



# Systematic review of untreated remission from alcohol problems: Estimation lies in the eye of the beholder



Richard Mellor, PhD student

Drug Policy Modelling Program (DPMP)

University of New South Wales, Australia



# Outline of presentation

1. **Why study untreated remission from alcohol problems?**
2. **Treatment planning**
3. **Systematic review of untreated remission from alcohol problems literature**
  - Research questions
  - Method
  - Results
  - Implications for treatment planning

# Why study untreated remission from alcohol problems?

## Expand our understanding of recovery

- More than hitting rock bottom?
- Recovery can be gradual (not just sudden) and abstinence is not always displayed (Kelly, Greene, & Bergman, 2018)

## Mechanisms of change can inform public health and treatment approaches

- People change multiple life circumstances (developing new relationships, and pursuing new hobbies and activities) (Klingemann, 2012)
- Treatment should support these life changes

## Treatment service planning

- Rates of untreated remission from alcohol problems

# Treatment planning

## What is the overall aim of treatment planning?

- Determine the type and number of treatment places that would be required in a given population

## Estimating the size of the population requiring treatment

- Levels of required treatment services  $\neq$  numbers of people currently seeking treatment
- Levels of required treatment services  $\neq$  numbers of people with an alcohol use disorder
- Need to know how many people resolve their alcohol problem without treatment, in order to take these people out of the planning equation

# Aims of the study

Lack of information available on rates of untreated remission from alcohol problems

## Systematic review

1. What are the estimates of untreated remission from alcohol problems?
2. How are estimates of untreated remission from alcohol problems shaped by different definitions and study designs?
3. What are the implications for treatment planning?

# Method: systematic review search strategy

## PRISMA electronic database search

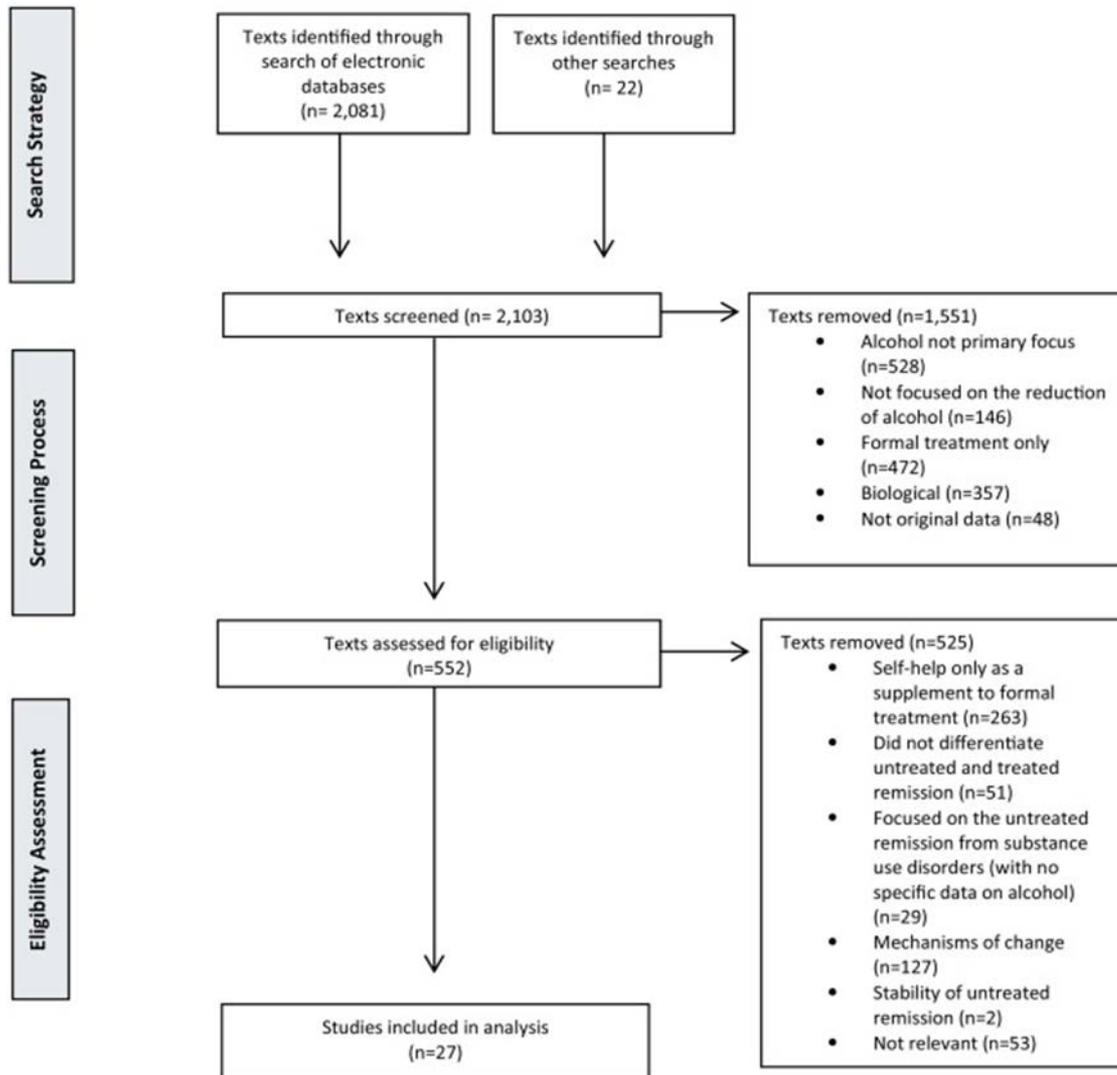
- 2,081 texts from electronic database (Medline, PsycINFO, and EMBASE)
- **alcohol use disorders** (e.g., *'alcohol-related disorders', alcohol AND dependence, abuse, use-disorder, addiction, behaviour, intoxication, consumption, problem, harmful, at-risk, heavy*)
- **AND untreated remission** (e.g. *spontaneous remission, untreated remission, natural recovery, maturation hypothesis*)

