Mental Health and Substance Use Disorders in Gambling Disorder: What does it mean for treatment?

> David Hodgins New Horizons Vancouver, March 2019

#### Disclosures



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#### Comorbidity

- Presence of mental health or substance use disorder, either concurrently or sequentially
- Concurrent Disorders
- Dual Diagnosis
- Multiple comorbidity
- Community versus treatment samples

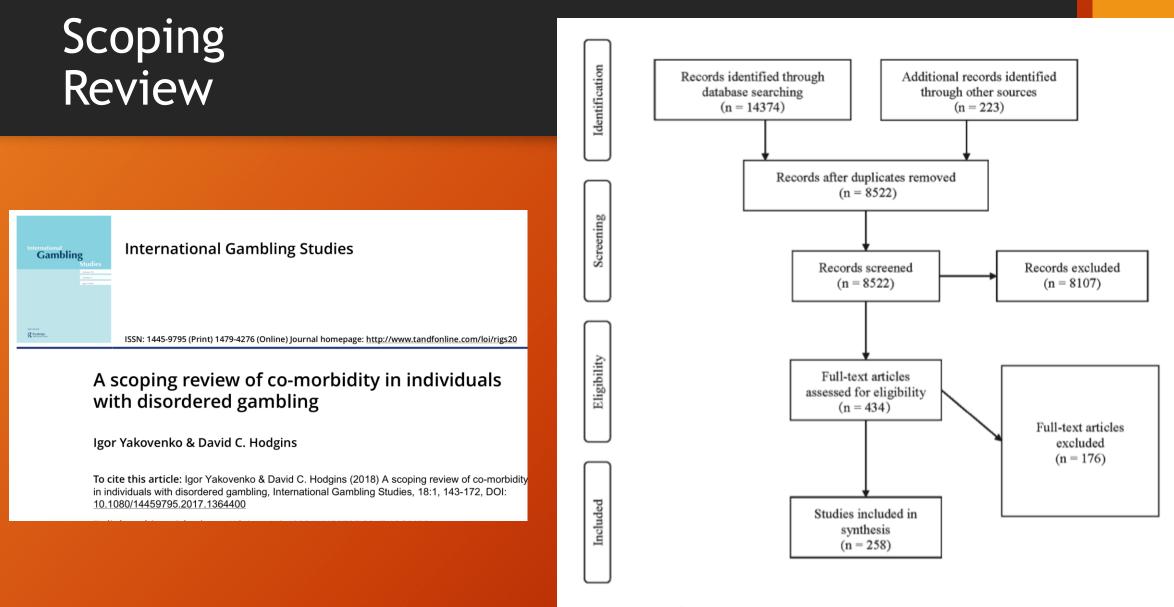
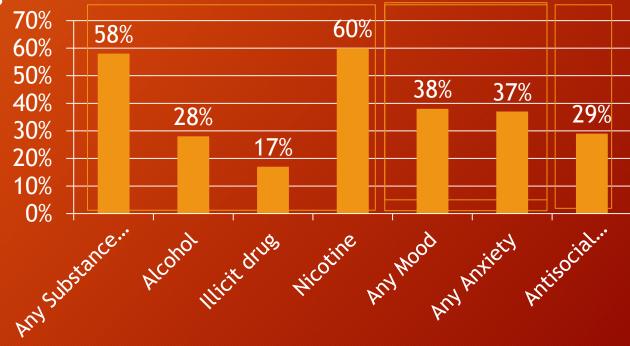


Figure 1. PRISMA flow diagram.

## Comorbidity is common in community samples of problem gamblers

- Lorains et al, 2011 Meta analysis
- 11 studies
  - 6 United States
  - 2 Canada
  - 2 Switzerland
  - 1 Korea
- Results quite variable

#### **Comorbidity Rate Among PGs**



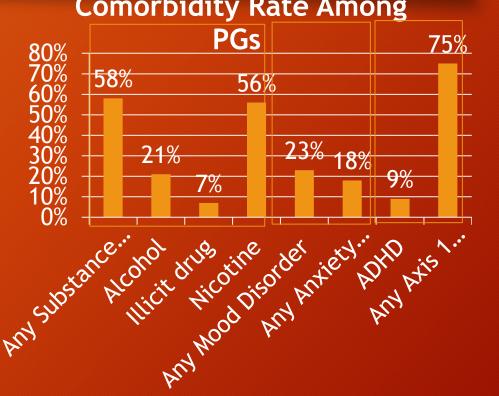
# Comorbidity and multiple comorbidity is the rule, not the exception



The data presented show rates of co-occurring disorders in the -1% of adult Americans who have gambling disorder. The data comes from the landmark mental health study, the National Comorbidity Survey Replication, conducted by Harvard Medical School and funded by the National Institutes of Mental Health.

#### Comorbidity is common in treatment samples

- Dowling at al. 2015 Meta analysis
- 36 studies
  - range from 4 to 26 studies per disorder
- Not consistently higher than community samples



#### **Comorbidity Rate Among**

#### Does comorbidity matter?

- Clinical picture: Related to more severe gambling problems, other psychosocial problems, impulsivity
- Assumption: Rockier recovery, more dropout, poorer gambling treatment outcomes

#### Case Study - Chris

- Age 25
- Self-employed sales
- Internet poker gambling
- Major debts
- Phase of life issues anxiety, depression
- Alcohol problem
- "escape gambler"
- Cognitive errors "gambling is a solution" belief

- Plus many cognitive justifications
  - I will only play a few hands
  - I will limit myself to \$30.
- Treatment Process Seven sessions
  - Motivational enhancement "incompatibility with self-image"
  - Monitoring Success and Failures
    - New activities, avoiding cues to gamble
  - Functional Analyses

#### Cognitive analysis and restructuring

```
Discussion with Dad about money – 11am
Few Drinks at lunch
I'll only play $30. – maybe I'll win
enough to make a payment
5 hours of play- $400.
```

#### Outcome

- Success?
- Quit gambling
- Still drinking heavily, but not more and not linked to gambling situations
- Longer term follow-up?

