Women and Chronic Pain: An Information Guide for Health and Social Service Providers

This information guide was designed by researchers and people with lived experience of chronic pain at the Centre of Excellence for Women's Health, as part of a larger study on women's chronic pain and prescription opioid use. The information included will help you learn more about women's chronic pain and strategies for pain management to support your practice and facilitate trusting relationships with patients.

Chronic pain is persistent or recurrent pain that lasts for longer than three months. Chronic pain is experienced as both physical and biological, as well as emotional and psychosocial.

The World Health Organization (WHO) defines chronic pain as a disease in and of itself.

In Canada, nearly 8 million people live with chronic pain, with women experiencing higher prevalence of chronic pain compared to men. Women tend to endure more severe, recurrent, and enduring pain than their male counterparts. However, women are less likely to receive adequate treatment for their chronic pain conditions.

Determinants of health such as age, poverty, safety, occupation, social support, violence, trauma, discrimination as well as sex and gender interact to increase vulnerability to chronic pain.

These observations underscore the need for increased awareness and targeted interventions to address the unique challenges faced by women in the context of chronic pain.

Sex and Gender Factors of Chronic Pain

Sex and gender related factors contribute to women's physical and emotional experience of chronic pain, and how their pain is investigated and treated.

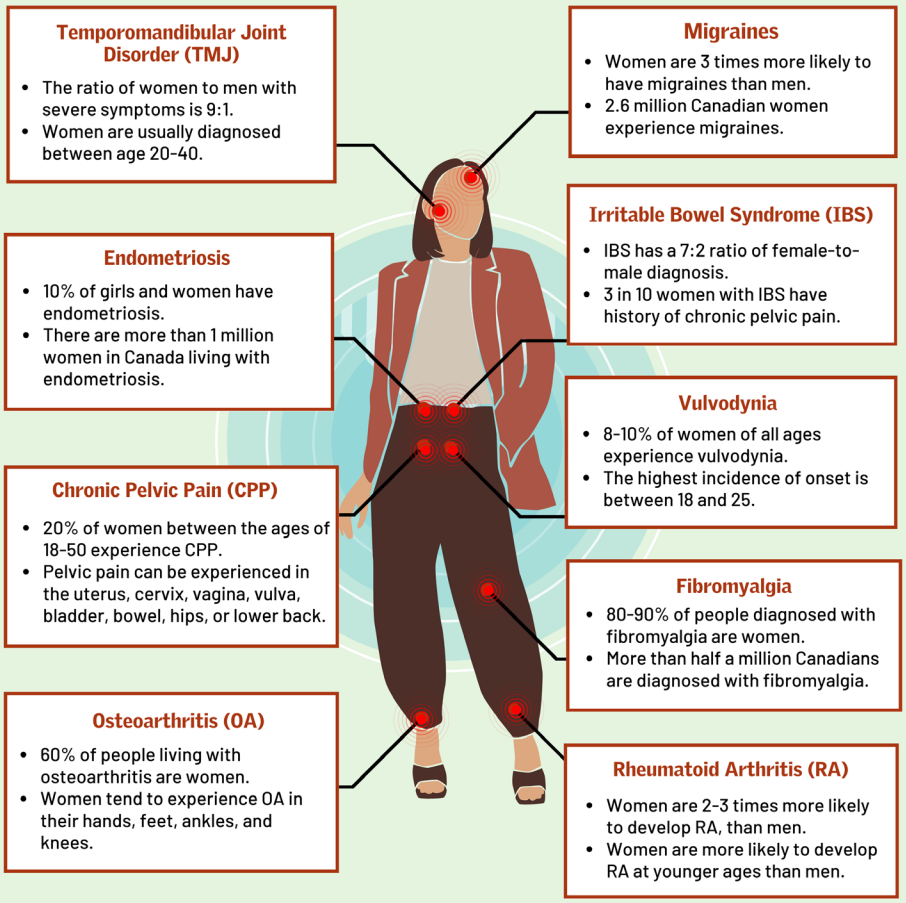
Sex refers to the biological aspects of our bodies, such as the anatomy, physiology, genetics, and hormones, which affect how our pain is experienced and the development of sex-specific chronic pain conditions.

- Hormone administration, withdrawal, or suppression can impact pain. For example, in a study by Al-Hassany et al. (2020), differences in hormonal types, levels, and processes were found to be related to sex differences in migraines.
- There are sex differences in the physiological mechanisms of pain. For example, in a study by Tschon et al. (2021), higher levels of inflammatory cytokines in women with knee and hip osteoarthritis is linked to higher pain.

centre of excellence for women's health

Gender refers to the socially constructed norms, roles, relations, and identities that influence individual and group experiences and responses, all of which shape our experiences and perceptions of pain.

