Emergency Psychiatry
Annotations by Scott Simpson, MD, MPH
of the APM Emergency Psychiatry SIG

June 2015

1. Emergency department-initiated buprenorphine/naloxone treatment for opioid dependence: a randomized clinical trial

Also of interest:

- Bloom JD: Psychiatric boarding in Washington State and the inadequacy of mental health resources

J Am Acad Psychiatry Law 2015; 43(2):218-222. Boarding of psychiatric patients in emergency departments has garnered national attention. In 2014, the Washington State Supreme Court prohibited psychiatric boarding in the state. Bloom reviews the circumstances of this 2014 case and the larger structural deficiencies—especially a lack of inpatient psychiatric beds—that precipitated the boarding crisis in Washington. The article is readable for its statistics alone: for example, in 2012, 64% of Washington’s involuntarily detained patients were boarded in emergency departments, and one patient boarded for 100 days. However, the ultimate effect of the boarder ban remains uncertain. Bloom considers this case’s implications for mental health care nationally, including the potential for “a situation in which the bar for continued hospitalization will be raised and premature discharge of patients becomes a new norm of this beleaguered system.”
Emergency department-initiated buprenorphine/naloxone treatment for opioid dependence: a randomized clinical trial
D’Onofrio G, O’Connor PG, Pantalon MV, et al
JAMA 2015; 313(16):1636-1644

ANNOTATION (Scott Simpson)

The Finding: In this randomized controlled trial, opioid dependent patients started on buprenorphine/naloxone in the emergency department (ED) and followed in primary care were more likely to be engaged in addictions treatment after 30 days (78%) than control patients receiving combinations of screening, brief intervention, and referral to treatment (37-45%). Over a month, buprenorphine patients misused opioids on fewer days and utilized inpatient addiction services less frequently (11% versus 35-37%).

Strength and Weaknesses: This trial reveals the value of ED-based addictions treatment among even the highly comorbid patients found in busy urban hospitals—26% of included patients had a prior inpatient psychiatric hospitalization; 9% were homeless; and over half had additional non-opioid substance use, including 55% using cocaine. About one-quarter of patients received a psychiatric evaluation at the index visit in addition to medical care. The two control conditions (referral for treatment and SBIRT) are apt, being frequently provided in larger hospitals.
Most disappointingly, the authors fail to describe adverse event rates, which limits interpretation of the intervention’s relative risks and benefits. A program for ED-initiated buprenorphine requires close collaboration between an emergency department and an outpatient clinic; this manuscript does not describe how many patients made it to their first follow-up appointment. One month is a fairly short time frame for outcomes in addiction, a chronic illness: the high observed response rates may reflect this short time, the efforts of study coordinators to retain and follow subjects, and patients’ awareness of being enrolled in the study (observer effect). Finally, patients’ use of non-opioid substances after 30 days is not described.

Relevance: Emergency psychiatrists manage substance use disorders on a daily basis. This trial suggests that intensive interventions in emergency settings (with planned outpatient follow-up) can be very effective. Although addictions treatment frustrates many clinicians, that even the control group had a good response to treatment should encourage providers that many substance-using patients seen in the emergency department can be successfully engaged in treatment.
Importance: Opioid-dependent patients often use the emergency department (ED) for medical care.

Objective: To test the efficacy of 3 interventions for opioid dependence: (1) screening and referral to treatment (referral); (2) screening, brief intervention, and facilitated referral to community-based treatment services (brief intervention); and (3) screening, brief intervention, ED-initiated treatment with buprenorphine/naloxone, and referral to primary care for 10-week follow-up (buprenorphine).

Design, Setting, and Participants: A randomized clinical trial involving 329 opioid-dependent patients who were treated at an urban teaching hospital ED from April 7, 2009, through June 25, 2013.

Interventions: After screening, 104 patients were randomized to the referral group, 111 to the brief intervention group, and 114 to the buprenorphine treatment group.

Main Outcomes and Measures: Enrollment in and receiving addiction treatment 30 days after randomization was the primary outcome. Self-reported days of illicit opioid use, urine testing for illicit opioids, human immunodeficiency virus (HIV) risk, and use of addiction treatment services were the secondary outcomes.

Results: Seventy-eight percent of patients in the buprenorphine group (89 of 114 [95% CI, 70%-85%]) vs 37% in the referral group (38 of 102 [95% CI, 28%-47%]) and 45% in the brief intervention group (50 of 111 [95% CI, 36%-54%]) were engaged in addiction treatment on the 30th day after randomization (P<.001). The buprenorphine group reduced the number of days of illicit opioid use per week from 5.4 days (95% CI, 5.1-5.7) to 0.9 days (95% CI, 0.5-1.3) vs a reduction from 5.4 days (95% CI, 5.1-5.7) to 2.3 days (95% CI, 1.7-3.0) in the referral group and from 5.6 days (95% CI, 5.3-5.9) to 2.4 days (95% CI, 1.8-3.0) in the brief intervention group (P<.001 for both time and intervention effects; P=.02 for the interaction effect). The rates of urine samples that tested negative for opioids did not differ statistically across groups, with 53.8% (95% CI, 42%-65%) in the referral group, 42.9% (95% CI, 31%-55%) in the brief intervention group, and 57.6% (95% CI, 47%-68%) in the buprenorphine group (P=.17). There were no statistically significant differences in HIV risk across groups (P=.66). Eleven percent of patients in the buprenorphine group (95% CI, 6%-19%) used inpatient addiction treatment services, whereas 37% in the referral group (95% CI, 27%-48%) and 35% in the brief intervention group (95% CI, 25%-37%) used inpatient addiction treatment services (P<.001).

Conclusions and Relevance: Among opioid-dependent patients, ED-initiated buprenorphine treatment vs brief intervention and referral significantly increased engagement in addiction treatment, reduced self-reported illicit opioid use, and decreased use of inpatient addiction
treatment services but did not significantly decrease the rates of urine samples that tested positive for opioids or of HIV risk. These findings require replication in other centers before widespread adoption.