



Problem Gambling

ABACUS Counselling Training & Supervision Ltd



What is problem gambling?



Which of these is most correct?

Problem gambling is when you are

- Losing more money than you win
- When family members think you have a gambling problem
- When you spend more than two hours a day gambling
- You gamble with stolen money
- When you try but can't stop gambling

Which of these is most correct?

It is *not* a problem gambler if

- You win more money than you lose
- If you are dealing in shares or property (not \$)
- You have no family, are retired, and have secure accommodation and food supply
- You have stopped gambling for the past year
- Your gambling is caused by earlier depression and AOD
- You gamble less than \$75 per week
- Your counsellor says you are fully recovered

Exercise



In groups,
draft one
sentence that
most
correctly
defines
'problem
gambling'

DSM-5 criteria

Gambling Disorder

A **persistent and recurrent** problematic gambling behaviour leading to significant impairment or distress with any 4 of these 9 criteria in a 12 month period:

1. Restless/irritable when attempting reduce or stop
 2. Repeated unsuccessful attempts to reduce or stop
 3. Increased \$ gambled to achieve desired excitement
 4. Often preoccupied with gambling (thoughts of gambling or getting money to gamble)
 5. Often gambles when feeling distressed (helpless, guilty anxious, depressed)
 6. Returns to 'chase' losses (get even)
 7. Lies about extent of gambling
 8. Risked or lost relationships or job, opportunities, because of gambling
 9. Relies on others for bailouts following gambling
- **Illegal behaviour to support gambling (deleted in DSM5)**

Problem gambling aetiology



Prevalence

- **DSM-5:** General population 0.2%-0.3% current (0.4%-1.0% lifetime)
- Often spontaneous remissions, starting again when under stress, depressed
- In youth, associated with AOD and impulsivity
- Earlier age of first gambling increases risk
- In NZ, higher risk for Māori, Pacific, Asian, refugees, males, those playing gambling machines, lower socio-economic status, shift work

Risk for PG varies by culture

Estimates in Abbott et al (2000) study of PG risk found:

- Maori at 3-5x risk for PG of NZ European
- Pacific 3-6x risk
- Asian 2x risk, and
- other ethnic groups up to 2x risk

Ethnicity	Problem	Path G
NZ Eur	1.3%	0.6%
Maori	3.6%	3.5%
Pacific Is	7.8%	3.2%
Asian	2.9%	NA
Other	0.8%	1.2%

Some findings

- Gambling disorder develops over years but appears to develop faster in females
- Early life gambling problems are correlated with higher impulsivity and AOD
- Females with gambling problems more likely to have depressive, bipolar and anxiety problems
- Those taking dopamine may develop urges to gamble e.g. aripiprazole

Some findings

- Problem gamblers often have poor general health – often tachycardia and angina
- They have high rates of other mental disorders such as substance use, depressive, anxiety, and personality disorders (often pre-existing the gambling), but gambling also may often pre-exist the substance use, and anxiety disorders

MH disorders often pre-exist

Kessler et al 2008

- 96.3% of those meeting Pathological Gambling Disorder (PGD) criteria also met another psychiatric disorder (and two-thirds met 3 or more disorders)
- 74.3% of these experienced the other disorder prior to PGD
 - 42% had a substance use disorder (57% of SUD started **before** PGD)
 - 56% had a mood disorder (65% **before** PGD)
 - 60% had an anxiety disorder (82% **before** PGD)

Reduced CNS activation

- Suggested that pathological gamblers experience reduced reward from gambling (lower activation of the ventral striatum (reward/motivation) and ventromedial prefrontal cortex (emotion/reward))
- Pathological gamblers need to gamble excessively just to achieve the level of excitement that non-problem gamblers achieve with a lower level of gambling
- Pathological gambling may have characteristics common to **substance abuse** and impulse control problems

Reuter et al 2005

What connection has PG to AOD?

High levels of both PG & AOD when they coexist

- 9-30% of AOD clients have PG issues and 25-72% of PG clients have AOD issues
- 17.3% of A & E patients admitted after a suicide attempt had both PG and AOD problems
- Environmental – same venues for alcohol and gambling
- Those recovering from addictions at risk for ‘substitution’ of another addictive behaviour

Exercise

DSM5 states: “Gambling Disorder..reflects evidence that gambling behaviours activate reward systems similar to those activated by drugs of abuse and produce some behavioural symptoms that appear comparable to those produced by substance use disorders”

In groups, describe three similarities GD or problem gambling has with AOD, and three differences

Addiction idiosyncrasies with PG

- Chasing losses (panic gambling)
- Lies about extent of gambling
- Needs bailouts
- No satiation
- The problem is also seen as the solution
- Isolation generally preferred
- Persistent and recurrent? – often substantial breaks where no gambling
- With many gamblers, lack of access to money can result in lack of urge to gamble
- Depression often intensifies after stopping gambling

More differences to AOD?

