

# Overview of Gambling Disorder

*RCPsych, 2025*

Prof. Sam Chamberlain MB/BChir PhD MRCPsych

## *Disclosures*

I do not accept any voluntary funds from the gambling or gaming industries

My research is funded by the NHS / NIHR

I receive a fee for editing an academic journal from Elsevier Publishing



Casino Royale, 1967 © Columbia Pictures

- Some people are able to gamble without significant negative consequences
- But a sizable proportion of people develop 'gambling disorder' (also known as pathological gambling, or gambling addiction)
- Officially recognised mental health condition
- Often overlooked and under-treated



# What is gambling disorder? ICD-11

Part of 'disorders due to addictive behaviors', code 6C50

- Persistent/recurrent gambling (normally over a period of at least 12 months), associated with:

- *Impaired control*
- *Increasing priority given to gambling over other activities*
- *Continuation/escalation despite negative consequences*

*Leading to impairment*



- 2-item Brief Problem Gambling Screen (BPGS)

Volberg & Williams, 2011

In the past 12 months:

1. Would you say you have been preoccupied with gambling?
2. Have you gambled longer, with more money or more frequently than you intended to?

# The broader issue of gambling-related harms

Gambling Disorder

'At-Risk' / harmful gambling

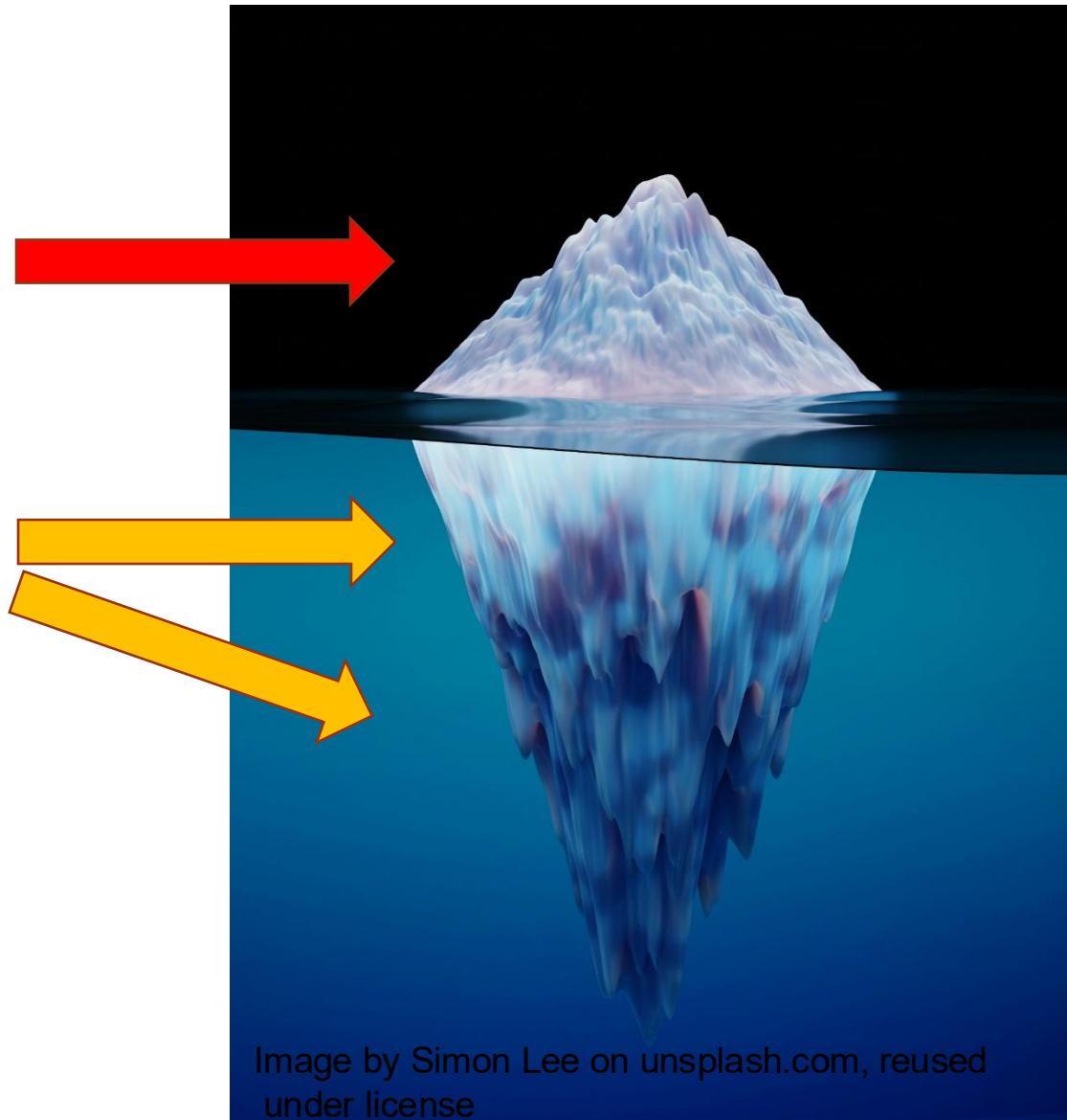


Image by Simon Lee on unsplash.com, reused under license

# Rates of gambling disorder across different types of gambling

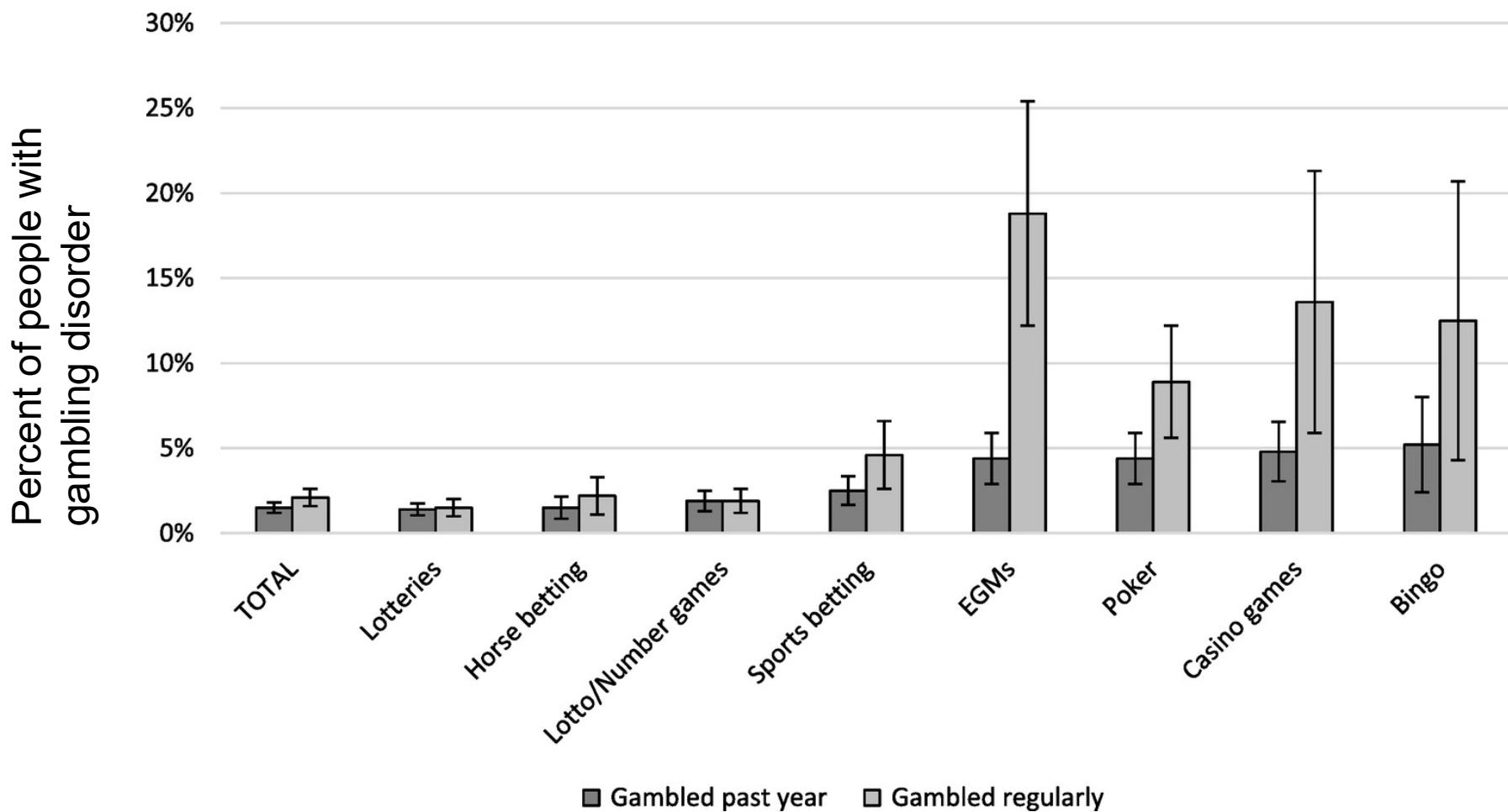


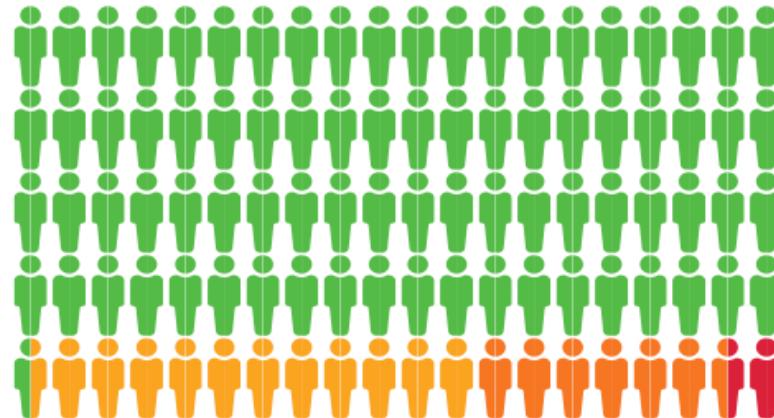
Figure from: Binde et al., International Gambling Studies, 2017. Copyright the authors.  
Reshown under Creative Commons License. EGMS = electronic gambling/gaming machines

# Gambling Disorder in the UK

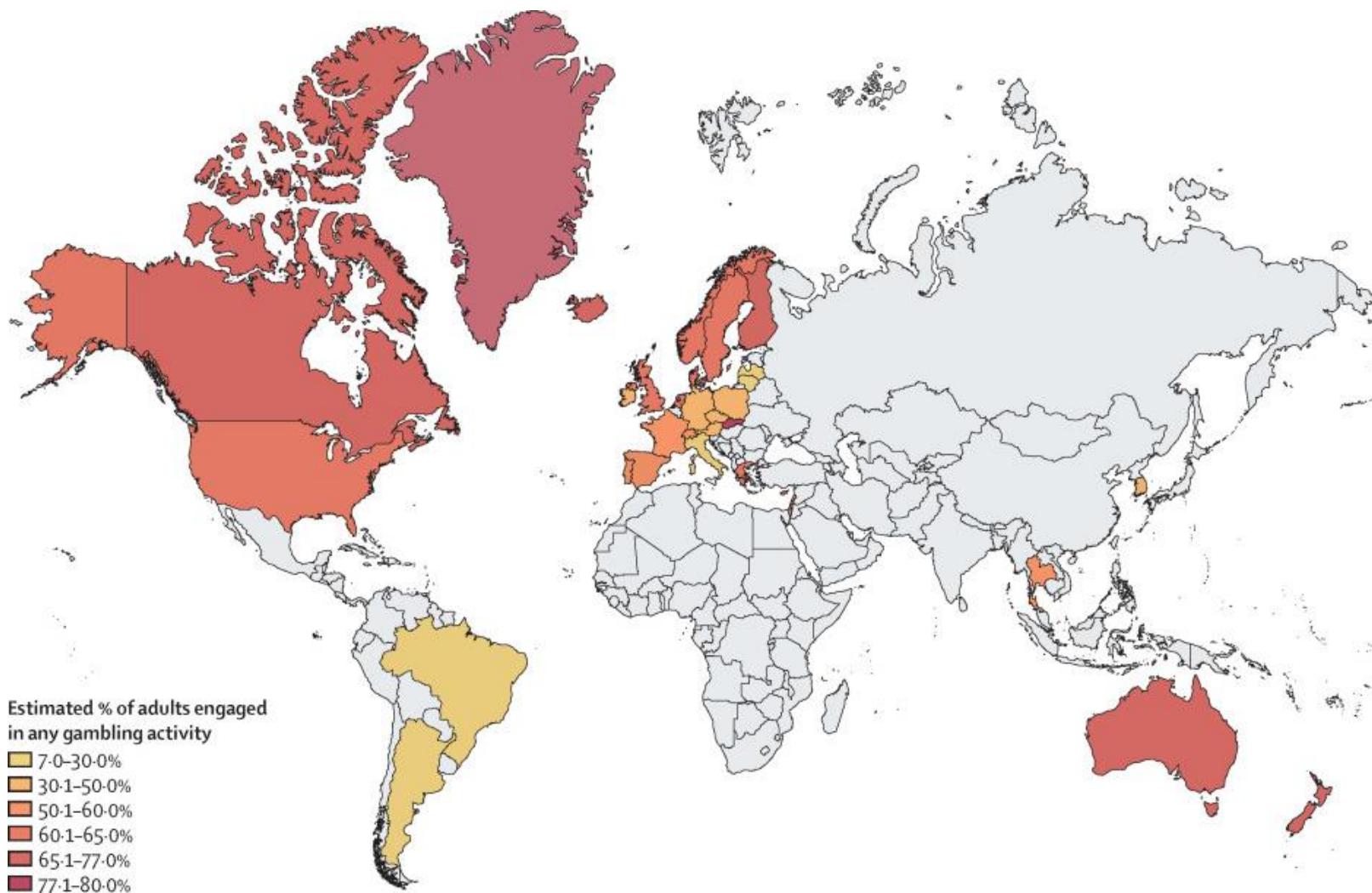
If Great Britain were 100 people: general population



