

Use of Buprenorphine to Treat Opioid Use Disorder

ABSTRACT

As the opioid crisis continues to worsen in the United States, nurses must take on a central role of intervention, which includes use of the opioid agonist medication, buprenorphine. The current article addresses the need to understand opioid use disorder as a chronic condition and increase access to treatment with pharmacotherapies, particularly buprenorphine, in outpatient settings. The pharmacological activity of buprenorphine is discussed, as well as the reasons for its underutilization, specifically stigma. Nurses can be frontline leaders in the fight against the opioid crisis by addressing stigma and increasing access to the life-saving medication, buprenorphine. [*Journal of Psychosocial Nursing and Mental Health Services*, 56(11), 9-12.]

The increase in drug overdose deaths continues a steady, dizzying upward climb: drug overdoses are now the leading cause of accidental death in the United States, with opioid-related overdoses as the main driver. Every 16 minutes, an individual in the United States dies from an opioid overdose (Rudd, Seth, David, & Scholl, 2016). We are in the midst of an overdose crisis, and practitioners must respond swiftly and appropriately.



The current article outlines three means to catalyze such a response. First, we must transform our understanding of the nature of addiction and treat substance use disorders (SUDs) as chronic, treatable conditions. Second, we must work to the best of our means and abilities to build a compassionate, supportive, continuum of care for patients seeking treatment. This continuum of care must include, and indeed may start with, harm reduction services, such as syringe exchanges and safe consumption sites, and extend through hospital emergency departments to residential facilities and adaptive primary care and outpatient clinics. Third, medicine and nursing need to examine their

roles in the stigmatization of SUDs, and work to disassemble—in thought and practice—misinformed views that prevent patients from accessing life-saving and life-improving treatment.

OVERVIEW

Opioid use disorder (OUD) is now understood as a chronic, relapsing brain disease characterized by compulsive and repetitive use despite harm to oneself or one's social functioning (Substance Abuse and Mental Health Services Administration [SAMHSA], 2015). One such aspect of the treatment of OUD as a disease is the centrality of pharmacotherapies in managing this chronic

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condition. Pharmacotherapies, in conjunction with psychosocial support, are considered the gold standard for treatment for OUD; their safety and efficacy have been “unequivocally established” (National Institutes of Health, 1997, p. 4; Volkow, Frieden, Hyde, & Cha, 2014). There are three U.S. Food and Drug Administration–approved medications for OUD: methadone; buprenorphine (Subutex®) or buprenorphine-naloxone (Suboxone®); and extended release

PHARMACOLOGY

Buprenorphine is a partial agonist at the mu opioid receptor. The benefits of buprenorphine pharmacodynamics are two-fold. First, as a partial opioid agonist, buprenorphine has a ceiling effect that is prohibitive of the most problematic opioid side effects, most notably respiratory depression. Thus, even when taken at excessive doses, it is difficult to cause significant respiratory depression (Khanna & Pillarisetti, 2015; Soyka, 2017). Second, despite

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naltrexone (Vivitrol®) (National Institute on Drug Abuse, 2016). The opioid agonist therapies methadone and buprenorphine-containing products are, according to the World Health Organization (WHO; 2017) essential medicines and most effective for treating OUD. These medications have been shown to increase patient retention in treatment, reduce opioid drug use, reduce risk of fatal and non-fatal overdose, and reduce transmission of infectious disease (Amato et al., 2005; LaRochelle et al., 2018; Mattick, Kimber, Breen, & Davoli, 2004; Schwartz et al., 2013). Methadone may only be dispensed in federally regulated opioid treatment programs (OTPs). The current article focuses on increasing access to buprenorphine via prescription in an office-based treatment setting, such as a primary care or outpatient SUD service. These office-based opioid treatment settings have been identified as “especially well positioned to provide a rapid response to the opioid crisis” (Sigmon, 2015, p. 395).

having only partial activity at mu receptors, buprenorphine has high affinity for mu receptors. Buprenorphine will bind so tightly to opioid receptors that full agonist opioid activity is blocked; buprenorphine users will not receive a euphoria from full agonist opioid agents (Khanna & Pillarisetti, 2015). In addition, buprenorphine slowly dissociates from the mu opioid receptor, allowing users to dose infrequently and simultaneously receive full benefit of opioid blockade (Khanna & Pillarisetti, 2015).

Buprenorphine-naloxone is the most common form of buprenorphine prescribed for treatment of OUD (SAMHSA, 2018c). This formulation is a sublingual tablet because naloxone is not orally bioavailable; thus, users do not experience withdrawal effects or discomfort. Naloxone is included in this formulation to prevent diversion and illicit use: if someone were to attempt intravenous use, one would experience immediate withdrawal (Drug Enforcement Administration [DEA], 2013; Soyka, 2017).

As outlined in the Drug Addiction Treatment Act (DATA) of 2000, any clinician wishing to prescribe buprenorphine, a Schedule III substance, must complete online or in-person training and submit an application for his/her DATA waiver to SAMHSA (2018a). The passage of the Comprehensive Addiction and Recovery Act (CARA) in 2016 extended the ability to prescribe to nurse practitioners (NPs) and physician assistants, who must complete 24 hours of training to be eligible for their DATA waiver (SAMHSA, 2018b). Once trained to identify and treat OUD, NPs can prescribe buprenorphine to patients under their care who meet criteria for an OUD. However, they must follow federal guidelines pursuant to the number of patients to whom they provide buprenorphine therapies (SAMHSA, 2018b).

