



MINISTRY OF HEALTH
SINGAPORE

Management of Gambling Disorders

MOH Clinical Practice Guidelines 3/2011



College of Family
Physicians, Singapore



Academy of Medicine,
Singapore



Singapore Medical
Association

**NATIONAL
ADDICTIONS
MANAGEMENT SERVICE**

June 2011

Levels of evidence and grades of recommendation

Levels of evidence

Level	Type of Evidence
1+ +	High quality meta-analyses, systematic reviews of randomised controlled trials (RCTs), or RCTs with a very low risk of bias
1+	Well conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias
1-	Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias
2+ +	High quality systematic reviews of case control or cohort studies. High quality case control or cohort studies with a very low risk of confounding or bias and a high probability that the relationship is causal
2+	Well conducted case control or cohort studies with a low risk of confounding or bias and a moderate probability that the relationship is causal
2-	Case control or cohort studies with a high risk of confounding or bias and a significant risk that the relationship is not causal
3	Non-analytic studies, e.g. case reports, case series
4	Expert opinion

Grades of recommendation

Grade	Recommendation
A	At least one meta-analysis, systematic review of RCTs, or RCT rated as 1+ + and directly applicable to the target population; or A body of evidence consisting principally of studies rated as 1+, directly applicable to the target population, and demonstrating overall consistency of results
B	A body of evidence including studies rated as 2+ +, directly applicable to the target population, and demonstrating overall consistency of results; or Extrapolated evidence from studies rated as 1+ + or 1+
C	A body of evidence including studies rated as 2+, directly applicable to the target population and demonstrating overall consistency of results; or Extrapolated evidence from studies rated as 2+ +
D	Evidence level 3 or 4; or Extrapolated evidence from studies rated as 2+
GPP (good practice points)	Recommended best practice based on the clinical experience of the guideline development group

CLINICAL PRACTICE GUIDELINES

Management of Gambling Disorders

MOH Clinical Practice Guidelines 3/2011

Published by Ministry of Health, Singapore
16 College Road,
College of Medicine Building
Singapore 169854

Printed by Chung Printing Pte Ltd

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ISBN 978-981-08-9145-9

Available on the MOH website: <http://www.moh.gov.sg/cpg>

Statement of Intent

These guidelines are not intended to serve as a standard of medical care. Standards of medical care are determined on the basis of all clinical data available for an individual case and are subject to change as scientific knowledge advances and patterns of care evolve.

The contents of this publication are guidelines to clinical practice, based on the best available evidence at the time of development. Adherence to these guidelines may not ensure a successful outcome in every case. These guidelines should neither be construed as including all proper methods of care, nor exclude other acceptable methods of care. Each physician is ultimately responsible for the management of his/her unique patient, in the light of the clinical data presented by the patient and the diagnostic and treatment options available.

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Foreword

Gambling disorders such as problem gambling and pathological gambling have serious and far-ranging adverse consequences. These include breakdown of significant relationships, difficulties managing work and studies, financial troubles, as well as physical and mental health deterioration.

A survey of gambling activities among Singapore residents conducted in 2008 estimated that 1.1% to 2.2% of respondents could be classified as problem gamblers, and 0.7% to 1.6% could be classified as pathological gamblers.* This is likely an under-estimate of the true extent of the problem as people with gambling disorders tend to hide or deny their gambling-related problems.

People with gambling disorders often present with non-specific physical symptoms, anxiety or insomnia and can also present with psychiatric comorbidities such as depression or anxiety disorders. As a result, gambling disorders can be easily overlooked and undetected by physicians.

This set of guidelines was developed to raise awareness and to assist in the detection, diagnosis and treatment of gambling disorders. I hope this set of guidelines will help people with gambling disorders and the healthcare professionals that work with them.

PROFESSOR K SATKU
DIRECTOR OF MEDICAL SERVICES

* Ministry of Community Development, Youth and Sports. Report of survey on participation in gambling activities among Singapore residents. 2008.

Executive summary of recommendations

Details of recommendations can be found in the main text at the pages indicated.

Assessment

C Screening for gambling disorders at the primary care setting is recommended for patients who present with frequent physical and psychological complaints, or who have a history of substance/alcohol use problems (pg 8).

Grade C, Level 2+

D Screening for gambling disorders is recommended if gambling is a regular and habitual activity (pg 8).