Symptoms often more covert – late stage identification by others commonplace

- Often escalated gambling to make good losses (of money belonging to others)
- Often high losses when identified
- Loss of trust results in poor support in recovery
- Very high offending
- Very high suicidal ideation (impulsive)

Manning et al 2015 *Psychiatric Research*

- Rates of suicide ideation (thoughts, plan) were significantly higher among gambling than substance use patients

Predisposing factors

- AOD issues
- Mental health issues, especially depression
- Parents with either (or both) Pathological Gambling Disorder and alcohol dependence more likely to result in their children being pathological gamblers
- Availability of gambling
- A 'win' early in their gambling experience

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Possible pathways – why drug misuse and problem gambling co-exists?

- Most risky forms of gambling occur in licensed premises
- Which comes first – AOD or gambling problems?
- Does it matter?
- Why do they coexist – ‘addictive personality’?
- Simply opportunity or is there a process occurring?
- Why is it important to know?

Causes of PG

Productivity Commission 2010

“...compulsive gambling can be genetically inherited, that it can be caused by certain drugs (associated with treatment of Parkinson’s disease), and that brain scans of those with problems can show quite different patterns from other gamblers*”

*For example, Xian et al (2007); Bostwick et al. (2009); Williams & Potenza (2008); Pallanti et al (2006); Potenza et al (2003); & Abler et al (2009)

PG may have a genetic factor

- N=4764 of which 867 identical pairs, 1008 non-identical pairs
- Participants with one PG DSM symptom 49% chance inherited, three or more symptoms 58% chance PG was inherited

“Like alcoholism, problem gambling is a complex disorder.... The answer will be in a collection of genes, maybe 10 or 100, we don’t know how many, but each gene will increase the risk slightly for developing those problems.”

