Buprenorphine: Reflections of an Addictions Psychiatrist

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Opioid addiction is a terrible illness with a terrible reputation. As a medical student and psychiatric resident, my best faculty role models demonstrated a compassionate approach but also conveyed an ironic sense that as physicians we would make little impact on this illness. The worst role models were derogatory and encouraged us to keep our distance from opioid-addicted patients. We were taught that these patients would either "age out" of their opioid addiction or die from illnesses, such as AIDS and hepatitis, associated with illicit intravenous drug use. Observational research has since shown that the natural history of this illness is far from benign: in a large cohort followed for over 30 years, a significant number do not "age out," and a significant number die from drug overdoses.[1]

Methadone Treatment

No teacher in medical school or residency even mentioned methadone therapy as a treatment option although it had been in clinical use for 15 years by the time of my training. My first job after residency was on an inpatient psychiatric service at a New York City public hospital. On this job I became acquainted with the hospital's methadone maintenance program through the dedicated program counselors who came to our floor, eager to share information about patients and willing to do whatever was necessary to promote a smooth transition in and out of the hospital.

This experience still gave me a negatively biased view of methadone treatment, because I only saw patients from the methadone program who did poorly. However, in my present job I have seen the promise of such therapy. As the medical director of a group of addiction treatment programs affiliated with a voluntary teaching hospital, it has been my pleasure to participate in providing care in our own methadone program, and to see large numbers of outpatients recover and never develop the horrible somatic sequelae predicted by my professors.

The medical literature now supports the effectiveness of opioid replacement therapy.[2] When methadone is administered for a sufficient length of time at adequate doses in the context of counseling, psychiatric care, and structured services, the effect of this treatment on decreasing illicit opioid use, improving physical and emotional health, and increasing prosocial behavior is unequivocal. Even though the results of studies are incontrovertible, whenever methadone treatment is presented in the lay media, it is presented as "controversial." Some state authorities are so unconvinced of the effectiveness of this treatment that they have limited the time one could receive the treatment, the doses physicians could prescribe, and even the availability of methadone treatment in their jurisdictions.

In part in response to this skepticism among policy makers, the National Institutes of Health reviewed the problem of opioid addiction in 1997[3] and concluded that opioid agonist treatment is highly effective and should be made more widely available to patients. Methadone was only available in certain states and, even then, almost exclusively in highly regulated methadone maintenance programs. This regulation and oversight greatly limited the clinical flexibility of these programs. The disadvantages to patients were inflexible program rules and loss of privacy, since treatment settings typically involved large public waiting rooms and lines to receive medication. Even given these shortcomings, methadone maintenance was a public health success where it was able to get a foothold, and the regulations, although inflexible, insured safety for those patients who would submit to the rules. Somehow patients and clinicians regularly navigated the rules and developed therapeutic relationships.

The problem was the number of patients who would not submit to those rules and would risk death due to opioid addiction rather than be caught alive in a methadone program and the number of patients who lived in areas of the country where methadone maintenance was not available or only available for time periods insufficient to produce benefit. The Drug Abuse Treatment Act (DATA) passed in 2000 and subsequent U.S. Drug Enforcement Administration scheduling decisions opened a door for patients with opioid addiction who either had little access to effective methadone treatment or would not enroll in available programs.

Buprenorphine Treatment

Buprenorphine, a medication in use as a parenteral analgesic, had performed well in clinical trials to treat opioid addiction when given sublingually. DATA specified that physicians with addiction medicine expertise attested to by certain credentials would be permitted to prescribe buprenorphine wherever they practiced and in whatever manner patient and doctor agreed to. Physicians without such expertise could be credentialed after taking an 8-hour course on addiction and buprenorphine pharmacology. Both types of physicians were required to establish linkages with addiction treatment programs in order to have access to psychosocial services for the patients, which are unavailable in most office-based practices.

Buprenorphine is a partial μ opioid agonist.[4] As a result, it is safer in overdose than methadone, which is a full agonist, and is much less likely to produce respiratory depression. It is a safer medication to make more widely available to relatively inexperienced physicians. As a partial agonist, with a high avidity for μ receptors, it can displace full agonists and precipitate withdrawal if its administration is not timed correctly. In that way it can be tricky to use, but even inexperienced physicians can learn "induction" protocols, which make precipitated withdrawal less likely. Because it is only a partial agonist, buprenorphine may not suppress withdrawal symptoms as well as methadone in patients tolerant to large amounts of full agonist substances. Finally, buprenorphine was formulated with naloxone in the pharmaceutical preparation most widely prescribed for opioid addiction. This preparation may limit intravenous diversion of the medication; taken sublingually as intended, the naloxone has no effect, but if the preparation is injected, it blocks opioid agonist effects.

DATA also specified that the government would review the impact of this new set of regulations prior to reauthorizing them. Such a review has been conducted at the request of the U.S. Substance Abuse and Mental Health Services Administration, and the results from this relatively new program are so far encouraging.[5] Larger numbers of people with opioid addiction are getting access to medication-assisted treatment, and access is available in regions of the country where no access was previously available. There had been concern that only a small number of physicians would take the training necessary to become credentialed to prescribe buprenorphine, given attitudes of physicians toward addicts in general and opioid addicts in particular. In fact, large numbers of physicians have taken advantage of the training, and, over time, a larger percentage of those taking the training are applying for the credential and using it.

Effects of Buprenorphine Availability on Methadone Treatment Programs

The availability of this new medication treatment modality has had an unsettling effect on methadone treatment programs. On the one hand, staff members in these programs sincerely want people with opioid addiction to get more help and want more physicians to learn that people with opioid addiction can be helped. On the other hand, the availability of buprenorphine imposes on the programs the pressure of competing for patients, and methadone treatment programs are significantly handicapped in the marketplace by the degree to which their treatment modality is regulated and regimented by the regulations. For example, in New York State, new patients must typically present to programs daily for the first 90 days.

Beyond resentments about unfair competition, methadone clinicians know what benefits their intensive treatment can produce for patients who are severely debilitated by opioid addiction and worry that some patients will be shortchanged in office-based practices that may provide little beyond prescriptions for buprenorphine. What this calls for is a systematic review of methadone treatment regulations to remove those that are onerous and serve little clinical purpose. Formal opioid agonist programs are a valuable resource, and they deserve a chance in the treatment marketplace.

Conclusion

For patients with opioid addiction, the availability of buprenorphine means more options in setting and intensity of treatment. Patients may elect to receive buprenorphine from primary care physicians who are credentialed to prescribe it. In consultation with their primary care physician, they may decide to receive additional help from an addiction treatment specialist. They may decide to enroll in a licensed addiction treatment program in order to have access to a wider range of services such as relapse prevention groups and vocational training. The important change is the menu of potentially effective options that was previously unavailable. Alert physicians will monitor patient progress and suggest changes in treatment (including commencing methadone maintenance) when a chosen treatment option is not working well.

The availability of buprenorphine has had the interesting effect of making me aware that I am old enough to recognize something that is really new. This relatively unregulated yet effective medication has brought me patients whom I never would have been able to help before. The patients sit in the waiting room next to patients with other psychiatric problems and have the dignity of privacy. Furthermore, I have a tool that helps them stabilize quickly and progress in treatment. When clonidine or methadone maintenance was my only tool, even patients who lived in the neighborhood of my office regularly dropped out or refused to enter treatment. Patients now regularly come a great distance to receive buprenorphine treatment from me. They should not have to travel that far. More physicians should learn how to use this medication and enjoy the gratification of helping patients recover from opioid addiction.

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