Grade D, Level 4

C Screening for gambling disorders should be routinely performed as part of all psychiatric assessment, especially in those individuals with mental health conditions (pg 9).

Grade C, Level 2+

GPP Corroborative history in relation to gambling patterns and behaviour should be obtained from family members and significant others as far as possible (pg 9).

GPP

D An individual who is screened positive for gambling disorder should be referred to the appropriate professionals for further clinical evaluation (pg 9).

Grade D, Level 4

D The key aspects of assessment should include the following:

- Full psychiatric history including:
 - history of presenting complaints
 - psychiatric, family, treatment, past and personal histories
- Detailed assessment of gambling behaviour:
 - initiation
 - progression
 - current frequency (days per week or hours per day)
 - current severity (money spent on gambling proportionate to income)

- types of games played
 - maintaining factors
 - features of dependence
 - Consequences: financial, interpersonal, vocational, social and legal
 - Reasons for consultation, motivation to change and expectations of treatment
 - Assessment of suicide risk
 - Assessment of Axis I and II comorbidities, including alcohol and substance use disorders
 - Comprehensive mental state examination
- (pg 10) **Grade D, Level 4**

GPP A comprehensive clinical interview that includes a psychiatric assessment and mental state examination should be performed when assessing gambling disorders. A multi-disciplinary assessment is recommended (pg 11).

GPP

D DSM-IV diagnostic criteria for pathological gambling should be used to evaluate and confirm a diagnosis of pathological gambling (pg 11).

Grade D, Level 4

Management: Interventions

GPP A comprehensive treatment plan that incorporates a multi-disciplinary and multi-modal approach should be developed for the management of pathological gambling (pg 13).

GPP

GPP When prescribing medications to treat pathological gambling, the medical practitioner should inform the patient of the off-label use and the possible side-effects of these medications (pg 13).

GPP

A An opioid antagonist like naltrexone or nalmefene may be considered for reduction of gambling urges and thoughts in pathological gamblers (pg 14).

Grade A, Level 1+

B Fluvoxamine and paroxetine may be considered for reduction of gambling behaviour, urges and thoughts in pathological gamblers (pg 14).

Grade B, Level 1+

B Psychological interventions utilising the components of cognitive-behavioural therapy are recommended for the treatment of pathological gambling (pg 16).

Grade B, Level 2++

A Motivational enhancement therapy (face-to-face or telephone counselling) and self-help workbooks are recommended for the treatment of gambling disorders, especially for individuals who are ambivalent about quitting gambling or entering treatment, or who are not keen on long-term therapy (pg 17).

Grade A, Level 1+

D Mindfulness therapy may be used as an adjunct intervention in the treatment of gambling disorders (pg 17).

Grade D, Level 3

GPP Self-help support groups should only be considered as complementary services to professional treatment for individuals with gambling-related problems (pg 18).

GPP

GPP Financial counselling, limiting access to money and restricting admission into gambling venues are complementary and practical approaches that should be considered for those who have gambling-related problems (pg 18).

GPP

Management: Special populations

C Screening tools that are specific to the adolescent population (e.g. SOGS-RA, DSM-IV-J) should be used in the screening for gambling disorders among adolescents (pg 19).

Grade C, Level 2+

D Cognitive behavioural therapy may be used in the treatment of adolescent pathological gambling (pg 20).

Grade D, Level 3

D Therapy for adolescent gambling disorders should include components such as acceptance of the problem, establishment of mutual trust, involvement of family, restructuring of leisure time, cognitive restructuring of erroneous beliefs and enhancement of effective coping skills (pg 20).

Grade D, Level 3

C Screening for gambling disorders is recommended in older adults who engage in gambling activities (pg 21).

Grade C, Level 2+

C Clinical assessment of older adults, who are suspected or diagnosed to have a gambling disorders, should include a comprehensive evaluation of physical, psychiatric and social histories (pg 21).

Grade C, Level 2+

GPP Empirical treatment using best practices in adult problem/pathological gamblers is recommended for the treatment of older adults with gambling disorders (pg 21).

GPP

C Screening for comorbid psychiatric conditions in individuals with gambling disorders is highly recommended (pg 21).

Grade C, Level 2+

GPP Appropriate treatment for the identified comorbid psychiatric disorders in individuals with gambling disorders should be instituted (pg 21).

GPP

B Family members and significant others of individuals with gambling disorders should be engaged in treatment as far as possible (pg 22).