#### The data

- Treatment effectiveness overall
  - Consistently positive and growing evidence-base
    - Cognitive-behavioural treatments
    - Motivational Interviewing
    - Brief Treatment
    - Online Treatments
    - Naltrexone (not approved)
  - Impact of comorbidity on these outcomes?
    - Little studied
    - Recommendation #1

## Does having a comorbid disorder or two affect how well you do in treatment?

- Dowling 2016 review
  - 21 treatment studies that looked at one or more comorbid disorders
- Mood of 12 treatments, only 2 shows a negative effect
- Alcohol Use Disorder of 11 studies only 3 showed negative impact
- Anxiety Disorder of 12 studies only 1 showed a negative impact.
- Personality Disorders 1 study, no effect

#### Interpretations

- Very meager data base
- One plausible interpretation is that people make sensible decisions about where to present for treatment - people choosing gambling treatment are managing the other issues reasonably well
- Need to study impact of gambling disorder on mental health and SUD treatment
- Gambling Disorder rates are high in these patient groups.
  - Cowlishaw et al. 2014 meta analyses- 25 studies of substance treatment samples
    - Gambling Disorder- 14%, Problem gambling 23%

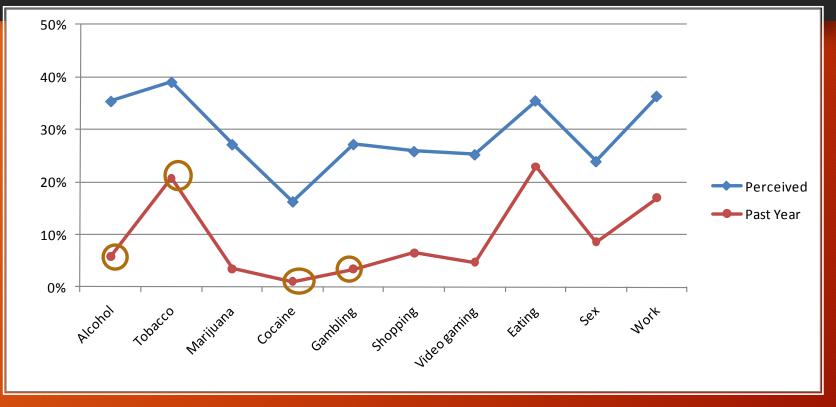
#### Implications

- Clinicians (and researchers) tend to overlook issues/ disorders that are not the focus of their treatment programs
  - Education
  - Routine screening/structured assessment
    - Brief Screener for Behavioural Addictions (BSBA), PROMIS
  - Assessing Brief Intervention Efficacy
- Need to better understand patterns of co-occurrence to know where to put resources

## Understanding patterns of co-occurrence (example from addictions)

• Where will gambling problems show up in numbers large enough to screen?

#### Problem Prevalence and Perceived Problem Prevalence in Alberta (N = 6000)



Konkolÿ Thege, B., Colman, I., el-Guebaly, N., Hodgins, D., Patten, S., Schopflocher, D., Wolfe, J., & Wild, T.C. (2015). Substance-related and behavioural addiction problems: Two surveys of Canadian adults. *Addiction Research and Theory*, 23(1), 34-42.

### What about comorbidity?

• Past Year problems? Two or more 21% None 49%



### What about comorbidity?

Past Year Problems (N = 2728)- 7 problem clusters



### Conclusions

- Half the respondents had a problem (half did not)
- Mix of "pure disorders" and mixed-addiction
  - Eating, Work, Smoking can be pure disorders
  - Sex, video and shopping tend to have other problems
  - Substances tend to have most other problems
  - Gambling is comorbid
    - M = 3.4 problems (SD = 2)
- Behavioural and substance problems may group differently than we expect, which may have implications for organizing treatment

#### Possible Etiological Models

- Gambling as an escape people with mental health disorders attempt to self-medicate the dysphoria
- Substance use disorder may trigger gambling disorder via neuroadaptation in brain reward circuits that lead to other disorders (precipitation model)
- Gambling arousal and distress cause mental health symptoms such as anxiety and depression (secondary disorder model)
- An underlying factor causes both disorders (third factor model)
  - Impulsivity, reward deficiency syndrome, emotional dysregulation deficit
- Addiction Syndrome Models (e.g., Shaffer)

#### Subtypes of Gambling Disorder



#### Subtypes of Gambling Disorder



#### Scoping Summary & Conclusions

- Most of the research to date has focused on prevalence of comorbidity of gambling and other disorders in community samples and in gambling and substance treatment clients
- Comorbidity is linked to more complicated problems
- No clear evidence that gambling treatment is ineffective with comorbidity

#### Scoping Summary & Conclusions

- Screening for comorbidity in gambling treatment is important but perhaps more important is screening in mental health and substance treatments
- How to intervene in efficient and effective ways is unclear
- Need to document and evaluate the "no wrong door" approaches

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#### policy paper

#### Addressing the Needs of Problem Gamblers With Co-Morbid Issues: Policy and Service Delivery Approaches

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