Prevention and Management of Opioid Misuse and Opioid Use Disorder Among Women Across the Lifespan



he National Association of Nurse Practitioners in Women's Health (NPWH) supports the role of women's health nurse practitioners (WHNPs) and other nurse practitioners (NPs) who provide healthcare for women across the lifespan in the provision of safe and effective treatment of pain. In certain cases, this treatment may include the prescription of opioid pain relievers (OPR). NPWH acknowledges that NPs must use evidencebased strategies to reduce harm from the misuse of OPR and to prevent the development of opioid use disorder (OUD). These strategies include screening for opioid use/misuse/abuse, educating patients about the risks associated with OPR misuse, and following evidence-based guidelines when prescribing OPR.1,2 In addition, when OUD is identified, NPs qualified to provide medicationassisted treatment (MAT) should follow evidencebased guidelines and prescribe within federal and state regulations.

Use of OPR in general should be reserved for acute pain resulting from severe injuries, medical conditions, or surgical procedures, and only when non-opioid alternatives are ineffective or contraindicated. When OPR are prescribed, they should be given at the lowest necessary dose for the shortest duration (usually <14 days).² Although many NPs in primary care treat acute pain, the treatment of chronic pain is best achieved through a multimodal and multidisciplinary approach that includes a team member with expertise in pain management. This approach is particu-

larly advantageous when chronic pain management includes OPR use.^{1,2} NPs should consider evidence-based nonpharmacologic therapies and non-opioid medications as first-line treatment for chronic pain. Primary care NPs with adequate training who prescribe OPR for chronic pain should follow evidence-based guidelines such as those provided by the CDC.¹

Whether prescribing OPR for acute or chronic pain, NPs should use risk-mitigation strategies to reduce the potential for harm from misuse or abuse. These strategies include checking state prescription drug monitoring programs when available to assess a patient's history of controlled substance use, avoiding concurrent prescription of benzodiazepines, and establishing realistic treatment goals with patients. In addition, overdose mitigation includes consideration of coprescribing the opioid antagonist naloxone when appropriate, along with education about its use to reverse respiratory depression from OPR overdose.¹⁻³

For individuals with OUD, MAT has proven to be clinically effective.⁴⁻⁷ MAT entails the use of medications along with counseling and behavioral therapies to treat OUD and to prevent opioid overdose.⁴ This recovery-oriented treatment approach has been shown to improve patient survival, increase retention in treatment, decrease drugrelated criminal activity, increase patients' ability to gain and maintain employment, and improve birth outcomes among pregnant women with

OUD.4 The Comprehensive Addiction and Recovery Act (CARA) was signed into law in July 2016.8 The law includes a section authorizing NPs who meet certain criteria, including participation in a mandatory 24-hour education program, to receive a waiver to prescribe the opioid agonist buprenorphine as a crucial component of treatment for OUD. NPs who receive this education and waiver are able to work within their individual state prescribing laws to provide increased access to OUD treatment.

NPWH will provide leadership and collaborate with other organizations and agencies to deliver NP education, develop policies, and conduct and/or support research, all in a concerted effort to increase knowledge and provide resources for NPs to prevent and reduce harm from OPR misuse. NPWH will actively monitor and engage in the process needed to implement CARA so that access to treatment for OUD can reach all women in need.

Background

Pain can be acute or chronic in nature. Acute pain may be related to disease, injury, or recent surgery and typically diminishes with tissue healing. Chronic pain is consistent pain that lasts more than 3 months; usually has neurologic, emotional, and behavioral components; and often affects function, social roles, and quality of life.^{1,2} At least 116 million adults in the United States have chronic pain conditions.⁹

Some efforts to improve pain management, despite clinicians' best of intentions, have had adverse effects. The number of prescriptions for OPR quadrupled between 1999 and 2013.^{10,11} During this same time period, deaths from opioid use/misuse have also quadrupled.¹⁰ In 2014, more than 28,000 persons in the U.S. died of opioid overdoses, with at least half of these overdoses involving prescription OPR.¹⁰ These overdose death rates are highest among persons aged 25-54 years.¹⁰

Lethal overdose is not the only risk associated with prescription OPR. Every day, more than 1,000 persons are seen in emergency departments (EDs) for reasons related to misusing prescription OPR.¹² Hospital admissions for nonfatal overdoses are on the rise. Other serious consequences include falls and fractures in older adults, sleep-disordered breathing, cardiac arrhythmias related to methadone use, and immunosuppression.²

