



# Women, Girls, and Prescription Medication

# USE AND MISUSE OF PRESCRIPTION MEDICATION

## What are the issues for women and girls?

There are increasing reports of prescription drug use and misuse in Canada. Indeed, Canada has the world's second-highest prescription opioid pain reliever consumption rate, after the United States [1, 2]. Due to this, their use and misuse now contributes to the *third highest burden of disease connected to substance use* (after alcohol and tobacco)[1]. Some have considered this a crisis [3].

These trends are of concern to the public health, health promotion, treatment and policy sectors, and could benefit from increased research and improved programming. There is also a need to bring a sex and gender lens to the use and misuse of prescription medication to illuminate the specific issues for women, girls, men and boys.

We recently investigated the impact of prescription medications specifically on the health of girls and women. We undertook a scoping review of literature, and then conducted an environmental scan involving practitioners, researchers and policy makers in Canada. This is what we found.

- Increasing numbers of women and girls use or misuse prescription medication in Canada.
- The reasons are complex, but include chronic pain, experiences of trauma, substance use or addiction and/or mental health issues.
- These factors can make it very challenging to respond to misuse of prescription pain medication among women and girls, and at the same time, offer effective pain management.
- Improved responses require input and action from primary care, addiction services, pain management and mental health services.

- Policy makers and researchers could play an important role in funding and evaluating initiatives that are sex and gender specific, trauma-informed, harm reduction oriented, and account for differences between and among groups of women who use or misuse prescription drugs.

This research was funded by the Canadian Institutes for Health Research (CIHR), under the Canadian Research Initiative in Substance Misuse. The scoping review included academic literature published from January 1990-May 2014, as well as grey literature sources relevant to girls' and women's prescription drug use/ misuse. A total of 42 relevant peer reviewed articles were located, and additional 46 references were located through grey searches. The environmental scan was conducted in December 2014. A web survey was conducted with health care providers, researchers, medical school instructors, health system planners and policy makers, and community based peer advocates from across Canada whose work focuses on chronic pain, trauma, addiction, Aboriginal women's health, prescribing practices and/or professional regulation. Participants were asked to identify needs and opportunities related to the misuse of prescription medications by girls and women, priority programs, policy issues and/or research questions. To identify research and practice needs and opportunities, two in-person meetings were held with researchers, advocates and treatment personnel in two provinces (BC and ON). During the second meeting the results of the scoping review and environmental scan were discussed. The quotes in this document are from the environmental scan.

## What are the rates of use in Canada?

In Canada, the use of all psychoactive pharmaceutical drugs<sup>1</sup> is higher among females than among males (27% compared with 21%) [4].

Opioids are the most commonly used type of psychoactive pharmaceutical drug with 1 in 6 Canadians aged 15 years and older reporting the use of opioids.

5.2% of those using opioid pain relievers reported abusing them or using them to get “high” (rates of abuse did not vary significantly by gender).

## What is behind these statistics?

A range of explanations has been offered for women’s misuse of prescription drugs, including the effects of sex and gender-based factors as well as patient and physician behaviours. Women tend to visit health care providers more often [5], are more likely than men to use any prescription drugs, are more likely to be prescribed opioids and anxiolytics than men [6]. Gendered experiences of violence and trauma can also increase women’s vulnerability to prescription medication use.

We carried out a scoping review of academic literature on women’s prescription drug use and trauma and chronic pain, and an environmental scan with 37 Canadian practitioners, policy makers, researchers and community advocates. The results of these two data gathering initiatives revealed some key themes.

<sup>1</sup> Which are 1) opioid pain relievers, such as oxycodone (Percodan, OxyContin), meperidine (Demerol), and fentanyl; 2) stimulants, such as methylphenidate (Ritalin, Concerta), amphetamine and dextroamphetamine (Adderall, Dexedrine); and 3) tranquilizers and sedatives, such as benzodiazepines like diazepam (Valium), lorazepam (Ativan) and alprazolam (Xanax).

The scoping review revealed that women who have experienced **trauma** are more likely to experience chronic pain [44], and have unrecognized or difficult to treat medical conditions such as fibromyalgia [7], irritable bowel syndrome, and chronic fatigue syndrome [8]. Women who have experienced trauma may not always receive adequate treatment for psychiatric or substance use issues and may self-medicate with prescription opioids [8]. Some reports highlight the need for integrating consideration of trauma with substance use treatment. The biological effects of psychosocial stressors can result in changes in, and over activation of, neural structures which contribute to anxiety and chronic pain [9].

