Opioid use disorder in women: Distinguishing features

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Despite substantial effort for years in the health and legal system, the opioid epidemic remains a significant problem in our nation. Opioid use in women warrants more attention because their use, and response to treatment, presents a different picture than in men. This article describes opioid use in women and approaches that nurse practitioners in primary care settings can take to identify risks for opioid use disorder, promote prevention, facilitate early detection, and provide treatment.

KEY WORDS: substance abuse, substance use disorder, opioid dependence, women, addiction

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The *Diagnostic and Statistical Manual of Mental Disorders* describes opioid use disorder (OUD) as a pattern of opioid use leading to problems or distress, with at least 2 of 11 characteristics occurring within a 12-month period.[1] These characteristics are listed in *Table 1*.[1] Widespread awareness of the opioid epidemic, education of healthcare providers, prescription drug monitoring, and dissemination of evidence-based guidelines have fostered safer prescribing of opioids, yet OUD persists as a major health concern. The relationship of overall health, biology, gender, and social circumstances to opioid misuse and OUD need to be understood and addressed.

Notable is the difference in prescribing patterns between men and women. The National Center for Health Statistics reports that opioid use was higher among women than men and use increased with age. Opioids were prescribed at emergency department discharge at a rate of 39.9/1,000 visits for women and 32.6/1,000 for men in the reporting year 2019–2020.[2,3] Opioid use disorder can be seen in women of all ages and in any setting. Although the diagnostic criteria are the same for women and men, the disease manifests differently as does response to treatment. The purpose of this article is to provide nurse practitioners in primary care settings with an overview of risks for and consequences of OUD specific to women, treatment and

Table 1. DSM-5 criteria for diagnosis of opioid use disorder[1]

- Presence of 2–3 symptoms indicate mild opioid use disorder; 4–5 symptoms moderate; > 6 severe opioid use disorder.
- Opioids are often taken in larger amounts or over a longer period than intended.*
- There is a persistent desire or unsuccessful efforts to cut down or control opioid use.*
- A lot of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects.
- Craving, or a strong desire to use opioids*
- Recurrent opioid use resulting in failure to fulfill major role obligations at work, school, or home
- Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids
- Important social, occupational, or recreational activities given up or reduced because of opioid use
- Recurrent opioid use in situations in which it is physically hazardous*
- Continued use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by opioids*
- Tolerance, as defined by either of the following: a need for markedly increased amounts of opioids to achieve intoxication or desired effect; or markedly diminished effect with continued use of the same amount of an opioid
- Withdrawal, as manifested by either of the following: the characteristic opioid withdrawal syndrome; or the same (or a closely related) substance taken to relieve or avoid withdrawal symptoms

*Reported by patient presented in the case scenario

recovery considerations, and principles for the safe management of pain to prevent OUD. In this article, the use of the word women refers to those assigned female sex at birth with a recognition that culturally defined gender roles beyond biologic differences also are relevant. The case of a mid-life woman with OUD is used to create a picture of the intricacies of the development, attributes, and multidisciplinary treatment approach for OUD.

Unique attributes in the development of substance use disorders in women

Physiologic and structural differences between women and men place women at higher risk for substance use disorders and impact their response to treatment. Hormones, monthly cycling, and distribution of body fat and muscle are just a few differences that affect metabolism overall.[4–6] The impact of gonadal hormones (estradiol, progesterone, testosterone) on opioid receptors differs between the sexes affecting opioid absorption, distribution, and metabolism.[6–8] Structural differences are found in several places along neural pathways.[7] Women become addicted more quickly on a smaller amount of opioids, and their cravings are more intense.[6–8] Rapid addiction, powerful cravings, and severe withdrawal symptoms are barriers to opioid use cessation.

One very important factor distinguishing the risk for substance use disorders in women versus men is emotional distress and its relationship to substance use. Emotional distress drives substance use in women more than men.[6–11] Mental illness, one cause of emotional distress, is more prevalent in women than men and is closely linked to substance use.[12–16]

Women experience more social vulnerabilities than men.[4–6,8,12] The social expectations of women, especially those with children, are that women are selfless and maternal. Opioid use contradicts this image, therefore stigmatizing women more severely than men. Addiction also has contributed to neglect or involvement of the legal system, with children being removed from the home.

Many women are primary caregivers not only for children but also for other family members or hold jobs as caregivers. It is common for women to put their health needs last, ignoring health maintenance, screening, and overall good health practices. Women in caregiving roles who have OUD live with the competing demand and anxiety of having to sustain the addiction while maintaining their caregiver role. It is common for women in these situations to put their health and healthcare last. They have difficulty focusing on getting the help they need.

Case scenario–pathway to opioid use disorder

AR is a 55-year-old woman who presents to a drug rehabilitation and counseling center. During intake, she reports being addicted to opioids and wishes to become "clean and free," being tired of having to worry about her addiction and how it affects caring for her family.

