipline, which is the epistemological basis for practice-oriented knowledge development.
- Practice assumption: Problems of concern to a discipline are detected through its practice. Research questions are conceptualized within one's knowledge and experience of practice. Accordingly, ID research generates knowledge to address disciplinary questions that emerge from practice.
- Methodological assumption: Problems of the discipline exist in naturalistic settings, and no *a priori* theory can predict all of the variations in which practice problems (and their answers) exist. A naturalistic interpretive orientation is the basis for the development of clinically relevant probable-truth claims.

### *Additional Assumption in Co-Positioning Theory*

ID is a legitimate structure from which to develop sound research designs (Caelli et al., 2003; Thorne et al., 1997). The literature revealed fervent scholarly debate in the early and mid-

2000s on the usefulness of theoretical perspectives in augmenting the quality, and therefore the credibility, of qualitative research (e.g., Braun & Clark, 2006; Holloway & Todres, 2003; Morse et al., 2002; Patton, 2002; Reeves et al., 2008; Rolfe, 2006; Sandelowski, 1986, 1993, 2000; Thorne et al., 1997). Although some have argued that authentic qualitative research must be embedded in a clear theoretical framework, others have held that rigorous, and sometimes excessive, reliance on the epistemological doctrines of traditional qualitative methods leads to poor participant representation and weakens the quality of research outcomes (Smith et al., 2011). I suggest that contemporary qualitative methodologists must carefully balance the risks of strict adherence to a prescriptive research methodology that requires theoretical frameworks with the risks of not applying theory.

The aim of ID research is to develop useful practice-specific knowledge, understood and conceptualized in the context of researchers' disciplinary knowledge and naturalistic experience (Thorne, 2016). Arguably, the use of a particular theory must be intentional, and it must be congruent with the core philosophical assumptions of ID. Because researchers' disciplinary orientation is the ontological and epistemological foundation for ID research, theoretical positioning must not detract from, or be incommensurable with, their disciplinary orientation. Rather, these elements must be congruent and co-inform research-design decision making during the entire research process.

Thorne (2014, 2016) contended that in ID, meaningful research results—those that maintain the integrity of the research process—arise from researchers' intentional and thoughtful reflection on potential unintended outcomes or interpretations that result from misused theory, philosophy, or value-laden words. Thus, using an ID approach to inform design, analysis, and dissemination of research requires that researchers omit and/or avoid references to theory (or

philosophy) that can undermine the intended research aims. I argue that in some situations the omission or avoidance of value-laden theory or concepts is not possible. In fact, a clinical phenomenon under study might introduce a value that requires its explicit attention and form the basis for the questions that we ask and its clinical interpretation. Arguably, if reference to theory is required, then ethical research requires its thoughtful, intentional, and cautious integration into each design and implementation phase of ID research projects.

### *Thorne's Theoretical Forestructure*

Thorne (2016) described *theoretical forestructure* as an intellectual activity that encourages researchers to consider their disciplinary orientations, theoretical allegiances, and individual perspectives during the early design phases of an ID research project. Clarifying their theoretical forestructure is crucial to enable researchers to become aware of their "theoretical allegiances" (p. 70) to minimize theoretical bias(es).

I turn my attention to the practice of forensic nursing to highlight the impact of theoretical allegiances. Broadly, potential topics of interest to forensic nurses are concepts such as punishment, power, social control, and masculinity. Theories such as deterrence and rational choice, labeling theory, and symbolic interaction theory have shaped these concepts, and philosophers such as Michel Foucault (1975/2012) have influenced them. In ID, the existing knowledge that researchers use to define these concepts could be considered value-laden and detract from the intended clinical usefulness of the research project. Thorne (2016) noted that "a casual reference to Michel Foucault, for example, might communicate to informed scholars a very explicit set of understandings about the dynamics of knowledge, power, and social control" (p. 72) that the target audience would expect to see in the research findings. These value-laden "cues" reveal researchers' theoretical positioning (p. 71). Although researchers use *a priori*

theory in ID, they must do so cautiously and intentionally to offer new insights into rather than detracting from a problem situated in the practice realm. Alternatively, *a priori* theory also ensures that prospective knowledge users apply the research findings in a way that the study authors have intended. This might be desirable in situations of highly sensitive and morally ambiguous topics or practice areas to ensure that knowledge users apply research findings to practice situations ethically.

In keeping with the nursing example, it is important to recognize that nurses are also people who are connected to and understand the world in unique ways. As an example, the unique insights of forensic nurses with personal experiences of addiction can contribute to the development of relevant clinical knowledge. Furthermore, individual nurses might adopt attitudes and beliefs from the broader society that impact their own practice ethic and clinical decision making. It is essential to consider the effect of these social and political influences in designing sound nursing research in the context of forensic nursing. Collectively, the three elements of theoretical forestructuring that I describe in this section provide insights into how *a priori* knowledge and experience influence all aspects of the research process. In this process the need to co-position theory in an ID research study becomes apparent. Although I present a nursing example in this paper, the same principles apply to clinicians in other disciplines.

As Thorne (2016) suggested, understanding the theoretical forestructure is a deliberate exercise in which researchers actively seek to identify what they know about the phenomena under study; it includes identifying value and bias orientations. To access this type of information, I propose that researchers approach this endeavour by considering the following questions: What general disciplinary knowledge do clinicians use to understand and respond to a clinical phenomenon of interest? What subdisciplinary knowledge do clinicians use to

understand and respond to a clinical phenomenon that occurs in a specific practice context? How do individual clinicians (including researchers) position themselves to understand and respond to a clinical phenomenon in a specific practice setting? Why is general disciplinary knowledge insufficient to address a clinical phenomenon in a specific practice setting?

The answers to the first question help to understand the phenomenon within the discipline. The second question focuses on the contextual factors associated with specific practice settings within the broader discipline. The third question calls on researchers to identify personal knowledge that can enhance or bias the overall research endeavour and to recognize any controversial areas that, without an overlying theory, can reshape the intended meaning of the research outcomes. The last question helps to determine the overall disciplinary significance of the proposed research project and identify any value orientations that can alter the meaning of the intended outcomes of the research study. This last question is the rationale and justification for co-positioning theory in ID research, and it is important to include it in subsequent research studies for transparency and research integrity purposes.

**Disciplinary Assumptions.** Researchers' knowledge of their discipline, which forms the epistemological and ontological basis for ID research, orients them to questions of interest to the discipline (or area within the discipline) and shapes the data collection, data analysis, and research outcomes (Thorne, 2016). Nursing, however, is a complex and dynamic entity that individual nurses do not know in its entirety. Although bound by the common mandate of the profession, each nurse's experience of the discipline is unique, depending on the area of specialization, past clinical experiences, formal education, geographical location of practice, and so forth. In nursing, as in other disciplines, a unified and fully known ontology and epistemology do not exist. I suggest that the collective knowledge of all practitioners in a discipline over the

entirety of its past, present, and future, and inclusive of the generalities, contradictions, and nuances of each practice context, represents the totality of a discipline's ontology and epistemology.

Although disciplinary ontology exists differently for practitioners across the discipline and over time, I assume that similar probable truth claims repeat across multiple nursing subcontexts and point toward a common reality that is useful to the broader discipline. In nursing, this shared knowledge binds people together in their discipline. Similarly, unique disciplinary phenomena and knowledge restricted to distinctive practice contexts lead to common experiences for nurses in different clinical contexts and geographical regions. For nursing, this represents contextualized knowledge that exists in specialty areas within and across multiple jurisdictions. Furthermore, individual clinicians experience nursing practice in relationship to their own understandings of the world, including knowledge of practice, personal values and biases, and moral positioning.

In practical terms, I acknowledge that both common and unique pluralistic ontological and epistemological standpoints exist amongst clinicians. As an example, the specialized knowledge and practices of nurses who work in areas such as pediatric and forensic settings are consistent with the values and orientations of the broader discipline. This common disciplinary knowledge is evident in entry-to-practice standards, codes of ethics, core theories, and practice experiences. Although nurses might recognize these shared elements in the practice of other nurses, those in a pediatric environment might not be aware of the nuanced elements of forensic nursing practice and vice versa. Thus, the broad tenets of nursing and specific knowledge located within specific practice contexts inform nurses' disciplinary knowledge. Individual nurses then enact these tenets in clinical practice situations.

The breadth and depth of disciplinary knowledge create a complex and vast ontological and epistemological territory, unknowable in its totality by any single clinician. Clinicians' knowledge—both what they know and how they know it—contributes to the entirety of disciplinary knowledge. Although some might argue that clinicians develop knowledge through practice, I cannot ignore the valuable theoretical knowledge that clinicians use to synthesize, understand, and respond to various clinical problems. This disciplinary orientation is the location from which to detect, understand, and address practice problems. I submit that, without theory, without a common knowledge to recognize and address problems that clinicians encounter in practice, there is no discipline. In the nursing context, nurses use their knowledge of nursing to make clinical decisions. Similarly, nursing researchers rely on this same knowledge of nursing to interpret and make decisions when they analyze their research data.

Thus, in some circumstances it is not possible to address practice problems without relying on specific theoretical positions. Similarly, within the research context, researchers commonly apply theoretical positions to guide the development of new knowledge (Dahnke & Dreher, 2015). Although relying on disciplinary knowledge or theoretical positioning as a starting point from which to discover new knowledge is merited, they need not be mutually exclusive. Though complex, some research requires the use of both disciplinary and theoretical positioning to answer difficult questions that have the potential to advance the aims of clinical practice. Stated differently, co-positioning one's disciplinary/practice knowledge with an existing theoretical approach has the capacity to generate clinically useful new practice knowledge.

Knowledge of one's discipline enables the recognition of clinical problems that require the interpretive structure that theoretical co-positioning offers, which presents a different road

map within the discipline. Theoretical co-positioning restricts knowledge development within the boundaries that the theory itself permits, but this might be exactly what is required. If research is akin to the exploration of vast sections of unknown territory, then theoretical positioning might be useful in aiding researchers in locating specific types of discoveries relevant to advancing the practices of a discipline.

Also through the application of disciplinary knowledge, clinicians might begin to observe a previously undescribed phenomenon and pose legitimate questions to identify problems that they encounter in practice. The questions that practitioners ask reflect knowledge gaps in the practice of their discipline that beg for clinically useful answers. Theoretical co-positioning can orient researchers to a specific region of study in which they can ask particular questions and leverage existing knowledge to discover the unknown.

**Practice Assumptions.** The practice of one's discipline is intrinsically linked to the extant knowledge of the discipline itself. Practice is often the location where clinicians identify gaps in disciplinary knowledge and pose research questions of relevance to the field. In ID, researchers use practice knowledge to detect and make sense of patterns and themes that give rise to subsequent research findings (Thorne, 2016). Given that the epistemic aims of ID are the development and practical application of disciplinary knowledge, the research outcomes must then, too, be oriented to advancing clinical practice. To proceed by using an ID approach, researchers must then logically describe how addressing identified gaps of knowledge will be clinically relevant to practitioners of the discipline. Thus, researchers who use an ID approach must move beyond describing the significance of their research to also describing the significance of their research to the practice of their discipline. If no identifiable clinical

relevance is discernible within the context of the question or research proposal, researchers should use another research method.

Co-positioning theory in ID research study contributes to sound and clinically relevant research findings. Freedman (1987) termed this *scientific validity and value*. Researchers should use theoretical positioning only as a mechanism to help them to generate usable practice knowledge. Stated simply, theoretical co-positioning in ID is only an instrument to narrow the dataset to within its prescribed parameters to provide researchers with a very specific type of data from which they can interpret their meaning within the clinical practice context.

**Methodological Assumptions.** In 2004 Thorne et al. identified three axioms of naturalistic inquiry that are aligned with ID's "interpretive naturalistic orientations" (p. 3) to address the criticism that it lacked an epistemological and ontological foundation and thus a sound methodological basis. Some have since interpreted these key axioms as representing ID's "philosophical framework" (Hunt, 2009, p. 1285) or "philosophical tenets" (Clark al., 2011, p. 197). These assumptions are not entirely correct. ID, similarly to other qualitative research approaches, aligns with the basic axioms of naturalistic inquiry (Sandelowski, 2000) and offers a logical and guided approach to designing a useful research method (Thorne, 2016). Broadly, a naturalistic orientation is a clinical research "approach to understanding the social world in which the researcher observes, describes, and interprets the experiences and actions of specific people and groups in societal and cultural contexts" (Armstrong, 2010, p. 880). This fits precisely with the objectives of clinical researchers who want to understand the intersubjectivity of clients, patients, or any population of interest to their discipline or profession. Researchers then interpret these subjective understandings and create outcomes to improve the provision of care, service delivery, client satisfaction, or other outcomes of interest. Thus, although it is

essential, the naturalistic orientation only partly informs the methodological foundation on which the discipline's philosophical framework rests. The methods that researchers use in ID research projects must accord with the interpretive naturalistic orientation of ID, make sense from within a disciplinary perspective, and draw on methodological knowledge of qualitative sciences.

Researchers who use an ID approach do not rely on strict methodological traditions when they design research projects. As Mayan (2016) posited, "Method exists within methodology" (p. 31), which means that theoretical assumptions and philosophical positions through which researchers come to know the unknown inform the methods that they follow. No single methodology or method, including those in quantitative sciences, can possibly answer the potentially infinite discipline-specific research questions. Thus, we must carefully understand the types of answers to day-to-day practice questions that clinicians ask of the discipline. By necessity, an ID research design involves logically and thoughtfully applying knowledge from within the breadth of the human sciences. This methodological "borrowing" (Thorne, 2016, p. 39) is the basis from which design decisions contribute to better-fitting research approaches. Strictly adhering to well-established research methods is akin to trying to fit a square peg into a round hole.

It is important to test the suitability of a particular theoretical position against the philosophical underpinnings of ID. Thus, theoretical co-positioning cannot obstruct the interpretive naturalistic orientations that are required for qualitative research guided by an ID approach. Further, the objective of ID (i.e., to develop useful practice-specific knowledge) must remain intact. It is important to understand that, if theoretical co-positioning is required and suitable alongside the philosophical foundation of ID, researchers must take seriously the associated methodological implications of doing so.

## Methodological Implications of Co-Positioning Theory in Interpretive Description

Once researchers determine the aims of their research projects, they follow the three remaining phases of the research process: creating a dataset, analyzing the data, and translating the findings into research outcomes. Theoretical positioning shapes each of these phases, from the questions asked to the way in which they produce the research outcomes. They must understand, acknowledge, and honestly represent such impacts to disseminate credible research findings. The impact of theoretical co-positioning in ID research studies also varies depending on the type of theory that researchers use.

### *Constructing Data*

Irrespective of researchers' methodological traditions, all research projects require data; this is the basic unit of interest in research. The quality of the dataset is ultimately the basis of the development of research outcomes. However, researchers' decisions concerning data sources are somewhat tentative and reliant on imperfect theoretical frameworks, practice or research experiences, and/or personal biases, amongst many other subjective factors. Ultimately, an ethic of research is to remain vigilant to factors that can potentially influence the dataset. This vigilance informs the truth claims that reflect the tentativeness of the data from which they were developed.

It is important to note that the co-positioning of theory in ID research becomes an instrument in which researchers use a disciplinary lens to understand the clinical significance of potential research findings. Researchers must remain vigilant not to construct data too narrowly because they will only merely confirm what they have already theorized and yield no significant clinical benefit. Concurrent data collection and data analysis is one strategy to identify data errors in a study's data-construction strategy and amend it appropriately.

***Data Analysis***

Though it is tempting to use the co-positioned theory to guide an analytical framework, this could potentially marginalize the disciplinary interpretation required in ID. The sole use of knowledge located inside a theory to locate research findings can corrupt the analytical process. If a data collection strategy is robust and conceptualized through a co-positioned theory, then researchers must construct sufficient data, with descriptions of phenomena inherently connected to the co-positioned theory. Movement between and within theoretical knowledge and disciplinary knowledge in the analysis of data becomes an intentional, potentially arduous, but required approach.