Slutske et al 2010 Archives of General Psychiatry

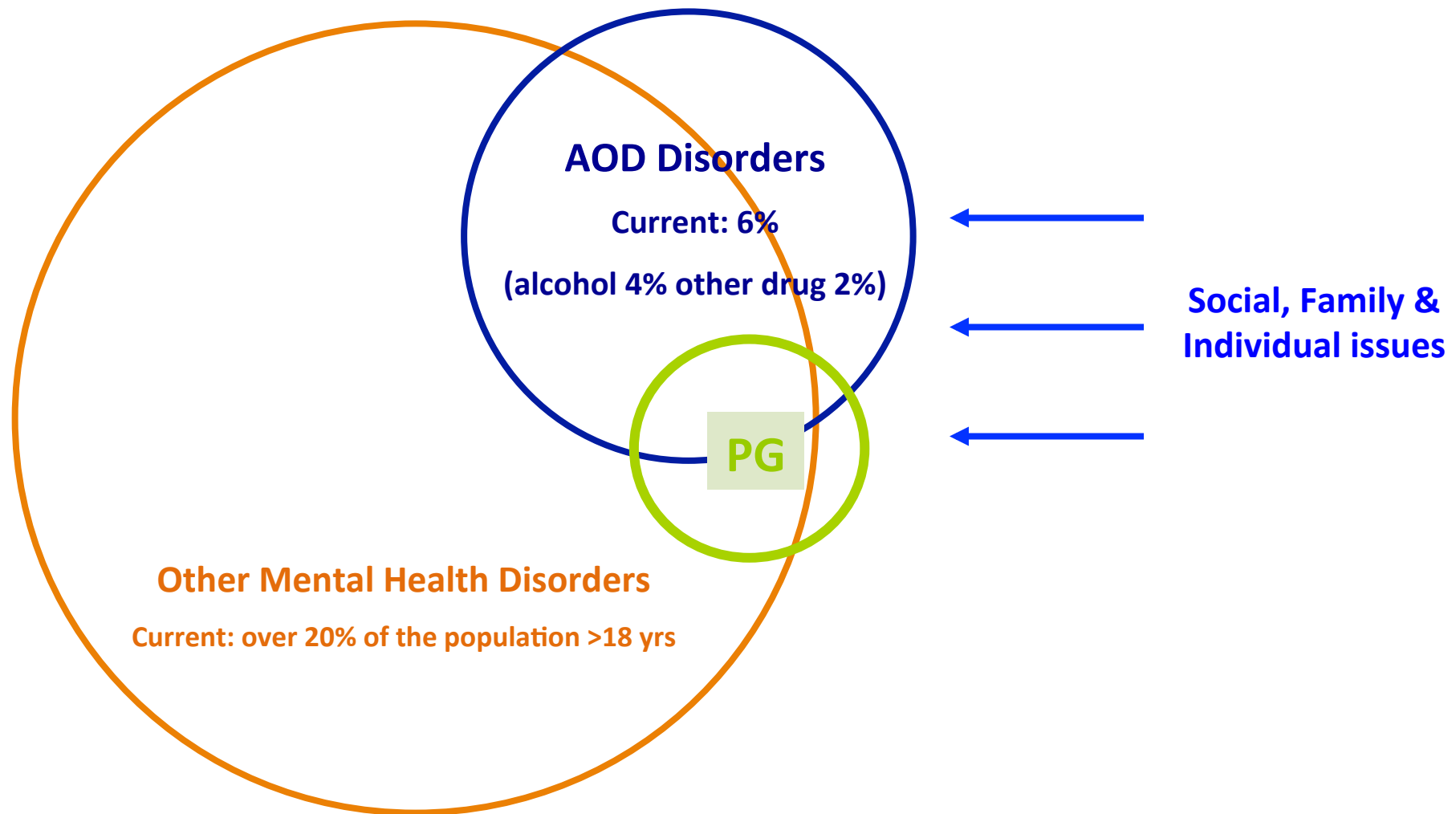
Learning: habits and addiction

- Habitual behaviours are established with the influence of biological (including genetic), psychological (thoughts and interpretations) and social (environment) factors
- These can be triggered by five senses (hearing, sight, smell, taste and touch) or may directly be affected by drugs or recollections such as 'flashbacks'
- Learning or a habit can change biological processes such as tolerance to a drug or behaviour (eg problem gambling)

Coexisting AOD with problem gambling



But PG usually co-exists with other MH issues



Increased Risk in PG

NZHS; Kessler 2008; Zimmerman 2006; Korman 2008; Cunningham-Williams 2007; Petry 2005

Disorder	General Population	PG
Alcohol (abuse/dependence)	13.5%	73%
Drug (not alcohol: abuse/dependence)	6%	38%
Depression (any affective)	8.3%	49.6%
Anxiety	14.6%	41.3%
Anti-Social PD	3%	23%
Paranoid PD	0.5-2.5%	25%
Psychological distress K10	5-7%	21-23%
General health (NZHS)	5-7%	21-23%
Smoking nicotine	16-17%	58-76%

Overlap between AOD & PG

NZ Health Survey 2006/7

Problem gamblers often have AOD issues:

Male PGs **72.6%**, female PGs **37.6%** score 8 or more on AUDIT – cf. general population 17.7%

DSM-5

“Gambling disorder also appears to aggregate with antisocial personality disorder, depressive and bipolar disorders, and other substance use disorders, particularly with alcohol disorders”

Coexisting AOD & gambling

Zorland et al 2013

- N=602 mandated to US Drug Ct
- Prevalence of co-existing problems with gambling were high
- 20.1% were pathological gamblers
- 10.3% were problem (subclinical) gamblers
- 22% were gambling but at a low risk level

PG & co-existing problems (CEP)

In most circumstances problem gambler has one or more coexisting mental health problems (coexisting mood, anxiety, AOD) that **predate the gambling problems**

This could mean:

- Most problem gamblers have a biological risk for addictions
- Problem gambling is phenomenologically experienced as reducing dysphoria of other conditions (lifts mood, reduces anxiety, displaces boredom) i.e. self-medication

CADS/ABACUS study 2006

- Goal was to assess the validity of a brief gambling screen (EIGHT screen) in an AOD setting
- Four Auckland CADS settings together with a small number from AOD settings around NZ
- N=669 AOD patients participated
- All presenting AOD patients were invited to complete the screen with few electing not to participate

Results

- Overall, 17.9% (n=120) of all AOD participants (n=669) were positive on the gambling screen
- A further 71 (10.6%) scored between 1-3 (sub-clinical) on the gambling screen
- Of those who scored positive on the gambling screen, 72% scored six or more out of a maximum of eight
- High likelihood of these high positives meeting a diagnosis of Pathological Gambling Disorder (DSMIV)

