On the Social Determinants of Health and Extended-Release Naltrexone

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Naltrexone is a long-acting opioid antagonist, which acts by effectively blocking cravings and feelings of euphoria. When the US Food and Drug Administration (FDA) approved naltrexone in 1975, there was optimism about how its μ-receptor blockade made it the "perfect medication" for opioid use disorder. However, providers soon realized that patients only took naltrexone consistently under dire circumstances, such as doctors with substance use disorders at risk of losing their medical licenses or prisoners with substance use disorders out on early work release.[1] After the FDA approved naltrexone for the treatment of alcohol use disorder (AUD) in 1994, a similar pattern emerged. Clinical trials exhibited that naltrexone was well tolerated and effective in decreasing heavy drinking.[2] However, in clinical settings, patients with AUD did not take naltrexone regularly.[3]

Efforts to improve adherence led to the development of extended-release (ER) naltrexone, an injectable depot lasting up to 28 days. ER naltrexone was approved for AUD in 2006, and studies reported that its use led to higher refill rates and lower overall health care–related costs compared to all oral medications for AUD including oral naltrexone.[4,5] Many providers and hospital administrators anecdotally believe that administering ER naltrexone prior to discharge can protect their patient with AUD from relapsing and readmission.

In a recent article, Tigh et al[5] examined this hypothesis. Their study focused on a predominantly White male patient population in Nebraska. They had a relatively low sample size (N = 58) and a difficult-to-treat patient cohort with several comorbidities (eg, all participants had a comorbid psychiatric disorder). While they did not find a major difference in the number of hospitalizations or emergency department visits, they did note decreased hospital length of stay and highlighted homelessness as a key factor leading to readmission that is often not addressed appropriately during discharge.

There are limited studies on homelessness and AUD, but many are available looking at how homelessness affects treatment for patients with opioid use disorder. A 17-year longitudinal analysis of correlations between socioeconomic status and opioid-related mortality and hospitalization in Canada revealed that psychosocial factors (like housing insecurity) play a significant role in the opioid epidemic.[6] Another Canadian study[7] highlighted the importance of addressing housing instability as a key factor in the provision of harm reduction services. A study[8] conducted in New York City also identified housing insecurity as playing a role in nonfatal opiate overdoses.

Patients with AUD are already at high risk of treatment nonadherence and readmission. While ER naltrexone can help prevent relapse for 28 days, they may face homelessness for several months. Co-occurring psychiatric disorders can make it much more difficult for patients with AUD to be stable in the community.[9] Unstable housing can also lead to increased stress-related alcohol use and other maladaptive coping behaviors.[10] Instead of using ER naltrexone alone, we should examine this medication with novel interventions targeting homelessness and endeavor to improve outcomes for these difficult-to-treat patients.[11]

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REFERENCES

1. Modesto-Lowe V, Van Kirk J. Clinical uses of naltrexone: a review of the evidence. *Exp Clin Psychopharmacol*. 2002;10(3):213–227.
2. Kranzler HR, Soyka M. Diagnosis and pharmacotherapy of alcohol use disorder: a review. *JAMA*. 2018;320(8):815–824.
3. Rubinsky AD, Chen C, Batki SL, et al. Comparative utilization of pharmacotherapy for alcohol use disorder and other psychiatric disorders among US Veterans Health Administration patients with dual diagnoses. *J Psychiatr Res*. 2015;69:150–157.
4. Hartung DM, McCarty D, Fu R, et al. Extended-release naltrexone for alcohol and opioid dependence: a meta-analysis of healthcare utilization studies. *J Subst Abuse Treat*. 2014;47(2):113–121.
5. Tigh J, Daniel K, Balasanova AA. Impact of hospital-administered extended-release naltrexone on readmission rates in patients with alcohol use disorder: a pilot study. *Prim Care Companion CNS Disord*. 2022;24(6):21m03213.
6. Alsabbagh MW, Cooke M, Elliott SJ, et al. Stepping up to the Canadian opioid crisis: a longitudinal analysis of the correlation between socioeconomic status and population rates of opioid-related mortality, hospitalization and emergency department visits (2000–2017). *Health Promot Chronic Dis Prev Can*. 2022;42(6):229–237.
7. Milaney K, Passi J, Zaretsky L, et al. Drug use, homelessness and health: responding to the opioid overdose crisis with housing and harm reduction services. *Harm Reduct J*. 2021;18(1):92.
8. Pérez-Figueroa RE, Obonyo DJ, Santoscoy S, et al. Housing instability, structural vulnerability, and non-fatal opioid overdoses among people who use heroin in Washington Heights, New York City. *Behav Med*. 2022;48(4):320–330.
9. Drake RE, Wallach MA, Teague GB, et al. Housing instability and homelessness among rural schizophrenic patients. *Am J Psychiatry*. 1991;148(3):330–336.
10. Joseph PL, Applewhite J, Fleary SA. Housing and food insecurity, health literacy, and maladaptive coping behaviors. *Health Lit Res Pract*. 2022;6(4):e280–e289.
11. Fazio D, Zuiderveen S, Guyet D, et al. ED-Home: pilot feasibility study of a targeted homelessness prevention intervention for emergency department patients with drug or unhealthy alcohol use. *Acad Emerg Med*. 2022;29(12):1453–1465.