In co-positioning theory in an ID research project, researchers must recognize that the data are constructed from the understandings of a particular theory. Extreme caution is required to avoid simply confirming theory with clinical examples. Rather, when researchers interpret data and decide on the findings, they must interpret the significance of the results first within the context of the discipline and then determine how to understand these findings through the co-positioned theory. This is an iterative process. Although it is not explicitly a form of theory testing, it is possible that clinical interpretations will further broaden, refute, or confirm conceptual elements of the theory itself.

Thorne (2016) proposed that, once the interpretation of the research findings is complete, researchers must use theory to situate these findings within the broader context of theoretical knowledge. This answers the question of whether researchers' disciplinary interpretation of their dataset fits within broader existing theories. Although this is a recommendation for ID research when researchers do not co-position theory within the actual research project, using this same approach in ID projects co-positioned with theory has merit. Even when they co-position theory

in an ID research study, it does not mean that the findings relate only to that co-positioned theory. Instead, the imposition of the theory can shape the findings, and other types of knowledge make them understandable.

Therefore, I propose that researchers approach data analysis by posing the following questions: What do the data reveal from a disciplinary perspective? What do the data reveal through the lens of the co-positioned theory? How can researchers understand these findings collectively to inform clinical practice? How might this be significant to clinicians who practice in specific clinical settings? This iterative process helps to develop more nuanced understandings of the data and can lead to powerful descriptions and interpretations for practice. It is an effective strategy to move in and out of disciplinary and theoretical gazes and consider the impact of the findings within each pattern of knowing.

***Research Outcomes and Dissemination***

Most publications require a description of the study participants that is typically modelled on the descriptions in quantitative studies and includes descriptive statistics to produce a set of characteristics such as mean age, gender, and income level. Although useful and meaningful in quantitative research, such an approach in qualitative studies can be misleading because of the use of nonrandomization and smaller sample sizes. Scholars must endeavour to ensure that descriptions of qualitative research samples are honest and useful to the knowledge consumer. Participant representation should reflect the truth-claim potential of the research method.

Co-positioning theory in ID research adds another dimension to consider when researchers decide how to represent their participants, which should both reflect the truth-claim potential of ID and align with the core elements that underpin any co-positioned theory. For example, using brief narrative profiles that describe their subjective characteristics to represent

participants can be useful when researchers co-position theories that focus on individual subjective experiences.

Co-positioning theory in ID studies can introduce additional value-laden language and/or philosophical orientations that researchers might need to address carefully to avoid obscuring the intended meaning of the research outcomes (Thorne, 2016). Presenting preliminary findings to peers at a research conference can be useful to detect residual value-laden words, statements, or references that can detract from or alter the intended meaning. This is a form of peer review, and researchers can use the arising critiques to further refine the final written research paper. This approach is the same as in other ID studies. Thorne (2016) noted that many researchers present tentative findings at a conference as a mechanism to test their readiness to solidify their findings and write their research report.

**Conclusion**

ID is a sound qualitative research design that enables researchers to discover new practice-oriented knowledge that is meaningful to their disciplines. Co-positioning of theory in ID research requires a cautious, intelligent, and deliberate approach, and researchers should consider it only in situations in which the research outcomes risk being flawed if they omit specific theory. Co-positioning theory in ID research also requires that researchers make methodological-design decisions in each phase of the research project—from refining their research question to disseminating newly discovered knowledge. The co-positioned theory, in other words, becomes inseparable from the research design.

## References


Armstrong, J. (2010). Naturalistic inquiry. In N.J. Salk (Ed.), *Encyclopedia of research design* (pp. 880–885). Sage.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Caelli, K., Ray, L., & Mill, J. (2003). 'Clear as mud': Toward greater clarity in generic qualitative research. *International Journal of Qualitative Methods*, *2*(2), 1–13. https://doi.org/10.1177/160940690300200201

Clark, M. I., Spence, J. C., & Holt, N. L. (2011). In the shoes of young adolescent girls: Understanding physical activity experiences through interpretive description. *Qualitative Research in Sport, Exercise and Health*, *3*(2), 193–210. https://doi.org/10.1080/2159676x.2011.572180

Dahnke, M. D., & Dreher, H. M. (2015). *Philosophy of science for nursing practice: Concepts and application* (2nd ed.). Springer.

Foucault, M. (2012). *Discipline & punish: The birth of the prison* (A. Sheridan, Trans.). Vintage. (Original work published in 1975)

Freedman, B. (1987). Scientific value and validity as ethical requirements for research: A proposed explication. *IRB: Ethics and Human Research*, *9*(6), 7. https://doi.org/10.2307/3563623

Holloway, I., & Todres, L. (2003). The status of method: Flexibility, consistency and coherence. *Qualitative Research*, *3*(3), 345–357. https://doi.org/10.1177/1468794103033004

Hunt, M. R. (2009). Strengths and challenges in the use of interpretive description: Reflections arising from a study of the moral experience of health professionals in humanitarian work. *Qualitative Health Research*, *19*(9), 1284–1292. https://doi.org/10.1177/1049732309344612

Mayan, M. J. (2016). *Essentials of qualitative inquiry (Qualitative essentials)*. Routledge.

Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, *1*(2), 13–22. https://doi.org/10.1177/160940690200100202

Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd ed.). Sage.

Reeves, S., Albert, M., Kuper, A., & Hodges, B. D. (2008). Why use theories in qualitative research? *BMJ, 337*, a949. https://doi.org/10.1136/bmj.a949

Rolfe, G. (2006). Validity, trustworthiness and rigour: Quality and the idea of qualitative research. *Journal of Advanced Nursing*, *53*(3), 304–310. https://doi.org/10.1111/j.1365-2648.2006.03727.x

Sandelowski, M. (1986). The problem of rigor in qualitative research. *Advances in Nursing Science*, *8*(3), 27–37. https://doi.org/10.1097/00012272-198604000-00005

Sandelowski, M. (1993). Rigor or rigor mortis. *Advances in Nursing Science*, *16*(2), 1–8. https://doi.org/10.1097/00012272-199312000-00002

Sandelowski, M. (2000). Whatever happened to qualitative description? *Research in Nursing & Health, 23(*4), 334–340.

Smith, J., Bekker, H., & Cheater, F. (2011). Theoretical versus pragmatic design in qualitative research. *Nurse Researcher*, *18*(2), 39–51. https://doi.org/10.7748/nr2011.01.18.2.39.c8283

Thorne, S. (2014). The science and art of theoretical location. *Evidence Based Nursing*, *17*(2), 31. https://doi.org/10.1136/eb-2014-101738

Thorne, S. (2016). *Interpretive description: Qualitative research for applied practice* (2nd ed.). Routledge. https://doi.org/https://doi.org/10.4324/9781315545196

Thorne, S., Kirkham, S. R., & MacDonald-Emes, J. (1997). Interpretive description: A noncategorical qualitative alternative for developing nursing knowledge. *Research in Nursing & Health*, *20*(2), 169–177. https://doi.org/10.1002/(sici)1098-240x(199704)20:2<169::aid-nur9>3.0.co;2-i

Thorne, S., Kirkham, S. R., & O'Flynn-Magee, K. (2004). The analytic challenge in interpretive description. *International Journal of Qualitative Methods*, *3*(1), 1–11. https://doi.org/10.1177/160940690400300101

## Chapter 6: Relational Ethics in Interpretive Description Correctional Health Research

**Abstract**

**Background:** Co-positioning theory in ID research projects yields specific knowledge that might be required in highly sensitive, morally ambiguous practice situations.

**Question:** How can theory, specifically relational ethics, be co-positioned in ID research?

**Approach:** This paper demonstrates the co-positioning of relational ethics in a research study focused on understanding the experience of pain of men who are incarcerated. A summary of the theoretical forestructure highlights the need to include relational ethics in the ID research design. The author then discusses the methodological implications of co-positioning relational ethics in an ID research design.

**Conclusion:** Using a structured approach to theoretical forestructuring is an effective way to highlight the need to co-position relational ethics in research. Relational ethics is a subjective ethic that does not disrupt but fits within the methodological underpinnings of IDs. A structured and iterative approach to the data analysis and interpretation produced unique results inclusive of both nursing and relational ethics. The research outcomes are different than they would have been if the author had used nursing and relational ethics lenses separately to analyze the data.

## Relational Ethics in Interpretive Description Correctional Health Research

As an NP in a correctional healthcare setting, I am often challenged when I face patients' reports of physical pain. In part, this is because of some of the longstanding systemic tensions between caring and custody (Peternelj-Taylor, 1999), power imbalances, relational complexity, and nurses' professional commitments to patients, which often engender mistrust in the relational dynamic between nurses and patients (Austin et al., 2009). The subjective nature of pain and the complexities of its assessment and management within a forensic environment spawned from a research question for my doctoral research: What is the experience of pain of men who are incarcerated? My intent was to develop nursing practice knowledge to inform nurses in correctional settings on ethical, compassionate, and effective day-to-day responses to pain-related patient experiences in correctional healthcare practice.

Though incarceration is not well understood, it adds another layer to the complexities of the pain experience. I am reminded of Florence Nightingale's (1859/1992) charge that, in nursing, observation "is not for the sake of piling up miscellaneous information or curious facts, but for the sake of saving life and increasing health and comfort" (p. 70). This makes obvious that noticing and describing a symptom are insufficient. Nightingale advocated observations as evidence to inform changes in nursing practice, education, and policy (McDonald, 2010).

ID (Thorne, 2016), an applied qualitative health research approach, is an approach to translating research observations into meaningful clinical recommendations. Although ID offers a flexible approach to designing qualitative research projects to inform clinical practice, Thorne (2016) cautioned against using theory in designing unless it is absolutely required. I contend that investigating the pain experience of incarcerated people is one such situation in which theoretical approaches (i.e., relational ethics) are warranted to create the needed disciplinary knowledge.

The purpose of this paper is to describe my process of co-positioning relational ethics within an ID research study to develop disciplinary-specific and clinically relevant knowledge of pain experiences during periods of incarceration. I begin by discussing the results of the theoretical forestructuring and concluding that an ID research project co-positioned with relational ethics is required to study pain amongst people who are incarcerated. I then describe how relational ethics constitutively fits with the philosophical foundations of ID. Finally, I discuss the methodological implications of co-positioning relational ethics in an ID research study.

**Theoretical Forestructure: Pain in Correctional Nursing Practice**

The first purpose of this dissertation was to understand the pain experience of men in correctional settings to inform ethical clinical practice. This research aim is clearly of interest to nursing, amenable to qualitative inquiry, relevant to my correctional practice settings, and thus congruent with the broad objectives of ID (Thorne, 2016). I used theoretical forestructuring to better understand the relationship of the phenomenon of interest—the pain experiences of people who are incarcerated —within correctional nursing practice. This process was a deliberate exercise, as Thorne (2016) recommended, to avoid unintentionally introducing bias into the research.[1]

The final phase of the theoretical forestructuring process involves justifying the co-positioning of theory in ID research. The following question guided this final phase: Why is our current disciplinary understanding of pain insufficient to address existing practice problems in correctional settings***?*** The intent of this question was to create a space to synthesize what we know and do not know and to determine whether additional research is required and what type of

[1] Refer to chapter 5 for a complete discussion.

research is needed. As I demonstrated in Chapter 2, we know little about people's experience of pain during periods of incarceration. In fact, incarceration creates a unique psychosocial environment that shapes pain experiences in unanticipated ways. The lack of research in this topic area and the subjectivity of pain experiences indicated the need for a qualitative study. However, I did not want to lose sight of why I sought to learn more about the pain experiences of people who are incarcerated in the first place; namely, I wanted to develop new knowledge to inform correctional nursing practice. Thus, I viewed ID, given its focus on practice, as a reasonable research approach to meet these aims.

It is important to note that during this theoretical forestructuring, I discovered that the complexities of correctional nursing practice, its location in the overlap between the justice and health systems, and ongoing concerns regarding the conflation of pain and punishment and societal biases create the potential for moral minefields. For clarity, the concept of pain during incarceration takes on many different meanings, some of which potentially overlap. In this way, the mere use of the term *pain* when studying pain during incarceration introduces a biased direction that can severely corrupt an entire research project.

Thus, continuous, active ethical positioning is required to ensure that actions that arise from day-to-day correctional practice decisions are appropriate. Ethical guidance must support nurses' complex pain-related decision making in correctional nursing contexts. This does not suggest that nurses in correctional practice settings are inherently unethical. Rather, it is prudent to support clinical excellence by clarifying and-supporting nurses' ethical decision making when they encounter complex situations. Traditional principle-based ethical models have been identified as insufficient to help nurses to understand and resolve the ethical nuances of day-to-

day practice situations in correctional nursing practice settings (Appelbaum, 1997, 2008; Austin, 2001; Austin et al., 2009; Lazzaretto-Green et al., 2011).

Relational ethics, an applied healthcare ethic, has the potential to help locate clinically fitting and ethical solutions to such day-to-day practice problem (Bergum & Dossetor, 2020). Relational ethics enables clinicians to consider ethical relationships in forensic healthcare settings beyond traditional principle-based approaches. Compared to focusing on a universally correct response, relational ethics is a pluralistic action ethic that offers clinicians a way to seek a "fitting, most appropriate action for everyone involved in a particular situation" (Bergum & Dossetor, 2020, p. 128). It is important to consider that relational ethics offers a theoretical basis to account for the possibility that a clearly correct and morally satisfying ethical response might not be possible. Faced with complex and challenging situations, clinicians who use a relational ethics framework consider the possibility that the "best thing to do" might actually involve doing the "least-worst thing" (Austin et al., 2009, p. 844). Ethical action involves action that is consistent with the core elements of relational ethics, which are engaged interaction, mutual respect, embodied knowledge, uncertainty/vulnerability, and interdependent environment (Austin, 2008; Pollard, 2015). Relational ethics does not call for the rejection of professional values or roles; rather, it calls for professionals to embrace them. Professional codes, professional values, social responsibilities, culture, gender, and all other relevant factors are important in determining how best to act. Unlike the incommensurability of the values and roles of forensic clinicians and principle-based ethics theory, the prospect of "being a nurse" in a forensic setting and responding ethically to incarcerated people's pain symptoms seems possible with a relational ethics approach (Austin et al., 2009).

Relational ethics offers a way to fill this void in forensic and correctional practice (Austin et al., 2009). It is an applied ethic, gives space to highlight and address even the "dark and dangerous components" (Austin et al., 2009, p. 845) of humanity, and helps clinicians to find fitting responses to everyday dilemmas in practice. For these reasons, and given its utility, relational ethics rose to a high level of importance that required its explicit positioning within my research study. Thus, an ID approach co-positioned with relational ethics is appropriate to produce research outcomes that are capable of meeting the demand for pain-specific correctional nursing knowledge. However, can researchers co-position a relational ethics approach in ID research?

### *Testing the Fit of the Theoretical Position in Interpretive Description*

Recalling that researchers' disciplinary orientation is the ontological and epistemological basis of sound ID research, a theoretical co-position must not be incommensurable with their discipline or the philosophical basis that underpins ID. Rather, researchers' disciplinary orientation must coexist with and co-inform research design decision making during the research process. I will demonstrate how relational ethics fits at the philosophical level with ID research.

Relational ethics in healthcare calls on clinicians to decide how best to act based on the nuanced contexts of patient-practitioner relationships. Ethical actions are not static but reflect "the best thing for this person, at this particular time, under these circumstances, given this information" (Austin et al., 2009, p. 844). Thus, day-to-day ethical decision making requires that clinicians interpret patient-specific contexts within a naturalistic environment and recognize the imperfection and tentativeness of ethical decision making. Austin (2008) acknowledged the criticisms of "relativism and lack of impartiality and universality" (p. 749); yet within these very criticisms the strengths of relational ethics become apparent. Like ID, which fills knowledge

gaps that other approaches to research leave open (Thorne, 2016), relational ethics fills gaps in ethical knowledge that are located between what we know to be right and what we know to be wrong. These gaps occur where correctional nurses often practice, and thus relational ethics is an appropriate approach to find fitting responses to moral dilemmas in everyday practice. It is important to note that relational ethics fits interpretive naturalistic orientations that ID require and are amenable to study through qualitative methods.