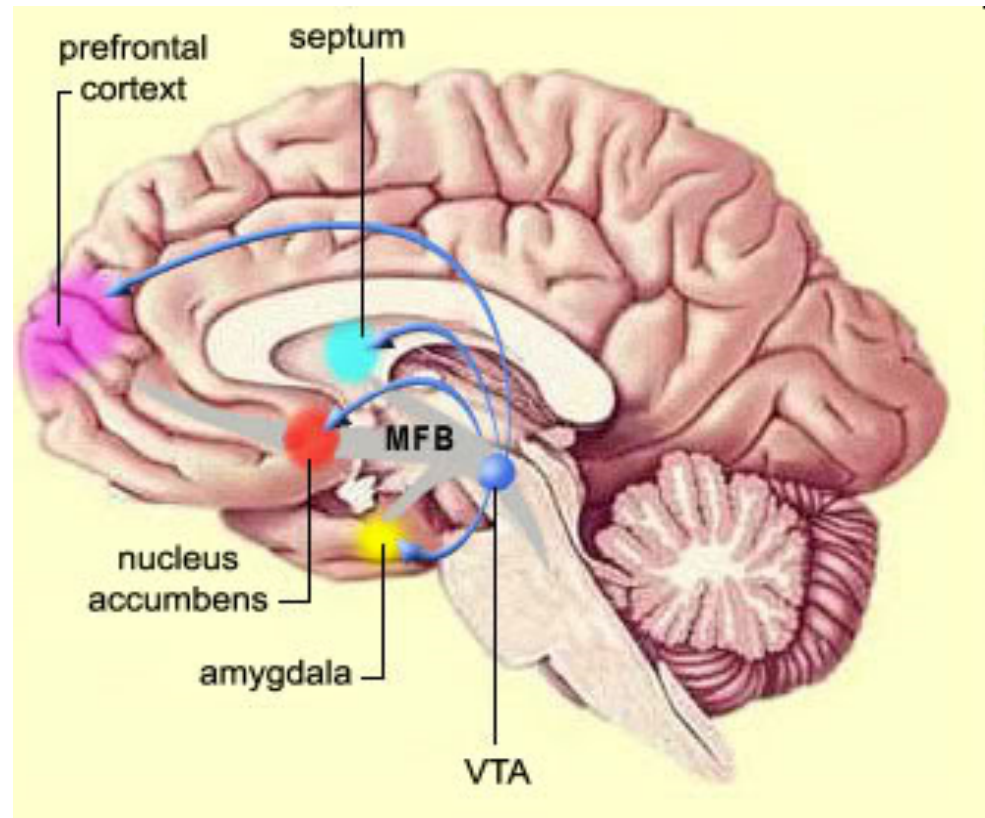
Exercise

- There can be a high overlap between AOD and problem gambling (PG), with often half of those attending PG services affected by AOD
- Assuming that AOD problems don't enhance help-seeking for PG, in groups, consider and suggest the strongest three reasons this may occur

CNS pathways in problem gambling

‘...similar neural systems have been identified as contributing to drug and gambling related behaviours.

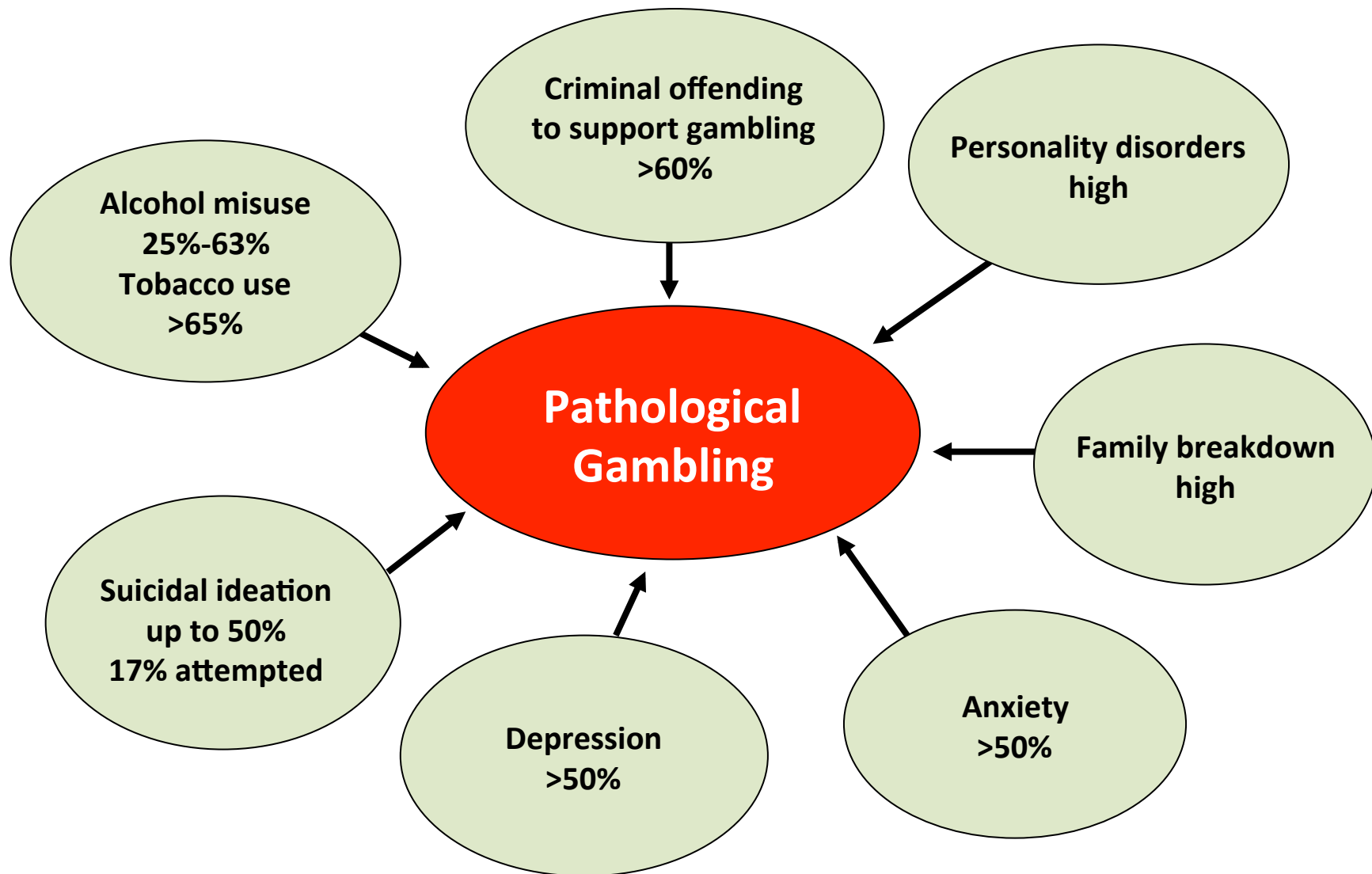
One of the central pathways implicated in substance dependence and rewarding and reinforcing behaviours in general is the dopaminergic mesocortical limbic system, with core neural connections between the dopamine neurons in the ventral tegmental area and their projection site in the nucleus accumbens’ *Potenza et al 2002*



