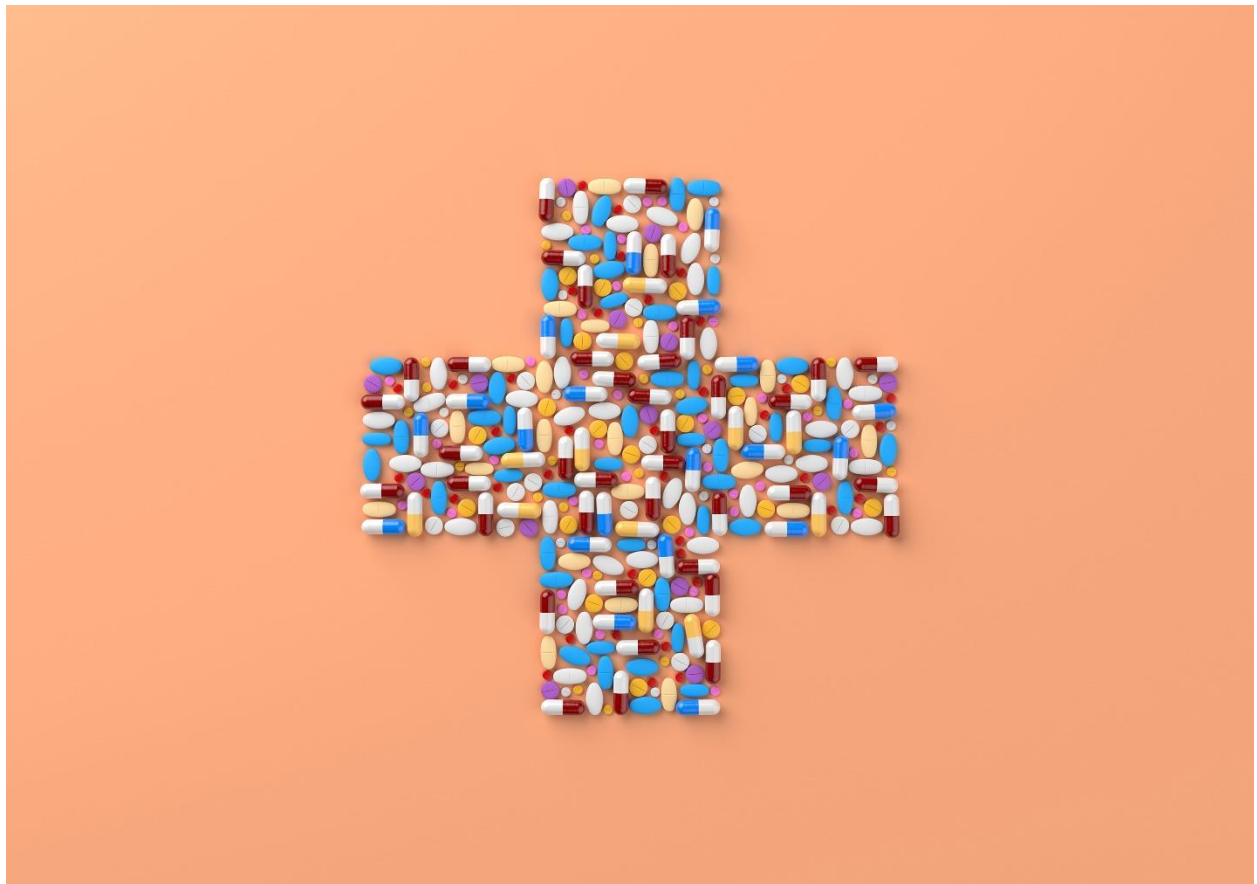


Methadone for Opioid Use Disorder Treatment: New Evidence on Comparative Effectiveness

By Rebecca Ellner, MD



The ongoing opioid crisis continues to present significant challenges to healthcare providers and systems worldwide. While both buprenorphine/naloxone and methadone are established treatments for opioid use disorder (OUD), questions remain about their comparative effectiveness, particularly in the context of evolving patterns of opioid use, including the rise of fentanyl. Previous research has not fully examined how these treatments differ across various patient subgroups or comprehensively compared their effectiveness in real-world settings.