Next, researchers must determine the congruency between relational ethics and the disciplinary orientation that underpins a proposed ID research project. This suggests that relational ethics must be constitutively aligned with the philosophies of the nursing discipline. Austin et al. (2009) advanced relational ethics as a suitable applied ethic in forensic settings, including in correctional nursing practice. Austin (2008) emphasised that the concept of autonomy, "the idea of the self-contained separate person, free from external constraint, does not capture the inherently social nature of human lives" (p. 749). This is particularly true in prison settings, where court appearances, resource availability, distrust of staff, legal strategy, threats to safety, comorbid illness, or other competing priorities or demands influence the decision making of people who are incarcerated. Relational ethics, as a healthcare ethic, offers clinicians an approach to explore complex healthcare issues within the interrelated intersubjective contexts in which they exist. This aligns with the essence of nursing, whereby the discipline acknowledges the variability of human experiences and the messiness of clinical situations in which nurses routinely develop nurse-patient therapeutic relationships and make decisions on complex daily practice issues.

### *Implications of Co-Positioning Relational Ethics in Interpretive Description*

My research question arose from real-life problems that occur amongst nurses in correctional practice settings. My consideration of theoretical forestructuring highlighted the need to co-position relational ethics in the study of the pain experiences of people who are incarcerated. The next phase was to design the ID study, specifically with a focus on selecting the setting and participants, constructing data, analyzing the data, and translating the findings into research outcomes. In this section, I describe how the co-positioning of relational ethics impacted design-decisions in each phase of the research process.

#### *Selecting the Study Setting and Participants*

Selecting the study setting and participants is important in any research study and remains no less important when researchers co-position relational ethics in an ID research study. The objective of the research study was to develop knowledge to inform practice-oriented ethical knowledge that would be useful to correctional nursing practice. Seeking data from correctional healthcare professional and correctional officers was one way to meet these objectives.

However, the co-positioning of relational ethics also requires data to develop a nuanced and subjective description of the pain that people who are incarcerated experience. The power imbalances and relational concerns within the nurse-patient relationships in correctional settings can impact nurses' descriptions of their patients' pain. Data from a nursing perspective will likely not be unbiased and amenable to the development of a sufficient robust understanding of pain experience amongst people who are incarcerated. The dataset must then contain data that are better suited to explain the experience of nursing incarcerated people who experience pain rather than focusing on the subjective experiences of incarcerated persons. The same reasoning also excluded data from correctional officers. Rather, the specific type of data required for my

study was located explicitly within the personal experiences of people who had pain while they were incarcerated.

For these reasons, I determined that surrogate data that would describe the pain experiences of people who were incarcerated was insufficient to meet the type of research outcomes that I required to co-position relational ethics in an ID research project. I therefore sought data directly from people who were experiencing pain while incarcerated. This required that I recruit participants and interview them in a correctional setting, which I did in my study.

I designed my participant recruitment as broadly as possible while balancing the security requirements of the correctional facility. To preserve confidentiality and to avoid collecting data that the presence of correctional officers would shape, I interviewed the participants in the same location where lawyers meet their clients. The participants recognized this as confidential space, and I deemed it fitting to ensure that I would obtain the best possible descriptions of their pain. Interviewing individuals in a space that assures confidentiality and privacy gave these incarcerated people an opportunity to set aside their acts of toughness, although briefly, and provided glimpses of the persons cloaked in the inmate persona (Hefner, 2017; Sloan, 2016). This demonstrated to the participants that I, the researcher, was external to the security processes and mitigated the potential power imbalances between myself as the researcher and the participants, guided by the central tenets of relational ethics.

### *Constructing Data*

The relational focus of relational ethics can privilege the collection of a certain type of data—specifically, data on ethical patient-nurse relationships within the context of pain management. This type of data is necessary to meet the practice-oriented objectives called for in the research study. However, relational ethics might preclude other types of data and thus keep

concealed other potential discoveries. The risks of bias, including stigma associated with addiction and nurses' social beliefs about pain, punishment, and incarceration or other forms of abjection, are significant and can shape, whether consciously or not, researchers' collection and analysis of the data and the implementation of relevant findings in practice. Although I consider myself a moral person of upstanding professional character, I must also recognize that I, like any other clinician, am prone to bias. Accordingly, co-positioning relational ethics in this research study, despite potential gaps in certain types of data, was the safest and most responsible course of action.

In designing my data-collection strategy, I originally developed a preliminary interview guide that contained questions that nurses typically ask when they analyze a clinical sign or symptom. This is the disciplinary orientation of the study. The questions elicited data on pain location, quality, quantity, timing, aggravating/alleviating factors, associated signs and symptoms, environmental factors, significance to the patient, and the patient's perspective (Stephen & Skillen, 2020). This yielded a broad scan of the territory to find specific locations from which to collect further data specific to relational ethics. I collected and analyzed the data concurrently to identify possible themes and refine the interview questions for subsequent interviews. Within this concurrent data analysis/collection phase, data specific to the elements of relational ethics began to take shape. I then used the elements of relational ethics to uncover potential experiences of pain as they related to issues of vulnerability, uncertainty, engagement, mutual respect, and interdependent environments. For instance, in the early interviews the participants referred to a nurse as either "a good nurse" or "a bad nurse" within the context of their pain experiences. In the later interviews I asked additional probing questions such as "How does a good nurse treat you when you say you have pain?" to further clarify the specific actions

and behaviors of nurses within the context of the nurse-patient relationship and understand “a good nurse” and “a bad nurse” from a relational ethics perspective.

The imposition of a theoretical co-position affected the data construction. Thus, frequent reminders of the overall purpose of the study were useful to ensure that the data construction was sufficiently broad to be of use in this research endeavour. I set the structures of nursing and relational ethics as a touchstone, a place to which I could return after I ventured broadly into the surrounding “analytical trails” (Thorne, 2016, p. 165). This kept open the possibility of discovering new understandings of pain that would be useful to nursing practice in correctional settings. Further, I postulate that, given the relational ethical focus of the data construction, the dataset not only offered insights into nursing practice (which must be ethical), but also brought additional clarity to the relational ethics itself.

As an example, one participant suggested that having an opportunity to masturbate more frequently would help to resolve his pain symptoms. From a relational ethics perspective, the participant might have been saying that the high degree of surveillance in prisons can preclude or limit this intimate act. I explored this concept of surveillance in subsequent interviews. However, the possibility of masturbation as an analgesic prompted exploration of the literature. Indeed, I found case reports of people with psychiatric conditions, primarily schizophrenia, who masturbate to self-treat painful conditions such as dental or abdominal pain. The subjects of the case reports engaged in masturbation instead of verbalizing their pain symptoms to their healthcare providers (Marchand, 1961). Others have noted that sexual orgasm, most often during masturbation, can relieve the pain associated with migraine headaches or chronic back issues, at least temporarily (Uca & Kozak, 2015). Similarly, Meddings et al. (2022) presented a case report of foot-pain resolution with sexual orgasm.

My aim in this study was to provide nurses with practical knowledge on pain management in correctional settings. I situated this theme within the broader objectives of the study to make a sound decision on how to proceed with the research. From a relational ethics perspective, this can potentially build thematically embodied knowledge, specifically personal knowledge of what reduces pain within the body. I then developed a broader question on the embodied knowledge of pain relief. Specifically, I asked the participants what type of activities or exercises improved or worsened, even if only temporarily, pain in their bodies.

These examples demonstrate the ongoing decision making required to construct a pertinent dataset to meet the end objectives of a research project. Each example offers evidence of how relational ethics influences research decision making and affects the very data in the subsequent data analysis. Researchers' disciplinary orientations and theoretical positionings also influence the analytical process of the final constructed dataset.

During the data-collection period, I used journaling as a mechanism to reflect on interviews, record preliminary observations, and identify or track emerging trends. Thorne (2016) noted that journaling is a useful tool that helps researchers to identify or track the ways in which they understand or interpret their data. This was relevant in this study because I used the core elements of relational ethics as a framework from which to contextualize and interpret the data from the interviews. In my research journal, for instance, I included data not captured though audio recordings, such as lockups and staff impressions or attitudes. This formed additional contextual data that I used to further advance knowledge on relationships and ethics.

### *Data Analysis and Interpretation*

As I discussed earlier, my data analysis occurred concurrently with my data collection. This gave me an opportunity to redress poorly fitting questions, add questions to expand the

exploration of the concept of interest, and confirm or reject preliminary interpretations of the data (Thorne, 2016; Thorne et al., 2004). In ID, data analysis is more than merely "taking things apart and putting them back together" (Thorne, 2016, p. 157) and requires that researchers move beyond reporting on the self-evident. Rather, a process of deconstructing the interpretations of the data, identifying and testing "hunches as to how it may fit together in new ways" (Thorne, 2016, p. 157), is required to report on meaningful research findings. Thorne (2016) identified three phases of data analysis: sorting and organizing, making sense of patterns, and transforming patterns into findings.

As I discussed in the preceding paper, iterative consideration of the following questions guided my analysis: What do the data reveal from a disciplinary perspective? What do the data reveal through the lens of the co-positioned theory? How can researchers understand these findings collectively to inform clinical practice? How might this be significant to clinicians who practice in specific clinical settings? In keeping with ID, I employed an inductive analytical approach.

Accordingly, I first examined the dataset through a wider nursing lens to ensure that I had not coded the data too narrowly or prematurely. I then coded the data on the nurse-patient relationship. Next, I highlighted data segments that corresponded to each element of relational ethics. Then, from the coded data I wrote descriptions of how people who are incarcerated experience pain. I examined the resulting narratives for their relevance to ethical nursing practice in correctional settings, and specific themes and patterns emerged. The subsequent patterns yielded themes and patterning that I employed during the interpretive phase of ID.

I did not develop probable truth claims by relying purely on a nursing analytical framework to place alongside relational ethics postanalysis. Stated differently, I did not ask,

"What does this mean from a nursing perspective?" or "What does this mean from a relational ethics perspective?" Rather, I approached the interpretive phase of the data analysis by asking, "How do I, as a nurse, interpret the data from a relational ethics perspective?" This method explicitly includes co-positioned theory in the disciplinary interpretation and yields a unique interpretive approach to transforming data into probable truth claims to inform clinical decision making.

With regard to the masturbation example, a strictly nursing lens might have led to a recommendation to provide dedicated space and privacy for masturbation. The co-positioning of relational ethics with nursing resulted in unique data and different analytical and interpretive maneuvering. As a result, the issue became less about masturbation and more an acknowledgment of restricted autonomy or ability to engage in self-care or self-management strategies because of the interdependent prison structures. Access to over-the-counter analgesics, ice packs, heat pads, rehabilitation programs, and mediation is limited in correctional settings, and these forms of pain relief are often available only upon recommendation from a nurse or NP. Thus, correctional nurses must recognize the relational dependency and power imbalance between nurse and patient to decide how best to proceed in the day-to-day care of people who experience pain symptoms during periods of incarceration.

### *Research Outcomes and Dissemination*

The dissemination of research findings is crucial to any research project and instrumental to translating knowledge into practice. At the outset I sought to ensure that clinicians could use my research findings as intended in practice. According to Gadamer's (2008) understanding of hermeneutics, written texts (or any form of communication) can be interpreted and take on very different meaning than initially intended. This makes it even more important that the explicit and

clear inclusion of the overarching co-positioned theory be apparent in scholarly publications and presentations.

Choosing how to represent the participants becomes an important endeavour to minimize misinterpretations of the research outcomes. The co-positioning of relational ethics in my research study called into question the common use of descriptive statistics to describe qualitative sample. Such statistical representations of qualitative data introduce a biased direction that can lead readers to conclude incorrectly that the sample conforms with typical statistical theory, which is seldom the case. Additionally, relational ethics involves understanding the subjective and personal situations of individuals to develop fitting responses to ethical dilemmas. To signal the importance of individual contexts in my research, I have included short narratives about each participant. I have given the participants pseudonyms and briefly described their life situations to give readers a sense of how each participant existed within the world. For example, I described Scott as follows:

> Scott, a former boxer, had a constant burning pain in his shoulder that started "years ago." Despite having had many x-rays and medical assessments, he did not understand what caused his pain. He was initially prescribed a strong opioid analgesic for his pain but soon began to use heroin and then fentanyl. He was in his early 30s and had been in and out of jail for most of his adult life.

I then wrote the Findings section to describe each participant's experience of the broader themes that I discovered during my data analysis. I remind readers that the experiences of each participant demonstrate how I pieced together data segments to develop clinically useful findings.

Knowledge users should also have more than just a casual reference to the co-positioned theory; rather, it is important to state explicitly that it is instrumental to understanding and implementing the research findings (Thorne, 2016). In my research papers I situated the findings within the language of relational ethics. To better access nurse practicing in correctional settings,

I will target my dissemination interventions toward workshops, webinars, and clinical policy development.

**Conclusion**

The central assumption of ID research, as an applied research approach, is that it is grounded in a naturalistic interpretive orientation. Although ID research does not require theoretical co-positioning, I have described a research project in which relational ethics meaningfully enhanced the study of pain experiences amongst people who are incarcerated. Through a series of questions to approach theoretical forestructuring, and a description of how co-positioning relational ethics in ID influenced crucial elements of the research project, I demonstrated that this approach can result in the development of useful, ethically oriented nursing knowledge for nursing practice with people who experience pain during periods of incarceration.

## References


Appelbaum, P. S. (1997). A theory of ethics for forensic psychiatry. *Journal of the American Academy of Psychiatry and the Law Online*, 25(3), 233–247. http://jaapl.org/content/jaapl/25/3/233.full.pdf

Appelbaum, P. S. (2008). Ethics and forensic psychiatry: Translating principles into practice. *Journal of the American Academy of Psychiatry and the Law Online*, 36(2), 195–200. http://jaapl.org/content/jaapl/36/2/195.full.pdf.

Austin, W. (2001). Using the human rights paradigm in health ethics: The problems and the possibilities. *Nursing Ethics,* 8(3), 183–195. https://doi.org/10.1177/096973300100800304

Austin, W. (2008) Relational ethics. In L. M. Given (Ed.), *The SAGE encyclopedia of qualitative research methods* (pp. 749-749). Sage.

Austin, W., Goble, E., & Kelecevic, J. (2009). The ethics of forensic psychiatry: Moving beyond principles to a relational ethics approach. *Journal of Forensic Psychiatry & Psychology*, *20*(6), 835–850. https://doi.org/10.1080/14789940903174147

Bergum, V., & Dossetor, J. B. (2020). *Relational ethics: The full meaning of respect.* University Publishing Group.

Gadamer, H. G. (2008). *Philosophical hermeneutics*. University of California Press.

Hefner, M. K. (2017). Queering prison masculinity. *Men and Masculinities*, *21*(2), 230–253. https://doi.org/10.1177/1097184x17695037.

Lazzaretto-Green, D., Austin, W., Goble, E., Buys, L., Gorman, T., & Rankel, M. (2011). Walking a fine line: Forensic mental health practitioners' experience of working with correctional officers. *Journal of Forensic Nursing*, *7*(3), 109–119. https://doi.org/10.1111/j.1939-3938.2011.01107.x

Marchand, W. E. (1961). Analgesic effect of masturbation: Masturbation as a clinical sign of painful somatic disorders in psychotic patients: Report of two cases. *Archives of General Psychiatry*, *4*(2), 137–138. https://doi.org/10.1001/archpsyc.1961.01710080033006

McDonald, L. (2010). Florence Nightingale a hundred years on: Who she was and what she was not. *Women's History Review*, *19*(5), 721–740. https://doi.org/10.1080/09612025.2010.509934

Meddings, K., Klein, C., & Elliott, S. (2022). Successful multidisciplinary management of foot pain with orgasm: A case report. *Sexual Medicine*, *10*(2), 100499. https://doi.org/10.1016/j.esxm.2022.100499

Nightingale, F. (1992). *Notes on nursing: What it is, and what it is not*. Lippincott Williams & Wilkins. (Original work published 1859)

Peternelj-Taylor, C. (1999). Forensic psychiatric nursing: The paradox of custody and caring. *Journal of Psychosocial Nursing and Mental Health Services*, *37*(9), 9-11. https://doi.org/10.3928/0279-3695-19990901-06

Pollard, C. (2015). What is the right thing to do: Use of a relational ethic framework to guide clinical decision-making. *International Journal of Caring Sciences 8*(2), 362–368.

