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Methadone or Buprenorphine for Maintenance Therapy of Opioid Addiction: What's the Right Duration?

Michael G. O'Neil, PharmD | February 03, 2014

Question

How long should patients with opioid addiction be treated with methadone or buprenorphine?

Response from Michael G. O'Neil, PharmD

Professor, Department of Pharmacy Practice; Consultant, Drug Diversion and Substance Abuse, South College School of Pharmacy, Knoxville, Tennessee

In 2012, nearly 5 million people older than 12 years were reported to be nonmedical users of pain medications in the United States.[1] Effective and predictable long-term treatment for opioid use disorder (OUD), including addiction, is a major focus for clinicians, researchers, and the pharmaceutical industry. Current long-term treatment options for OUD include abstinence or nonpharmacologic intervention programs, methadone maintenance therapy, buprenorphine maintenance therapy, buprenorphine/naloxone combination maintenance treatment, and naltrexone pharmacotherapy.

Opioid use disorder is a complex, chronic disease influenced by multiple factors, including genetics, environment, sociology, physiology, and individual behaviors. Common symptoms of opioid addiction may be defined as a compulsion to "use," craving of the individual's drug (or drugs) of choice, continued abuse of the drugs despite perceived or known negative consequences, loss of control of the behavior to not use the drug, and potential for relapse after cessation of the drugs of choice.[2]

The onset of addiction is usually insidious and not preceded by any single event before diagnosis or treatment. Common risks for addiction may include self-medication to treat health-related disorders, such as somatic or neuropathic pain, anxiety, or depression. Self-medication to enhance work performance secondary to the stimulatory or euphoric effects of opioid medications is another potential risk factor. Other risks, such as opioid self-administration for recreational purposes, are at the top of the list.

Both methadone and buprenorphine have US Food and Drug Administration approval for the treatment of opioid addiction. Successful treatment with methadone and buprenorphine is well supported in the evidence-based literature. One of the most up-to-date reviews is found in the American Society of Addiction Medicine's publication "Advancing Access to Addiction Medications."[3]

Goals of methadone and buprenorphine therapy for opioid addiction include suppression of withdrawal symptoms and reduction of symptoms, such as drug craving and compulsion to use. Other goals of therapy are to reduce the number of "use events," overdose, infections from intravenous injection of drugs, and needle sharing, and to disrupt OUD behaviors to optimize behavior modification and prevent relapse. Goals may also include reduction in criminal activity and successful return of the patient to the workforce.[4]

Regardless of pharmacologic intervention, studies indicate that treatment is optimized when it includes counseling, behavior-modification therapies, and treatment of other comorbid medical and psychiatric diseases.

Opioid addiction treatment is complicated by the need for frequent office visits, urine drug screens, and counseling sessions; varying medical coverage plans; and limited access to medical services and trained providers. All of these factors affect patient treatment adherence. In addition, individual patients may share their prescription opioid medication, sell it, or take extra doses, similar to patients with chronic pain or anxiety.

The appropriate duration of methadone or buprenorphine maintenance treatment for opioid addiction is controversial and complicated. One confounding factor is the comparison of treatment methods with those for other substance use disorders. National organizations, such as the Substance Abuse and Mental Health Services Administration and the National Institute on Drug Abuse, along with scores of state and community organizations, have initiated educational

programs regarding the treatment of all substance use disorders. Health professional training has been limited but is now slowly being integrated into medical, nursing, and pharmacy education. The abstinence-based philosophy of substance use disorders is nonpharmacologic treatment that emphasizes various types of counseling, behavior-change therapies, or use of community support groups.

In addition, a small number of long-term outcome studies of treatment of opioid addiction have had a duration greater than 2 years. It is not reasonable to expect treatment of addiction to be held to a higher standard for evidence for treatment than common physical conditions. Clinical trials investigating the long-term safety and efficacy of pharmacologic treatment for more than 2 years in the United States are limited for most drugs. Although long-term pharmacotherapy outcome data exist in a few areas, such as pharmacologic management of hypertension or hypercholesterolemia, even these studies are rarely longer than 2 years. Lifelong treatment is expected once the signs and symptoms of disease are stabilized.