*Many women are still able to obtain (opioids) easily whether appropriate or not due to providers not being able to address underlying problems.*  
~ Pain practitioner, Ontario

Prescription medication abuse among **pregnant** women is a significant problem affecting women’s health that increases the risk for neonatal abstinence syndrome (NAS) in infants [10] and may contribute to challenges in early mother-child attachment [11, 12]. Pregnant women are increasingly prescribed opioid medications (particularly codeine and hydrocodone) [13]. The incidence of NAS in Ontario increased 15-fold during from 1992 to 2011, and the *majority* of the mothers of infants with NAS had received a prescription for an opioid both before and during their pregnancy [14]. Pregnant women using prescription medications often use other substances concurrently, including alcohol and tobacco, creating additional health risks for the woman and the fetus [15, 16]. But the barriers for pregnant women who seek treatment for their substance use are formidable, including fear of child apprehension from child protection authorities.



There are also challenges in treating **concurrent addiction** and pain. Canadian practitioners who participated in the environmental scan suggested that best practice for treating women with concurrent addiction and pain issues was to see a physician who specializes in pain management and addiction. The Canadian Guideline For Safe and Effective Use of Opioids For Chronic Non-Cancer Pain indicate that if addiction issues are already present in a patient, there is a need to monitor and contract around the prescribing of opioids [17], and, if the addiction issues are beyond the scope of the practitioner, the expectation is that the patient is referred to an addiction specialist. However, a number of respondents indicated that physicians with this sort of specialization were in limited supply, and accessing them was challenging for most people. In addition, there are only a few psychiatrists in Canada that specialize in pain management, and pain specific clinics are difficult to access.

## What does this mean for practice?

The evidence from the review and the scan are important bases for improving the responses to women and girls who use or misuse prescription medications, especially opioids, in Canada. There are several steps that need to be taken.

### 1. Working together to provide interdisciplinary pain management.

A lack of integration between professions and disciplines means less appropriate treatment for women (and men) with multiple issues, and limited sharing of expertise between different parts and members of the treatment system. Interdisciplinary pain management that addresses physical pain as well as psychosocial and psychological health could bring together a range of practitioners (physician, psychologist, physical therapist, nurse, pharmacist, etc.) to tailor a treatment plan to meet the individual needs of the patient. Such individualized plans could include:



pharmacological intervention, brief education, and intensive rehabilitation programs (including for example, physical therapy and cognitive behavioral therapies). Interventions for women who have experienced violence should be trauma focused and address nonmedical use of medications, and all responses should be trauma-informed[18]. Interdisciplinary mentorship networks and communities of practice (such as the Atlantic Mentorship Network for Pain and Addiction (AMN-P&A) ([www.atlanticmentorship.com](http://www.atlanticmentorship.com))) are models for interdisciplinary pain management as they focus on linking groups of primary health care providers (mentees) directly to pain and addiction experts (mentors) to help individuals living with chronic pain and addiction.

*While there are gender-specific trauma treatment options available, I am not aware of any which are linked to pain treatment programs.*

*- Regulation/ professional standards policy maker, Alberta*

## 2. Melding the response to pain management and addiction.

Our environmental scan revealed that a shared understanding of pain management and addiction treatment was not always present among practitioners. Merging pain management and addiction treatment is tricky, and requires a balanced approach to both issues. Different professions often have different views of addiction, which can lead to some women being over prescribed or over using pain medication, while others are being under prescribed for fear of addiction. In addition, pre-existing addiction concerns (opioid or otherwise) can prevent women from obtaining the pain management they need. When pain relievers are not available, women may turn to other substances to cope with their distress.



## 3. Providing non-opioid options for pain management.

Strategies that offer other options to women and girls are often difficult to access. For example, barriers to accessing psychiatry, counselling, trauma treatment, and specialized chronic pain specialists include long wait lists, user fees, or lack of geographic access. Complementary health services that might offer women pain relief, such as physiotherapy, massage and acupuncture are expensive and often not covered by insurance. There is evidence that acupuncture may be beneficial for treating some types of chronic pain including back pain and osteoarthritis, although for most other types of pain further research is required [19]. There is also some

evidence to support the use of meditation, relaxation, yoga, massage, herbs and supplementation for treating various forms of chronic pain [20-22]. For example, engagement in an 8 week yoga intervention was associated with improvements in pain, psychological function and cortisol levels in women with fibromyalgia [5]. Several studies have reported that mind-body interventions (including breathing, meditation and yoga) helped reduce pain and other symptoms among older adults [4, 23] and women and men with cancer [1]. There has also been some promising research exploring the integration of Indigenous healing practices with western approaches to address substance use among Indigenous people [24-26]. However, most of the current evidence does not provide data or analysis of the specific benefits for women or sub-groups of women.