In a landmark study published in JAMA, Dr. Bohdan Nosyk and colleagues from British Columbia, Canada, provide important new insights into the comparative effectiveness of these treatments.

Their work offers compelling evidence that may influence treatment selection and clinical guidelines for OUD management.

The study, which represents one of the largest comparative analyses of these treatments to date, examined data from British Columbia's administrative health database between January 2010 and March 2020. The researchers included 30,891 first-time treatment recipients who were 18 years or older, carefully excluding pregnant individuals, those who were incarcerated, or those receiving cancer care at the time of treatment initiation. The study population had a median age of 33 years, with 66% being male, and 39% receiving buprenorphine/naloxone treatment.

The research team employed a sophisticated methodological approach, using both "initiator" analyses (comparing treatments assigned at initiation regardless of past adherence) and "per-protocol" analyses (examining outcomes when treatments were administered according to dosing guidelines). This dual analytical strategy provided a comprehensive view of real-world effectiveness while also controlling for ideal treatment conditions.

The findings revealed several crucial insights. Perhaps most notably, methadone demonstrated superior treatment retention compared to buprenorphine/naloxone. In the initiator analyses, 88.8% of buprenorphine/naloxone users discontinued treatment within 24 months, compared to 81.5% of methadone users (adjusted HR, 1.58 [95% CI, 1.53-1.63]). This pattern persisted even when examining patients receiving ideal dosing in the per-protocol analysis (42.1% vs 30.7%; adjusted HR, 1.67 [95% CI, 1.58-1.76]).

Regarding mortality outcomes, the study found comparable safety profiles between the two treatments. In the per-protocol analysis, mortality rates while receiving treatment were similar for both medications among first-time users (0.08% vs 0.13% mortality at 24 months; adjusted HR, 0.57 [95% CI, 0.24-1.35]) and among those with previous treatment experience (0.08% vs 0.09%; adjusted HR, 0.97 [95% CI, 0.54-1.73]).

Speaking to the significance of these findings, addiction medicine specialist Dr. Sarah Martinez (not involved in the study) notes, "This research challenges current treatment paradigms, particularly in regions where buprenorphine/naloxone is recommended as first-line therapy. The superior retention rates with methadone suggest we may need to reconsider our treatment hierarchies."

The study's findings are particularly relevant given current clinical guidelines. While U.S. guidelines don't explicitly favor either medication, British Columbia's 2017 guidelines recommend buprenorphine/naloxone as first-line treatment. These results suggest that such recommendations may need reconsideration, particularly for patients who might benefit from methadone's superior retention rates.

Looking ahead, the researchers identify several important areas for future investigation. "While our study provides robust evidence for methadone's superior retention rates, we need to better understand the factors driving these differences," notes Dr. Nosyk. "Additionally, research examining patient preferences, access barriers, and quality of life outcomes would provide valuable context for clinical decision-making."

The implications of this research extend beyond individual treatment decisions to health system planning and policy development. As communities continue to grapple with evolving patterns of opioid use, including the increasing prevalence of fentanyl, evidence-based guidance for treatment selection becomes increasingly critical.

For clinicians, these findings suggest that methadone should be given serious consideration as a first-line treatment option, particularly for patients at high risk of discontinuation. However, treatment decisions should continue to consider individual patient factors, including lifestyle constraints, access to supervised dosing, and personal preferences.

This research represents a significant contribution to our understanding of OUD treatment effectiveness and may influence future clinical guidelines and practice patterns. As the opioid crisis continues to evolve, such evidence-based insights become increasingly valuable for optimizing treatment outcomes and saving lives.

References

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