Other complicating factors include influence from federal, state, and private insurance regulators, and lack of understanding of the disease of addiction. Public perception is that once patients are detoxed from opioids, they should simply choose not to use. This acute care model is not appropriately applied to the chronic disease of addiction. Just as all people with hypertension or diabetes are not expected to control their chronic disease with diet and exercise alone, patients with addiction may not be able to control their disease without pharmacologic therapy.

Patients may discontinue use of long-term prescribed medications owing to adverse drug reactions, poor medication tolerance, and nonadherence. Discontinuation of medication may also occur because of physiologic changes, such as weight loss, or environmental changes, such as place of work. Discontinuation of medication for chronic physical conditions once a patient has stabilized is probably considered unacceptable. Similarly, psychiatric illnesses, such as schizophrenia or bipolar disorders, are chronic diseases that generally require lifelong medication management.

Abrupt discontinuation of medication, or even careful tapering of medications once patients are stabilized, commonly causes recurrence of symptoms despite behavior modifications. In addition, the apprehension of relapse may have significant psychological consequences for patients who have maintained a stable lifestyle with opioid maintenance therapy.

Finally, although opioid addiction is recognized as a chronic disease, both government agencies and private insurance companies in at least 11 states have imposed lifelong limits for methadone and buprenorphine ranging from 12-36 months.[3] The financial burden of drug costs to government agencies, insurance companies, and medical facilities has a major impact on the duration of methadone and buprenorphine treatment programs.

Current practice standards or guidelines for most pharmacologic agents used in chronic disease treatment promote individualization of drug therapy. Using the lowest effective dose for the shortest necessary period to keep symptoms under control, minimize disease progression, optimize behavior modification, and minimize adverse effects of medications while improving quality of life is desired.

Individual success at maintaining recovery cannot be easily predicted at the onset of treatment; therapeutic goals for addiction management should therefore include using the lowest dose possible for the shortest time necessary, but with efforts to strive toward abstinence, because behaviors and environments are better controlled owing to interruption of OUD behaviors. Patients should not be led to assume that they will require this medication for the rest of their lives (although some individuals might).

Data supporting positive long-term outcomes after definitive discontinuation of methadone or buprenorphine in a predetermined time frame for all patients are lacking. Prudent clinical practice dictates that duration of therapy should be individualized by well-trained addiction specialists, taking into account a disease treatment history that includes such factors as relapse, individual patient characteristics, evidence-based literature, patient adherence, socioeconomic characteristics, and environmental considerations until long-term evidence-based studies prove otherwise.

In summary, the complexities of the disease of opioid addiction have created a frustrating situation for practitioners and patients alike. Basic practice principles for chronic diseases, such as hypertension or schizophrenia, should be applied to patients who are unable to stay in recovery using abstinence programs alone. Strict discontinuance of opioid maintenance therapy solely on the basis of duration of treatment is not clinically justifiable at this time. Individualization of treatment for opioid addiction with methadone or buprenorphine by qualified specialists is necessary for many suffering patients, in conjunction with counseling, community support, or behavioral interventions. Treatment cultures for

opioid addiction need to continue to evolve, as does education of the general public.

References

1. US Department of Health and Human Services; Substance Abuse and Mental Health Services Administration; Center for Behavioral Health Statistics and Quality. *Results From the 2012 National Survey on Drug Use and Health: Summary of National Findings*. NSDUH series H-46, HHS publication no. (SMA) 13-4795. Rockville, Md: US Department of Health and Human Services; 2013.

2. McCoy K. Opioid addiction. NYU Langone Medical Center. June 2013. http://psych.med.nyu.edu/patient-care/conditions-we-treat/opioid-abuse Accessed January 20, 2014.

3. Rinaldo SG, Rinaldo DW. Advancing access to addiction medications: implications for opioid addiction treatment. American Society of Addiction Medicine. June 2013.http://www.asam.org/docs/advocacy/Implications-for-Opioid-Addiction-Treatment Accessed January 15, 2014.

4. National Institute on Drug Abuse. Principles of drug abuse treatment for criminal justice populations -- a research-based guide. NIH publication no. 11-5316. January 2012. http://www.drugabuse.gov/sites/default/files/podat_cj_2012.pdf

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