Association Between Opioid Agonist Therapy and Relapse Rates to Opioids and Stimulants in Individuals with Severe Mental Illness Using Both Substances: Preliminary Findings

OBJECTIVE

- To investigate the association between opioid agonist therapy (OAT) prescriptions and relapse rates to opioids and stimulants in individuals diagnosed with both opioid and stimulant use disorders (OUD- StUD) and severe mental illness (SMI) based on DSM-5 criteria.

METHODS

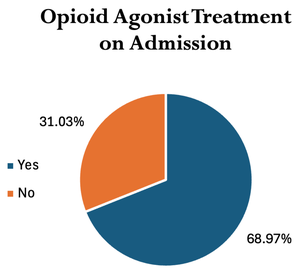
- **Design:** Retrospective cohort study
- **Participants:** 116 inpatients ≥ 19 yo, at the Red Fish Healing Centre with StUD-OUD_SMI from Oct 8, 2021to Apr 31, 2024.
- **Analysis:** Negative binomial regression
- **Exclusion**: 2 individuals on fentanyl patch

RESULTS

- During admission, 102 individuals with OUD-StUD received OAT (including 24 new initiations) while 14 declined OAT despite medical recommendations, **often citing sporadic fentanyl use/or no recent use and a preference for methamphetamine.**
- Sustained release oral morphine (SROM) was linked to higher opioid relapse rates compared with methadone or buprenorphine.
- Individuals declining OAT were associated with lower relapse rates to opioids but not to stimulants.
- There was no detectable variability on impact of OAT on stimulant relapses.

CONCLUSIONS

- Early evidence indicates that SROM prescriptions may be associated with increased opioid relapse rates, potentially reflecting a more severe underlying condition that necessitates more intensive interventions. However, OAT does not seem to affect stimulant relapse rates.
- A growing pattern has emerged where individuals with a past diagnosis of OUD but no current physiological opioid dependence are declining OAT, often in the context of intermittent opioid use and significant stimulant use—highlighting the need for further investigation and comprehensive risk evaluation.



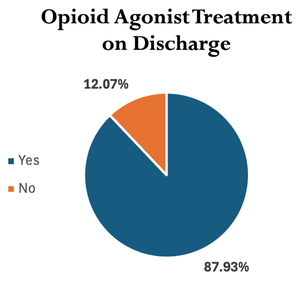


Table 1. Participant Characteristics

		All patients (n=116)	On methadone at discharge (n=39)	On buprenorphine at discharge (n=50)	On SROM at discharge (n=13)	Not on OAT at discharge (n=14)
Age, years, mean (SD)		33.4 ± 9	34.7 ± 8.4	32.5 ± 8.9	32.3 ± 9.3	34 ± 10.8
Duration of stay, days, mean (SD)		216.6 ± 91.2	192.7 ± 85.7	225.7 ± 85.4	238.4 ± 110.7	230.4 ± 106.5
Sex, male, n (%)		68 (58.6%)	19 (48.7%)	31 (62%)	8 (61.5%)	10 (71.4%)
Ancestry, european, n (%)		69 (59.5%)	24 (61.5%)	27 (54%)	10 (76.9%)	8 (57.1%)
Diagnosis besides OUD and StUD						
	Schizophrenia and related psychotic disorder, n (%)	111 (95.7%)	38 (97.4%)	47 (94%)	13 (100%)	13 (92.9%)
	Bipolar disorder, n (%)	9 (7.8%)	4 (10.3%)	3 (6%)	1 (7.7%)	1 (7.1%)
	MDD, n (%)	14 (12.1%)	9 (23.1%)	1 (2%)	3 (23.1%)	1 (7.1%)
	Nicotine use disorder, n (%)	59 (50.9%)	19 (48.7%)	25 (50%)	7 (53.8%)	8 (57.1%)
OAT dosing characteristics		**NA**	**PO (mg)**	**LAI (mg)** / **PO (mg)**	**PO (mg)**	**NA**
	Daily OAT dose, mean mg/mcg (SD)	NA	112.2 ± 61.5	194.7 ± 102.6 / 17.1 ± 6.4	1084.6 ± 731	NA
	OAT newly initiated, n (%)	24 (20.7%)	2 (5.1%)	21 (42%)	1 (7.7%)	0
UDS characteristics over the duration of observation period						
	Total UDS performed per patient, mean (SD)	43 ± 23.2	35.4 ± 18.4	45.2 ± 22.9	47.5 ± 29.2	52.4 ± 27.2
	Total UDS performed per patient/duration of stay, mean (SD)	0.2 ± 0.1	0.2 ± 0.1	0.2 ± 0.1	0.2 ± 0.1	0.3 ± 0.1
	Stimulant relapse per patient, mean (SD)	2.6 ± 3.1	2.4 ± 2.7	2.9 ± 3.6	3.2 ± 3.3	1.6 ± 1.7
	Opioid relapse per patient, mean (SD)	1.4 ± 2.9	1.1 ± 1.9	1.3 ± 1.9	4.2 ± 6.5	0.2 ± 0.4
Number of self-reported overdose, mean (SD)		6.9 ± 8.1	6.4 ± 15.5	6.8 ± 7.9	8.0 ± 7.6	7.7 ± 10.8
Co-prescribed medications						
	Amphetamine/Methylphenidate, n patients (%)	13 (11.2%)	4 (10.3%)	2 (4%)	5 (38.5%)	2 (14.3%)
	Antipsychotic medication, n patients (%)	88 (75.9%)	37 (94.9%)	29 (58%)	8 (61.5%)	14 (100%)

