



# DSM V: PATHOLOGICAL GAMBLING AS AN ADDICTION?

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# CLINICAL PERSPECTIVE

- I am an addictions psychiatrist, it is with this perspective that I talk to you today.
- Having been referred over 600 pathological gamblers for treatment at the National Problem Gambling Clinic, I am more convinced than ever of common underlying neuronal pathways between my drug and alcohol patients on one ward and the PG patients at the clinic.



# QUESTIONS FOR LATER DISCUSSION

- Should Pathological gambling be considered within the same classification system as substance use disorders?
- Should PG and addictions share a common framework?
- If so, what will the implications for the provision of treatment be?



# LIST OF ARGUMENTS FOR RECLASSIFICATION

- HISTORICAL:
- As you will see from the next few slides, the currently used diagnostic criteria for PG were based on the Psychoactive substance dependence criteria in DSM.



# PATHOLOGICAL GAMBLING

- PG was added to the Diagnostic and Statistical Manual of Mental Disorders (**DSMIII**) in 1980 under ‘Disorder of Impulse Control, not Elsewhere Classified’.
- The criteria differed then in number (6) and included a mandatory criterion ‘Chronically unable to resist gambling impulses’.

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## DSM III

- Associated features were ‘these individuals are most often overconfident, somewhat abrasive, very energetic and big spenders’
- ‘Not able to account for money’ (extensive monetary losses or gains) was another criterion later removed.





# DSM III-R

- ‘Chronic inability to resist gambling impulses’ criterion was removed.
- Requirement to fulfill at least 4 of 9 criteria.
  - Emphasis on money was reduced and the impact of gambling on psychosocial functioning was emphasized.
  - Many of these criteria were similar to those for Psychoactive Substance dependence.
  - The only unique criterion to PG was chasing losses.





# DSM IV

- Current edition (DSM IV) continues to classify PG under ‘Impulse Control Disorder Not Elsewhere Classified’
- In the same category are trichotillomania and pyromania
- Note that 5 out of the 7 substance misuse dependence criteria continue to be present in PG in this edition, however, another 5 do not have a direct link



# DSM IV

- The ones unique to PG in DSM IV are:
- Escaping negative moods
- Chasing losses
- Lying to others
- Committing illegal acts to fund habit
- Relying on others for bailouts
- **BUT...All of above apart from chasing losses are present in my substance misuse patients!!!**



# DSM IV

- Could it be that those unique criteria would apply just as well to other addictions?
- If so, this leaves almost no single way of focussing on PG for its individual traits, therefore making it a logical step to classify it with other addictions.
- Will this demistify it as a diagnosis for addiction colleagues?



# DISORDERED GAMBLING

- The working group has suggested renaming pathological gambling and calling it 'DISORDERED GAMBLING'.
- It will be with this new name that it will appear in DSM V if plans go ahead.



# Disordered Gambling

- The DSM work group has proposed the reclassification of DG:


to the newly named category of **Addiction and Related Disorders**. (In DSM IV: Substance-Related disorders)

Disordered Gambling will be the **only** behavioral addiction in this category.



## **DISORDERED GAMBLING ( as it will appear in DSM V...)**

- A) A persistent and recurrent maladaptive gambling behaviour as indicated by 5 or more of the following:
- Preoccupation with gambling
- Need to gamble increasing amounts of money
- Repeated unsuccessful efforts to control gambling
- Restless or irritable when attempting to cut down

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- Gambles as a way of escaping from problems or relieving a dysphoric mood
  - Chases losses
  - Lies to family members and professionals about extent of gambling
  - Jeopardized or lost a significant relationship, job or educational opportunity because of gambling.





# DSM V

- Financial bailout by family and friends
- B) the gambling behaviour is not better accounted for by a Manic Episode.



# WHY THIS DECISION?

- There are commonalities between PG and substance use disorders:
- Clinical presentation
- Etiology
- Comorbidity
- Neurobiology



# CLINICAL

- PG has high comorbidity rates with substance misuse disorders. (Petry et al 2005)
- 70% of PGs had alcohol use disorder
- 30% of PGs had substance use disorder
- Other studies show 50% rates of substance misuse. Black & Moyer 1998
- In my clinical work in the UK our rates do not appear to be as high although certainly significant in prevalence. NB Bidirectionality.



# CLINICAL

- Another common clinical characteristic in PG and substance misuse is high rates in young people with lower prevalence in adulthood .



# comorbidity

- High comorbidity with substance misuse may suggest that the disorders are linked and part of the same spectrum with an aetiological overlap.
- However, we also know, that many other pathologies such as anxiety disorders and personality disorders are more prevalent in PGs.



# COURSE OF PG

- Shaffer & Hall 2002, in a prospective study of casino employees, describe a fluctuating course of improvement, relapse and remission
- This closely resembles the course of recovery in addiction patients, with better rates of abstinence in PGs than in drugs or alcohol.







# HOPPING PHENOMENOM

- Poly-drug users move from one drug of choice to another.
- There is some clinical evidence that PGs may be behaving in a similar way, moving from one type of gambling to another. (Blume 1994) or indeed from one addiction to another.



# Physiology

- There is much evidence of Frontal lobe dysfunction in PGs as compared to controls. Ruge et al 1993.
- Substance misuse patients AND alcohol misuse patients show similar frontal lobe test results compared to controls. They seem to share a faulty decision-making ability when it comes to long term gains.



# Neuropsychology

- On ventromedial prefrontal cortex tests (IGT Iowa Gambling task, CGT Cambridge Gambling test) PGs performed significantly poorly compared to controls (Cavedini et al 2002) as did substance misuse and alcohol dependent subjects. ( Bowden-Jones 2005, Clark et al 2008)
- However, their performance on dorsolateral prefrontal cortex tasks was not consistently impaired, nor was it in substance misuse patients.



# Neuropsychology

- These similarities are not only apparent on touch screen computerized tests but also in more sophisticated neuroimaging studies such as the ones Goudriaan et al have been conducting.



# Genetics

- We know PG has a genetic component as does Substance misuse.
- Slutske et al 2000: Vietnam Era Twin Registry study showed a linear relationship between alcohol dependence and severity of disordered gambling.
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# MOLECULAR GENETICS

- Dopamine 2 receptor genes studies have shown commonalities between PG and substance misuse.
- A [mesocortical limbic dopamine dysregulation](#) links PG and addictions to impulsivity and impaired decision-making.

What will all this mean clinically for our patients? Will PG seen as addiction make treatment more accessible?





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