- Chronic pain can have psychosocial impacts, including on women's ability to form relationships with others. For example, in a study by Souza et al. (2011), women with chronic pelvic pain reported pain-related changes in their lives beyond physical discomfort. They reported impairments in their social, professional, and maternal lives.
- Expectations surrounding traditional gender roles can significantly influence how chronic pain is managed. For example, in a study by Cote & Coutou (2010), findings revealed that women experiencing work disability remain at home for extended periods compared to men. The demands of household responsibilities impeded their ability to dedicate time and energy to their rehabilitation efforts. Conversely, men reported feeling they had ample time available to focus on their recovery journey.



Sex- and- gender related factors result in women disproportionately experiencing certain chronic pain conditions. There are at least nine chronic pain conditions that disproportionately affect women due to sex- and gender-related factors. Several of these chronic pain conditions, such as endometriosis, vulvodynia, and fibromyalgia often take several years for women to be diagnosed. During this time, women may be left experiencing unrelenting pain. Find the full infographic here.

Discussion Questions

1. What is your role in supporting women who experience chronic pain?
2. How do sex- and gender- related factors inform your understanding of chronic pain?
3. How could you implement sex and gender considerations into your work with chronic pain?

Women, Chronic Pain and Prescription Opioids

Women are more likely to be prescribed, and rely on, prescription opioids for chronic pain management. Compared to men, women are also prescribed opioids at higher doses and at longer intervals.

Sex- and gender- informed approaches to opioid prescription are needed to understand why women use opioids, how opioids are metabolized differently by males and females, and to ensure appropriate use of opioids.

In our interviews, women reported using prescribed opioids because it was the only medication that gave them sufficient pain relief and allowed them to return to day-to-day activities like work, exercise, and shopping. Another reported reason was that prescription opioids allowed them to be present in their relationships, as a friend, partner, or mother. All these things improved their mental health and quality of life.

There are some important sex- and gender- related factors to consider when prescribing. For example, since opioids dissolve in fats and females tend to have a higher body fat percentage compared to males, fixed doses, as opposed to doses adjusted according to weight, could result in higher blood concentration levels for women. Additionally, long-term opioid use can impact female hormones, menstrual cycle, and fertility.

Women Want You to Know

These two key findings are from our scoping review and interviews regarding women's experiences with prescribed opioids.

1. **Prescription opioids have a role in pain management.**

Despite the harms associated with prescription opioid use, women repeatedly expressed the importance of their prescription opioid for pain management. Women want providers to know that there is an important role for prescription opioids in women's pain management journeys, especially within a comprehensive health plan that involves other interventions.

2. **More information about prescription opioids is desired by women.**

Women discussed desiring to know more about the harms, benefits, and side effects of taking prescribed opioids. They wanted to have safe and non-stigmatizing conversations with their doctors about prescription opioid use. We made a fact sheet on Women, Prescription Opioids & Chronic Pain that speaks to these information needs, and gives information on sex and gender considerations of prescription opioid use.

Want to know more?

Use this link or QR code to access a video from CEWH researchers about diverse women's experiences with chronic pain and prescription opioid use.

Discussion Questions

1. How could you implement this knowledge of women's experiences with prescribed opioids into your practice?
2. How might you describe the benefits and harms of prescription opioids for chronic pain when working with patients?

Effective Comprehensive Multidisciplinary Treatments for Women's Chronic Pain

It is essential to offer women a diverse array of options to empower them in making informed decisions tailored to their individual needs, abilities (including financial, physical, and psychological factors), and circumstances.

This diagram demonstrates 8 categories of pain management interventions that work together to address the multidimensional experiences of women's chronic pain. It is part of a larger information sheet that explains each type of intervention, and how it has been used to reduce pain and other accompanying symptoms. Women's chronic pain is most effectively managed when there are strategies from various categories being used simultanously as part of a holistic pain managment plan.

The Most Evidenced Treatments for Women's Chronic Pain

The following pain management strategies are the most reported evidence-based strategies for women with chronic pain, identified in a larger literature review aimed at understanding effective treatments for women's pain. The next two pages offer a brief description of the strategy and how it has been demonstrated to be effective.