More than 4 million persons in this country abuse or are dependent on opioids.¹³ In fact, as many as 1 in 4 persons receiving prescription OPR in primary care settings for chronic noncancer pain struggles with addiction.¹⁴ More than 60% of persons taking OPR for at least 3 months are still taking them 5 years later.² Abuse of OPR results in more than \$72 billion in medical costs each year, which is similar to the cost of chronic diseases such as asthma and HIV infection.³

About 25% of persons who abuse OPR obtain them through their own prescriptions, and about 50% of persons who abuse prescription OPR obtain them for free or buy them from friends or relatives. 15 Others get OPR by stealing from friends or relatives or from drug dealers. 15 If unable to obtain prescription OPR, persons with OUD may turn to heroin. In fact, dependence on or abuse of prescription OPR has been associated with a 40-fold increased risk of dependence on or abuse of heroin. 16

The increase in OPR prescriptions has not been accompanied by an overall change in the amount of pain reported. Recent systematic reviews have shown at most only modest benefits of OPR for chronic pain when balanced with potential risk of harm.^{17,18}

The use of safer and more effective treatments for chronic pain could reduce the number of persons who develop OUD or experience an overdose or other adverse event related to opioid use. Studies have supported a range of effectiveness for nonpharmacologic approaches to chronic pain

management that include behavioral, psychological, and physical-based therapies and non-opioid pharmacologic treatments such as acetaminophen, non-steroidal anti-inflammatory drugs, and selected anticonvulsants and antidepressants. Use of multiple modalities is likely to be more effective than a single modality. Pecause of the complexities involved, the initiation of treatment and the ongoing care for patients with chronic pain are most safely and effectively directed by a multidisciplinary team that includes pain management specialists. 1,2

The CDC's OPR prescribing guidelines include a recommendation for clinicians to offer or facilitate MAT for patients with OUD.¹ MAT is underutilized, with only 20% of adults with OUD receiving needed treatment each year. Cost and access are primary barriers.¹⁹ With implementation of CARA, NPs, as part of the treatment team, will be able to prescribe some of the medications used in MAT, thereby expanding access to patients.

Implications for women's healthcare and WHNP practice

Although both men and women experience opioid misuse/abuse and related fatalities, certain gender-related differences exist. Women, when compared with men, are more likely to be prescribed OPR, to use these agents long term, and to receive prescriptions for higher doses.²⁰ Every 3 minutes, a woman goes to the ED for a reason related to prescription OPR misuse/abuse.²¹ Evidence suggests that women, relative to men, may progress to dependence on OPR at a more accelerated rate.²²

Men are more likely than women to die of an opioid overdose, but the gap is closing. Prescription OPR overdoses in women cause more deaths than do overdoses of benzodiazepines, antidepressants, and heroin combined.²¹ In fact, for women, OPR are involved in 7 out of 10 prescription drug-related deaths. Intentional OPR over-

doses are involved in 1 in 10 suicides among women.²⁰

The potential for adverse events related to OUD extends to women across the lifespan and beyond the direct health effects. OUD places women at risk for behaviors that further jeopardize their well-being, including prostitution, stealing, and other criminal activities that are often associated with violence. Women with OUD may engage in these risky behaviors in order to support themselves and their addiction. These behaviors place these women at risk for experiencing legal ramifications of their criminal activities, being victims of violence, and acquiring sexually transmitted infections. Women who inject opioids through intravenous or intradermal routes are at added risk for contracting HIV and hepatitis C infections.^{3,23}

Nurse practitioners should ask female patients of all ages about the use of prescription OPR and other medications for nonmedical reasons as part of routine alcohol and substance use screening. Validated screening tools are available to use with adolescents, pregnant women, and adults.^{23,24} Early identification of opioid misuse/abuse allows NPs to provide evidence-based brief interventions,²⁵ actively participate in MAT if they meet criteria for prescribing treatment medication, and/or make referrals for additional services when needed.