Sloan, J. A. (2016). *Masculinities and the adult male prison experience*. Springer.

Stephen, T. C. & Skillen, D. L. (Eds.). (2020). *Canadian nursing health assessment: A best practice approach.* Wolters Kluwer.

Thorne, S. (2016). *Interpretive description: Qualitative research for applied practice*. Routledge. https://doi.org/https://doi.org/10.4324/9781315545196

Thorne, S., Kirkham, S. R., & O'Flynn-Magee, K. (2004). The analytic challenge in interpretive description. *International Journal of Qualitative Methods*, *3*(1), 1–11. https://doi.org/10.1177/160940690400300101

Uca, A. U., & Kozak, H. H. (2015). Masturbation and orgasm as migraine headache treatment: Report of a case. *Neurology Asia*, *20*(2), 185–186. http://neurologyasia.org/articles/neuroasia-2015-20(2)-185.pdf

# Chapter 7: Conclusion

Because of the multiple meanings of pain in prison and its conflation with punishment, it was necessary that I ground this research in ethical healthcare practice. Otherwise, developing a specific and subjective understanding of pain experiences during incarceration, nuanced and ethically oriented pain interventions were elusive for correctional nursing practice. Austin et el. (2009) identified relational ethics as useful to locate fitting responses in correctional healthcare practice. Resultantly, I co-positioned relational ethics (Bergum & Dossetor, 2020) with an ID (Thorne, 2016) approach to develop a clinically useful understanding of people's experience of pain in correctional settings to inform ethical clinical practice. I achieved these aims by separating the aim into two guiding questions: (a) What is the pain experience of men who are incarcerated? and (b) How can researchers co-position relational ethics in an ID research study to develop discipline-specific and clinically relevant knowledge to guide effective, individualized, and ethical care in correctional settings?

## Clinical Lessons From the Pain That Incarcerated People Experience

This section summarizes the findings that contribute to the clinical knowledge that I have gained to respond ethically to men who experience pain during incarceration. I reported these findings in Chapters 5 and 6 of this dissertation and focus on two overarching themes: (a) The altered autonomy and dependency that incarceration causes influence the pain experience, and (b) The culture of toxic hypermasculinity that characterizes correctional settings influences the pain experience.

People who are incarcerated experience pain in relation to the societal isolation that results from incarceration, physical buildings, security structures, correctional staff's workflow and staffing patterns, correctional health nurses, correctional officers, and each other. These

relational subjective factors affect the experience and meaning of pain. Power imbalances between a person who experiences pain and others in the correctional setting, including staff and other incarcerated people, further influence the experience of pain during incarceration.

Being confined and experiencing pain reinforced the participants' dependency on staff for pain management. Staff who are responsible for maintaining institutional safety and security control access to pharmaceuticals, healthcare providers, ice or heat, and rehabilitation therapy and equipment, for example. Some of the participants interpreted the delays in accessing pain-relieving products, therapies, or health services as dehumanizing and unnecessarily contributing to their suffering. They described "good nurses" as those who promptly acted on their reports of pain and thus demonstrated compassion. However, many institutional processes, including the HSR process, created a relational distance between nurses and their patients that the participants perceived as impersonal and often a barrier to pain-related care. As a result, they used multiple mechanisms to circumvent official channels to request healthcare (e.g., approaching nursing staff during their medication rounds).

In this study the participants described their loss of autonomy in relationship to pain management but also revealed their attempts to manage their pain independently, such as cultivating peer relationships for support and assistance. As Finn pointed out with regard to diverting over-the-counter medications to give to another person in pain, "We are not animals." However, they had to balance such diversion activities against the risks of being caught. All of the participants described institutional concerns about substance-use disorders, drug diversion, and inherent distrust because of criminal histories, and they worried that the nurses would not trust the veracity of their reports of pain. As a result, they relied on historical medical records, including diagnostic imaging findings, as proof of their pain reports.

Friendships amongst people who are incarcerated are situated within toxic hypermasculine hierarchies and are different from what they might be accustomed to in free society. The participants described friendship as transactional in nature, superficial, and reliant on the ability to demonstrate loyalty and respect within the context of a normative prison code. Nonetheless, having friends offered assurances of safety and created a distraction from their pain and access to rehabilitation equipment and programs. Conversely, the participants who did not feel safe and whose pain impacted their ability to fight and defend themselves experienced pain in fear and isolation. Having unmet safety needs impacts self-actualization and can limit the efficacy of any pain or criminal justice rehabilitative interventions. Pain leads to isolation, a type of self-imposed solitary confinement that can have serious mental-health consequences.

**Summary of Clinical Implications**

The research findings offer correctional nurses knowledge that is useful in providing healthcare to people who are incarcerated and feel pain. The clinical recommendations that arose from this research are as follows.

- I recommend that nurses promptly respond to any concerns related to pain.
- I recommend that nurses focus on recalibrating trust in clinical relationships with people who have pain during incarceration. This can decrease the sense of pain injustice.
- I recommend that nurses design pain interventions to increase patient autonomy with regard to accessing pain relief, particularly when nurses are not present on the unit.
- I recommend that nurses design pain-rehabilitation programs for peer groups or individuals.

- I recommend that nurses ensure that patients fully understand the causes of their pain and activity levels that can lead to disability. This will help to reduce patients' uncertainty and decrease their concerns about further worsening their pain or becoming disabled.
- I recommend that nurses assess patients' perceptions of safety, particularly among people who have pain and self-isolate. I also recommend that pain assessments include mental-health assessments that focus on depression, anxiety, and suicide risk.
- I recommend that nurses work with correctional officers to arrange safer accommodations, whenever possible, for those who feel unsafe in specific units or institutions.

Given that I co-positioned relational ethics in this study design, the research outcomes are oriented towards relationships and conceptualized from an ethical perspective. I encourage nurses to consider how these findings are applicable to their own patients. Furthermore, I suggest that nurses apply relational ethics approaches to advance the care outcomes of people who are incarcerated.

**Co-Positioning Relational Ethics in Interpretive Description Research**

To partially answer the second research question, in Chapter 5, I demonstrated how to co-position theory in a methodological paper. In this study, I developed new knowledge to advance ID on a philosophical basis from which to co-position theory in ID research projects. Chapter 6 informs other researchers how I co-positioned relational ethics in the ID study that I conducted for this doctoral dissertation. Together, Chapter 5 and Chapter 6 fully address the second guiding question because, first, I developed the methodological basis for co-positioning theory in ID research and then demonstrated how I co-positioned relational ethics in an ID

research study. This preliminary methodological work was required to enable me to develop a research method and guide the qualitative study to answer my second guiding research question. Further, this work is foundational and will guide other researchers who desire to co-position theory when they design their ID research studies.

In summary, I developed a methodological approach to co-positioning theory in ID research. Like Thorne (2016), I maintain that researchers should do so only if it is necessary, which becomes apparent during the theoretical forestructuring process. Co-positioned theory must be commensurable with the overarching methodological orientation of ID or the epistemological underpinnings of the relevant practice discipline. Further, co-positioning theory in ID is a deliberate act that must mesh with each phase of the research process. Resultantly, the co-positioned theory becomes inseparable from the research method and influences the research-design decision making. Co-positioning theory also shapes the presentation and dissemination of the research findings.

Theoretical co-positioning is a research instrument that steers researchers towards specific types of data, which they then interpret within the parameters of theory, within the context of their disciplines, and in relationship to one another. Research outcomes become the product of how researchers use their disciplinary knowledge and knowledge from the co-positioned theory. Thus, they must test any co-positioned theory against and align it with the philosophical underpinnings of ID (i.e., naturalistic orientation and disciplinary knowledge).

Last, I have demonstrated how I co-positioned relational ethics in ID by applying the methodological knowledge that I developed in chapter 5. The value orientation derived from including relational ethics was intentional, produced a specific type of data and specific research outcomes, and impacted each phase of the research project. I conclude that relational ethics can

be co-positioned in an ID research study to develop disciplinary-specific and clinically relevant knowledge that guides effective, individualized, and ethical care in correctional settings

**Postscript: Applying Research Findings within a Patient Context**

In this section I present a brief example of how clinicians can use the knowledge that this doctoral study generated to understand day-to-day pain-related ethical dilemmas and determine a situationally specific appropriate response to guide action when it is required. Although I offer an appropriate response within the context of the example, I do not attempt to prescribe an appropriate response for others in similar clinical situations. Instead, I invite readers to locate themselves relationally within the nuances of their own clinical encounters in search of similarly appropriate responses. Nonetheless, I do acknowledge Bergum and Dossetor's (2020) observation that "perhaps studying one situation tells us something about all other relationships and potentially contributes to something about the greater relational ethics" (p. xx). Thus, continued dialogue to describe situations of relational ethics will not only offer insight into this approach to ethics, but can also contribute to the development of new ethical knowledge.

I recall Jim, who presented to the NP clinic three days following his incarceration. After a registered nurse assessed him, she referred him to an NP for extreme pain in his head and neck. Jim squinted his eyes as he entered the brightly lit office and sat on the examination table opposite the NP at the desk. Jim held his head, rocking back and forth while he sat on the exam table. The NP's "Hello, how are you?" elicited an irritable "How the fuck do you think I feel?" The correctional peace office, standing near the door, took a deep breath through his nose and closed his eyes for a slight moment. He then intervened with a calm, "Hey, if you can't behave here, you can go back to your cell. The NP is only trying to help you." A few tears began to flow

from Jim's eyes, his rocking movements stopped, and his face reddened as he said, "My head and neck really fucking hurt. I need help."

In the past three days Jim had submitted multiple HSRs, asked the officers for help, and pleaded with the nurses for help when they made their medication rounds. Jim was grateful to be sitting in front of an NP but still frustrated by having to suffer pain by himself without anything to relieve it. He knew that this was a consequence of being in jail, but it made him feel like a second-rate human. He muttered, "How can you guys just leave people like me in pain? It's not right, you know? Like, I'm a person, you know?" Jim was experiencing the powerlessness and sense of worthlessness that many of the participants in my study described. I am reminded of a representational quotation from Scott: "It's almost like 'fucking screw you,' you know? 'You're a criminal. . . . You don't deserve proper whatever, like, treatment." He further elaborated: "Never are you able to do anything, which in its own is torture." As an NP, I wonder whether this was how Jim had experienced his pain too.

I also observed the notable and important relational circumstances between Jim and the NP. The very possibility of clinical engagement between an NP and a patient becomes contingent on the behavioural expectations of the correctional peace officer. This third party, necessary to preserve security structures within the facility, has enormous power to influence whether the NP-patient relationship continues or even exists. Jim had little choice but to conform to the behavioural expectations of the facility to even entertain the possibility of receiving healthcare services. Like the participants in this study, Jim was reminded that his access to health services depended on the people and security structures inherent to his incarceration.

Jim felt powerless when he realized that he was not freely able to manage his pain as he would normally do if he were not incarcerated. Jim knew that his headache was a result of his

failure to wear his glasses. He thought that they might have broken during his arrest, but they could also have been with his other personal effects. Jim knew that if he could take one of his partner's Percocets and lie down in his bed, he would feel better; but he could not because he was in jail. Jim could not do anything but wait and hope that someone would take his pain seriously.

Jim assumed that the NP believed that he was a liar. He knew that the track marks on his arms, even though the wounds had been healed for many years, revealed that he had a substance-use disorder. Jim worried that his pain would remain untreated because of his addiction, and he told the NP, "I really do have pain. Look at my medical record. I've had migraines since my head injury. I have x-rays, and you can even see the scar on my neck from surgery."

Although the NP had chosen to practice in a correctional setting and was the only available practitioner on this day, Jim had no real choice as to who he saw about his healthcare concerns. His only alternative would have been to live with his pain. Jim did not know the NP; they had never met. Jim did not have the benefit of the preexisting relationship that he might have with his regular NP or family physician. Rather, he arrived at the NP clinic with whatever level of trust he had in the NP's professional credentials and the hope that the NP would believe him. This trust in the nursing profession, reinforced in the broader mandate of healthcare, was a point of privilege that Jim could leverage as an entry point into the relational space required for ethical patient care to occur. However, previous experiences with nurses and other healthcare professionals in correctional healthcare settings and the broader healthcare system also shaped his trust in the nursing profession, and Jim's past institutional experiences of prejudice, racism, misdiagnosis, medical errors, and poor treatment could have weakened this trust. Equally, nurses in corrections often receive the warning not to let manipulative patients "take them in." This

results an initial nurse-patient encounter in which distrust rather than trust occurs at the outset (Austin, 2001; Austin et al., 2009).

The participants in the current study described the use of diagnostic imaging findings and other past medical records as proof of their pain to nurses. Jim also provided evidence to support his claim of having neck pain. He continued the relationship, trusting that the NP would believe his reports of pain and treat it appropriately. However, the onus of building trust within this initial relationship seemed to rest with Jim. It was an intervention point for the NP to begin to work towards developing an effective therapeutic relationship as a mechanism to improve the overall health outcomes for patients.

Regardless of the skepticism and power imbalances that exist, clinical action is required. The space offered within the context of the relationship between nurse and patient enables the recognition of differences to gain a better understanding of the other. From this type of understanding, mutual respect emerges, and the nurse and patient recalibrate their trust. It is possible that a distrustful and manipulative relationship will become the "least-worst" type of nurse-patient relationship. Though tenuous, it is a legitimate relationship in which the members create relational space and the possibility of healthcare exists. The outright rejection of manipulation or the discontinuation of nurse-patient encounters as a result of actual or perceived manipulation hinders engaged nurse-patient interactions and potentially obscures productive care priorities.

The findings of this study inform an understanding of both Jim's situation and the NP's task to determine a fitting clinical response. In this example there was an enormous power differential between Jim and the NP. Despite Jim's multiple attempts to access healthcare services for his head and neck pain, there was a three-day delay between his reporting of the pain

and his seeing the NP. As I discussed above, I wondered whether Jim might have felt powerless in trying to managing his pain because of the restrictions of the correctional setting. It is also possible that Jim felt devalued as a human and perceived the healthcare access delay as an injustice. This did not excuse poor behaviour; however, it gave the NP important insights into how to better engage with Jim and deal with the potential challenges of fostering a mutually respectful therapeutic relationship. In this instance, one potential intervention might have been to deliver subsequent interventions promptly; for instance, by administering an analgesic during the clinic visit or asking the officers to check Jim's property for his glasses. Although these interventions are very simple, my research findings indicate that they could have signaled to Jim that he mattered, he is human, and that the NP was a good nurse.

These interventions might be logical and simple, but they are also potent in that they created the basis for a therapeutic relationship. As the participants pointed out, trust in a relationship might not mean that the nurse "will give them their bank card," but a respectful place existed where the participants could feel free to discuss their healthcare concerns with nurses.

**Conclusion**

This dissertation offers preliminary insights into how correctional health nurses can approach the pain that their patients experience and advance methodological knowledge of ID. This is the first study, to my knowledge, of the influence of imprisonment on the pain experiences of people who are incarcerated.

This study has demonstrated that people experience pain not only during incarceration, but also in relationship to being incarcerated. Additional study is required to better understand the significance of this relationship to ensure that nurses and other healthcare professionals are

better equipped to manage pain in this population. For example, can interventions designed to alter the psychosocial environment that incarceration creates improve the pain of people who are incarcerated? Furthermore, what instruments can clinicians use to measure such improvements in the pain experience?

