Opiate Dependence Treatment with Buprenorphine: One Year's Experience in a Family Practice Residency Setting

Stephen Colameco, MD, MEd
John Armando, LCSW
Christopher Trotz, MD

ABSTRACT. Buprenorphine became available for office-based treatment of opiate dependence in January 2003, at which time the Underwood-Memorial Hospital Family Practice Residency Program began offering buprenorphine treatment at its family practice center. This article describes the patient selection process, outcomes, and obstacles to treatment. Patients who had a pharmaceutical benefit were much more likely to remain in treatment than those who had to pay for the medication. The authors are not aware of other residency programs currently providing buprenorphine training, and postulate reasons why family physicians in the United States have not readily adopted the office-based opiate treatment model.

Stephen Colameco is Director, Underwood-Memorial Hospital Family Practice Residency Program, Woodbury, NJ and Assistant Clinical Professor, Department of Family Medicine, Thomas Jefferson University, Philadelphia, PA.

John Armando supervises behavioral health training, Underwood-Memorial Hospital Family Practice Residency Program, Woodbury, NJ.

Christopher Trotz is a second year resident, Underwood-Memorial Hospital Family Practice Residency Program, Woodbury, NJ.

Address correspondence to: Stephen Colameco, MD, MEd, Life Care Medical Center, 601 North Main Street, Glassboro, NJ 08028 (E-mail: scolamec@ix.netcom.com).

Journal of Addictive Diseases, Vol. 24(2) 2005
http://www.haworthpress.com/web/JAD

Digital Object Identifier: 10.1300/J069v24n02_03

KEYWORDS. Buprenorphine, opiate, addiction treatment, family practice, substance abuse

INTRODUCTION

Primary care office-based addiction treatment has been shown to improve patient satisfaction and outcomes.[1-6] Buprenorphine is a relatively new and effective treatment for opiate dependence, with response rates comparable to methadone.[7-9] In Europe and Australia, this medication has been available for office-based treatment for a number of years. Although buprenorphine (Buprenex) has been available for parenteral treatment of pain, it had not been approved for use in addiction treatment until recently. The U.S. Drug Abuse and Treatment Act of 2000 provided the basis for expanding opiate dependence treatment to primary care settings. In 2002, the DEA reclassified buprenorphine from a class V to a class III controlled substance. On October 8, 2002, the U.S. Food and Drug Administration approved buprenorphine for use in the treatment of opiate dependence and it became available in local pharmacies a few months later. Physicians certified by the American Society of Addiction Medicine or the American Board of Addiction Psychiatry are eligible to apply for special DEA certification which is required to prescribe buprenorphine for addiction. Primary care providers who wanted to prescribe buprenorphine for addiction treatment must also apply to the Center for Substance Abuse Treatment (CSAT) upon completing an eight-hour training course. Only one physician in a group practice may prescribe buprenorphine, and there is a 30-patient limit per practice. Buprenorphine is available in two forms for sublingual administration: Subutex, which contains buprenorphine only, and Suboxone, which is a combination of buprenorphine and naloxone. Both are available as 2 mg and 8 mg tablet forms. Subutex is primarily used for induction from "street" opiates to maintenance therapy. Suboxone is used for maintenance treatment, as naloxone is added to the product to reduce potential intravenous use or diversion. The Drug Abuse and Treatment Act of 2000 places a number of restrictions on prescribing. Patients must be closely monitored and must be actively engaged in counseling.

The director of Underwood-Memorial Hospital's Family Practice Residency (SC) is a certified addiction specialist who maintains an addiction treatment practice. The residency family practice center (FPC) began treating patients when buprenorphine/naloxone (Suboxone) became available in local pharmacies.

METHODS

Patient Selection: The FPC did not actively recruit patients. Referrals to the practice were primarily from addiction counselors who had previously referred patients for medication management and from "word of mouth" referrals. Before scheduling an appointment, the treating physician interviewed prospective patients over the telephone. Patients deemed *inappropriate* for treatment included the following: (a) methadone patients unless referred by the treatment provider for induction onto buprenorphine, (b) patients who had failed methadone treatment, (c) patients with major co-occurring psychiatric disorders, (d) those who did not meet DSM-IV criteria for opiate dependence, (e) patients who had not attempted drug-free treatment, or (f) those who could not afford the treatment.

Initial Visit and Induction onto Maintenance Treatment: The initial visit consisted of an hour interview conducted by the treating physician. At the time of visit, the treating physician detailed potential risks and benefits of treatment when compared to alternatives, admission criteria, and program requirements for ongoing treatment. Patients received an information packet and signed consent to treat forms. The initial assessment included documentation of active withdrawal–a requirement for induction onto maintenance medication. After the initial assessment, patients received sublingual buprenorphine 2-4 mg sublingually, followed by hourly assessments for withdrawal signs and symptoms; additional doses of buprenorphine were administered as needed to a maximum of 8 mg. Only one patient required supplemental medication to alleviate withdrawal symptoms, and was successfully placed on treatment.