Grade B, Level 2++

1.1 Background information

Gambling is a common leisure activity amongst Singaporeans today. It is widely available in various forms e.g. lotteries, sports betting, horse racing, casino games. Different platforms for placing bets are available, from traditional ways (e.g. betting outlets, phone calls) to high-tech methods (e.g. smart phones and internet).

While people who gamble mostly engage in social or recreational gambling, there are others who develop problems as a result of their gambling behaviour. These problems include breakdown in significant relationships, difficulties managing work or studies, financial troubles, as well as physical and mental health deterioration. In the latest prevalence estimate of problem gambling in Singapore released by the Ministry of Community Development, Youth and Sports (MCYS) in 2008, 1.2% of randomly selected Singapore residents aged 18 years and above were classified as probable pathological gamblers.¹

Gambling disorders are a relatively new medical concern. In fact, research on gambling disorders and treatment has only intensified in the last decade. Nonetheless, professionals and clinicians are well aware of the devastating consequences that gambling disorders can bring to individuals, families and the society at large. The importance of screening, early detection and intervention cannot be over-emphasized.

1.2 Objective of guidelines

This set of guidelines is developed to raise awareness and assist in the detection, diagnosis and treatment of gambling disorders.

1.3 Target groups

Individuals who suffer from gambling disorders can present under various circumstances in the primary care and hospital-based settings. Their age group can range from adolescent to elderly. Hence, the content of these guidelines will be useful for all medical practitioners and allied health professionals in relation to screening and early detection

of gambling disorders. These guidelines will also benefit professionals who are involved in the diagnosis and treatment of pathological gambling, which is the most severe form of gambling disorder.

1.4 Development of guidelines

These guidelines have been produced by a committee comprising psychiatrists in hospitals and private practice, family physicians, addiction counsellors and a psychologist.

1.5 Review of guidelines

Evidence-based clinical practice guidelines are only as current as the evidence that supports them. Users must keep in mind that new evidence could supersede recommendations in these guidelines. The workgroup advises that these guidelines be scheduled for review five years after publication, or if new evidence appears that requires substantive changes to the recommendations.

2 Understanding gambling disorders

2.1 Terminology

Gambling-related harm lies on a continuum that ranges from no gambling problems to severe problems. Different terms have been used to categorise gambling-related harm based on the gambling patterns and behaviour of individuals. These include “at risk gambling”, “excessive gambling”, “compulsive gambling”, “dysfunctional gambling”, “problem gambling”, and “pathological gambling”.

For clarity and practicality, the terms “problem gambling” and “pathological gambling” will be used in this CPG. Together, problem and pathological gambling constitute gambling disorders.

2.2 Definitions

Problem gambling refers to a less severe form of gambling disorder. It covers a wide range of adverse consequences as a result of gambling, but does not meet the full criteria in the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV)² to satisfy a diagnosis of pathological gambling.

Pathological gambling refers to the most severe form of gambling disorder. It involves a pattern of excessive and destructive gambling behaviour. Several symptoms are pathognomonic of pathological gambling. These features are discussed further in the next section.

3.1 Screening

Early identification may help prevent a problematic gambling behaviour from escalating to a serious problem. Hence, screening for gambling disorders is critical so that affected individuals can be referred for further assessment and intervention.

Problem and pathological gamblers tend to hide or deny their gambling-related problems. Research has shown that although 1 in 10 primary care patients have a gambling problem, patients do not volunteer information about their gambling behaviour.³ Most of these gamblers instead present with vague and non-specific physical complaints, such as insomnia, gastrointestinal symptoms, cardiac-related symptoms and headaches.⁴⁻⁶ Psychological complaints, such as emotional distress, anxiety and depression, and social difficulties like marital and interpersonal problems are also common.⁷⁻⁹ Although such complaints are frequently encountered at the primary healthcare setting, gambling disorders are often overlooked and undetected by family physicians.¹⁰ Very few healthcare providers ask patients about gambling problems even if they are aware of these disorders.¹¹⁻¹²

Pathological gambling remains largely undiagnosed even among at-risk populations.⁶ Risk factors for pathological gambling include early age of onset of gambling, male gender, unemployment, poor academic performance, depression, anxiety, personality disorders and substance/alcohol use disorders.¹³⁻¹⁵

C Screening for gambling disorders at the primary care setting is recommended for patients who present with frequent physical and psychological complaints, or who have a history of substance/alcohol use problems.¹³⁻¹⁵

Grade C, Level 2+

D Screening for gambling disorders is recommended if gambling is a regular and habitual activity.¹⁶

Grade D, Level 4

C Screening for gambling disorders should be routinely performed as part of all psychiatric assessment, especially in those individuals with mental health conditions.¹³⁻¹⁵

Grade C, Level 2+

GPP Corroborative history in relation to gambling patterns and behaviour should be obtained from family members and significant others as far as possible.