## References

Austin, W. (2001). Relational ethics in forensic psychiatric settings. *Journal of Psychosocial Nursing and Mental Health Services, 39*(9), 12–17. https://doi.org/10.1111/j.1365-2850.2004.00715.x

Austin, W., Goble, E., & Kelecevic, J. (2009). The ethics of forensic psychiatry: Moving beyond principles to a relational ethics approach. *Journal of Forensic Psychiatry & Psychology, 20*(6), 835–850. https://doi.org/10.1080/14789940903174147

Bergum, V., & Dossetor, J. B. (2020). *Relational ethics: The full meaning of respect.* University Publishing Group.

Thorne, S. (2016). *Interpretive description: Qualitative research for applied practice*. Routledge. https://doi.org/https://doi.org/10.4324/9781315545196

**Reference List of Works Cited in This Dissertation**

Abdulcadir, J., & Catania, L. (2021). Conceptualizing sexual pain in women with female genital mutilation/cutting. *Archives of Sexual Behavior*, *50*(5), 1871–1874. https://doi.org/10.1007/s10508-020-01691-1

Adams, L. M., & Turk, D. C. (2018). Central sensitization and the biopsychosocial approach to understanding pain. *Journal of Applied Biobehavioral Research*, *23*(2), e12125. https://doi.org/10.1111/jabr.12125

Adshead, G. (2000). Care or custody? Ethical dilemmas in forensic psychiatry. *Journal of Medical Ethics*, *26*(5), 302–304. https://doi.org/10.1136/jme.26.5.302

Akca, Y. E., Slootmaekers, L., & Boskovic, I. (2020). Verifiability and symptom endorsement in genuine, exaggerated, and malingered pain. *Psychological Injury and Law*, *13*(3), 235–245. https://doi.org/10.1007/s12207-020-09375-w

Al-Mahrezi A. (2017). Towards effective pain management: Breaking the barriers. *Oman Medical Journal, 32*(5), 357–358. https://doi.org/10.5001/omj.2017.69

American Academy of Family Physicians. (2017). *Incarceration and health: A family medicine perspective (position paper)*. https://www.aafp.org/about/policies/all/incarceration.html

Appelbaum, P. S. (1997). Ethics in evolution: The incompatibility of clinical and forensic functions. *The American Journal of Psychiatry, 154*(4), 445. https://doi.org/10.1176/ajp.154.4.445

Appelbaum, P. S. (1997). A theory of ethics for forensic psychiatry. *Journal of the American Academy of Psychiatry and the Law Online*, 25(3), 233–247. http://jaapl.org/content/jaapl/25/3/233.full.pdf

Appelbaum, P. S. (2008). Ethics and forensic psychiatry: Translating principles into practice. *Journal of the American Academy of Psychiatry and the Law Online*, 36(2), 195–200. http://jaapl.org/content/jaapl/36/2/195.full.pdf.

Armstrong, J. (2010). Naturalistic inquiry. In N.J. Salk (Ed.), *Encyclopedia of research design* (pp. 880–885). Sage.

Armstrong, S., & Jefferson, A. M. (2017). Disavowing 'the' prison. In D. Moran & A. Schliehe (Eds.), *Confined places, secure spaces: The spatialisation of studies of confinement* (pp. 237-267). Palgrave Studies in Prisons and Penology. Palgrave Macmillan. https://doi.org/10.1057/978-1-137-56057-5_9

Austin, W. (2001a). Relational ethics in forensic psychiatric settings. *Journal of Psychosocial Nursing and Mental Health Services, 39*(9), 12–17. https://doi.org/10.1111/j.1365-2850.2004.00715.x

Austin, W. (2001b). Using the human rights paradigm in health ethics: The problems and the possibilities. *Nursing Ethics,* 8(3), 183–195. https://doi.org/10.1177/096973300100800304.

Austin, W. (2008). Relational ethics. In L. M. Given (Ed.), *The SAGE encyclopedia of qualitative research methods* (pp. 749-749). Sage. https://www-doi-org.login.ezproxy.library.ualberta.ca/10.4135/9781412963909.n378

Austin, W., Goble, E., & Kelecevic, J. (2009). The ethics of forensic psychiatry: Moving beyond principles to a relational ethics approach. *Journal of Forensic Psychiatry & Psychology*, *20*(6), 835–850. https://doi.org/10.1080/14789940903174147

Austin, W., Lemermeyer, G., Goldberg, L., Bergum, V., & Johnson, M. S. (2005). Moral distress in healthcare practice: The situation of nurses. *HEC Forum, 17*(1), 33–48.

Australian Institute of Health and Welfare. (2019). *The health of Australia's prisoners 2018.* https://www.aihw.gov.au/getmedia/2e92f007-453d-48a1-9c6b-4c9531cf0371/aihw-phe-246.pdf.aspx?inline=true

Aydede, M. (2017). Defending the IASP definition of pain. *The Monist*, *100*(4), 439–464. https://doi.org/10.1093/monist/onx021

Aziz, H., Ackah, R. L., Whitson, A., Oppong, B., Obeng-Gyasi, S., Sims, C., & Pawlik, T. M. (2021). Cancer care in the incarcerated population: Barriers to quality care and opportunities for improvement. *JAMA Surgery, 156*(10), 964–973. https://doi.org/10.1001/jamasurg.2021.3754

Benhamed, A., Boucher, V., & Emond, M. (2022). Pain management in emergency department older adults with pelvic fracture: still insufficient. *Canadian Journal of Emergency Medicine*, *24*(3), 245-246. https://doi.org/10.1007/s43678-022-00299-9

Berge, K. H., Dillon, K. R., Sikkink, K. M., Taylor, T. K., & Lanier, W. L. (2012). Diversion of drugs within health care facilities, a multiple-victim crime: Patterns of diversion, scope, consequences, detection, and prevention. *Mayo Clinic Proceedings*, *87*(7), 674–682. https://doi.org/10.1016/j.mayocp.2012.03.013

Bergum, V., & Dossetor, J. B. (2020). *Relational ethics: The full meaning of respect.* University Publishing Group.

Bi-Mohammed, Z., Wright, N. M., Hearty, P., King, N., & Gavin, H. (2017). Prescription opioid abuse in prison settings: A systematic review of prevalence, practice and treatment responses. *Drug and Alcohol Dependence*, *171*, 122–131. https://doi.org/10.1016/j.drugalcdep.2016.11.032

Bodkin, C., Pivnick, L., Bondy, S. J., Ziegler, C., Martin, R. E., Jernigan, C., & Kouyoumdjian, F. (2019). History of childhood abuse in populations incarcerated in Canada: A systematic review and meta-analysis. *American Journal of Public Health, 109*(3), e1–e11. https://doi.org/10.2105/AJPH.2018.304855

Bor, J. S. (2022). The aging of the US prison population: A public health crisis. *Health Affairs, 41*(5), 622–627. https://doi.org/10.1377/hlthaff.2022.00280

Boskovic, I., Bogaard, G., Merckelbach, H., Vrij, A., & Hope, L. (2017). The verifiability approach to detection of malingered physical symptoms. *Psychology, Crime & Law*, *23*(8), 717–729. https://doi.org/10.1080/1068316X.2017.1302585

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Brennan, F., Lohman, D., & Gwyther, L. (2019). Access to pain management as a human right. *American Journal of Public Health, 109*(1), 61–65. https://doi.org/10.2105/AJPH.2018.304743

Brislin, S. J., Perkins, E. R., Ribes-Guardiola, P., Patrick, C. J., & Foell, J. (2022). Pain processing and antisocial behavior: A multimodal investigation of the roles of boldness and meanness. *Personality Disorders*. Advance online publication. https://doi.org/10.1037/per0000556

Burles, M., Holtslander, L., & Peternelj-Taylor, C. (2021). Palliative and hospice care in correctional facilities: Integrating a family nursing approach to address relational barriers. *Cancer Nursing, 44*(1), 29–36. https://doi.org/10.1097/NCC.0000000000000754

Caelli, K., Ray, L., & Mill, J. (2003). 'Clear as mud': Toward greater clarity in generic qualitative research. *International Journal of Qualitative Methods*, *2*(2), 1–13. https://doi.org/10.1177/160940690300200201

Canadian Nurses Association. (2017). *The code of ethics for registered nurses*. /https://www.crns.ca/wp-content/uploads/2018/11/Code-of-Ethics-2017-Edition.pdf

Cancio, R. (2018). Pain and masculinity: A cohort comparison between Mexican American Vietnam and post-9/11 combat veterans. *Men and Masculinities*, *23*(3-4), 725–748. https://doi.org/10.1177/1097184x18761779

Carnevale, F. A., Teachman, G., & Bogossian, A. (2017). A relational ethics framework for advancing practice with children with complex health care needs and their parents. *Comprehensive Child and Adolescent Nursing*, *40*(4), 268–284. https://doi.org/10.1080/24694193.2017.1373162

Carriere, J., Martel, M. O., Kao, M.-C., Sullivan, M., & Darnall, B. (2017). Pain behavior mediates the relationship between perceived injustice and opioid prescription for chronic pain: A collaborative health outcomes information registry study. *Journal of Pain Research*, *10*, 557–566. https://doi.org/10.2147/jpr.s128184

Chaimowitz, G., & Canadian Psychiatric Association (2012). The criminalization of people with mental illness. *Canadian Journal of Psychiatry, 57*(2), 1. https://www.cpa-apc.org/wp-content/uploads/Criminalization-of-People-with-Mental-Illness-Revision-1-2018-EN-web-Final-v2.pdf.

Chou, L., Ranger, T. A., Peiris, W., Cicuttini, F. M., Urquhart, D. M., Sullivan, K., Seneviwickrama, M., Briggs, A. M., & Wluka, A. E. (2018). Patients' perceived needs for medical services for non-specific low back pain: A systematic scoping review. *PLOS ONE*, *13*(11). https://doi.org/10.1371/journal.pone.0204885

Clark, M. I., Spence, J. C., & Holt, N. L. (2011). In the shoes of young adolescent girls: Understanding physical activity experiences through interpretive description. *Qualitative Research in Sport, Exercise and Health*, *3*(2), 193–210. https://doi.org/10.1080/2159676x.2011.572180

Clear, T. R., & Frost, N. A. (2015). *The punishment imperative: The rise and failure of mass incarceration in America* (reprint ed.). NYU Press.

College and Association of Registered Nurses of Alberta. (2020). *Medication administration standards*. https://nurses.ab.ca/docs/default-source/document-library/standards/medication-management-standards.pdf?sfvrsn=4265098d_12

Condon, L., Hek, G., Harris, F., Powell, J., Kemple, T., & Price, S. (2007). Users' views of prison health services: A qualitative study. *Journal of Advanced Nursing, 58*(3), 216–226. https://doi.org/10.1111/j.1365-2648.2007.04221.x

Correctional Service of Canada. (2021). *Correctional programs for men.* https://www.csc-scc.gc.ca/002/002-0002-en.shtml#icpm

Craig, K. D., & MacKenzie, N. E. (2021). What is pain: Are cognitive and social features core components? *Paediatric and Neonatal Pain, 3*(3), 106–118. https://doi.org/10.1002/pne2.12046

Crewe, B. (2009). *The prisoner society: Power, adaptation and social life in an English prison.* Oxford University Press.

Crewe, B. (2011). Depth, weight, tightness: Revisiting the pains of imprisonment. *Punishment & Society*, *13*(5), 509–529. https://doi.org/10.1177/1462474511422172

Croft, M., & Mayhew, R. (2015). Prevalence of chronic non-cancer pain in a UK prison environment. *British Journal of Pain, 9*(2), 96–108. https://doi.org/10.1177/2049463714540895

Dahnke, M. D., & Dreher, H. M. (2015). *Philosophy of science for nursing practice: Concepts and application* (2nd ed.). Springer.

de Viggiani, N. (2012). Trying to be something you are not. *Men and Masculinities*, *15*(3), 271–291. https://doi.org/10.1177/1097184x12448464

Demiris, G.; Oliver, D.P. (2019). Defining and Analyzing the Problem, in Behavioral Intervention Research in Hospice and Palliative Care; Elsevier: Amsterdam, The Netherlands, pp. 27–39

Dhaliwal, K., & Hirst, S. (2016). Caring in correctional nursing. *Journal of Forensic Nursing*, *12*(1), 5–12. https://doi.org/10.1097/jfn.0000000000000097

Dierkhising, C. B., Ko, S. J., Woods-Jaeger, B., Briggs, E. C., Lee, R., & Pynoos, R. S. (2013). Trauma histories among justice-involved youth: Findings from the National Child Traumatic Stress Network. *European Journal of Psychotraumatology, 4*(1), 20274. https://doi.org/10.3402/ejpt.v4i0.20274

Dubin, A. E., & Patapoutian, A. (2010). Nociceptors: The sensors of the pain pathway. *The Journal of Clinical Investigation, 120*(11), 3760–3772. https://doi.org/10.1172/JCI42843

Duenas, M., Ojeda, B., Salazar, A., Mico, J. A., & Failde, I. (2016). A review of chronic pain impact on patients, their social environment and the health care system. *Journal of Pain Research*, 9, 457-467. https://doi.org/10.2147/JPR.S105892

Eidelman-Rothman, M., Goldstein, A., Weisman, O., Schneiderman, I., Zagoory-Sharon, O., Decety, J., & Feldman, R. (2016). Prior exposure to extreme pain alters neural response to pain in others. *Cognitive, Affective, & Behavioral Neuroscience*, *16*(4), 662–671. https://doi.org/10.3758/s13415-016-0422-7

Einat, T., & Einat, H. (2000). Inmate argot as an expression of prison subculture: The Israeli case. *The Prison Journal*, *80*(3), 309–325. https://doi.org/10.1177/0032885500080003005

Engels, G., Francke, A. L., van Meijel, B., Douma, J. G., de Kam, H., Wesselink, W., Houtjes, W., & Scherder, E. J. (2014). Clinical pain in schizophrenia: A systematic review. *The Journal of Pain, 15*(5), 457–467. https://doi.org/10.1016/j.jpain.2013.11.005

Evans, T., & Wallace, P. (2007). A prison within a prison? *Men and Masculinities*, *10*(4), 484–507. https://doi.org/10.1177/1097184x06291903

Fasick, V., Spengler, R. N., Samankan, S., Nader, N. D., & Ignatowski, T. A. (2015). The hippocampus and TNF: Common links between chronic pain and depression. *Neuroscience and Biobehavioral Reviews*, 53, 139–159. https://doi.org/10.1016/j.neubiorev.2015.03.014

Feinberg, J. (1965). The expressive function of punishment. *Monist*, *49*(3), 397–423. https://doi.org/10.5840/monist196549326

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine, 14*(4), 245–258. https://doi.org/10.1016/s0749-3797(98)00017-8

Foster, J., Bell, L., & Jayasinghe, N. (2013). Care control and collaborative working in a prison hospital. *Journal of Interprofessional Care, 27*(2), 184–190. https://doi.org/10.3109/13561820.2012.730073

Foucault, M. (2012). *Discipline & punish: The birth of the prison* (A. Sheridan, Trans.). Vintage. (Original work published in 1975)

Freedman, B. (1987). Scientific value and validity as ethical requirements for research: A proposed explication. *IRB: Ethics and Human Research*, *9*(6), 7. https://doi.org/10.2307/3563623

Gadamer, H. G. (2008). *Philosophical hermeneutics*. Univervisty of California Press.

Gadow S. (1999). Relational narrative: The postmodern turn in nursing ethics. *Scholarly Inquiry for Nursing Practice, 13*(1), 57–70.