If Great Britain were 16-24 year old gamblers



# Gambling in different countries



# Common comorbidities in Gambling Disorder

- *Systematic Review and Meta-analysis in treatment-seeking patients (Dowling et al., Aust N Z J Psych, 2015)*
- *75% of patients had one or more comorbidities*
  - *Nicotine dependence (56%)*
  - *Depression (30%)*
  - *Alcohol abuse (18%) and dependence (15%)*
  - *Social phobia (15%), Generalised Anxiety Disorder (15%), panic disorder (14%)*
  - *ADHD (9%)*
  - *Bipolar (9%)*
  - *OCD (8%)*
- *Also overlap with Problematic Usage of the Internet – 18% of gamblers had notable PUI (Chamberlain et al., CNS Specs, 2017)*

# Profound consequences of gambling disorder



Source: Corfe et al., Social Market Foundation, 2021; and adaptation (2016) of data from the Australian Productivity Commission on (1999). See also: Potenza et al., Nature Reviews, 2019. Potenza et al., Nature Reviews, 2019; Bowden-Jones, BMJ, 2017; Chamberlain et al., Addict Behav, 2017; Dowling et al., Aust N Z J Psych, 2015.

# *Factors that can influence gambling-related harms*

## **Societal and commercial**

Policy and regulatory climates and associated corporate norms and practices; for example, ineffective regulation, certain product characteristics, advertising environments or gambling availability

## **Community**

Characteristics of local areas and cultures in local spaces or broader social groups, like schools and workplaces; for example, access and availability of gambling locally, poor social or cultural capital, or greater deprivation

## **Families and social networks**

Factors in an individual's closest relationships, such as family, partners, and peers; for example, cultures of gambling in family or peer groups or poor social support

## **Individual**

Individual characteristics, life events, personal history, and cognitive characteristics; for example, negative motivations for gambling, early gambling experiences, engagement in other risk behaviours

*From: Wardle & Rogers, British Medical Journal, 2019.*

Be aware! Certain medications can trigger gambling disorder (and other impulsive/compulsive problems)

Main culprits:

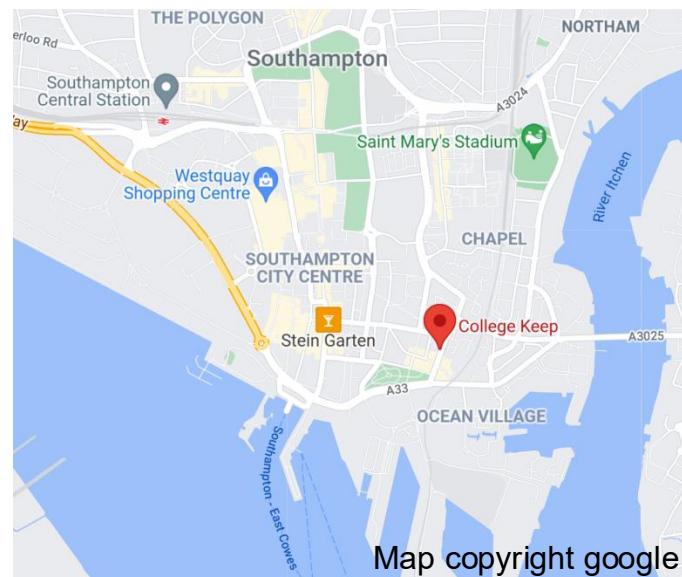
Dopamine agonists (especially such as pramipexole and ropinirole)

