

The Role of OBAT Nurse Treatments on Patients with OUD/SUD and Histories of Childhood Trauma

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BACKGROUND

- Substance use disorder (SUD) and opioid use disorder (OUD) are chronic disorders that often require medical interventions to treat properly.²
- There is a link between childhood adversity and more negative health outcomes, leading to changes in behavior and neurocircuitry.¹
- Early treatments and interventions can help reduce this intergenerational continuation of SUDs and OUDs.³
- Office-based addiction treatment (OBAT) is an effective treatment using approved medications for substance use integrated within a primary care setting.⁴

OBJECTIVES

- Examine if there is a correlation between a history of childhood trauma and an increase in relapse rate.
- Help guide office-based addiction treatment (OBAT) treatment methods to increase remission rate of SUD/OUD patients.

METHODOLOGY

- Patients' data were included based on whether they engaged in OBAT treatment and had a history of childhood trauma.
- Measures of relapse and remission were compared between subject groups using a Chi-squared goodness of fit test.

RESULTS

- Rates of relapse were compared in patients with SUD/OUD between those who were and were not enrolled in OBAT.
- The relapse rate was also examined in patients with SUD/OUD who also had a history of childhood trauma.

Rates of relapse in patients with SUD/OUD based on OBAT enrollment

	Enrolled in OBAT	Not Enrolled in OBAT
Relapse	196	134
No Relapse	53	40

$$X^2(1, N = 423) = 30.50, p = 2.28 \times 10^{-7}$$

Rates of relapse in patients with SUD/OUD and a history of childhood trauma who were enrolled in OBAT

	Childhood Trauma	No Childhood Trauma
Relapse	94	40
No Relapse	24	17

$$X^2(1, N = 175) = 22.96, p = 1.04 \times 10^{-5}$$

Rates of relapse in patients with SUD/OUD and a history of childhood trauma who were not enrolled in OBAT

	Childhood Trauma	No Childhood Trauma
Relapse	21	12
No Relapse	4	7

$$X^2(1, N = 44) = 3.27, p = 0.19$$

CONCLUSION

- The dataset suggests that there is an effect of OBAT enrollment on rates of relapse as well as an effect of childhood trauma on relapse rate amongst patients enrolled in OBAT.
- There was no effect of childhood trauma on rates of relapse with patients not enrolled in OBAT.
- OBAT techniques and childhood trauma are not independent from relapse rates and affect each other.

RECOMMENDATIONS

- Although the analyses demonstrate an effect between OBAT enrollment, childhood trauma, and relapse rate, the study was unable to define the relationship between these variables.
- Future studies could increase the sample size and examine the dataset further to provide a directionality between our variables to examine correlation or causation.

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References
 Carlyle, M., Broomby, R., Simpson, G., Hannon, R., Fawaz, L., Mollaahmetoglu, O. M., Drain, J., Mostazir, M., & Morgan, C. J. (2021). A randomised, double-blind study investigating the relationship between early childhood trauma and the rewarding effects of morphine. *Addiction Biology*, 26(6). <https://doi.org/10.1111/adb.13047>
 Kumar, N., Stowe, Z. N., Han, X., & Mancino, M. J. (2016). Impact of early childhood trauma on retention and phase advancement in an outpatient buprenorphine treatment program. *The American Journal on Addictions*, 25(7), 542-548. <https://doi.org/10.1111/ajad.12437>
 Westenberg, J. N., Tai, A. M., Elmer, J., Kamel, M. M., Wong, J. S., Azar, P., Vo, D. X., Moore, E., Mathew, N., Seethapathy, V., Choi, F., Vogel, M., & Krausz, R. M. (2021). Treatment approaches and outcome trajectories for youth with high-risk opioid use: A narrative review. *Early Intervention in Psychiatry*, 16(3), 207-220. <https://doi.org/10.1111/eip.13155>
 Training and technical assistance. Boston Medical Center. (n.d.). Retrieved July 9, 2022, from <https://www.bmc.org/office-based-addiction-treatment-obat/training-and-technical-assistance>