Gadow, S. (2003). Restorative nursing: Toward a philosophy of postmodern punishment. *Nursing Philosophy*, *4*(2), 161–167. https://doi.org/10.1046/j.1466-769x.2003.00133.x

Garland E. L. (2012). Pain processing in the human nervous system: A selective review of nociceptive and biobehavioral pathways. *Primary Care, 39*(3), 561–571. https://doi.org/10.1016/j.pop.2012.06.013

Garland, E. L., Froeliger, B., Zeidan, F., Partin, K., & Howard, M. O. (2013). The downward spiral of chronic pain, prescription opioid misuse, and addiction: Cognitive, affective, and neuropsychopharmacologic pathways. *Neuroscience and Biobehavioral Reviews, 37*(10, Pt. 2), 2597–2607. https://doi.org/10.1016/j.neubiorev.2013.08.006

Gatchel, R. J., & Maddrey, A. M. (2004). The biopsychosocial perspective of pain. In J. M. Raczynski & L. C. Leviton (Eds.), *Handbook of clinical health psychology: Vol. 2. Disorders of behavior and health* (pp. 357–378). American Psychological Association. https://doi.org/10.1037/11589-011

Gatchel, R. J., Peng, Y. B., Peters, M. L., Fuchs, P. N., & Turk, D. C. (2007). The biopsychosocial approach to chronic pain: Scientific advances and future directions. *Psychological Bulletin, 133*(4), 581–624. https://doi.org/10.1037/0033-2909.133.4.581

GBD 2016 Disease and Injury Incidence and Prevalence Collaborators. (2017). Global, regional, and national incidence, prevalence, and years lived with disability for 328 diseases and injuries for 195 countries, 1990-2016: A systematic analysis for the Global Burden of Disease Study 2016. *Lancet, 390*(10100), 1211–1259. https://doi.org/10.1016/S0140-6736(17)32154-2

Generaal, E., Vogelzangs, N., Macfarlane, G. J., Geenen, R., Smit, J. H., de Geus, E. J. C. N., Penninx, B. W. J. H., & Dekker, J. (2016). Biological stress systems, adverse life events and the onset of chronic multisite musculoskeletal pain: A 6-year cohort study. *Annals of the Rheumatic Diseases*, *75*(5), 847–854. https://doi.org/10.1136/annrheumdis-2014-206741

Gibson, S. J., & Farrell, M. (2004). A review of age differences in the neurophysiology of nociception and the perceptual experience of pain. *The Clinical Journal of Pain, 20*(4), 227–239. https://doi.org/10.1097/00002508-200407000-00004

Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Harvard University Press.

Goesling, J., Clauw, D. J., & Hassett, A. L. (2013). Pain and depression: An integrative review of neurobiological and psychological factors. *Current Psychiatry Reports*, *15*(12). https://doi.org/10.1007/s11920-013-0421-0

Griffin, M. L., McDermott, K. A., McHugh, R. K., Fitzmaurice, G. M., Jamison, R. N., & Weiss, R. D. (2016). Longitudinal association between pain severity and subsequent opioid use in prescription opioid dependent patients with chronic pain. *Drug and Alcohol Dependence*, *163*, 216–221. https://doi.org/10.1016/j.drugalcdep.2016.04.023

Grupp, S. E. (1971). *Theories of punishment*. Indiana University Press.

Han, R. T., Kim, Y.-B., Park, E.-H., Kim, J. Y., Ryu, C., Kim, H. Y., Lee, J. H., Pahk, K., Shanyu, C., Kim, H., Back, S. K., Kim, H. J., Kim, Y. I., & Na, H. S. (2018). Long-term isolation elicits depression and anxiety-related behaviors by reducing oxytocin-induced GABAergic transmission in central amygdala. *Frontiers in Molecular Neuroscience*, *11*. https://doi.org/10.3389/fnmol.2018.00246

Hantke, V., Wolff, H., & Williams, B. A. (2016). The pains of imprisonment: Challenging aspects of pain management in correctional settings. *Pain Management, 6*(2), 133–136. https://doi.org/10.2217/pmt.15.62

Haraldstad, K., Christophersen, K-A., & Helseth, S. (2017). Health-related quality of life and pain in children and adolescents: A school survey. *BMC Pediatrics*, 17, 174. https://doi.org/10.1186/s12887-017-0927-4

Health Canada. (2021). *Chronic pain in Canada: Laying a foundation for action.* https://www.canada.ca/content/dam/hc-sc/documents/corporate/about-health-canada/public-engagement/external-advisory-bodie/canadian-pain-task-force/report-2021-rapport/report-rapport-2021-eng.pdf

Hefner, M. K. (2017). Queering prison masculinity. *Men and Masculinities*, *21*(2), 230–253. https://doi.org/10.1177/1097184x17695037.

Helm, P. J., Medrano, M. R., Allen, J. J., & Greenberg, J. (2020). Existential isolation, loneliness, depression, and suicide ideation in young adults. *Journal of Social and Clinical Psychology*, *39*(8), 641–674. https://doi.org/10.1521/jscp.2020.39.8.641

Holloway, I., & Todres, L. (2003). The status of method: Flexibility, consistency and coherence. *Qualitative Research*, *3*(3), 345–357. https://doi.org/10.1177/1468794103033004

Holmes, D., Perron, A., & O'Byrne, P. (2006). Understanding disgust in nursing: Abjection, self, and the other. *Research and Theory for Nursing Practice*, *20*(4), 305–316. https://doi.org/10.1891/rtnp-v20i4a006

Holt-Lunstad, J., Smith, T. B., Layton, J. B. (2010). Social relationships and mortality risk: A meta-analytic review. *PLoS Medicine*, 7, e1000316. https://doi.org/10.1371/journal.pmed.1000334

Hooten, W. M. (2016). Chronic pain and mental health disorders: Shared neural mechanisms, epidemiology, and treatment. *Mayo Clinic Proceedings, 91*(7), 955-970. http://dx.doi.org/10.1016/j.mayocp.2016.04.029

Humo, M., Lu, H., & Yalcin, I. (2019). The molecular neurobiology of chronic pain–induced depression. *Cell and Tissue Research, 377*(1), 21–43. https://doi.org/10.1007/s00441-019-03003-z

Hunt, M. R. (2009). Strengths and challenges in the use of interpretive description: Reflections arising from a study of the moral experience of health professionals in humanitarian work. *Qualitative Health Research*, *19*(9), 1284–1292. https://doi.org/10.1177/1049732309344612

Institute of Medicine. (2011). *Relieving pain in America: A blueprint for transforming prevention, care, education, and research*. The National Academies Press. https://www.ncbi.nlm.nih.gov/books/NBK91497/

International Association for the Study of Pain. (2020, July 16). *IASP announces revised definition of pain*. https://www.iasp-pain.org/PublicationsNews/NewsDetail.aspx?ItemNumber=10475

International Pain Summit of the International Association for the Study of Pain. (2011). Declaration of Montréal: Declaration that access to pain management is a fundamental human right. *Journal of Pain & Palliative Care Pharmacotherapy, 25*(1), 29–31. https://doi.org/10.3109/15360288.2010.547560

Jacob, J. D., Gagnon, M., & Holmes, D. (2009). Nursing so-called monsters. *Journal of Forensic Nursing*, *5*(3), 153–161. https://doi.org/10.1111/j.1939-3938.2009.01048.x

Jacob, J. D., & Holmes, D. (2011). Working under threat: Fear and nurse-patient interactions in a forensic psychiatric setting. *Journal of Forensic Nursing*, *7*(2), 68–77. https://doi.org/10.1111/j.1939-3938.2011.01101.x

Jewkes, Y. (2005). Men behind bars. *Men and Masculinities*, *8*(1), 44–63. https://doi.org/10.1177/1097184x03257452

Johnsen, A. T., Petersen, M. A., Snyder, C. F., Pedersen, L., & Groenvold, M. (2016). How does pain experience relate to the need for pain relief? A secondary exploratory analysis in a large sample of cancer patients. *Supportive Care in Cancer*, *24*(10), 4187–4195. https://doi.org/10.1007/s00520-016-3246-7

Jones, R. D. (1945). Theories of punishment. *Probation, 4*(13), 155–156. https://doi.org/10.1177/026455054500401307

Kent, G. (1985). Memory of dental pain. *Pain*, *21*(2), 187–194. https://doi.org/10.1016/0304

Keogh, E. (2015). Men, masculinity, and pain. *Pain*, *156*(12), 2408–2412. https://doi.org/10.1097/j.pain.0000000000000328

Khera, T., & Rangasamy, V. (2021). Cognition and pain: A review. *Frontiers in Psychology, 12*, 673962. https://doi.org/10.3389/fpsyg.2021.673962

Kneeland, E. T., Griffin, M. L., Taghian, N., Weiss, R. D., & McHugh, R. K. (2019). Associations between pain catastrophizing and clinical characteristics in adults with substance use disorders and co-occurring chronic pain. *The American Journal of Drug and Alcohol Abuse*, *45*(5), 488–494. https://doi.org/10.1080/00952990.2019.1581793

Kouyoumdjian, F., Schuler, A., Matheson, F. I., & Hwang, S.W. (2016). Health status of prisoners in Canada: Narrative review. *Canadian Family Physician, 62*(3), 215–222.

Koyama, T., McHaffie, J. G., Laurienti, P. J., & Coghill, R. C. (2005). The subjective experience of pain: Where expectations become reality. *Proceedings of the National Academy of Sciences of the United States of America, 102*(36), 12950–12955. https://doi.org/10.1073/pnas.0408576102

Kunyk, D., & Austin, W. (2012). Nursing under the influence: A relational ethics perspective. *Nursing Ethics, 19*(3), 380–389. https://doi.org/10.1177/0969733011406767

Kupers, T. A. (2001). Rape and the prison code. In D. Sabo, T. A. Kupers & W. London (Eds.), *Prison masculinities* (pp. 111-117). Temple University Press.

Kupers, T. A. (2005). Toxic masculinity as a barrier to mental health treatment in prison. *Journal of Clinical Psychology*, *61*(6), 713–724. https://doi.org/10.1002/jclp.20105

Lazzaretto-Green, D., Austin, W., Goble, E., Buys, L., Gorman, T., & Rankel, M. (2011). Walking a fine line: Forensic mental health practitioners' experience of working with correctional officers. *Journal of Forensic Nursing*, *7*(3), 109–119. https://doi.org/10.1111/j.1939-3938.2011.01107.x

Leadley, R. M., Armstrong, N., Lee, Y. C., Allen, A., & Kleijnen, J. (2012). Chronic diseases in the European Union: The prevalence and health cost implications of chronic pain. *Journal of Pain & Palliative Care Pharmacotherapy, 26*(4), 310–325. https://doi.org/10.3109/15360288.2012.736933

Levine, D. N. (2007). Sherrington's "The Integrative action of the nervous system": A centennial appraisal. *Journal of the Neurological Sciences, 253*(1-2), 1–6. https://doi.org/10.1016/j.jns.2006.12.002

Lidow M. S. (2002). Long-term effects of neonatal pain on nociceptive systems. *Pain, 99*(3), 377–383. https://doi.org/10.1016/S0304-3959(02)00258-0

Lin, J. T., & Mathew, P. (2005). Cancer pain management in prisons: A survey of primary care practitioners and inmates. *Journal of Pain & Symptom Management, 29*(5), 466–473. https://doi.org/10.1016/j.jpainsymman.2004.08.015

Loeser, J. D. (2000). Pain and suffering. *The Clinical Journal of Pain*, *16*(2). S2–S6. https://doi.org/10.1097/00002508-200006001-00002

Loeser, J. D., & Melzack, R. (1999). Pain: An overview. *The Lancet, 353*(9164), 1607–1609. https://doi.org/10.1016/S0140-6736(99)01311-2

Loeser, J. D., & Treede, R-D. (2008). The Kyoto protocol of IASP basic pain terminology. *Pain*, *137*(3), 473–477. https://doi.org/10.1016/j.pain.2008.04.025

Lohman, D., Schleifer, R., & Amon, J. J. (2010). Access to pain treatment as a human right. *BMC Medicine, 8*, 8. https://doi.org/10.1186/1741-7015-8-8

Losin, E. A., Anderson, S. R., & Wager, T. D. (2017). Feelings of clinician-patient similarity and trust influence pain: Evidence from simulated clinical interactions. *The Journal of Pain*, *18*(7), 787–799. https://doi.org/10.1016/j.jpain.2017.02.428

Lum K. L. (2003). Palliative care behind bars: The New Zealand prison hospice experience. *Journal of Pain & Palliative Care Pharmacotherapy, 17*(3-4), 131–140.

Lynch, M. E., Campbell, F., Clark, A. J., Dunbar, M. J., Goldstein, D., Peng, P., Stinson, J., & Tupper, H. (2008). A systematic review of the effect of waiting for treatment for chronic pain. *Pain, 136*(1-2), 97–116. https://doi.org/10.1016/j.pain.2007.06.018

MacDonald, F., & Dobrowolsky, A. (Eds.). (2020). *Turbulent times, transformational possibilities? Gender and politics today and tomorrow*. University of Toronto Press.

Manz, C. R., Odayar, V. S., & Schrag, D. (2021). Disparities in cancer prevalence, incidence, and mortality for incarcerated and formerly incarcerated patients: A scoping review. *Cancer Medicine, 10*(20), 7277–7288. https://doi.org/10.1002/cam4.4251

Marchand, W. E. (1961). Analgesic effect of masturbation: Masturbation as a clinical sign of painful somatic disorders in psychotic patients: Report of two cases. *Archives of General Psychiatry*, *4*(2), 137–138. https://doi.org/10.1001/archpsyc.1961.01710080033006

Margiotta, F., Hannigan, A., Imran, A., & Harmon, D. C. (2017). Pain, perceived injustice, and pain catastrophizing in chronic pain patients in Ireland. *Pain Practice*, *17*(5), 663–668. https://doi.org/10.1111/papr.12501

Marini, V. A., Leibowitz, G. S., Burton, D. L., & Stickle, T. R. (2014). Victimization, substance use, and sexual aggression in male adolescent sexual offenders. *Criminal Justice and Behavior, 41*(5), 635–649. https://doi.org/10.1177/0093854813507567

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*(4), 370. https://doi.org/10.1037/h0054346

Matthews, T., Danese, A., Wertz, J., Odgers, C. L., Ambler, A., Moffitt, T. E., & Arseneault, L. (2016). Social isolation, loneliness and depression in young adulthood: A behavioural genetic analysis. *Social Psychiatry and Psychiatric Epidemiology*, *51*(3), 339–348. https://doi.org/10.1007/s00127-016-1178-7

Matthias, M. S., Parpart, A. L., Nyland, K. A., Huffman, M. A., Stubbs, D. L., Sargent, C., & Bair, M. J. (2010). The patient-provider relationship in chronic pain care: Providers' perspectives. *Pain Medicine, 11*(11), 1688–1697. https://doi.org/10.1111/j.1526-4637.2010.00980.x

Mayan, M. J. (2016). *Essentials of qualitative inquiry (Qualitative essentials)*. Routledge.

McCandless, L. C., Stewart, L. C., Rempel, S. E. S., Venners, S. A., & Somers, J. M. (2015). Criminal justice system contact and mortality among offenders with mental illness in British Columbia: An assessment of mediation. *Journal of Epidemiology and Community Health, 69*(5), 460-466. https://doi.org/10.1136/jech-2013-203705

McDonald, L. (2010). Florence Nightingale a hundred years on: Who she was and what she was not. *Women's History Review*, *19*(5), 721–740. https://doi.org/10.1080/09612025.2010.509934

McParland, C., & Johnston, B. M. (2019). Palliative and end of life care in prisons: A mixed-methods rapid review of the literature from 2014-2018. *BMJ open, 9*(12), e033905. https://doi.org/10.1136/bmjopen-2019-033905

Meddings, K., Klein, C., & Elliott, S. (2022). Successful multidisciplinary management of foot pain with orgasm: A case report. *Sexual Medicine*, *10*(2), 100499. https://doi.org/10.1016/j.esxm.2022.100499

Melzack, R., & Scott, T. H. (1957). The effects of early experience on the response to pain. *Journal of Comparative and Physiological Psychology, 50*(2), 155-161. https://doi.org/10.1037/h0047770

Merleau-Ponty, M. (2012). *Phenomenology of perception* (D. Landes, Trans.). Routledge. (Original work published 1945)

Merskey, H. (2007). The taxonomy of pain. *Medical Clinics, 91*(1), 13–20. https://doi.org/10.1016/j.mcna.2006.10.009

Michalski, J. H. (2015). Status hierarchies and hegemonic masculinity: A general theory of prison violence. *British Journal of Criminology*, *57*(1), 40–60. https://doi.org/10.1093/bjc/azv098

Milano, C. (2006). Narcotics abuse in correctional facilities: Is pain medication being used inappropriately? *American Journal of Nursing, 106*(2), 22.