Aripiprazole (D2/D3 partial agonist)

See e.g. Seeman, Synapse, 2015; Wolfschlag et al., Pharm Medicine, 2023

# NHS Southern Gambling Service

- New treatment service, opened in Sept 2022
- Regional service led by **Hampshire and Isle of Wight Healthcare NHS Foundation Trust**
- Collaboration with **University of Southampton**



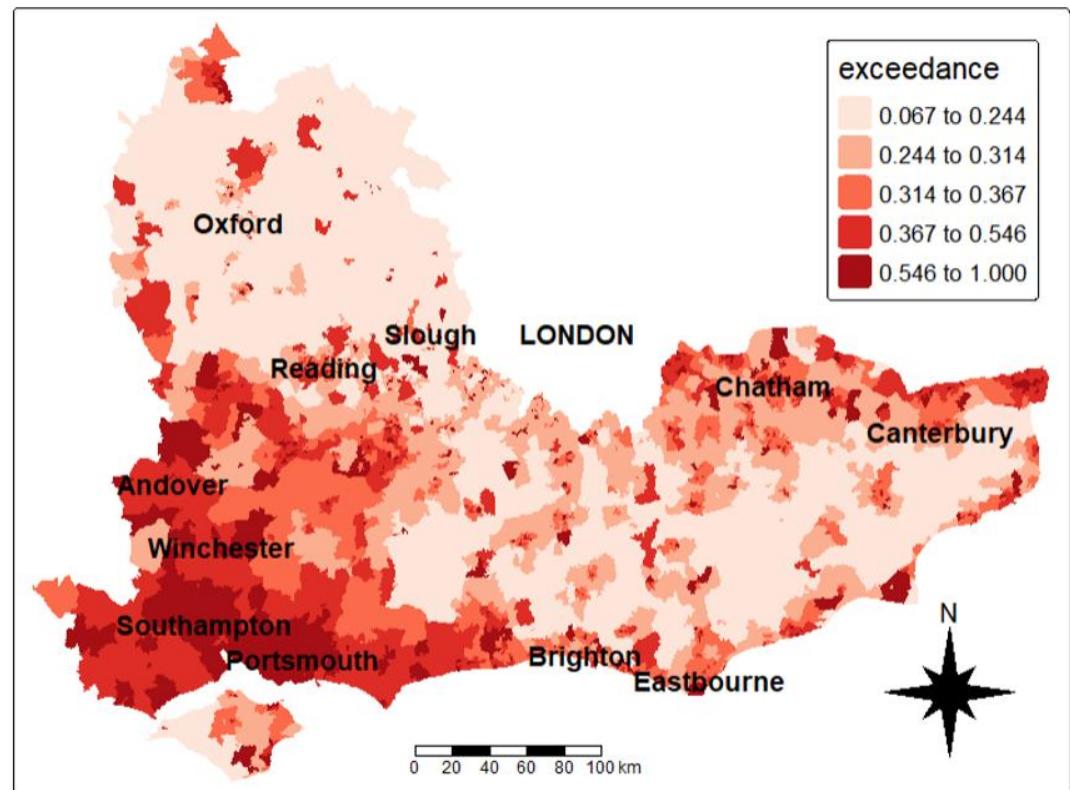


# Gambling venues and their association with incidence of help-seeking gambling disorder (Ioannidis et al., BJPsych Open 2025; in submission) (n=800 self referrals)

Map shows areas of excess risk of gambling disorder referrals

(deeper red = higher risk; note heightened risk in deprived coastal areas e.g. Medway, Southampton, Portsmouth)

- Significant association between presence of gambling venues, shorter drive to nearest venue, and higher rates of gambling disorder referral



# TREATMENT APPROACHES FOR GAMBLING DISORDER

- Evidence-based treatments
  - Psychotherapy
  - Medication
- Identify other needs and signpost