Counseling: The program required all patients to be actively involved in "group" work of some kind. "Group" work could include Narcotics Anonymous, faith-based group treatment, or group therapy at an addiction treatment center. In addition, all patients were required to receive individual counseling at the FPC or from another provider.

Treatment Monitoring: All patients were required to return to the FPC for monitoring, with 30 days being the longest acceptable time interval between visits; visit frequency depended on the intensity of treatment and communication with other treatment providers. Monitoring visits were 30-minutes assessments of treatment progress, and included clinical evaluation, drug testing, and communication with treatment providers, pharmacies, and family members.

RESULTS

Of the 35 patients treated over the one year encompassed by this study, 22 patients remain "clean" for over 90 days and actively "working" a recovery program. Four (4) patients were "therapeutically discharged" for failure to obtain required counseling or for other "contract" violation. Nine (9) patients were lost to follow-up; of these patients, five (5) were seen for the initial induction visit only. Three (3) patients made only one follow-up monitoring visit, and one (1) remained "clean" for three months before being lost to follow-up.

Table 1 compares patients retained in the program with those who were either lost to follow-up or therapeutically discharged. Only three (3) of the thirteen (13) patients lost to follow-up or therapeutically discharged had a prescription drug benefit or family member paying for buprenorphine compared with 22 of 22 patients retained in treatment. When these two groups were compared using the Fishers Exact Probability Test (Table 2) those differences were significant ($p < .01$). Psychiatric co-morbidity did not differentiate those patients who remained in treatment from those who did not.

TABLE 1. Demographic variables of retained versus non-retained patients

	Retained	Not Retained
Number of clients	22	13
Average daily buprenorphine dose	12.2	10.15
Median age	33	22
Mean age	32	24.6
Months in program	5.31	0.9
Prescription drug abuse	22	13
Heroin IVDU	5	7
Cocaine use	12	10
Suboxone dose reduce successfully	8	0
Faith-based treatment participation	5	0
12-step program participation	13	0
Employed	21	2
Health Insurance or family paying for treatment	22	3
Chronic pain syndrome	5	2
Depression current issue	8	2
Anxiety current issue	13	6
Sexual abuse history	3	4
Physical abuse history	2	2
Community mental health center patient	1	2
Eating disorder history	1	1
Methadone treatment in past	1	2

TABLE 2. Fishers exact probability test comparing patients with and without prescription drug benefit or family paying for treatment.

	Drug Benefit	No Drug Benefit	Total
Currently retained in treatment and "clean" for 90 days	22	3	25
Lost to follow-up or discharged	0	10	10
Total	22	13	35

DISCUSSION

This study demonstrates that addiction treatment can be successfully implemented in a primary care teaching setting. However, there remains a number of obstacles to broader implementation of buprenorphine treatment. One barrier appears to be financial. Although this study was primarily descriptive, the authors were surprised to find a strong correlation between having a prescription drug benefit or a family member paying for medication and retention in the program. This correlation might also reflect a higher level of social functioning on the part of those who have prescription drug benefits. Nevertheless, ability to pay for treatment is certainly one factor limiting treatment success.

Another related, and very important factor limiting ability to pay for care is the artificial division of healthcare into three separate treatment and reimbursement categories–physical, psychiatric, and addiction. In the authors' experience, all pharmaceutical plans in New Jersey, including Medicaid, have placed buprenorphine/naloxone (Suboxone) on formulary. The average retail price for Suboxone 8 mg is about $7.00, with most patients receiving 8-16 mg per day. For patients without health insurance, monthly treatment costs range from $300 to $500 per month. It is not surprising, therefore, that those patients who had health insurance or financial support from family were much more likely to stay in treatment than those who did not. Medicaid patients were not included in the study, because NJ Medicaid will not pay family physicians for office-based treatment; addiction treatment is "carved out" of Medicaid managed care plan contracts. Although insurance companies choose to include buprenorphine/naloxone on formularies, none pay physicians for office-based treatment as a separately billable service. Patients routinely pay cash for this "non-covered" benefit.

Another obstacle is the 30-patient, one-prescriber per practice limits imposed on Suboxone prescribing. It was beyond the scope of this study to measure the attitudes of medical students, residents or faculty toward office-based addiction treatment, but the authors believe that prescribing limitations were an obstacle in generating broader interest among staff in this new treatment modality. With these limitations, the prescribing physician must also make arrangements for "coverage" when away from the office, but no other physician may prescribe the medication; this may also limit physician interest in participating in the care of these patients.

