



Retention of opioid agonist treatment prescribers

Implications for treatment systems and potential impact on client outcomes

Outcomes from the Opioid Agonist Treatment Safety Study (<https://ndarc.med.unsw.edu.au/project/opioid-agonist-treatment-and-safety-oats-study>)

Nicola R Jones¹, Suzanne Nielsen², Michael Farrell¹, Robert Ali³, Anthony Gill⁴, Sarah Larney^{1,5}, Louisa Degenhardt¹

Introduction

- The Opioid Agonist Treatment (OAT) Safety Study consists of a population cohort of OAT patients (n≈45,000) treated between 2001 and 2018.
- The cohort was linked to State-wide hospitalization, emergency department, incarceration and mortality data.

Aims

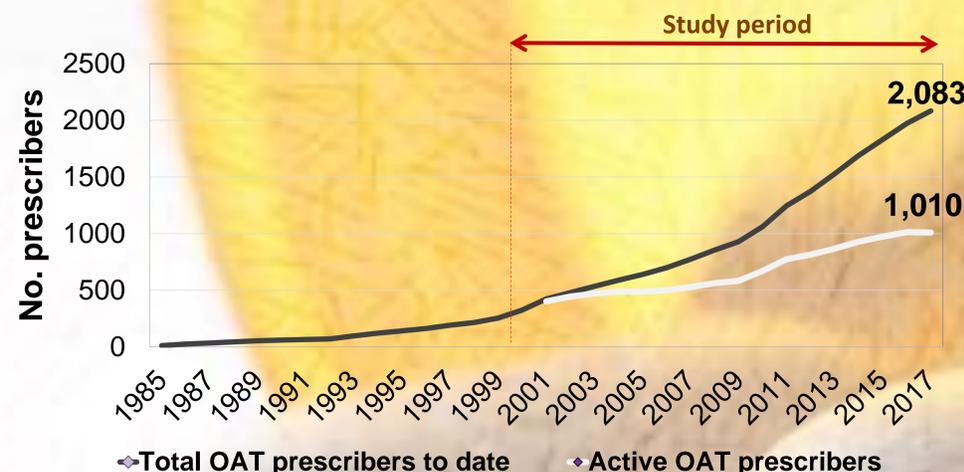
- There has been much research on the efficacy and effectiveness of opioid agonist treatment (OAT), but less on its implementation and sustainability. A challenge internationally has been recruiting and retaining prescribers. This piece of research aimed to characterise the prescribers in terms of OAT prescribing behaviours.

Methods

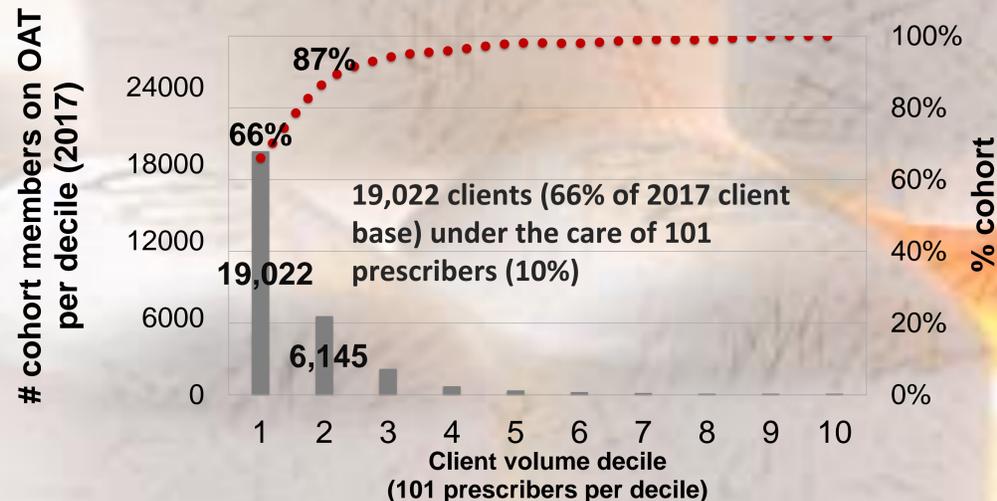
- Retrospective cohort study in New South Wales, Australia. There were **2,199** OAT prescribers between **1st August 2001-19th September 2018**.
- We examined trends in initiation and cessation of OAT prescribers. Adjusted hazard ratios were calculated to estimate prescriber retention, adjusting for year of initiation, practice type, client load and treatment prescribed.
- Using Pareto's law of the vital few (80/20 rule), assess the characteristics of the top 20% of clinicians, with respect to their annual client load, for those actively prescribing in 2017.

Results

OAT prescriber activity for people with a history of OAT 2001-2017, NSW



Pareto's principle; 2017 87% of OAT clients were cared for by the top 20% prescribers with respect to case loads



Limitations

- Reported associations are not causal.
- Clinician type and practice type dependent on submitted documentation.
- Completeness of recording of some information limited
- Potential duplication of health professionals identified
- Data collection has improved with time.

Key findings



Annual prescriber cessation rate has been steadily increasing from **3%** in 2001 to **12%** in 2017, as high as **20%** for prescribers with < 5 year history of prescribing, the risk of cessation for prescribers starting from 2016+ is more than 4 times that for those who started prior to 2001; adjusted hazard ratio for risk of cessation of **4.7; 95% CI (3.61-6.08)**.



The top 20% of prescribers of 2017 had a median history of prescribing of **17.5** years (IQR: 8-21); they prescribed both methadone and buprenorphine.

Implications

- Challenges maintaining continuity of care for clients on OAT
- Reduced accessibility of treatment

Conclusions

- OAT prescribing is concentrated in a small group of mature prescribers, and new prescribers are not being retained, which puts the system at risk.
- There is a need to identify and respond to the reasons that contribute to newer prescribers to cease prescribing and put in place strategies to increase retention and broaden the base of doctors involved in such prescribing.

Contact: Nikky Jones ✉ nicola.jones@unsw.edu.au

¹National Drug and Alcohol Research Centre, University of NSW, Sydney, Australia; ²Monash Addiction Research Centre and Eastern Health Clinical School, Monash University, Melbourne, Australia; ³School of Medicine, The University of Adelaide, Australia; ⁴NSW Ministry of Health, Level 6, 100 Christie St, St Leonards NSW 2065, Australia. ⁵Department of Family Medicine and Emergency Medicine, Université de Montréal and Centre de Recherche du Centre Hospitalier de l'Université de Montréal (CRCHUM), Canada.

Acknowledgments The authors wish to acknowledge all data custodians for providing access to the datasets used in this study: This work was supported by the National Institutes of Health (R01 DA144740 PI: Degenhardt). The National Drug and Alcohol Research Centre is supported by funding from the Australian Government Department of Health under the Drug and Alcohol Program.