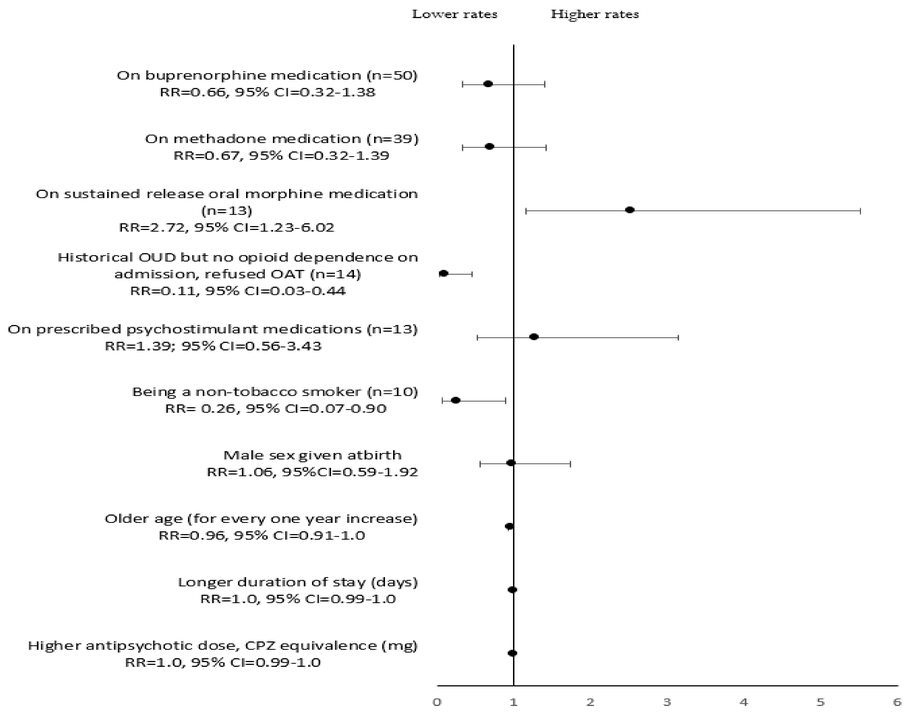


Figure 1- Rate of opioid use relapses in individuals with StUD-OUD and SMI comorbidity