Addicts tend to be complex, demanding patients who have co-occurring psychiatric disorders–a barrier to physician interest in treating addiction. A recent study of 716 consecutive admissions to a methadone program found that 47% had a lifetime psychiatric condition other than a substance use disorder, and 35% had two or more additional diagnoses.[10] The same study found 41% of men and 28% of women also had an Axis II (personality) disorder. Another study found at least one affective disorder in 58% and one anxiety disorder in 55% of methadone patients.[11] Patients with addiction and another psychiatric condition tend to be very "demanding" of time and attention, and both of these conditions are usually "carved out" of primary care payment by managed care plans and federal healthcare plans. As a result, there is no incentive for family physicians to provide care, despite the high prevalence of substance use and other psychiatric disorders in family practice.

These and other factors may explain why family practice as a specialty has failed to take a leadership role in addiction treatment. Although family practice offers fellowship training in obstetrics, geriatrics, faculty development, and sports medicine, it does not offer addiction fellowships. It is interesting to note that the American Academy of Family Practice (AAFP) did not offer a single educational program on topics of opiate, alcohol, marijuana, or stimulant use at either its 2002 or 2003 Annual Scientific Assemblies. During this same period of time, prescription drug abuse continued to escalate–with many prescriptions written by family physicians. In a personal communication, an AAFP representative explained that its constituency had previously shown little interest in addiction training, and that prior educational sessions had been poorly attended. In preparing this article for publication, the author (JA) posted a message on the Society of Teachers of Family Medicine (STFM) Behavioral Science Listserv (December 2003) inquiring whether other programs were providing buprenorphine treatment in an outpa-

tient setting, and whether other programs had considered the treatment but decided against it. The posting did not receive any replies.

There is little doubt that physicians require addiction training.[12] A recent study evaluated physician compliance with well-established medical treatment guidelines underscores the need for addiction training; this study found poor performance among family physicians in many areas, but by far the poorest adherence to guidelines was for alcohol abuse (10.5%)–less than half the level of next lowest adherence rate 13. Emergency physicians do not fare better; Rockett et al. found that less than 10% of patients treated in emergency departments who needed alcohol and other drug treatment received any, and only 1% of the time did the physician document a diagnosis of substance abuse.[14] It should not be surprising, therefore, that family physicians do not appear interested in office-based treatment.[15]

SUMMARY

Office-based addiction treatment can be effectively implemented in a family practice residency setting. Outcomes appear to be significantly influenced by patients' ability to pay for treatment. Broad adoption of addiction treatment in family practice offices will not likely occur without physician education and changes in healthcare finance systems.

REFERENCES

1. Samet H et al. Benefits of linking primary medical care and substance abuse services: patient, provider, and social perspectives. Arch Intern Med. 2001; 161:85-91.

2. Laine C et al. Regular outpatient medical and drug abuse care and subsequent hospitalization of persons who use illicit drugs. JAMA. 2001; 285:2355-2362.

3. Weisner C et al. Integrating primary medical care with addiction treatment, a randomized control trial. JAMA. 2001; 286:1715-1723.

4. Stuart M. Opioid-dependent people may prefer receiving treatment from GP offices compared to narcotics programmes. Evidence-Based Healthcare. 2002; 6(2): 56-57.

5. Resnick RB, Galanter M, Resnick E, Pycha C. Buprenorphine treatment of heroin dependence (detoxification and maintenance) in a private practice setting. J Addict Dis. 2001; 20:75-83.

6. Gibson AE, Doran CM, Bell JR, Ryan A, Lintzeris N. A comparison of buprenorphine treatment in clinic and primary care settings: a randomised trial. Medical Journal of Australia. 2003; 179(1):38-42.

7. Mattick R et al. Buprenorphine versus methadone maintenance therapy: a randomized double-blind trial with 405 opioid-dependent patients. Addiction. 2003; 98(4):441-52.

8. Kakko J et al. 1-year retention and social function after buprenorphine-assisted relapse prevention treatment for heroin dependence in Sweden: a randomized, placebo-controlled trial. Lancet. 2003; 361(9358):662-8.

9. Gerra G et al. Buprenorphine versus methadone for opioid dependence: predictor variables for treatment outcome. Drug & Alcohol Dependence. 2004; 75(1):37-45.

10. Brooner RK. Psychiatric and substance use comorbidity among treatment-seeking opioid users. Arch Gen Psych. 1997; (54):71-80.

11. Miller NS. Psychiatric comorbidity: prevalence in methadone maintenance treatment. Am J Drug and Alcohol Abuse. 1996; (22):95-107.

12. Miller NS. Why physicians are unprepared to treat patients who have alcohol- and drug-related disorders. Academic Medicine. 2001; 76(5):410-8.

13. McGlynn E A. The quality of health care delivered to adults in the United States. NEJM 2003; 384(26):2635-45.

14. Rockett IRH. Assessing substance abuse treatment need: a statewide hospital emergency department study. Ann Emerg Med. 2003;41:802-13.

15. Vastag B. In-office opiate treatment “not a panacea”: physicians slow to embrace therapeutic option. JAMA. 2003; 290(6):731-5.