Her oxycodone use began 5 years ago when she was prescribed a short 1-week course to manage pain resulting from a uterine prolapse repair and removal of fibroids. Once the initial prescription was

completed, pelvic pain persisted and was unrelieved by over-the-counter medication. She believes she became addicted "right away." She began to acquire illegal oxycodone to self-medicate, intending to return to her healthcare provider, but did not. Concerned only with getting quick relief because she was caring for a sick spouse and child, she put her needs last. Her mother also had recently died and she was grieving that loss.

Over the last 5 years, she progressed to needing a minimum of 60 mg/day of oxycodone to avoid withdrawal. She describes her withdrawal symptoms as extreme nausea, diarrhea, restlessness, and abdominal and muscle cramps. The cravings for opioids are so severe she states that "I feel as though I am jumping out of my skin" and says "the pain is crippling." Her many attempts to reduce use of oxycodone have been unsuccessful. She reports panicking if she is short of pills or cannot find the dealer. She feels that the addiction is worsening, needing more opioids to relieve the cravings. Her fear is not being able to care for her family and that others will learn of her addiction. This patient was positive for five diagnostic criteria, indicating moderate OUD. Additionally, AR screened positive for moderate anxiety. She continues with chronic pelvic pain and has a history of both irritable bowel syndrome and interstitial cystitis.

Treatment

The paradigm of harm reduction is the foundation for treating a person with addiction wherever they are seen. Stigma is reduced when the healthcare provider displays acceptance of the person while acknowledging the substance use. The person is then more likely to engage in the treatment of addiction and comorbid conditions.[17–19] Trauma-informed care is important because many women with OUD have experienced intimate partner violence and drugs are often introduced by intimate partners.[20] Adverse childhood experiences, abuse, and other social situations complicate care for women.[19,21] As previously described, emotional distress and coexisting mental health conditions including anxiety are hallmarks of OUD in women.[22] Relief of emotional distress and treatment for mental health conditions should be prioritized.

Key to recovery is counseling with a certified alcohol and substance abuse counselor and peer support. Counseling is time intense and requires commitment. Over time, meeting with a peer group can provide sober support. Sobriety differs from recovery. Sobriety is the absence of mind-altering substances. It permits clarity of decision making, can improve relationships with loved ones, and fosters reengagement in society including employment. Recovery from OUD is a longer process through which one improves overall wellness and can lead a self-directed life.

Expanded access to medication-assisted treatment combined with overdose education and naloxone distribution has been associated with reductions in morbidity and mortality from OUD.[23] Medication used for opioid use disorders [MOUD] suppresses the discomfort of withdrawal, including cravings. Medications include methadone, naltrexone, buprenorphine, and naloxone. When selecting medication, patient preferences and a shared decision-making approach should be used. Cost, access to medication, insurance coverage, setting, occupation, co-occurring conditions, motivation, and capacity to adhere to the regimen all must be considered. For example, if risk for relapse and nonadherence is high, naltrexone extended release may be the best choice but may be declined by insurance. Methadone versus buprenorphine/naloxone maintenance depends on access because methadone may not be available in many communities.

Buprenorphine is a partial opioid agonist. Unlike methadone, it can be provided within primary care settings. The dose can be established in the office setting and prescribed for the patient to self-administer daily. Doses are titrated up in 2 mg increments.[24] When combined with the opioid antagonist naloxone, cravings are reduced and a ceiling effect removes any sense of feeling "high," reducing risk of misuse, overdose, and side effects.[24] Buprenorphine/naltrexone eliminates the sensation of cravings without having full opioid potency or effects, so the person is sober and can focus on healing. Removing the desire and intense need to use allows for engagement in psychosocial and peer interventions. The combined strategy of individual counseling, peer support, and medication helps prevent relapse and overdose and improves chances for sustained recovery.[23–26]

Case scenario–pathway to treatment and recovery

AR's goal is to free herself of opioids without pain or jeopardy to her family or reputation. Continuously having to acquire opioids is stressful, and she fears the legal system. She expresses shame, self-doubt, and identifies secrecy as a priority. Four pillars of care were planned for this patient: care of medical problems, treatment of addiction, management of anxiety, and management of pain. All need to be addressed simultaneously.

Through coordinated care, she was referred to primary care, gynecology, and gastroenterology healthcare providers. Within 6 months, she had received treatment for irritable bowel syndrome, inter-

Table 2. Guidelines for prescribing opioids for chronic pain[27]

Determining when to initiate or continue opioids for chronic pain
- Opioids are not first–line or routine for chronic pain
- Establish and measure goals for pain and function
- Discuss benefits and risks and availability of nonopioid therapies

Opioid selection, dosage, duration, follow-up, and discontinuation
- Begin with immediate–release opioids
- Begin with a low dose and increase slowly
- In acute pain, prescribe no more than needed
- Avoid extended–release/long–acting opioids for acute pain
- Follow up and re–evaluate risk of harm; reduce dose, taper and discontinue if needed

Assessing risk and addressing harms of opioid use
- Evaluate risk factors for opioid–related harms
- Check PDMP for high doses and prescriptions from other providers
- Use urine drug testing to identify prescribed substances and undisclosed use
- Avoid concurrent benzodiazepine and opioid prescribing
- Arrange treatment for opioid use disorder if needed

PDMP, prescription drug monitoring program.

stitial cystitis, and was up to date with all health screenings and vaccinations. Over 6 months, the pain in her pelvis was markedly reduced.