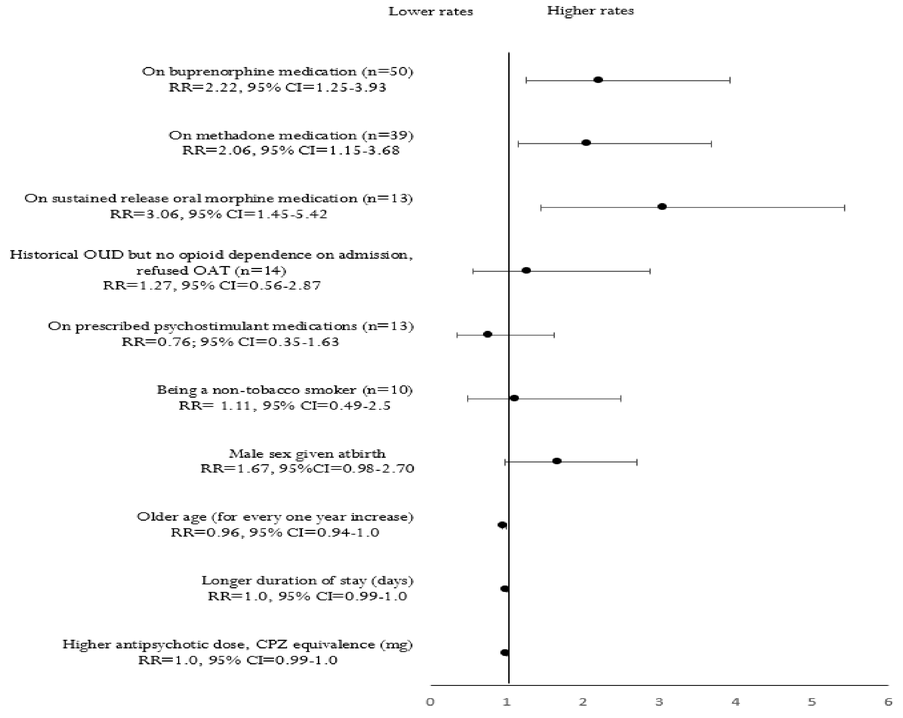
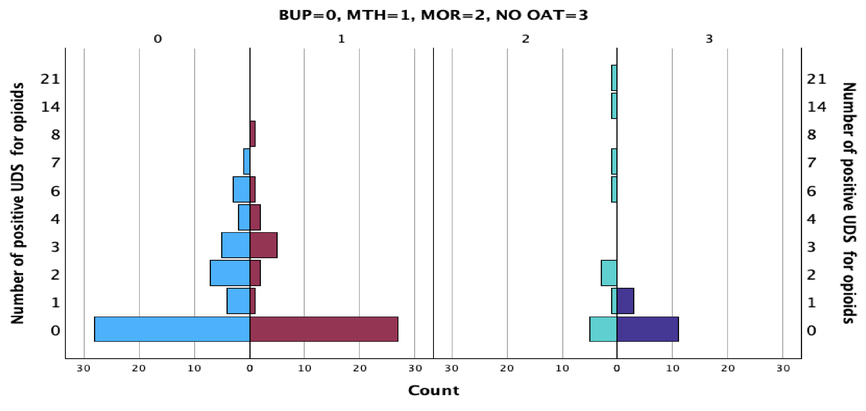
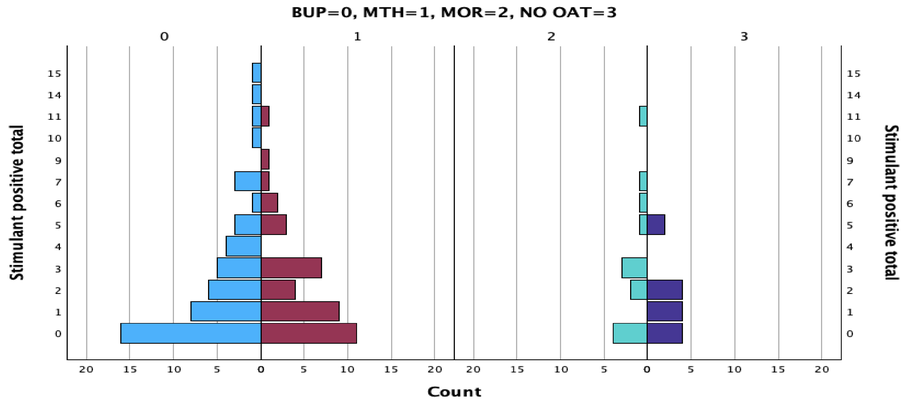


Figure 2- Rate of stimulant use relapses in individuals with StUD-OUD and SMI comorbidity





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