GPP

3.2 Screening tools

Since gambling disorder is a ‘hidden’ condition that cannot be detected by physical examination or investigations, the use of screening tools is necessary.

Several simple, reliable and validated screening tools are available for screening of adults with gambling disorders, such as the South Oaks Gambling Screen (SOGS), Lie/Bet Questionnaire, Canadian Problem Gambling Index (CPGI), Problem Gambling Severity Index (PGSI) and National Opinion Research Center DSM Screen for Gambling Problems (NODS).¹⁷⁻²⁷ Although these instruments have not been extensively validated in the local population, they remain useful for screening of gambling disorders.

A positive screening result merely suggests the presence of a possible gambling disorder. A referral to the appropriate professionals, such as psychiatrists and addiction counsellors, is necessary for further clinical assessment and diagnostic evaluation.

D An individual who is screened positive for gambling disorder should be referred to the appropriate professionals for further clinical evaluation.¹⁶

Grade D, Level 4

3.3 Diagnosis and evaluation

A detailed clinical assessment by the appropriate professionals is essential for establishing the severity of the gambling disorder, confirming the diagnosis of pathological gambling, assessing comorbid

psychiatric disorders, and formulating an effective treatment plan. Such a comprehensive assessment is best performed by a multi-disciplinary team of professionals that include psychiatrists, addiction counsellors and mental health clinicians.

D The key aspects of assessment should include the following²⁸:

- Full psychiatric history including:
 - history of presenting complaints
 - psychiatric, family, treatment, past and personal histories
- Detailed assessment of gambling behaviour:
 - initiation
 - progression
 - current frequency (days per week or hours per day)
 - current severity (money spent on gambling proportionate to income)
 - types of games played
 - maintaining factors
 - features of dependence
- Consequences: financial, interpersonal, vocational, social and legal
- Reasons for consultation, motivation to change and expectations of treatment
- Assessment of suicide risk
- Assessment of Axis I and II comorbidities, including alcohol and substance use disorders
- Comprehensive mental state examination

Grade D, Level 4

The diagnosis of pathological gambling is based on several pathognomonic features as specified in DSM-IV which requires at least 5 of 10 criteria to be met in order for the diagnosis to be made (see Box 1). Further, DSM-IV requires that the gambling behaviour is not due to a manic condition.² The DSM-IV diagnostic criteria have been found to be reliable and valid.²⁹

Problem gambling is considered when at least 1 but less than 5 of the diagnostic criteria for pathological gambling are met.

Box 1 Diagnostic criteria for pathological gambling²

- (A) Persistent and recurrent maladaptive gambling behaviour as indicated by five or more of the following features:
1. is preoccupied with gambling (e.g., preoccupied with reliving past gambling experiences, handicapping or planning the next venture, or thinking of ways to get money with which to gamble).
 2. needs to gamble with increasing amounts of money in order to achieve the desired excitement
 3. has repeated unsuccessful efforts to control, cut back, or stop gambling
 4. is restless or irritable when attempting to cut down or stop gambling
 5. gambles as a way of escaping from problems or of relieving a dysphoric mood (e.g., feelings of helplessness, guilt, anxiety, depression)
 6. after losing money gambling, often returns another day to get even (“chasing” one’s losses)
 7. lies to family members, therapist, or others to conceal the extent of involvement with gambling
 8. has committed illegal acts such as forgery, fraud, theft, or embezzlement to finance gambling
 9. has jeopardized or lost a significant relationship, job, or educational or career opportunity because of gambling
 10. relies on others to provide money to relieve a desperate financial situation caused by gambling
- (B) The gambling behaviour is not better accounted for by a manic episode.

GPP A comprehensive clinical interview that includes a psychiatric assessment and mental state examination should be performed when assessing gambling disorders. A multi-disciplinary assessment is recommended.

GPP

D DSM-IV diagnostic criteria for pathological gambling should be used to evaluate and confirm a diagnosis of pathological gambling.²

Grade D, Level 4

4.1 Indications for treatment

There is sufficient empirical data to support that gambling treatment is effective and that individuals suffering from gambling disorders can respond well to treatment.

