

Secondary Data Analysis Project (SDAP) Award: Researcher Perspective

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Overview

- Brief overview of our SDAP award
- Select key findings
- Facilitators & Opportunities for SDAPs
- Challenges



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Rationale for SDAP application

- Misuse of prescription drugs
 - Prescription opioids
 - Benzodiazepines
 - Z-drugs
 - Gabapentinoids
 - Psychostimulants
- Most EU countries lack a systematic method for identifying & monitoring trends in their use or misuse over time



Prescription drugs with potential for misuse (2010-2020)

Supply/availability

- Prescribing in the community
- Prescribing in prison setting
- Law enforcement drug seizures data

Detection rates

- Post-mortem
- Road users
- Drug using populations

Harm

- Drug poisoning deaths
- Non-fatal intentional drug overdose
- Drug treatment demand

Open access

Protocol

BMJ Open Prescription drugs with potential for misuse: protocol for a multi-indicator analysis of supply, detection and the associated health burden in Ireland between 2010 and 2020

Gráinne Cousins ¹, Louise Durand,¹ Aoife O’Kane,¹ Julie Tierney,² Richard Maguire,³ Siobhán Stokes ⁴, Deirdre O’Reilly,⁵ Ella Arensman,⁶ Kathleen E Bennett ⁷, María Otero Vázquez,⁸ Paul Corcoran,⁶ Suzi Lyons,⁹ Yvonne Kavanagh,¹⁰ Eamon Keenan¹¹



Ethical approval

Opportunity to address an important public health concern

Drug Supply Indicators

Early Warning Systems

Epidemiological Indicators

	National Bureau of Road Safety (MBRS)	National Drug Treatment Centre Laboratory	State Laboratory (Coroner Post-Mortem Toxicology)	Forensic Science Ireland (FSI)	Health Products Regulatory Authority (HPRA)	Community Pharmacy Dispensing Records (PCRS)	Prison Dispensing records (IPS)	National Drugs and Alcohol Surveys	National Drug Related Death Index (NDRDI)	National Self-Harm Registry Ireland (NSHRI)	National Drug Treatment Reporting System (NDTRS)
Drug supply				✓	✓	✓	✓				
Detection rates and patterns of use	✓	✓	✓					✓			
Health Burden									✓	✓	✓

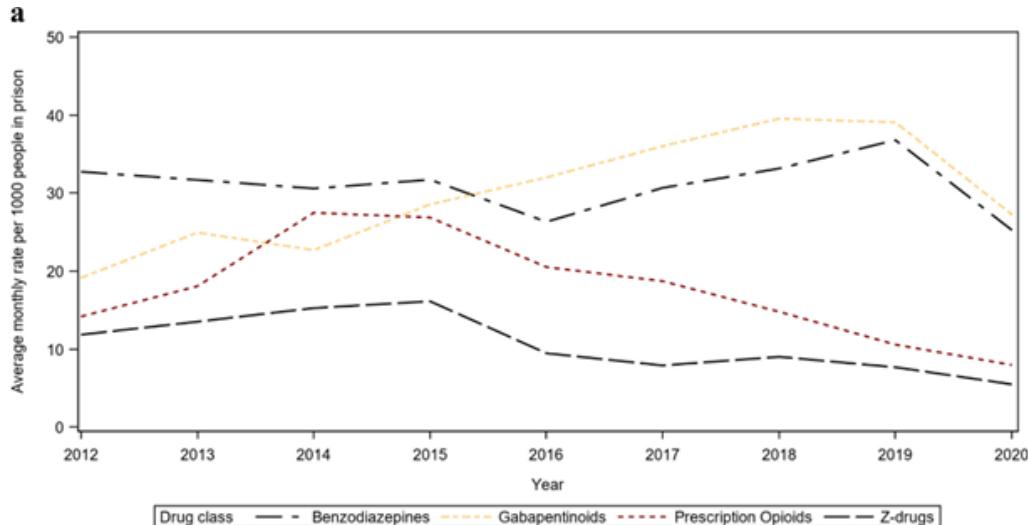
RESEARCH

Open Access



Prescription drugs with potential for misuse in Irish prisons: analysis of national prison prescribing trends, by gender and history of opioid use disorder, 2012 to 2020

