Opioid Withdrawal: Does a Day Make a Difference?

Emily Loscalzo, PsyD[1]; P. Joseph Resignato, MD[1]; Jillian H. Zavodnick, MD[2]; Stefan Kertesz, MD, MSc[3]

[1]Thomas Jefferson University, Department of Psychiatry and Human Behavior, Philadelphia, PA
[2]Thomas Jefferson University, Department of Internal Medicine, Philadelphia, PA
[3]University of Alabama at Birmingham School of Medicine, Division of Preventive Medicine, Birmingham, AL

Introduction

- As fatalities due to opioid use disorder continue to increase, hospitalization presents an opportunity to engage patients in addiction treatment.
- There is also a need to address withdrawal in these patients, to ensure completion of medical care and adequate follow up.
- Initiation of medications for opioid use disorder (MOUD) has been one strategy to decrease mortality related to opioid use disorder (Hassamal et al., 2017). Emergency department-administered buprenorphine has improved patient outcomes after discharge (D'Onofrio et al., 2017).
- Most research focused on initiation and referral from consult services in acute medical settings with good outcomes in the areas of retention and follow-up (Trowbridge et al., 2017; Shanahan et al., 2010).
- However, prompt control of cravings and withdrawal during hospital admissions is necessary to optimize patient comfort and avoid patient-directed discharge (PDD, previously against medical advice).

Objective: The present study was designed to address the following research questions:

Research Question 1: to evaluate the effect of the introduction of an opioid withdrawal protocol (OWP) in reducing delays to delivering treatment with methadone to inpatients with opioid withdrawal.

Research Question 2: to evaluate the effect of introduction of an OWP in decreasing PDD among inpatients with OUD experiencing opioid withdrawal.

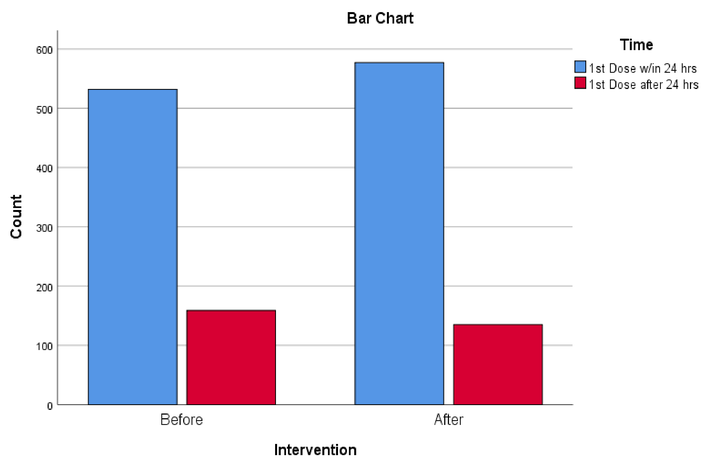
Method

The OWP was introduced in mid-2018 via policy, word of mouth, and specialized order set to support physicians in a large university hospital in initiating methadone for withdrawal without specialty consultation. Inclusion criteria were all inpatients who received methadone (<31mg/day) during the 12 months before (n=691) and 12 months after (n=712) OWP introduction (total n=1403). Outcome measures were number of individuals started on methadone for opioid withdrawal within 24 hours of admission and the number of PDDs.

Results

Patients were primarily white (72.5%), mean age 39 with roughly equal representation of males and females; no significant demographic differences pre- and post-intervention. Chi-square analyses crossing OWP introduction with doses received within 24 hours and PDDs were conducted. Individuals admitted after OWP introduction were no more likely to receive a dose of methadone within 24 hours of hospital admission than those admitted before OWP introduction, (37.9% vs 41.1%, p=0.062). There was no significant effect on likelihood of PDDs (40.6% vs. 39.9%, p=0.069).

Figure 1. First dose within 24 hours pre- and post-OWP



Discussion

- Providing methadone to patients as soon as possible upon their admission to medical hospitals may influence short-term outcomes such as decreased likelihood of PDD.
- The methods for introducing the opioid withdrawal protocol may have been necessary but not sufficient to institute organizational change.
- Review of organizational change frameworks, such as Consolidated Framework for Implementation Research (CFIR), will guide how to most effectively aid consistent use of OWP by hospital physicians.
- Other future directions for this initiative will include SBIRT and MI training for ED and other front line staff to reduce PDD rates, as well as investigating other forms of MOUD.
- Once implementation of the OWP is commonplace, longer-term outcomes should be examined as well, such as likelihood of referral to treatment, likelihood of attendance at treatment, and abstinence from opioids at 6- and 12-months.

References

- D'Onofrio, G., Chawarski, M.C., O'Connor, P.G., Pantalon, M.V., Busch, S.H., Owens, P.H., Hawk, K., Bernstein, S.L., Fiellin, D.A. (2017). Emergency Department-Initiated Buprenorphine for Opioid Dependence with Continuation in Primary Care: Outcomes During and After Intervention. Journal of General Internal Medicine, 32, 660–666.
- Hassamal, S., Goldenberg, M., Ishak, W., Haglund, M., Miotto, K., Danovitch, I. (2017). Overcoming barriers to initiating medication-assisted treatment for heroin use disorder in a general medical hospital: A case report and narrative literature review. Journal of Psychiatric Practice, 23(3), 221-229.
- Shanahan, C.W., Beers, D. Alford, D.P., Brigandi, E., Samet, J.H. (2010). A transitional opioid program to engage hospitalized drug users. Journal of General Internal Medicine, 25(8), 803-808.
- Trowbridge, P., Weinstein, Z.M., Kerensky , T., Roy P., Regan, D., Samet, J.H., & Walley, A.Y. (2017). Addiction consultation services – Linking hospitalized patients to outpatient addiction treatment. Journal of Substance Abuse Treatment, 79, 1-5.