Adolescence—Attention to prevention, as well as early identification of opioid misuse and OUD in adolescents, is critical. In 2014, 467,000 adolescents were nonmedical users of OPR, with 168,000 having OUD.¹³ Most adolescents who misuse OPR get the drugs from a friend or relative rather than through their own prescription.²⁶ Girls aged 12-17 years may be particularly vulnerable. These girls are more likely than males in this age group to use psychoactive drugs, including OPR, for nonmedical reasons, and they are more likely to become dependent.²⁷ NPs should screen adolescents for opioid misuse and OUD. It is particularly important to follow state and federal regulations regard-

ing confidentiality when an adolescent needs OUD treatment.²⁸

The reproductive years—Substance abuse, including abuse of opioids, is most prevalent during the reproductive years. OPR are widely prescribed for women in this age group. NPs should assess pregnancy status, sexual activity, and contraceptive use before prescribing OPR to reproductive-aged women.¹⁰ For women who are pregnant or could become pregnant while using OPR, NPs should discuss potential risks versus benefits, as well as alternative treatments. Data are limited, with a few studies suggesting a small increased risk for birth defects (e.g, neural tube defects, gastroschisis, congenital heart defects) associated with maternal OPR use, particularly when drug exposure occurs in early pregnancy.²⁹⁻³¹ As would be done with all patients, when OPR are indicated for treatment of acute pain in women who are pregnant, NPs should prescribe the lowest dose for the shortest duration of use. Care of pregnant women taking OPR for chronic pain should be multidisciplinary.

Medication-assisted treatment is important for pregnant women with OUD. Withdrawal from opioid use during pregnancy has been associated with adverse outcomes such as preterm labor and fetal demise.²³ Continuous exposure to opioids *in utero*—whether opioid use is illicit, prescribed for maternal pain, or through MAT—may lead to neonatal opioid withdrawal syndrome (OWS). Neonates with known *in utero* opioid exposure should be monitored for and treated as needed for withdrawal symptoms. The range and severity of symptoms experienced by neonates are related to the type of opioid, the duration of exposure, and concomitant exposure to other substances while *in utero*.^{32,33}

Many pregnant women with OUD are late in seeking prenatal care and are erratic in attending appointments.²³ But early, regular prenatal care is essential for women with OUD so that they can re-

ceive support and early treatment referrals to reduce their risks of harm and adverse pregnancy outcomes. Laws that require reporting of substance abuse during pregnancy may deter women with OUD from seeking prenatal care.^{34,35} NPWH opposes policies that require reporting or criminalization of substance abuse during pregnancy and supports repeal of existing laws with such mandates. WHNPs and other NPs who provide healthcare for pregnant women are on the forefront to identify, support, and provide appropriate referrals and collaborative care for pregnant women with OUD.

Mothers receiving MAT—with the exception of those who are HIV positive or continuing to use illicit substances—should be encouraged to breastfeed.^{23,28,36} Breastfeeding supports mother-infant bonding and may reduce the severity and duration of neonatal OWS.^{37,38} Minimal levels of methadone or buprenorphine are found in breast milk, regardless of the maternal dosage.^{22,39} Both medications are considered safe during breast-feeding.^{23,36,39} It is important to maintain open lines of communication for early identification of relapse. If relapse does occur, mothers should be provided with assistance to transition to bottle feeding with formula or donor milk.³⁶

Older age—Although women older than 65 years are generally at low risk for opioid abuse, specific concerns regarding their use of OPR still exist. WHNPs and other NPs who provide healthcare for older women should be cognizant of potential increased risks with OPR use related to reduced renal function and drug clearance, co-morbidities, polypharmacy, and impaired cognition, as well as an increased risk for falls and fractures.¹ Even women older than 65 can experience OUD.

Recommendations

Women's health NPs and other NPs who provide healthcare for women should:

• Use evidence-based guidelines for manage-

- ment of acute and chronic pain.
- Use risk-mitigation strategies when prescribing OPR for acute or chronic pain.
- Assess pregnancy status, sexual activity, and contraceptive use, as well as discuss potential risks and benefits, before prescribing OPR to women who are pregnant or could become pregnant.
- Use a nonjudgmental, respectful approach when broaching the topic of substance use/abuse.
- Screen all women at least annually—at well-woman visits, initial prenatal visits, and other visits when indicated—for substance use/abuse with a validated screening tool. Include questions concerning use of prescription drugs for nonmedical purposes.
- Provide an evidence-based brief intervention when substance abuse is identified and make referrals for additional services as needed. Know which services are available in the community.
- Use evidence-based guidelines if prescribing OUD treatment medication in collaboration with an MAT team.
- Collaborate in specialty care for pregnant women with OUD.
- Be aware of state reporting laws for substance abuse during pregnancy and advocate for retraction of legislation that exposes pregnant women with substance use disorders to criminal or civil penalities.

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