Screening



Pathological gambling is associated with many issues



Help-seeking for PG is low

emphasises benefits of screening

- Less than 10% of problem gamblers seek help
- Younger gamblers (often males) even less likely to seek help
- Female problem gamblers may seek help sooner – problems develop later than males but often develop faster

Interventions: screening for CEP?

“**Screening** is a process for evaluating the possible presence of a particular problem. The outcome is normally a simple yes or no (often *alerts to need for an assessment*)

Assessment is a process for defining the nature of that problem, determining a diagnosis, and developing specific treatment recommendations for addressing the problem or diagnosis”

SAMHSA TIP 51 Chapter 4: Screening and Assessment

Brief Interventions for PG

Brief intervention is a broad term

“A treatment strategy in which a short structured therapy is offered (between 5 minutes and 2 hours) and typically on a single occasion. Aimed at helping a person to reduce or stop (substance use)”

Cochrane Drugs and Alcohol Group

- Often a screen is offered – to identify harm from gambling, and feedback given
- Appropriate for moderate PG but can ‘sow the seed’ for those with more severe problems who may not be ready to change at this time

A NZ systematic CEP screen: The CHAT

- Developed in NZ originally for primary health
- Now starting to be widely used
- Covers 9 topics with 16 (main) questions around addictions and health lifestyle issues
- Originally topics were common but overlooked issues but happen to be strongly related to addictions and particularly PG
- Is brief, validated for Asian, Māori, Pacific, and each set of two (or one) questions are in turn validated and published in research journals

CHAT Screen

Case Finding and Help Assessment Tool

16 questions on 9 health & lifestyle issues of which one validated sub-screen is problem gambling

(2 questions, if one or both 'yes' then gambling may be a problem)

- Do you ever feel unhappy or worried after a session gambling?
- Does gambling sometimes cause you problems?

Lifestyle Assessment form (CHAT)

Case-finding and Help Assessment Tool

What we do and how we feel can sometimes affect our health. To help us assist you to reach and maintain a healthy and enjoyable lifestyle, please answer the following questions to the best of your ability

How many cigarettes do you smoke on an average day?

☐none ☐less than 1 a day ☐1-10 ☐11-20 ☐21-30 ☐31 or more

Do you ever feel the need to cut down or stop your smoking? (tick no if you don't smoke)

☐no ☐yes → if yes, do you want help with this? ☐no ☐yes but not today ☐yes

Do you ever feel the need to cut down on your drinking alcohol? (if you don't drink alcohol, just tick no)

☐no ☐yes

In the last year, have you ever drunk more alcohol than you meant to?

☐no ☐yes → if yes to either or both of these questions, do you want help with this? ☐no ☐yes but not today ☐yes

Do you ever feel the need to cut down on your non-prescription or recreational drug use?

(if you do not use other drugs, just tick no)

☐no ☐yes

In the last year, have you ever used non-prescription or recreational drugs more than you meant to?

☐no ☐yes → if yes to either or both of these questions, do you want help with this? ☐no ☐yes but not today ☐yes

Do you ever feel unhappy or worried after a session of gambling? (if you do not gamble, just tick no)

☐no ☐yes

Does gambling sometimes cause you problems?

☐no ☐yes → if yes to either or both of these questions, do you want help with this? ☐no ☐yes but not today ☐yes



During the past month have you often been bothered by feeling down, depressed or hopeless?

☐no ☐yes

During the past month have you often been bothered by having little interest or pleasure in doing things?

☐no ☐yes → if yes to either or both of these questions, do you want help with this? ☐no ☐yes but not today ☐yes

During the past month have you been worrying a lot about everyday problems?

☐no ☐yes → if yes, do you want help with this? ☐no ☐yes but not today ☐yes

What aspects of your life are causing you significant stress at the moment?

☐none ☐relationship ☐work ☐home life ☐money ☐health ☐study ☐other (specify)_____

Is there anyone in your life whom you are afraid or who hurts you in any way?