## What does this mean for policy and research?

### 1. Applying a sex and gender analysis.

We encountered a dearth of research on sex and gender specific impacts of and reasons for use of prescription drugs. We also found little about specific treatments for women. There is definitely a need for a comprehensive gendered analysis of prescription use and misuse in Canada in treatment, policy and research. Such an analysis would improve understanding of both women's and men's health. For example, while there are guidelines in place for prescribing opioids in Canada, they are not sex and gender sensitive. While the *Canadian Guideline For Safe and Effective Use of Opioids For Chronic Non-Cancer Pain* note the need for caution in opioid use among pregnant and breastfeeding women, it does not include any other sex or gender specific guidelines [17] that could take into account sex differences or gendered factors. This is a huge gap that needs to be filled. Similarly, policy and research approaches need an embedded sex and gender analysis in order to both generate more, and respond to existing evidence on women, girls and prescription drug use and misuse. Such information would assist in providing women-centred or gender sensitive, trauma informed and harm reduction oriented responses to prescription drug use and misuse.

### 2. Creating integrated systems of response from health promotion to treatment.

The respondents expressed a need for integrating health promotion, public health initiatives and clinical treatment options, as this continuum is often missing or disjointed. Such an integrated response would reflect and acknowledge both the sex and gender issues as well as the trends in women's prescription medication use and misuse. In addition, research and practice evidence suggests that there are particular risks associated with use of prescription medications among specific groups, such as pregnant women, Aboriginal

women, and women experiencing trauma and subsequent mental health issues. All of these subgroups need health promotion messaging, and policy and practice attention and tailored initiatives. In short, there is much to be done in this field. More research to unearth sex and gender specific data and patterns, as well as more innovative practices and policy development are all urgently needed. Our scoping review and environmental scan are but first steps in outlining the need.

## What are the key messages?

1. There is a shortage of sex specific and gender sensitive research on the causes and effects of prescription medication use and misuse in Canada.
2. Sex and gender sensitive prescribing guidelines, practices, and treatments in Canada are needed.
3. Canada needs a connected continuum of responses for women and men who are considering or needing prescription pain medication, that includes patient education, screening, monitoring and addiction treatment. A trauma-informed approach at all these points of intervention on the continuum is critical to engagement and support.
4. Canada needs a coordinated approach to pain management and addiction issues and more specialist treatment availability.



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# » Women and Prescription Pain Medications



**Use and misuse of prescription pain medication among Canadian women is a growing concern.**



**1 in 6 Canadians use opioid pain relievers**

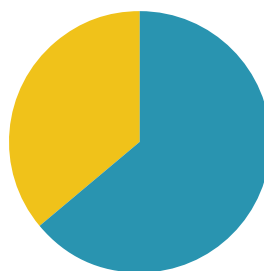
**Canada has the second highest prescription pain reliever use in the world \***

(\* after only the United States)



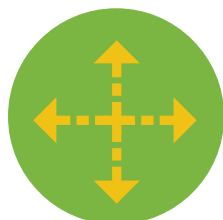
**OPIOIDS** are a type of pain reliever, mostly prescribed to treat acute and chronic pain.

Examples include medications like hydrocodone (e.g., Vicodin), oxycodone (e.g., OxyContin, Percocet), morphine and codeine.



**In Canada, 64% of users of opioids are women and 36% are men**

## Why are women vulnerable to prescription pain medication misuse?



### Different patterns of health care use

Women tend to visit health care providers more often, are more likely to use prescription drugs, and are more likely to be prescribed opioids and anti-anxiety medications



### Histories of violence and trauma

Many women have past or current experiences of violence and trauma. They may not have received adequate treatment or are using opioids to self-medicate



### Differing experiences with chronic pain

Women can be more sensitive than men to pain due to differences in sex hormones and genetics as well as how their bodies absorb, eliminate, and metabolize opioid medications





Serious harms from opioids and other prescription medications include addiction, overdose and death.

## » What are the Long Term Effects of Prescription Pain Medication for Women?

Chronic Headaches

Infertility

Anxiety and Depression

Hormonal Changes

## » What Does Misuse Look Like?

1. Using opioids together **with alcohol** or other medications that have a sedative effect
2. Taking **more** medication than recommended
3. **Changing how** the medication is taken (e.g., snorting or injecting)
4. Taking **someone else's** medication

## » Prescription Pain Medication During Pregnancy



Many women are prescribed opioids before they become pregnant and pregnant women are increasingly prescribed opioid medications

» Opioid use can increase the chance that the baby will be born prematurely or experience symptoms of withdrawal

» Pregnant women may need alternate forms of pain management

» Alternatives should always be discussed with a doctor as abruptly stopping the use of opioids in an opioid-dependent pregnant woman can result in harms such as early labour

## » How Can We Change This?

### » Women can:

- Talk to their doctor about different treatment options for pain
- Ask for treatment for underlying addiction or trauma issues
- Ask to try non-opioid pain medications
- Try complementary therapies such as: massage, acupuncture, relaxation and cognitive techniques, and yoga

### » Physicians can:

- Suggest non-opioid alternatives and complementary therapies
- Help women with symptoms of withdrawal, including prescribing medications like methadone or buprenorphine

### » All health care and social service providers can:

- Share information on the links between women's substance misuse and experiences of violence and trauma
- Provide women with support in seeking healing or women-centred addiction treatment services

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### » Sources

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