Louise Durand^{1*}, Eamon Keenan², Deirdre O'Reilly³, Kathleen Bennett⁴, Andy O'Hara⁵ and Gráinne Cousins¹



Although women represent less than 5% of prison population they had a higher burden of OUD;

- 597 per 1,000 women

v's

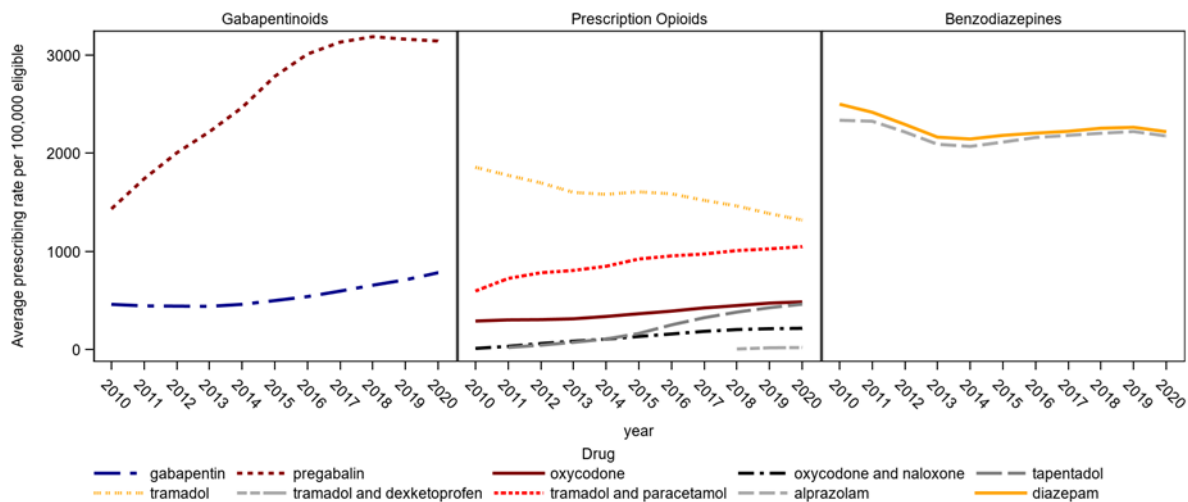
- 161 per 1,000 men



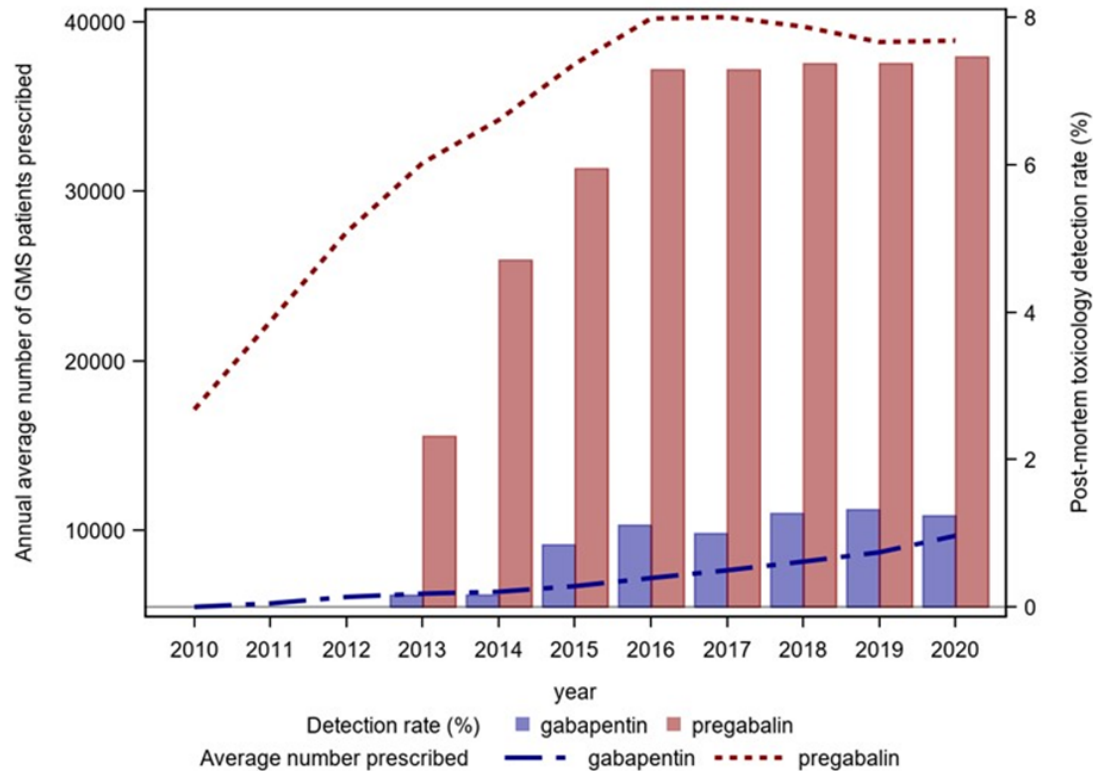
Problematic opioid use in Ireland, 2015–2019

- Opioid Use Disorder in prison
- Problem opioid use in community
 - 597 per 1,000 women in prison
 - 3.67 per 1,000 female population problem opioid users
 - 161 per 1,000 men in prison
 - 9.76 per 1,000 male population problem opioid users

Increase in pregabalin prescribing in the community



Increase in detection rate for pregabalin post-mortem



Facilitators

- Desire to optimise health and social care data for secondary purposes
 - Increased funding calls
 - Identified by European Commission /DoH as research priority
 - Strengthen national drug monitoring capacity
- Knowledge User as co-applicant
 - Interested in the research area = time to meet/discuss/ review
 - Familiar with current policy
 - Ability to effect policy change (nationally & internationally)
 - Supports PPI

Facilitators

- Public Patient Involvement (PPI) co-applicant
- Engaged Data Controllers
 - Key stakeholders in the project
- Large nationally representative & complete datasets
- Routine datasets – allow for analysis of trends over time



Challenges

- Identify data sources early (Culture of caution)
 - Data controllers
 - Find a champion (may be someone else – most likely someone who regularly uses software/reporting system)
- Opening Pandora's box
 - Exactly what data is recorded electronically (and why!)
 - Can it be extracted easily (or found!)
 - Changes over time are inevitable (and can introduce bias)
 - Data dictionaries not always available
 - Consistencies across datasets (e.g. gender, age etc.)
 - Surprises are inevitable
- Data sharing agreements – signed, before you get funded



Challenges

- Administrative data, produced by services as a by product of their day-to-day operations
 - Data wasn't collected for research purposes
 - Delays in accessing data (competing demands; need to anonymise data)
 - Definition of exposures and follow-up periods determined by the availability and quality of datasets, which vary over time
 - Anonymised data (aggregate or individual level)
- Multi-disciplinary team
 - Biostatistician often needed, but hard to find
 - Capacity development



Greatest threat.....over reliance on ecological analyses

- GDPR & health research regulations
 - anonymised aggregate level data
 - anonymised individual level data
- Infrastructure needed to support data linkage
 - Unique health identifier
 - FAIR Administrative data
 - Record linkage across different sectors: social and structural determinants of health
 - Anonymised + controlled access e.g. Third party data processor/Safe Haven



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