☐no ☐yes

Is there anyone in your life who controls you and prevents you doing what you want?

☐no ☐yes → if yes to either or both of these questions, do you want help with this? ☐no ☐yes but not today ☐yes

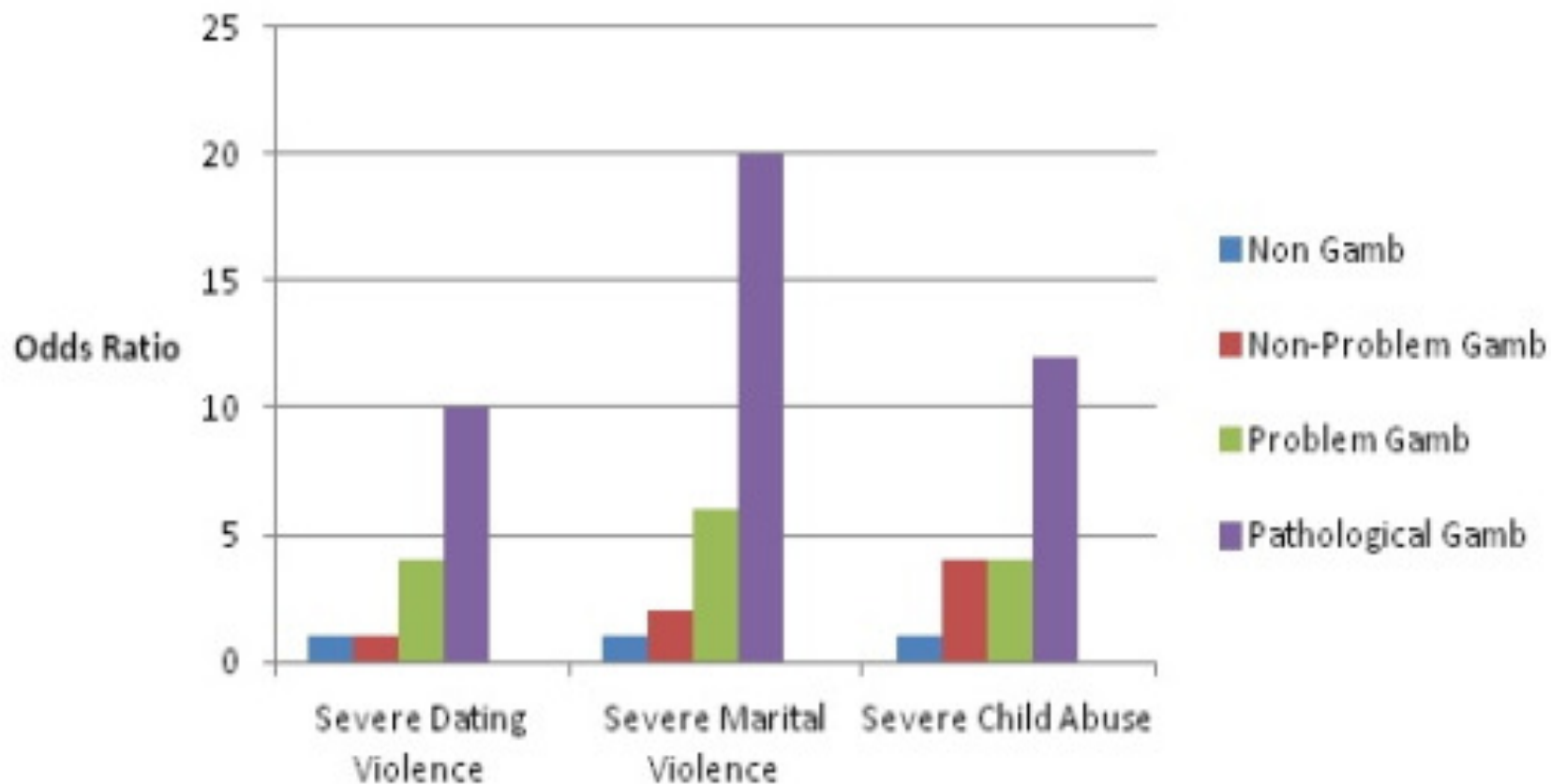
Is controlling your anger sometimes a problem for you?

☐no ☐yes → if yes, do you want help with this? ☐no ☐yes but not today ☐yes

As a rule, do you do more than 30 minutes of moderate or vigorous exercise (such as walking or a sport) on 5 days of the week?