# EVIDENCE-BASED PSYCHOLOGICAL TREATMENTS

---

- Generally CBT-based approaches are supported (Bowden Jones et al., RCPsych & BMJ, 2017; Hodgins, Stea, Grant, Lancet 2011)
- Motivational interviewing associated with reduced gambling frequency up to 1y after treatment in meta-analysis ( $\geq 5$  RCTs) (Yakovenko et al., Addict Behav, 2015)
- Imaginal desensitization effective vs control (Grant et al., BJPsych, 2018); benefits maintained at 1y
- Evidence for brief interventions – including benefits at 1y follow-up (e.g. Diskin & Hodkins, Behav Res Ther, 2009); benefits also found at 1y in studies of 'high expenditure gamblers' (Jonsson et al., Addiction, 2020)



# EVIDENCE-BASED PHARMACOLOGICAL TREATMENTS

---

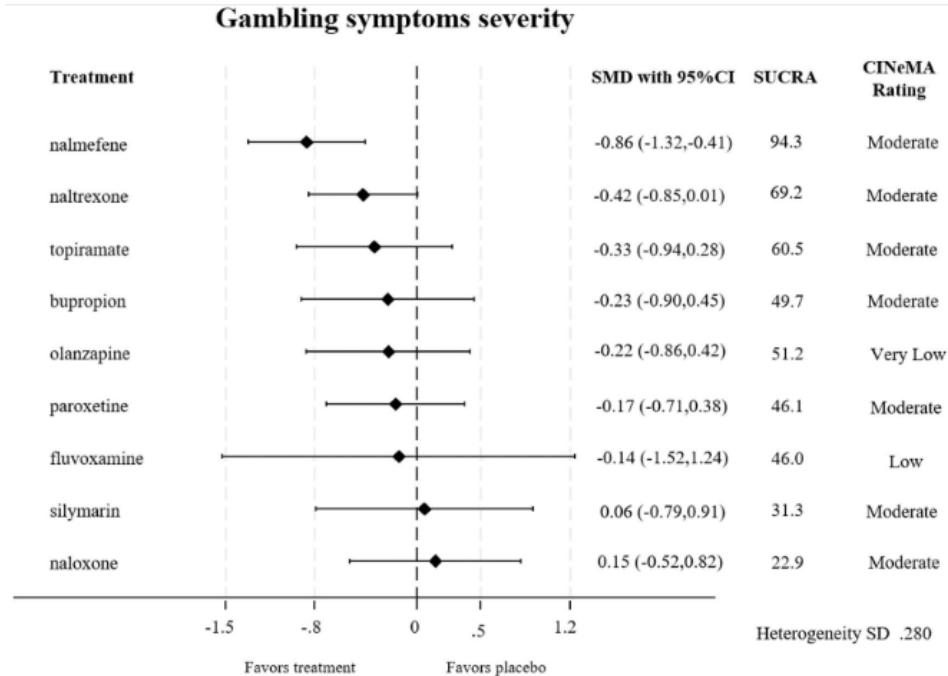
- Medications are used 'off label' (see RCPsych/BAP guidance) – as with the treatment of many psychiatric conditions
- Naltrexone and nalmefene currently have the best evidence from double-blind randomised placebo-controlled clinical trials





## Pharmacological management of gambling disorder: A systematic review and network meta-analysis

Konstantinos Ioannidis <sup>a b</sup>   , Cinzia Del Giovane <sup>c</sup> , Charidimos Tzagarakis <sup>d</sup> ,  
Jeremy E. Solly <sup>b e</sup> , Samuel J. Westwood <sup>f 1</sup> , Valeria Parlatini <sup>g k l m 1</sup> , Henrietta  
Bowden-Jones <sup>h</sup> , Jon E. Grant <sup>i</sup> , Samuele Cortese <sup>j n o p q</sup> , Samuel R. Chamberlain <sup>a</sup>



## Placebo and nocebo effects in gambling disorder pharmacological trials: a meta-analysis

Published online by Cambridge University Press: 20 November 2024

Konstantinos Ioannidis  , Nathan T.M. Huneke  , Jeremy E. Solly  ,  
Guilherme Fusetto Veronesi  , Charidimos Tzagarakis  , Valeria Parlatini  ,  
Samuel J. Westwood  , Cinzia Del Giovane  , David S. Baldwin  , Jon E. Grant  ,  
Samuele Cortese  and Samuel R. Chamberlain

Show author det

# CONCLUSIONS

- **Gambling disorder is common but often overlooked and under-treated**
- **Leads to many negative consequences including high rates of comorbidities**
- **Complex causal pathways**
- **Evidence-based psychological and pharmacological options exist**
- **Research urgently needed in priority topic areas**