Treatment for gambling disorders is indicated when there are concerns about an individual's gambling behaviour. Such concerns include presence of gambling-related problems, an individual recognizing that gambling has brought harms to self or significant others, or family members expressing worries about the gambling.³⁰

4.2 Formulating a treatment plan

Research into the treatment of gambling disorders focused primarily on pathological gambling because of the feasibility of diagnosis based on the DSM-IV criteria. However, the principles of treatment of pathological gambling may be applied to that of problem gambling after careful consideration of the clinical examination findings.

Various treatment modalities are currently available for pathological gambling, but no single modality has been shown to be most beneficial. Pathological gambling should be regarded as a multi-faceted condition that requires a multi-modal treatment that considers pharmacological interventions, psychological interventions and practical management.¹⁶ A multi-disciplinary approach involving various professionals including psychiatrists, addiction counsellors, allied health professionals and mental health clinicians should be used.

An individualized treatment plan that matches the patient's problems, needs, expectations and treatment goals to the appropriate interventions should be developed. The treatment plan should be comprehensive as far as possible, so as to address the multi-dimensional aspects of the disordered gambling behaviour. The treatment goals and objectives, types of interventions, duration of treatment, steps to ensure treatment adherence and continuing care, monitoring of treatment outcome, and linkages with other community resources should be included in the treatment plan. Although complete abstinence from the problematic

gambling activity should be the ultimate treatment goal, reduction in the gambling behaviour is often an interim target of treatment.

There are two main treatment settings for pathological gambling. While most cases can be managed at the outpatient setting, some patients may require inpatient treatment. The latter cases include those who require psychiatric stabilization or crisis intervention, or where there are safety concerns (e.g. suicidal tendencies). Inpatient treatment can also be considered for those who may benefit from a period of intensive rehabilitation in a residential setting.

GPP A comprehensive treatment plan that incorporates a multi-disciplinary and multi-modal approach should be developed for the management of pathological gambling.

GPP

4.3 Pharmacological interventions

Clinical trials have shown several medications to be effective in reducing gambling-related symptoms. To date, however, no medications have been approved by the US Food and Drug Administration (FDA) for treatment of pathological gambling. Nevertheless, pharmacological intervention may be an adequate treatment option in pathological gambling.³¹ When prescribing medications for pathological gamblers, the medical practitioner must be aware of the off-label use of these medications and their side-effects, and the patient should be informed.

GPP When prescribing medications to treat pathological gambling, the medical practitioner should inform the patient of the off-label use and the possible side-effects of these medications.

GPP

4.3.1 Opioid antagonists

Opioid antagonists are drugs that block the endogenous opioid receptors in the body. Blocking of these receptors effectively reduces the feeling of pleasure. Opioid antagonists, such as naltrexone and nalmefene, have been shown to be effective in reducing gambling urges, thoughts and severity.³²⁻³⁸

A An opioid antagonist like naltrexone or nalmefene may be considered for reduction of gambling urges and thoughts in pathological gamblers.³²⁻³⁸

Grade A, Level 1+

4.3.2 Selective serotonin reuptake inhibitors (SSRIs)

Research has implicated a dysfunction in the serotonergic system, which is involved in impulse regulation, in the aetiology of pathological gambling^{7, 39-41}, suggesting that selective serotonin reuptake inhibitors (SSRIs) may be useful in the treatment of this disorder. Evidence from studies that investigated the use of fluvoxamine and paroxetine in pathological gambling suggest that these SSRIs may be effective in reducing gambling behaviour, thoughts and urges.⁴²⁻⁴⁶

B Fluvoxamine⁴²⁻⁴⁴ and paroxetine⁴⁵⁻⁴⁶ may be considered for reduction of gambling behaviour, urges and thoughts in pathological gamblers.

Grade B, Level 1+

4.3.3 Stabilisers

Due to similarities between pathological gambling and bipolar disorder, the use of mood stabilisers have been evaluated in pathological gamblers. Lithium, carbamazepine, valproate and topiramate have been tested and shown to improve symptoms of pathological gambling.⁴⁷⁻⁵²

However there is currently insufficient evidence for a recommendation regarding the use of mood stabilisers in pathological gamblers.