☐yes ☐no → if no, do you want help with this? ☐no ☐yes but not today ☐yes

GAMBLING AND THE PERPETRATION OF VIOLENCE



US National Co-morbidity Survey Replication which included a large sample (n=3334) of adults (18 and over) who were representative of the US population based on a variety of census indicators. (Afifi et al., 2009)

Family violence and affected family gender

Suomi, Jackson et al 2013

N=115 PG's from a PG treatment service, 52.5% reported family violence in last year; gambling generally **preceded** family violence

Problem gamblers were violent with:

- Current partners 30%
- Parents 29%
- Ex-partners 19.5%
- Children 7%
- Extended family 5%
- Siblings 5%

32 % of **females** were victims of violence

25% of **females** were both victims and violent

10% of **females** were violent

7 % of **males** were victims of violence

20 % of **males** were both victims and violent

11 % of **males** were violent

Problem gamblers at-risk

Echeburua et al 2013

- Pathological gamblers more anxious and impulsive, poor self esteem
- Greater history of Axis 1 disorders (anxiety, depression especially)
- Males especially alcohol problems too
- **68.6% of female gamblers** compared with 9.8% non-problem gamblers reported being victims of intimate partner violence

Brief Gambler Screen (LieBet)

1. Do you feel you have ever had a problem with gambling?
(only ask if not obvious)
2. *If yes:*
And do you feel you currently have a problem with gambling?
3. Have you ever felt the need to bet more and more money?
4. Have you ever had to lie to people about how much you gambled?

If you answered yes to any of the above, what would help?

- ☐ I would like some information
- ☐ I would like to talk about it in confidence with someone
- ☐ I would like some support or help
- ☐ Nothing at this stage

Two longer screens

Harm (PGSI) Screen

- Developed in Canada and widely used
- 9 questions with 4 options each (scored never=0, sometimes=1, most of the time=2, almost always=3)
- Range of PG levels based on total scores (1-2=low risk, 3-7=moderate risk, 8-27 problem gambler)

EIGHT Screen

- Developed in NZ
- 8 questions – yes or no only options
- 4 or more equals problem gambler (3=at risk, 4-5=harm occurring, 6-8 serious harm, probably pathological gambling)

Gambler Harm Screen (PGSI)

The Gambler Harm Full Screen is scored by the client's response to each question:

Never = 0, Sometimes = 1, Most of the time = 2, Almost always = 3

Score: 3-7 Moderate Risk, 8-27 Problem Gambling

1. Thinking about the past 12 months, how often have you bet more than you could really afford to lose?
2. Thinking about the past 12 months, how often have you needed to gamble with larger amounts of money to get the same feeling of excitement?
3. Thinking about the past 12 months, how often have you gone back another day to try and win back the money you lost?
4. Thinking about the past 12 months, how often have you borrowed money or sold anything to get money to gamble?
5. Thinking about the past 12 months, how often have you felt that you might have a problem with gambling?
6. Thinking about the past 12 months, how often have people criticised your betting or told you that you have a gambling problem, regardless of whether or not you thought it was true?
7. Thinking about the past 12 months, how often have you felt guilty about the way you gamble or what happens to you when you gamble?
8. Thinking about the past 12 months, how often have you felt that gambling has caused you any health problems, including stress or anxiety?
9. Thinking about the past 12 months, how often have you felt your gambling has caused financial problems for you or your household?

EIGHT Screen

Early Intervention Gambling Health Test

1. Sometimes I've felt depressed or anxious after a session of gambling
☐ YES, that's true ☐ NO, I haven't
2. Sometimes I've felt depressed or anxious after a session of gambling
☐ YES, that's true ☐ NO, I haven't
3. When I think about it, gambling has sometimes caused me problems
☐ YES, that's true ☐ NO, I haven't
4. Sometimes I've found it better not to tell others, especially my family, about the amount of time or money I spend gambling
☐ YES, that's true ☐ NO, I haven't
5. I often find that when I stop gambling I've run out of money
☐ YES, that's true ☐ NO, I haven't
6. Often I get the urge to return to gambling to win back losses from a past session
☐ YES, that's true ☐ NO, I haven't
7. Yes, I have received criticism about my gambling in the past
☐ YES, that's true ☐ NO, I haven't
8. Yes, I have tried to win money to pay debts
☐ YES, that's true ☐ NO, I haven't

Score by adding the 'yes' answers:

3 low harm; 4-5 gambling harm occurring; 6-8 serious harm, with probable Gambling Disorder

Exercise

- Robert, 28, single, is receiving help for his methamphetamine and alcohol use as part of his intensive supervision sentence after conviction for theft. He is motivated to address his AOD issues. He says he also has problems with betting on horses, but says gambling is only after he is intoxicated with alcohol or meth, but thinks that will go now that he is fixing his AOD issues. You offer him a screen (PGSI or EIGHT) to provide more insight.
- In pairs one complete a screen as Robert, the other give feedback and provide some relevance of why the two may coexist, but addressing only one may not address both, and why addressing both together may have the best outcome

Effectively addressing problem gambling



Co-existing issues to address

- “It underlines the complex causality of problems experienced by problem gamblers. Problem gambling may exacerbate other dependencies, and they in turn may exacerbate problem gambling”
- “Counselling for problem gambling will need to also deal with these co-morbidities, and treatment for other dependencies may need to take into account secondary gambling problems that may not be transparent”

Australian Productivity Commission (1999)