Buprenorphine is well-known as a withdrawal management drug for OUD. Indeed, practitioners reading this article may work in, or have worked in, settings where it is used solely for withdrawal management or detoxification. However, patients maintained on buprenorphine post-withdrawal management have demonstrated improved outcomes. Data suggest that maintenance treatment is the standard of practice, and that patients maintained on buprenorphine for as long as 3 years are more successful month over month than their counterparts (Baxter, Clark, Samnaliev, Aweh, & O’Connell, 2015; Fiellin et al., 2014; Weiss et al., 2017). Indeed, we are moving toward a period in health care in which it may be considered negligence to not offer medication-supported recovery to those with moderate to severe OUD (Chang & Chen, 2018).

ACCESS

The lack of availability for medications to treat SUDs—particularly OUD—has been well-documented. This scarcity presents and compounds itself at the program and provider

level. Nationally, publicly funded addictions treatment programs have been slow to adopt evidence-based practices for SUD treatment, meaning that medications proven to treat SUDs are not widely or consistently available (Abraham, Knudsen, Rieckmann, & Roman, 2013; Knudsen & Roman, 2014). Data also suggest most providers who carry a DATA waiver work with small patient panels. A recent analysis of the seven states with the most DATA-waivered physicians evaluated monthly censuses of buprenorphine patients, finding that most prescribers tended to work far below their patient limits and have numerous months with no documented treatment episodes (Thomas et al., 2017).

Reasons for this lack of adoption by prescribers are wide-ranging. Observational studies of DATA-waivered physicians have found barriers to prescribe include: lack of institutional support, lack of time to see patients, logistical barriers such as lack of staff or inadequately trained support staff, low perceived confidence in ability to treat addiction, concerns over reimbursement rates, and the need for access to psychosocial services (DeFlavio, Rollin, Nordstrom, & Kazal, 2015; Huhn & Dunn, 2017; Hutchinson, Catlin, Andrilla, Baldwin, & Rosenblatt, 2014; Netherland et al., 2009).

Nationally, there are more patients struggling with OUD and needing pharmacological treatment than can access this treatment. Jones, Campopiano, Baldwin, and McCance-Katz (2015) estimated a treatment gap between need and capacity of more than 1 million individuals. In 2018, LaRochelle et al. identified that less than one third of patients who were extremely high risk for opioid drug overdose were given a medication to support recovery and decrease risk.

Lack of access to buprenorphine, or experiencing barriers in accessing buprenorphine, is especially important given that the research suggests a direct correlation exists between accessibility

of medication and rate of diversion. In other words, when those in need of buprenorphine have ready access to life-saving medications, they are less likely to seek these medications out in an illicit fashion (Lofwall & Havens, 2012).

STIGMA

Unfortunately, stigma toward these medications is one part of why they are so rarely used, despite the overwhelming evidence of their clinical efficacy (Volkow et al., 2014; Wakeman & Rich, 2017). The stigma is pervasive across the recovery continuum from treatment centers to mutual support groups. The belief is that maintenance agonist therapy is replacing one addiction with another, only a crutch, or prohibitive to the spiritual work that one must endure to engage in recovery (Wakeman & Rich, 2017; Woods & Joseph, 2015).

This stigma reaches beyond the recovery community and into the medical world. Negative attitudes of health care providers toward patients with SUD have been found to be common, and indicated in a more avoidant approach, shorter visits, and less engagement in caring for these patients (Van Boekel, Brouwers, Van Weeghel, & Garretsen, 2013). There are nurses, physicians, and pharmacists who decry agonist therapies despite the overwhelming evidence in their favor (Wakeman & Rich, 2017; Woods & Joseph, 2015). Moreover, until recently, there were court systems and social service workers in the United States who would interrupt patient access to opioid agonist medicines (Woods & Joseph, 2015).

Especially startling is the impact of stigma as it relates to housing those in early recovery. It is common for individuals new in recovery and in need of supportive housing to be found ineligible because of the medication prescribed to them by a qualified health professional. Individuals may be turned away to the street, sometimes the very street that encouraged their drug use in the first place (Woods & Joseph, 2015).

Even the language that is often used to describe pharmacotherapies for addiction (e.g., medication-assisted treatment) makes these medications sound as if they are time-limited and adjunctive (Wakeman, 2017). Stigma is an especially pertinent issue within marginalized communities. Stigma toward these medications can be mediated by race and class privilege but is more notable against people of color and White individuals in a lower socioeconomic class (Hatcher, Mendoza, & Hansen, 2017).

CONCLUSION

If treatment systems regarded addiction as a chronic medical illness, pharmacotherapies would likely be more common in SUD services. Given the recent passage of CARA, NPs can and should fill treatment gaps for vulnerable patient populations and help bring agonist therapies to communities that were previously lacking these treatments. A direct, actionable first step is to become DATA waived. NPs and RNs can help create systems of care that ensure immediate access to life-saving medications in the midst of a national crisis. And most poignantly, nurses can be on the frontlines fighting stigma toward those who struggle with the disease of substance use and the medications that are deemed standard of practice to treat it.

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The authors have disclosed no potential conflicts of interest, financial or otherwise.

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