The healthcare providers were able to arrange remote telehealth follow-up visits, creating a time-efficient management plan that AR could handle. This was critical as access to care is a barrier for many women with substance use disorders.[6,8,9,22,26] Remote visits provided a safe space, made secrecy possible, and lessened shame and self-doubt.

AR took the first step, was motivated to recover, and identified needing considerable help. She met with her counselor weekly or more often when necessary. Her counselor employed cognitive behavioral therapy (CBT), which re-directs thinking to a healthy place. Removing automatic negative thinking teaches one how to control what they can. Changing beliefs and attitudes to develop personal positive thoughts helps a person cope and targets problem solving. AR met many women in a peer group. Over time they became sober support for her, also helping her to overcome a sense of shame and self-doubt. Through CBT and peer group support, she developed problem solving skills that helped her strategize and improve family situations.

She was prescribed buprenorphine/naltrexone 8 mg orally once daily. This proved insufficient for her, so an additional 4 mg was prescribed as a late afternoon dose, alleviating all withdrawal symptoms. She also agreed to consult psychiatry for evaluation of anxiety. She initially refused medication but once fully engaged in treatment, she decided to start escitalopram 10 mg orally once daily. After 1 month, she described the "cloud finally lifted" as a result of the effect of the drug on anxiety. Buprenorphine/naloxone and escitalopram helped her engage fully in counseling and peer support, which guided her through recovery.

Improving medical issues and counseling restored a sense of control over her life. She was able to move toward her goal of eliminating opioids completely. Over 6 months, she reduced her dose of buprenorphine/naltrexone by 2 mg at time intervals comfortable for her and was able to eliminate opioids over the course of 18 months. She remains in the treatment center as part of a relapse prevention program.

Prevention

Every prescribing healthcare provider has a responsibility to address and manage pain appropriately and according to the evidence. A well-intended short course of opioids can result in addiction, but pain must always be addressed.[9,19,20] The Centers for Disease Control and Prevention guidelines for opioid prescribing in chronic pain is the gold standard (*Table 2*).[27] Safe prescribing in office settings should include these recommendations along with best practices in assessment, communication, and shared decision making. Nonopioids, nonpharmacologic interventions, and pain management consultation are preferred alternatives to opioids.

AR's path toward addiction started with pain. When managing a patient who presents with pain, accurate assessment, diagnoses, and evidence-based practice will optimize outcomes. The source of pain must be addressed through proper treatment and referral. When attempts at nonopioid pain-relieving strategies fail, a pain management consultation should be sought and followed up. This patient was able to improve her pain by managing the underlying medical conditions ignored for many years. The nonpharmacologic management of diet, vitamins, and treating the underlying conditions improved her pain.

Implications for nurse practitioners

Nurse practitioners in primary care settings with knowledge and skills for safe prescribing and evidence-based pain management are

well positioned to play a key role in the prevention of OUD. Understanding the unique attributes of women regarding opioid misuse and OUD is critical. Opioid addiction often starts with the mismanagement of pain and is more prevalent in women, so practicing according to guidelines is essential.[28,29]

Intervention is more likely when one is aware of risks for a substance use disorder. Red flags include abuse, trauma, intimate partner violence, stress, behavioral health diagnoses, and chronic pain. Universal screening for anxiety, depression, substance use, post-traumatic stress disorder, and suicidal ideation can be self-administered and reviewed in a few minutes in the primary care setting.

Screening, brief intervention and referral to treatment [SBIRT] is a reimbursable, evidence-based public health approach to identify patients with substance use placing them at risk and intervene promptly as indicated. When at-risk substance use is identified, brief intervention, based on clinical judgment and screening results, uses motivational interviewing to help bring a woman toward treatment. Referral to appropriate addiction treatment programs, behavioral health provider, pain specialist, or social services can help if the patient accepts them. If a patient declines to seek addiction rehabilitation or services or these are not readily available, medication-assisted treatment should still be initiated. Treatment of coexisting psychosocial issues and chronic health problems significantly improves the woman's chances of full recovery.[5,14,15,26,30] Familiarity with addiction services in the community and knowing how to access them is key in facilitating treatment. If behavioral health services are not immediately available, all attempts should be made to locate services that can be accessed remotely. Remote services can alleviate barriers to treatment such as lack of transportation, insurance, or childcare that are common among women with OUD.[31]

Women have been underrepresented in research pertaining to substance use and treatment. Further study about sex and gender differences that includes individuals with diverse sexual orientation and gender identity must be done to fully understand how to prevent and treat OUD.

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