Interdisciplinary Pain Programs

- Interdisciplinary pain management combines strategies from different health disciplines to address the comprehensive needs of both the physical and psychological aspects of chronic pain for personalized relief.

helpful for:

- Developing coping skills
- Improving mental health & mood
- Improving functionality & mobility
- Reducing pain

Prescription Medications

- Prescription medications, such as opioids, anticonvulsants, and antidepressants help to alleviate or control pain. The choice of medication depends on the nature and intensity of the pain, as well as individual health considerations.

helpful for:

- Reducing pain
- Addressing nerve pain
- Managing symptoms

Mindfulness

- Mindfulness is the practice of maintaining awareness and attention to the present moment, fostering a non-judgmental and accepting attitude towards one's thoughts, feelings, and bodily sensations (including pain).

helpful for:

- Reducing pain
- Reducing pain-related distress
- Relaxing
- Developing coping skills

Cognitive-Behavioural Therapy

- Cognitive Behavioural Therapy (CBT) is a structured, goal-oriented, and solutions-focused type of psychotherapy that focuses on identifying and changing thoughts, behaviours, and beliefs.

helpful for:

- Reducing pain
- Developing coping skills
- Improving sleep
- Managing symptoms

Exercise

- Exercise can be any form of activity that engages the body in movement. Examples include cardio (walking, running, swimming, etc.), strength training, and yoga.

helpful for:

- Improving mental health & mood
- Improving mobility & strength
- Longevity
- Reducing pain

Physical Therapy

- Physical therapy, or physiotherapy, is a healthcare profession that uses exercises and therapeutic interventions to enhance physical function, mobility, and overall well-being for injuries, chronic pain, and disabilities.

helpful for:

- Improving mental health & mood
- Improving functionality & mobility
- Reducing pain
- Managing symptoms

Muscular Injections

- Muscular injections deliver medications directly to painful or inflamed muscles or trigger points. The injection (such as morphine or Botox) aims to reduce inflammation, provide temporary pain relief, or alleviate muscle spasms.

helpful for:

- Reducing pain
- Managing symptoms
- Tapering off medication

Time

- The passage of time can contribute to a natural reduction in pain intensity in women's chronic pain conditions. This could be as a result of healing, pain coping, pain acceptance, and other self-management strategies.

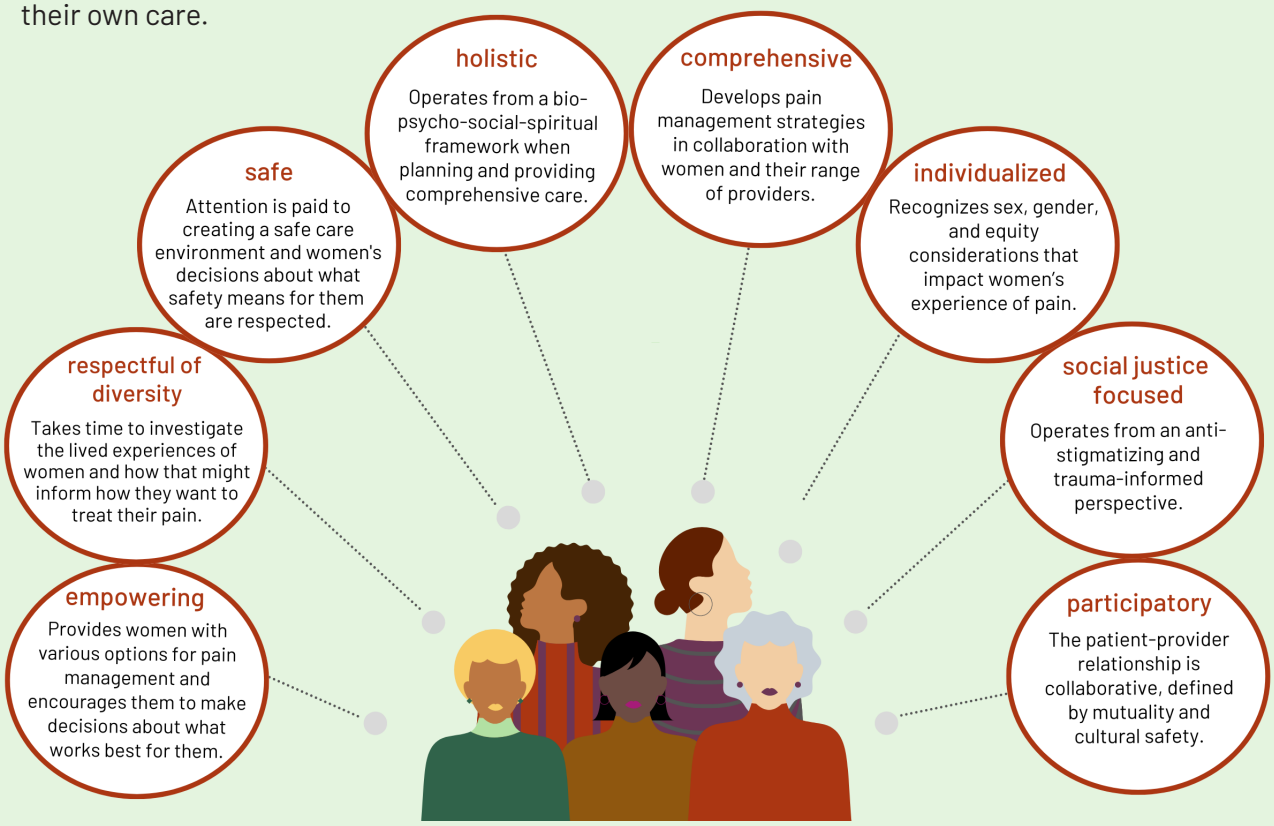
helpful for:

- Pain acceptance
- Lifestyle accommodations
- Building coping mechanisms
- Healing

Creating Comprehensive, Women-Centered Pain Management Responses

A comprehensive pain management plan acknowledges the unique experiences and needs of each woman living with chronic pain. Key elements of providing women with comprehensive care include:

- Recognizing that women's pain is influenced by a wide range of factors, including physical, psychological, emotional, social, spiritual, economic, cultural, and structural aspects, that impact their interactions with the healthcare system.
- Understanding that sex- and gender-related factors play a significant role in the development, perception, and management of pain.
- Emphasizing the importance of tailored approaches to investigation, diagnosis, prevention, and treatment through collaborative, coordinated, and interdisciplinary efforts.
- Offering a variety of pain management options, including medical, surgical, pharmacological, psychological, cultural, and lifestyle strategies, to empower women to make decisions based on their individual circumstances.
- Providing women with accurate, evidence-based information to enable them to actively participate in their own care.



This foundational knowledge has led to the development of this graphic, outlining principles of women-centered care. These principles complement the interactions with women experiencing chronic pain, promoting comprehensive and compassionate care.

Discussion Questions

1. How may you use the principles of women-centered care?
2. What policy and practice improvements are needed to support the integration of comprehensive women-centered care?
3. What additional research is needed?

Want to Learn More?

We have created a free online Educational Guide tailored specifically for service providers. This guide is structured into three comprehensive sections: 1) Women and Chronic Pain, 2) Women and Prescription Opioids, and 3) Women and Chronic Pain Management. The guide delves deeper into each topic offering new information about the barriers women face in their care and treatment. It also offers insights into effective strategies for providing women+ centered comprehensive care. We explore various approaches, such as motivational interviewing and trauma-informed practice, to ensure a holistic and empathetic approach to care.

We have made this educational resource available as a free course, accessible here.

In addition, we have developed a range of additional resources to support your practice:

- 8 Most Evidenced Treatments for Women's Chronic Pain
- Pain Management Strategies for Women with Chronic Pain
- Women, Chronic Pain & Prescription Opioids Fact Sheet
- Women and Prescription Opioids Info Sheet
- Women, Chronic Pain & Prescription Opioids: 8 Key Facts & Ideas for Action

Key References

1. Ait-Daoud, N., Blevins, D., Khanna, S., Sharma, S., Holstege, C.P. & Amin, P. (2019). Women and Addiction: An Update. *The Medical clinics of North America*, **103**(4), 699-711.
2. Canadian Pain Task Force. (2021). An Action Plan for Pain in Canada. Health Canada: Ottawa, ON.
3. Hachey, L.M., Gregg, J.A., Pavlik-Maus, T.L. & Jones, J.S. (2017). Health implications and management of women with opioid use disorder. *Journal of nursing education and practice*, **7**(8), 57.
4. Keogh, E. & Boerner, K. E. (2023). Challenges with embedding an integrated sex and gender perspective into pain research: Recommendations and opportunities, *Brain, Behavior, and Immunity*.
5. Meana, M., Cho, R., DesMeules, M. (2004). Chronic Pain: The Extra Burden on Canadian Women. *Women's Health Surveillance Report*, **4**(1), S17.

For a full list of references, view our Research Methodology.

To learn more about this project, visit our webiste: www.cewh.ca.

cewh.ca

@cewhca

The Centre of Excellence for Women's Health acknowledges the financial support of Health Canada's Substance Use and Addiction's Program.

centre of excellence for women's health

The Centre of Excellence for Women's Health respectfully acknowledges the First Nations, Inuit, and Métis peoples as the first inhabitants and traditional custodians of the lands where we live, learn, and work.