Miller, L. E., Eldredge, S. A., & Dalton, E. D. (2017). "Pain is what the patient says it is": Nurse–patient communication, information seeking, and pain management. *American Journal of Hospice and Palliative Medicine*, *34*(10), 966–976. https://doi.org/10.1177/1049909116661815

Mills, S., Nicolson, K. P., & Smith, B. H. (2019). Chronic pain: A review of its epidemiology and associated factors in population-based studies. *British Journal of Anaesthesia, 123*(2), e273–e283. https://doi.org/10.1016/j.bja.2019.03.023

Miró, J., Castarlenas, E., de la Vega, R., Galán, S., Sánchez-Rodríguez, E., Jensen, M. P., & Cane, D. (2018). Pain catastrophizing, activity engagement and pain willingness as predictors of the benefits of multidisciplinary cognitive behaviorally-based chronic pain treatment. *Journal of Behavioral Medicine*, *41*(6), 827–835. https://doi.org/10.1007/s10865-018-9927-6

Mishra, S. (2016). Theories of punishment: A philosophical aspect. *Imperial Journal of Interdisciplinary Research, 2*(8). http://www.onlinejournal.in/IJIRV2I8/014.pdf.

Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, *1*(2), 13–22. https://doi.org/10.1177/160940690200100202

Náfrádi, L., Kostova, Z., Nakamoto, K., & Schulz, P. J. (2018). The doctor-patient relationship and patient resilience in chronic pain: A qualitative approach to patients' perspectives. *Chronic Illness*, *14*(4), 256–270. https://doi.org/10.1177/1742395317739961

Nahmias, E., & Aharoni, E. (2018). Communicative theories of punishment and the impact of apology. In C. W. Surprenant (Ed.), *Rethinking punishment in the era of mass incarceration* (pp. 144–159). Taylor & Francis.

Nicholson, K., & Martelli, M. F. (2007). Malingering: Overview and basic concepts. In G. Young, A.W. Kane, & K. Nicholson (Eds.), *Causality of psychological injury* (pp. 375-409). Springer. https://doi.org/10.1007/978-0-387-36445-2_17

Nightingale, F. (1992). *Notes on nursing: What it is, and what it is not*. Lippincott Williams & Wilkins. (Original work published 1859)

Niveau, G. (2007), Relevance and limits of the principle of "equivalence of care" in prison medicine. *Journal of Medical Ethics, 33*(10), 610–613. https://doi.org/10.1136/jme.2006.018077

Noddings, N. (1984). *Caring: A relational approach to ethics and moral education.* University of California Press.

Pagé, M. G., Romero Escobar, E. M., Ware, M. A., & Choinière, M. (2017). Predicting treatment outcomes of pain patients attending tertiary multidisciplinary pain treatment centers: A pain trajectory approach. *Canadian Journal of Pain*, *1*(1), 61–74. https://doi.org/10.1080/24740527.2017.1325715

Painaustralia. (2019*). The cost of pain in Australia*. https://www2.deloitte.com/content/dam/Deloitte/au/Documents/Economics/deloitte-au-economics-cost-pain-australia-040419.pdf

Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd ed.). Sage.

Pellegrino E. D. (1993). The metamorphosis of medical ethics. A 30-year retrospective. *JAMA, 269*(9), 1158–1162. https://doi.org/10.1001/jama.1993.03500090094039

Perrault S. (2014a). *Admissions to adult correctional services in Canada, 2011/2012.* https://www150.statcan.gc.ca/n1/pub/85-002-x/2014001/article/11918-eng.htm

Perrault S. (2014b). *Admissions to youth correctional services in Canada, 2011/2012.* https://www150.statcan.gc.ca/n1/pub/85-002-x/2014001/article/11917-eng.htm

Peternelj-Taylor, C. (1999). Forensic psychiatric nursing: The paradox of custody and caring. *Journal of Psychosocial Nursing and Mental Health Services, 37*(9), 9-11. https://doi.org/10.3928/0279-3695-19990901-06

Peternelj-Taylor, C. (2004). An exploration of othering in forensic psychiatric and correctional nursing. *The Canadian Journal of Nursing Research, 36*(4), 130–146.

Phillips, A. E., Bick, B. L., Faghih, M., Yadav, D., Drewes, A. M., Singh, V. K., Olesen, S.S., on behalf of the Pancreatic Quantitative Sensory Testing (P-QST) Consortium. (2022). Pain sensitivity and psychiatric comorbidities in chronic pancreatitis patients with and without pain: Past experience matters. *Gastro Hep Advances, 1,* 796-802. https://doi.org/10.1016/j.gastha.2022.04.013

Pieritz, K., Rief, W., & Euteneuer, F. (2015). Childhood adversities and laboratory pain perception. *Neuropsychiatric Disease and Treatment*, *11*, 2109–2116. https://doi.org/10.2147/NDT.S87703

Poletti, S., Locatelli, C., Falini, A., Colombo, C., & Benedetti, F. (2016). Adverse childhood experiences associate to reduced glutamate levels in the hippocampus of patients affected by mood disorders. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, *71*, 117–122. https://doi.org/10.1016/j.pnpbp.2016.07.007

Pollard, C. (2015). What is the right thing to do: Use of a relational ethic framework to guide clinical decision-making. *International Journal of Caring Sciences, 8*(2), 362–368.

Pont, J., Stover, H., & Wolff, H. (2012). Dual loyalty in prison health care. *American Journal of Public Health, 102*(3), 475–480. https://doi.org/10.2105/AJPH.2011.300374

Quartana, P. J., Campbell, C. M., & Edwards, R. R. (2009). Pain catastrophizing: A critical review. *Expert Review of Neurotherapeutics*, *9*(5), 745–758. https://doi.org/10.1586/ern.09.34

Rababa, M., Hayajneh, A. A. & Bani-Iss, W. (2021). Association of death anxiety with spiritual well-being and religious coping in older adults during the COVID-19 pandemic. *Journal of Religion and Health, 60*, 50–63. https://doi.org/10.1007/s10943-020-01129-x

Racine, M. (2018). Chronic pain and suicide risk: A comprehensive review. *Progress in Neuro-Psychopharmacology and Biological Psychiatry, 87*, 269-280. https://doi.org/10.1016/j.pnpbp.2017.08.020

Raggio, A. L., Kopak, A. M., & Hoffmann, N. G. (2017). Opioid use disorders and offending patterns among local jail inmates. *Corrections*, *2*(4), 258-268. https://doi.org/10.1080/23774657.2017.1310003

Raja, S. N., Carr, D. B., Cohen, M., Finnerup, N. B., Flor, H., Gibson, S., Keefe, F. J., Mogil, J. S., Ringkamp, M., Sluka, K. A., Song, X. J., Stevens, B., Sullivan, M. D., Tutelman, P. R., Ushida, T., & Vader, K. (2020). The revised International Association for the Study of Pain definition of pain: Concepts, challenges, and compromises. *Pain, 161*(9), 1976–1982. https://doi.org/10.1097/j.pain.0000000000001939

Reavis, J. A., Looman, J., Franco, K. A., & Rojas, B. (2013). Adverse childhood experiences and adult criminality: How long must we live before we possess our own lives? *The Permanente Journal, 17*(2), 44-48. https://doi.org/10.7812/TPP/12-072

Reeves, S., Albert, M., Kuper, A., & Hodges, B. D. (2008). Why use theories in qualitative research? *BMJ, 337*, a949. https://doi.org/10.1136/bmj.a949

Reingle Gonzalez, J. M., Walters, S. T., Lerch, J., & Taxman, F. S. (2015). The relationship between drug use, drug-related arrests, and chronic pain among adults on probation. *Journal of Substance Abuse Treatment*, *53*, 33–38. https://doi.org/10.1016/j.jsat.2014.12.00

Rennie, C., Senior, J., & Shaw, J. (2009). The future is offender health: Evidencing mainstream health services throughout the offender pathway. *Criminal Behaviour and Mental Health, 19*(1), 1-8. https://doi.org/10.1002/cbm.723

Ricciardelli, R. (2013). Establishing and asserting masculinity in Canadian penitentiaries. *Journal of Gender Studies*, *24*(2), 170–191. https://doi.org/10.1080/09589236.2013.812513

Ricciardelli, R., Pratt, K., & Idzikowski, M. (2021). Care, custody, control, and the preservation of life: The complexity of correctional officer work. *Journal of Crime and Justice*, *44*(1), 1–15. https://doi.org/10.1080/0735648x.2020.1759444

Robinson, O. C. (2014). Sampling in interview-based qualitative research: A theoretical and practical guide. *Qualitative Research in Psychology*, *11*(1), 25–41. https://doi.org/10.1080/14780887.2013.801543

Robinson, R. K. (2011). Masculinity as prison: Sexual identity, race, and incarceration. *California Law Review*, *99*, 1309–1408.

Robles, D., Gomtsian, L., Navratilova, E., & Porreca, F. (2017). Role of opioid-sensitive descending pain modulatory pathways in affective and sensory components of chronic pain in rats. *The FASEB Journal, 31*(S1). https://doi.org/10.1096/fasebj.31.1_supplement.985.16

Rolfe, G. (2006). Validity, trustworthiness and rigour: Quality and the idea of qualitative research. *Journal of Advanced Nursing*, *53*(3), 304–310. https://doi.org/10.1111/j.1365-2648.2006.03727.x

Roos, C. M., Zhang, B., Palmer, A. K., Ogrodnik, M. B., Pirtskhalava, T., Thalji, N. M., Hagler, M., Jurk, D., Smith, L. A., Casaclang-Verzosa, G., Zhu, Y., Schafer, M. J., Tchkonia, T., Kirkland, J. L., & Miller, J. D. (2016). Chronic senolytic treatment alleviates established vasomotor dysfunction in aged or atherosclerotic mice. *Aging Cell, 15*(5), 973–977. https://doi.org/10.1111/acel.12458

Rzeszutek, M., Oniszczenko, W., Schier, K., Biernat-Kałuża, E., & Gasik, R. (2016). Temperament traits, social support, and trauma symptoms among HIV/AIDS and chronic pain patients. *International Journal of Clinical and Health Psychology, 16*(2), 137–146. https://doi.org/10.1016/j.ijchp.2015.10.001

Sachs-Ericsson, N. J., Sheffler, J. L., Stanley, I. H., Piazza, J. R., & Preacher, K. J. (2017). When emotional pain becomes physical: Adverse childhood experiences, pain, and the role of mood and anxiety disorders. *Journal of Clinical Psychology, 73*(10), 1403-1428. https://doi.org/10.1002/jclp.22444

Salter, M. (2019, February 27). The problem with a fight against toxic masculinity. *The Atlantic*, *27*. https://dickkesslerphd.com/wp-content/uploads/2019/03/The-Problem-With-a-Fight-Against-Toxic-Masculinity.pdf

Sandelowski, M. (1986). The problem of rigor in qualitative research. *Advances in Nursing Science*, *8*(3), 27–37. https://doi.org/10.1097/00012272-198604000-00005

Sandelowski, M. (1993). Rigor or rigor mortis. *Advances in Nursing Science*, *16*(2), 1–8. https://doi.org/10.1097/00012272-199312000-00002

Sandelowski, M. (2000). Whatever happened to qualitative description? *Research in Nursing & Health, 23(*4), 334–340.

Santini, Z. I., Jose, P. E., York Cornwell, E., Koyanagi, A., Nielsen, L., Hinrichsen, C., Meilstrup, C., Madsen, K. R., & Koushede, V. (2020). Social disconnectedness, perceived isolation, and symptoms of depression and anxiety among older Americans (NSHAP): A longitudinal mediation analysis. *The Lancet Public Health*, *5*(1), e62-e70. https://doi.org/10.1016/s2468-2667(19)30230-0

Schaefer, I., DiGiacomo, M., Heneka, N., Panozzo, S., Luckett, T., & Phillips, J. L. (2022). Palliative care needs and experiences of people in prison: A systematic review and meta-synthesis. *Palliative Medicine, 36*(3), 443–461. https://doi.org/10.1177/02692163211068278

Schalinski, I. (2016). Hair cortisol analysis as a marker of past adverse experiences in adult patients with severe mental illness. *Psychoneuroimmunology, 71*(Suppl.), 73. https://doi.org/10.1016/j.psyneuen.2016.07.189

Schopflocher, D., Taenzer, P., & Jovey, R. (2011). The prevalence of chronic pain in Canada. *Pain Research & Management, 16*(6), 445–450. https://doi.org/10.1155/2011/876306

Scott, W., Trost, Z., Bernier, E., & Sullivan, M. J. (2013). Anger differentially mediates the relationship between perceived injustice and chronic pain outcomes. *Pain, 154*(9), 1691–1698. https://doi.org/10.1097/AJP.0000000000000095

Sessle, B. J. (2011). Unrelieved pain: A crisis. *Pain Research & Management, 16*(6), 416–420. https://doi.org/10.1155/2011/513423

Shammas, V. L. (2017). Pains of imprisonment. In K. R. Kerley (Ed.), *The encyclopedia of corrections* (pp. 1–5). John Wiley & Sons. https://doi.org/10.1002/9781118845387.wbeoc020

Sharma, G. (2017). Pros and cons of different sampling techniques. *International Journal of Applied Research*, *3*(7), 749–752.

Shelton, D. (2002). Failure of mental health policy-incarcerated children and adolescents. *Pediatric Nursing, 28*(3), 278.

Simpson, A. I., McMaster, J. J., & Cohen, S. N. (2013). Challenges for Canada in meeting the needs of persons with serious mental illness in prison. *Journal of the American Academy of Psychiatry and the Law Online, 41(*4), 501–509.

Sinatra, R. (2010). Causes and consequences of inadequate management of acute pain. *Pain Medicine, 11*(12),1859–1871. https://doi.org/10.1111/j.1526-4637.2010.00983.x

Skarupski, K. A., Gross, A., Schrack, J. A., Deal, J. A., & Eber, G. B. (2018). The health of America's aging prison population. *Epidemiologic Reviews, 40*(1), 157–165. https://doi.org/10.1093/epirev/mxx020

Sloan, J. A. (2016). *Masculinities and the adult male prison experience*. Springer.

Smith, J., Bekker, H., & Cheater, F. (2011). Theoretical versus pragmatic design in qualitative research. *Nurse Researcher*, *18*(2), 39–51. https://doi.org/10.7748/nr2011.01.18.2.39.c8283

Smith, L. R. (2020). *Supporting people after remand or conviction (SPARC): An innovation in pre-custody care.* Doctoral dissertation, University of Lincoln. https://eprints.lincoln.ac.uk/id/eprint/448

Sondhi, A., & Garrett, T. (2018). Non-cancer pain clinic in three English prisons: Understanding prisoner needs and prescribing practice in relation to chronic non-cancer pain (CNCP). *International Journal of Prisoner Health, 14*(4), 268–275. https://doi.org/10.1108/IJPH-11-2017-0052

Spencer, D. C. (2012). Narratives of despair and loss: Pain, injury and masculinity in the sport of mixed martial arts. *Qualitative Research in Sport, Exercise and Health*, *4*(1), 117–137. https://doi.org/10.1080/2159676x.2011.653499

Steingrimsdottir, O. A., Landmark, T., Macfarlane, G. J., & Nielsen, C. S. (2017). Defining chronic pain in epidemiological studies: A systematic review and meta-analysis. *Pain, 158*(11), 2092–2107. https://doi.org/10.1097/j.pain.0000000000001009

Stephen, T. C. & Skillen, D. L. (Eds.). (2020). *Canadian nursing health assessment: A best practice approach.* Wolters Kluwer.