A similar approach to AOD

- Comprehensive screen may identify relevant issues and assist with treatment plan
- Level of motivation to address the gambling may need to be addressed
- Agreed treatment plan
- Integrated approach
- Relapse prevention

Intensive therapy: CBT for PG

- Combination of Cognitive (altering thoughts or cognitions focus) and Behavioural (changing behaviours focus) therapies
- Learning strategies to cope an important aspect of this therapy, however many clients do not complete homework – MI may assist motivation to do this
- However, many addiction clients discontinue treatment (more than 1/3 PG complete less than 3 hours therapy)

CBT as a PG therapy

- Twenty-five studies analysed
- Highly significant effect of CBT in reducing gambling behaviours within the first three months of therapy cessation, regardless of the type of gambling behaviour practiced
- Effect sizes were also significant at six, twelve and twenty-four month follow-up periods
- Analysis suggested that both individual and group therapies were equally as effective in the 3 month time window

Gooding & Tarrier, 2009

Pharmacotherapy

Relatively new approach – evidence of abnormalities with PGs serotonin, norepinephrine, dopamine and opioid systems

Three classes of drugs:

- Opiate antagonists (naltrexone, nalmefene – increases feeling of satiation)
- Antidepressants (SSRIs – reduce impulsivity)
- Mood stabilisers (lithium, carbamazepine, similar effects to SSRIs)

Naltrexone used in Australia for PG

Australian National Health & Medical Research Council (Nov 2011)

- “Gambling addiction needs to be viewed as a medical problem and that people suffering the addiction should not be expected to manage their impulses alone or only through participation in self help programs.
- Existing research evidence suggests that the most effective treatment for gambling addiction is cognitive behavioral therapy, followed by other psychotherapies such as motivational interviewing and motivation enhancement therapy.
- SSRI antidepressants have not been found effective for the treatment of people with gambling problems alone (not concurrently depressed).
- Naltrexone may be used - with caution - as a pharmacological agent to treat gambling addiction.”

Overall: how effective?

16 studies analysed

- Analysis showed that the pharmacological interventions were more effective than no treatment/placebo, yielding an overall effect size of 0.78 (large effect)
- Effect sizes at post treatment was lower in studies using a placebo-control condition compared with studies without any control condition

Pallesen, Molde, Arnestad et al., 2007

Recent other findings

Piz et al 2013 – *‘Successful long-term (3-year) treatment of gambling with naltrexone’*

- Naltrexone, opioid antagonist, successful in the 3 year case study

Kalk et al 2014

- Acamprosate may be a suitable treatment through reduction of craving (decreasing glutamate) in other addictions (*such as gambling*)

But some therapies may be more effective in PG treatment

CBT (CT, MI, imaginal desensitisation) more effective in PG compared with other therapies – significant still at 2 yrs.

Cognitive therapy, motivational interviewing and imaginal desensitization were significant, although there was tentative evidence that when different types of therapy were compared cognitive therapy had an added advantage

However, evaluation of treatment for problem gambling lags behind other fields and this needs to be redressed in the future.

Gooding & Tarrier, 2009, 25 studies

Relapse protective factors

- Raise awareness of any process that associates AOD and gambling and develop alternative processes
- Being aware of new triggers (advertising, increasing stress to a new situation, minimising past consequences, wanting to be 'normal' and take or leave gambling)
- Taking up past activities enjoyed or new activities to replace gambling
- Exclusion orders
- Managing debt

Some therapeutic thoughts



Multimodal approach

“Although it has unique elements, pathological gambling has many signs and symptoms shared with other disorders (e.g. anxiety, depression, impulsivity), consequently, disordered gambling is best thought of as a **syndrome**. From this perspective, the most effective treatments for gambling problems will reflect a multimodal ‘cocktail’ approach combined with patient-treatment matching. **These multidimensional treatments will include combinations of psychopharmacology, psychotherapy, and financial, educational and self-help interventions**, such treatment elements are both additive and interactive to deal with the multidimensional nature of gambling disorders”

Shaffer & Korn (1999)

Some of the approaches used in PG

There appears to be no recommended approach for the treatment of PG

- **In NZ:**
 - Motivational Interviewing (MI) -
 - Cognitive Behavioural Therapy (CBT)
 - Brief intervention
- **In Australia, most common approaches are:**
 - Behavioural therapy
 - Cognitive therapy
 - CBT
 - Pharmacotherapy
 - Brief intervention

Correlation PG, AOD & SC

therapy implications?

- “Associations between problem gambling, and alcohol use disorder, nicotine dependence...were overwhelmingly positive and significant ($p < 0.05$)”

Park et al (2009)

- “Being dependent on any drug was related to smoking and drinking, with heavy smokers having a 12-fold increase in the odds of dependence, and those scoring 16 or more on the AUDIT having a six-fold increase in the risk of drug dependence. These behaviours are associated with significant added mental and physical health problems”

Farrell et al (2009)