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Letter to Editor: Medications for opioid use disorder demonstrate clear benefit for patients with invasive infections

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Letter to Editor

In “*Long-term Outcomes of Injection Drug-related Infective Endocarditis Among People Who Inject Drugs*,” Suzuki *et al.* suggest that medications for opioid use disorder (MOUD) may not be sufficient to impact 5-year mortality rates.¹ Suzuki specifically states that “... [although MOUD] may increase the number of such patients engaging in ongoing treatment, more research is needed to determine the impact of these medications on longer-term outcomes.” However, with a sample size of only 26 patients stratified into three treatment groups (no MOUD *vs.* buprenorphine *vs.* methadone), this interpretation is limited and insufficiently powered to assess these outcomes. These results are insufficient evidence to conclude that MOUDs provide no benefit to people with invasive infections from injection opioid use.

Several recent publications show MOUD is associated with *statistically significant* improved patient outcomes. One large retrospective study showed that addiction medicine consults were associated with increased MOUD prescribing (87% *vs.* 17%), increased rate of completing antibiotic therapy in the hospital (79% *vs.* 40%), reduced discharges against medical advice (16% *vs.* 49%), and reduced 90-day readmission rates (hazard ratio, 0.378; 95% confidence interval [CI], 0.21–0.69).² The benefits of addiction medicine consults are largely driven by continued use of MOUD, rather than the specific MOUD selected.³ Indeed, initiation of MOUDs in hospital settings appears durable and reduces other opioid use for at least 6 months compared to controls.⁴ Meta-analyses also demonstrate reductions in all-cause mortality (11.3 *vs.* 36.1 per 1,000 person years for methadone treatment with

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similar reductions of 4.3 vs 9.5 per 1,000 person years for buprenorphine treatment) and overdose-related mortality (2.6 vs. 12.7 per 1,000 person years for methadone and 1.4 vs 4.6 per 1,000 person years for buprenorphine) for patients who received MOUD compared to those who do not.⁵ While these findings cannot be directly compared to those reported by Suzuki *et al.*, they are derived from larger adequately powered analyses and clearly demonstrate substantial benefits for prescribing MOUD to people who inject drugs.

We agree with Suzuki *et al.* that identifying other key components of comprehensive care (i.e., housing, connection to mental health resources, primary care linkage) for patients with OUD-related infections should be an active area of research for potential interventions. However, given the abundance of evidence supporting the benefits of MOUD, it is clear that patients who present with OUD-related infections should be offered MOUD. Our current CDC-funded collaborative is building a toolkit to improve the treatment of patients who present to the hospital with injection OUD-associated infections.

References

- 1). Suzuki J, Johnson JA, Montgomery MW, Hayden MC, Price CN, Solomon DA, Liebschutz JM, Schnipper JL, Weiss RD. Long-term Outcomes of Injection Drug-related Infective Endocarditis Among People Who Inject Drugs. *J Addict Med.* 2019 10 18.
- 2). Marks LR, Munigala S, Warren DK, Liang SY, Schwarz ES, Durkin MJ. Addiction Medicine Consultations Reduce Readmission Rates for Patients With Serious Infections From Opioid Use Disorder. *Clin Infect Dis.* 2019 5 17;68(11):1935–1937. [PubMed: 30357363]
- 3). Marks LR, Schwarz ES, Liss D, Munigala S, Warren DK, Liang SY, Durkin MJ. Comparison of Medication Assisted Therapy Treatment Strategies for Opioid Use Disorder in Persons who Inject Drugs and are Hospitalized with Serious Infections. Presented at IDWeek; 10 2–6, 2019; Washington D.C., <http://idweek.org>
- 4). Liebschutz JM, Crooks D, Herman D, Anderson B, Tsui J, Meshesha LZ, Dossabhoy S, Stein M. Buprenorphine Treatment for Hospitalized, Opioid-Dependent Patients: A Randomized Clinical Trial. *JAMA Intern Med.* 2014 8; 174(8): 1369–1376. [PubMed: 25090173]
- 5). Sordo L, Barrio G, Bravo MJ, Indave BI, Degenhardt L, Wiessing L, Ferri M, Pastor-Barriuso R. Mortality risk during and after opioid substitution treatment: systematic review and meta-analysis of cohort studies. *BMJ.* 2017 4 26;357:j1550. [PubMed: 28446428]