Stevens, B. (2021). Revisions to the IASP definition of pain: What does this mean for children?. *Paediatric and Neonatal Pain, 3*(3), 101–105. https://doi.org/10.1002/pne2.12047

Stewart, L. A., Nolan, A., Sapers, J., Power, J., Panaro, L., & Smith, J. (2015). Chronic health conditions reported by male inmates newly admitted to Canadian federal penitentiaries. *Canadian Medical Association Open, 3*(1), E97–E102. https://doi.org/10.9778/cmajo.20140025

Stojkovic S. (2007). Elderly prisoners: A growing and forgotten group within correctional systems vulnerable to elder abuse. *Journal of Elder Abuse & Neglect, 19*(3-4), 97–117. https://doi.org/10.1300/J084v19n03_06

Stubbs, B., Koyanagi, A., Thompson, T., Veronese, N., Carvalho, A. F., Solomi, M., Mugisha, J., Schofield, P., Cosco, T., Wilson, N., & Vancampfort, D. (2016). The epidemiology of back pain and its relationship with depression, psychosis, anxiety, sleep disturbances, and stress sensitivity: Data from 43 low- and middle-income countries. *General Hospital Psychiatry*, 43, 63–70. https://doi.org/10.1016/j.genhosppsych.2016.09.008

Sullivan, M. J., Adams, H., Horan, S., Maher, D., Boland, D., & Gross, R. (2008). The role of perceived injustice in the experience of chronic pain and disability: Scale development and validation. *Journal of Occupational Rehabilitation, 18*(3), 249–261. https://doi.org/10.1007/s10926-008-9140-5

Sullivan, M. J., Bishop, S. R., & Pivik, J. (1995). The pain catastrophizing scale: Development and validation. *Psychological Assessment*, *7*(4), 524. https://doi.org/10.1037/1040-3590.7.4.524

Sullivan, M. J., Thorn, B., Haythornthwaite, J. A., Keefe, F., Martin, M., Bradley, L. A., & Lefebvre, J. C. (2001). Theoretical perspectives on the relation between catastrophizing and pain. *The Clinical Journal of Pain*, *17*(1), 52–64. https://doi.org/10.1097/00002508-200103000-00008

Suso-Ribera, C., García-Palacios, A., Botella, C., & Ribera-Canudas, M. V. (2017). Pain catastrophizing and its relationship with health outcomes: Does pain intensity matter? *Pain Research and Management*, *2017*, 1–8. https://doi.org/10.1155/2017/9762864

Sykes, G. M. (2007). *The society of captives: A study of a* maximum security prison. Princeton University Press. https://doi.org/10.2307/j.ctv14164hw (Original work published 1958)

Taddio, A., Katz, J., Ilersich, A. L., & Koren, G. (1997). Effect of neonatal circumcision on pain response during subsequent routine vaccination. *The Lancet, 349*(9052), 599–603. https://doi.org/10.1016/S0140-6736(96)10316-0

Teo, A. R. (2012). Social isolation associated with depression: A case report of hikikomori. *International Journal of Social Psychiatry*, *59*(4), 339–341. https://doi.org/10.1177/0020764012437128

Tesarz, J., & Eich, W. (2017). A conceptual framework for "updating the definition of pain". *Pain, 158*(6), 1177–1178. https://doi.org/10.1097/j.pain.0000000000000878

Thorne, S. (2014). The science and art of theoretical location. *Evidence Based Nursing*, *17*(2), 31. https://doi.org/10.1136/eb-2014-101738

Thorne, S. (2016). *Interpretive description: Qualitative research for applied practice*. Routledge. https://doi.org/https://doi.org/10.4324/9781315545196

Thorne, S., Kirkham, S. R., & MacDonald-Emes, J. (1997). Interpretive description: A noncategorical qualitative alternative for developing nursing knowledge. *Research in Nursing & Health*, *20*(2), 169–177. https://doi.org/10.1002/(sici)1098-240x(199704)20:2<169::aid-nur9>3.0.co;2-i

Thorne, S., Kirkham, S. R., & O'Flynn-Magee, K. (2004). The analytic challenge in interpretive description. *International Journal of Qualitative Methods*, *3*(1), 1–11. https://doi.org/10.1177/160940690400300101

Toch, H. (1998). Hypermasculinity and prison violence. In L. H. Bowker (Ed.), *Masculinities and violence* (pp. 168–178). Sage. https://doi.org/10.4135/9781483328010.n9

Tomaselli, G., Buttigieg, S. C., Rosano, A., Cassar, M., & Grima, G. (2020). Person-centered care from a relational ethics perspective for the delivery of high quality and safe healthcare: A scoping review. *Frontiers in Public Health*, 8, 44. https://doi.org/10.3389/fpubh.2020.00044

Torrey, E. F., Zdanowicz, M. T., Kennard, A. D., Lamb, H. R., Eslinger, D. F., Biasotti;, M. C., & Fuller, D. A. (2014*). Treatment of persons with mental illness in prisons and jails: A state survey.* https://www.ojp.gov/ncjrs/virtual-library/abstracts/treatment-persons-mental-illness-prisons-and-jails-state-survey

Treede, R.-D. (2018). The International Association for the Study of Pain definition of pain: As valid in 2018 as in 1979, but in need of regularly updated footnotes. *PAIN Reports*, *3*(2). https://doi.org/10.1097/pr9.0000000000000643

Uca, A. U., & Kozak, H. H. (2015). Masturbation and orgasm as migraine headache treatment: Report of a case. *Neurology Asia*, *20*(2), 185–186. http://neurologyasia.org/articles/neuroasia-2015-20(2)-185.pdf

University of Alberta, Faculty of Nursing, Graduate Education Committee. (2022). *Master's and doctoral thesis guidelines (traditional & paper-based).* https://www.ualberta.ca/nursing/media-library/forms/grad/thesis-guidelines-traditional--paper-based_2022-05-04.pdf

Unterwald, E. M., Rubenfeld, J. M., Imai, Y., Wang, J., Uhl, G. R., & Kreek, M. J. (1995). Chronic opioid antagonist administration upregulates mu opioid receptor binding without altering mu opioid receptor mRNA levels. *Molecular Brain Research, 33*(2), 351–355. https://doi.org/10.1016/0169-328X(95)00143-G

Vigo, D., Thornicroft, G., & Atun, R. (2016). Estimating the true global burden of mental illness. *The Lancet. Psychiatry, 3*(2), 171–178. https://doi.org/10.1016/S2215-0366(15)00505-2

Waller, R., Smith, A. J., O'Sullivan, P. B., Slater, H., Sterling, M., & Straker, L. M. (2020). The association of early life stressors with pain sensitivity and pain experience at 22 years. *Pain, 161*(1), 220–229. https://doi.org/10.1097/j.pain.0000000000001704

Walsh, E., Butt, C., Freshwater, D., Dobson, R., Wright, N., Cahill, J., Briggs, M., & Alldred, D. (2014). Managing pain in prison: Staff perspectives. *International Journal of Prisoner Health, 10*(3), 98–208. https://doi.org/10.1108/IJPH-08-2013-0037

Walsh, S., O'Neill, A., Hannigan, A., & Harmon, D. (2019). Patient-rated physician empathy and patient satisfaction during pain clinic consultations. *Irish Journal of Medical Science (1971–)*, *188*(4), 1379–1384. https://doi.org/10.1007/s11845-019-01999-5

Wang, E. A., Hong, C. S., Shavit, S., Sanders, R., Kessell, E., & Kushel, M. B. (2012). Engaging individuals recently released from prison into primary care: A randomized trial. *American Journal of Public Health, 102*(9), e22–e29. https://doi.org/10.2105/AJPH.2012. 300894

Williams, A., & Craig, K. D. (2016). Updating the definition of pain. *Pain, 157*(11), 2420–2423. https://doi.org/10.1097/j.pain.000000000000061

Williams, B. A., Ahalt, C., Stijacic-Cenzer, I., Smith, A. K., Goldenson, J., & Ritchie, C. S. (2014). Pain behind bars: The epidemiology of pain in older jail inmates in a county jail. *Journal of Palliative Medicine, 17*(12), 1336–1343. https://doi.org/10.1089/jpm.2014.0160

Willmott, Y. (1997). Prison nursing: The tension between custody and care. *British Journal of Nursing*, *6*(6), 333–336. https://doi.org/10.12968/bjon.1997.6.6.333

Wilper, A. P., Woolhandler, S., Boyd, J. W., Lasser, K. E., McCormick, D., Bor, D. H., & Himmelstein, D. U. (2009). The health and health care of US prisoners: Results of a nationwide survey. *American Journal of Public Health, 99*(4), 666–672. https://doi.org/10.2105/AJPH.2008.144279.

Wilson, I. R. (2017). Management of chronic pain through pain management programmes. *British Medical Bulletin*, 1–10. https://doi.org/10.1093/bmb/ldx032

Wolff, N., Huening, J., Shi, J., & Frueh, B. C. (2014). Trauma exposure and posttraumatic stress disorder among incarcerated men. *Journal of Urban Health, 91*(4), 707–719. https://doi.org/10.1007/s11524-014-9871-x

World Health Organization. (2021). *Ageing and health*. https://www.who.int/news-room/fact-sheets/detail/ageing-and-health

World Health Organization. (2022). *ICD-11: International classification of diseases, 11th revision.* https://www.who.int/standards/classifications/classification-of-diseases

Yoder, J. R., Whitaker, K., & Quinn, C. R. (2017). Perceptions of recidivism among incarcerated youth: The relationship between exposure to childhood trauma, mental health status, and the protective effect of mental health services in juvenile justice settings. *Advances in Social Work, 18*(1), 250–269. https://doi.org/10.18060/21305

You, D. S., & Meagher, M. W. (2016). Childhood adversity and pain sensitization. *Psychosomatic Medicine, 78*(9), 1084–1093. https://doi.org/10.1097/PSY.0000000000000399

Zinger, I. (2016). Human rights and federal corrections: A commentary on a decade of tough on crime policies in Canada. *Canadian Journal of Criminology and Criminal Justice*, *58*(4), 609–627. https://doi.org/10.3138/cjccj.2016.e06

Zuccaro, S. M., Vellucci, R., Sarzi-Puttini, P., Cherubino, P., Labianca, R., & Fornasari, D. (2012). Barriers to pain management: Focus on opioid therapy. *Clinical Drug Investigation, 32*(Suppl 1), 11–19. https://doi.org/10.2165/11630040-000000000-00000

## Appendix A: Information Letter for Nurses and Officers

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**INFORMATION LETTER**

**Study Title: Understanding the Experience of Pain during Incarceration: An Interpretive Description**


**Research Investigator:**
Stewart MacLennan
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306-337-3814


**What is this research study about?** The intent of this study is to better understand what it is like for incarcerated people to have pain in jail. Factors such as mental illness, addictions and drug diversion often become entangled with acute and chronic pain. By understanding pain in people who are incarcerated, I hope to provide nurses with added evidence to support their pain related treatment decision-making.

**How will this study impact my work?** I will have recruitment posters and study information posted on each unit. If anyone is interested in participating, please take their name and pass it along to the health care staff (a HSR may also be submitted requesting participation). I will see potential participants in the health care unit. I will complete a 1-hour interview with participants meeting our study's selection criteria.

**Any questions?** If you have any questions about the research now or later, please contact Stewart MacLennan at 780-492-7547 or Dr. Diane Kunyk at 780-492-9264.

If you have any questions regarding the rights of the participants, you may contact the Health Research Ethics Board at 780-492-2615. This office has no affiliation with the study investigators.

**Appendix B: Recruitment Poster**

# Are You in Pain?

## LET YOUR VOICE BE HEARD

We are looking for volunteers to take part in a study of the experiences of having pain when in jail.

You will be asked to take part in a 45–60-minute interview about what it is like to have pain when you are in jail.

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## Appendix C: Participant Information Letter and Consent

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### INFORMATION LETTER and CONSENT FORM

**Study Title: Understanding the Experience of Pain during Incarceration: An Interpretive Description**


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**Why am I being asked to take part in this research study?** You are being asked to take part in this study because you had pain in jail. People seem to have a harder time with pain when they are in jail compared to when they are at home. Learning what it was like for you to have pain in jail is important. It might change how nurses look after people who have pain in jail.

**What is the reason for doing the study?** I am doing this study because I want to learn how nurses can better look after people who have pain in jail. It can be hard for nurses to figure who needs treatment for pain and who doesn't. This study will give nurses more information to better look after pain in people who are in jail.

**What will I be asked to do?** Taking part of this study will only take about 80 minutes. The interview will take about 60 minutes and will happen in the healthcare clinic. It will take about 20 minutes to go over the study information and the consent form.

**What are the risks and discomforts?** Some people may feel bothered by talking about there pain. If this happens, you will be offered follow-up by the healthcare staff.

**What are the benefits to me?** There will be no direct benefits to you for taking part in this study. Participating will not cost you anything.

**Do I have to take part in the study?** Being in this study is your choice. If you decide to be in the study, you can change your mind and stop being in the study at any time, and it will in no way affect how you are treated by the healthcare and correctional officers. If you do decide to leave the study part way through the interview, we will not use any of the information you gave us.

**Will I be paid to be in the research?** No.

**Will my information be kept private?** During the study we will be collecting data about you. We will do everything we can to make sure that this data is kept private. No data relating to this study that includes your name will be released outside of the researcher's office or published by the researchers. Sometimes, by law, we may have to release your information with your name so we cannot guarantee absolute privacy. However, we will make every legal effort to make sure that your information is kept private. We may use the data we get from this study in future research, but if we do this it will have to be approved by a Research Ethics Board. At the University of Alberta, we keep data stored for a minimum of 5 years after the end of the study

**What if I have questions?** If you have any questions about the research now or later, please contact Stewart MacLennan at 780-492-7547 or Dr. Diane Kunyk at 780-492-9264.

If you have any questions regarding your rights as a research participant, you may contact the Health Research Ethics Board at 780-492-2615. This office has no affiliation with the study investigators.

Consent Statement

I have read this form and the research study has been explained to me. I have been given the opportunity to ask questions and my questions have been answered. If I have additional questions, I have been told whom to contact. I agree to participate in the research study described above and will receive a copy of this consent form. I will receive a copy of this consent form after I sign it.

| | |
|---|---|
| _____ | _____ |
| Participant's Name (printed) and Signature | Date |
| _____ | _____ |
| Name (printed) and Signature of Person Obtaining Consent | Date |

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**CONSENT**

**Title of Study: Understanding the Experience of Pain during Incarceration: An Interpretive Description**

**Principal Investigator(s): Stewart Maclennan Phone Number: 780-492-7547**

| | Yes | No |
|---|---|---|
| Do you understand that you have been asked to be in a research study? | ☐ | ☐ |
| Have you read and received a copy of the attached Information Sheet? | ☐ | ☐ |
| Do you understand the benefits and risks involved in taking part in this research study? | ☐ | ☐ |
| Have you had an opportunity to ask questions and discuss this study? | ☐ | ☐ |
| Do you understand that you are free to leave the study at any time, without having to give a reason and without affecting your future treatment in jail | ☐ | ☐ |
| Has the issue of confidentiality been explained to you? | ☐ | ☐ |
| Do you understand who will have access to your study records, | ☐ | ☐ |
| Who explained this study to you? | | |

_____

I agree to take part in this study:

**Understanding the Experience of Pain during Incarceration: An Interpretive Description**

Signature of Research Participant

_____

(Printed Name)_____Date:_____

I believe that the person signing this form understands what is involved in the study and voluntarily agrees to participate.

Signature of Investigator or Designee _____ Date _____

**THE INFORMATION SHEET MUST BE ATTACHED TO THIS CONSENT FORM AND A COPY GIVEN TO THE RESEARCH PARTICIPANT**