## Other searchers

- 22 texts from reference harvesting, Google scholar, CORK bibliography

Limits: humans, written in English, published after 1975

# Method: screening process and eligibility assessment



## Screening process

- 1,551 removed

## Eligibility assessment

- No restrictions placed on definitions, measures, and designs of the screened studies
- 27 studies provided numeric estimates of untreated remission from alcohol problems

## Analysis

- Narrative synthesis

# Results

## **27 studies included in the review**

- 24 studies (89%) conducted in North America
- 12 studies (44%) longitudinal studies
- 20 studies (74%) used convenience sampling

## **Estimates of untreated remission from alcohol problems**

- 124 estimates taken from 27 studies
- Ranged enormously from 2.7% to 98.3%

## **Two central features of the literature**

- Methodological variation (in starting sample)
- Definitional variation (definitions of an alcohol problem, remission, and treatment)

# Methodological variation

## Method 1 ('alcohol problem sample') (37 estimates from 11 studies )

- Start with a sample of **people with alcohol problems** and estimate what proportion remit without treatment

## Method 2 ('untreated sample') (36 estimates from 16 studies)

- Start with a sample of **untreated people with alcohol problems** and estimate what proportion successfully remit

## Method 3 ('remitted sample') (51 estimates from 19 studies)

- Start with a sample of **people already in remission from alcohol problems** and estimate what proportion have not received treatment

# Methodological variation

## Impact of method on estimates of untreated remission from alcohol problems (n = 9 studies)

- Method 1 ('alcohol problem sample'): mean = 22% (3% - 64%)
- Method 2 ('untreated sample'): mean = 41% (7% - 78%)
- Method 3 ('remitted sample'): mean = 43% (4% - 94%)

# Definitional variation

## Definition of an alcohol problem

- Consumption – Diagnosis

## Definition of remission

- Absence of diagnosis – Abstinence
- Moderation

## Definition of treatment

- Formal alcohol treatment and self-help groups (Alcoholics Anonymous)
- Mental health treatment and primary care (few studies)

# Definitional variation

## Definition of an alcohol problem

- Lenient definitions ———→ Higher estimates
- Cunningham (1999): one alcohol-related consequence (88%) six or more consequences (54%)

## Definition of remission

- Lenient definitions ———→ Higher estimates
- Dawson et al. (2005): abstinence (12%) absence of diagnosis (73%)

## Definition of treatment

- Inclusive definitions ———→ Lower estimates
- Tuithof et al. (2016): specialised alcohol and drug treatment (64%) plus mental health treatment (43%)

# Implications for treatment planning

## Methodological variation

- Method 3 ('remitted sample') not useful (~~starting sample is people already in remission from alcohol problems and therefore not in demand of treatment~~)
- Method 1 ('alcohol problem sample') best used when the aim is to estimate the total number of people who will need treatment in a given year
- Method 2 ('untreated sample') best used when estimating how many *additional* treatment places are required for people not receiving treatment

## Definitional variation

- Definition of an alcohol problem: rates of untreated remission are going to be lower for more severe levels (or tiers) of problem severity
- Definition of remission: goals of the treatment plan?
- Definition of treatment: the role of digital support services and mental health services?

# Thanks!!!

Journal of Substance Abuse Treatment 102 (2019) 60–72



ELSEVIER

Contents lists available at [ScienceDirect](#)

## Journal of Substance Abuse Treatment

journal homepage: [www.elsevier.com/locate/jsat](http://www.elsevier.com/locate/jsat)



## Systematic review of untreated remission from alcohol problems: Estimation lies in the eye of the beholder

Richard Mellor<sup>a,\*</sup>, Kari Lancaster<sup>b</sup>, Alison Ritter<sup>c</sup>

<sup>a</sup> Drug Policy Modelling Program, National Drug and Alcohol Research Centre, University of New South Wales, Sydney, Australia

<sup>b</sup> Centre for Social Research in Health, University of New South Wales, Sydney, Australia

<sup>c</sup> Drug Policy Modelling Program, Social Policy Research Centre, University of New South Wales, Sydney, Australia