4.3.4 Other medications

Other classes of psychotropic agents have been tested in pathological gamblers, such as olanzapine (anti-psychotic), bupropion (selective dopamine and noradrenaline reuptake inhibitor), N-acetylcysteine (glutamate modulator) and modafinil (stimulant).⁵³⁻⁵⁸

There is currently insufficient evidence for a recommendation regarding the use of such psychotropic agents in pathological gamblers.

4.4 Psychological interventions

There are 3 main types of psychological interventions for pathological gambling: behavioural therapy, cognitive therapy, and cognitive-behavioural therapy. Other forms of psychological treatment include psychodynamic psychotherapy, brief intervention, mindfulness therapy and social support groups.

4.4.1 Behavioural therapy (BT)

Behavioural therapy is based on the principles of classical and operant conditioning of learning theory. It aims to modify a person's behaviour through reinforcement of desired behaviours and elimination of undesirable behaviours. Gambling can be regarded as a learned maladaptive and disordered behaviour. Various forms of behavioural therapy have been used to help gamblers unlearn this disordered behaviour, such as aversion therapy, imaginal relaxation, imaginal desensitisation, and in vivo exposure.⁵⁹⁻⁶³

However there is currently insufficient evidence for a recommendation regarding the exclusive use of behavioural therapy in pathological gamblers.

4.4.2 Cognitive therapy (CT)

Cognitive therapy focuses on identifying and correcting dysfunctional or erroneous thoughts (cognitive errors), with the aim of modifying emotional responses and changing behaviours. Cognitive errors, such as superstitious beliefs, illusion of control, and irrational beliefs about randomness and chance, perpetuate the gambling behaviour in pathological gamblers.⁶⁴⁻⁶⁵ Cognitive therapy has been used to correct cognitive errors and reduce the desire to gamble.⁶⁶⁻⁶⁷

However there is currently insufficient evidence for a recommendation regarding the exclusive use of cognitive therapy in pathological gamblers.

4.4.3 Cognitive-behavioural therapy (CBT)

Cognitive-behavioural therapy combines the principles of both cognitive and behavioural therapies. It attempts to modify the pathological gamblers' cognitions and behaviours through techniques such as identifying high-risk gambling situations or gambling triggers, and developing relapse prevention strategies. Key cognitive-behavioural therapy techniques in treating pathological gambling include 5 components: (a) psychoeducation about gambling, (b) cognitive restructuring to correct cognitive errors, (c) developing problem-solving skills, (d) social skills training, and (e) developing relapse prevention skills.⁶⁸

To date, cognitive-behavioural therapy has the most empirical evidence for the treatment of pathological gambling.⁶⁹⁻⁷⁰ Individual cognitive-behavioural therapy has been shown effective in improving gambling symptoms and reducing gambling behavior.^{64, 69-77} Group cognitive-behavioural therapy has also been shown to be effective in treating pathological gamblers.⁷⁸⁻⁷⁹

B Psychological interventions utilising the components of cognitive-behavioural therapy are recommended for the treatment of pathological gambling.⁶⁹⁻⁷⁰

Grade B, Level 2++

4.4.4 Brief interventions

Brief interventions refers to less intensive treatment that range from one to several time-limited sessions. It is a useful approach for reducing gambling behaviours among those who are not ready to seek treatment or quit gambling, or who are not keen on long-term therapy.

Brief interventions with self-help workbooks and telephone counselling have been used to reduce gambling behaviours.⁸⁰⁻⁸³ Brief motivational enhancement therapy, which attempts to increase a gambler's motivation and readiness for change, was found to reduce gambling symptoms and achieve positive treatment outcome.⁸³⁻⁸⁶

A Motivational enhancement therapy (face-to-face or telephone counselling) and self-help workbooks are recommended for the treatment of gambling disorders, especially for individuals who are ambivalent about quitting gambling or entering treatment, or who are not keen on long-term therapy.⁸⁰⁻⁸³

Grade A, Level 1+

4.4.5 Mindfulness therapy

Mindfulness therapy can reduce the impulsiveness of reacting to thoughts, especially gambling-related cognitive errors.⁸⁷ It involves the willingness to recognise gambling craving and the desire to chase losses, and to tolerate the discomfort of not acting on that desire.⁸⁸ Therefore, mindfulness therapy may be useful in reducing gambling-related problems.⁸⁹

D Mindfulness therapy may be used as an adjunct intervention in the treatment of gambling disorders.⁸⁷⁻⁸⁹

Grade D, Level 3

4.4.6 Psychodynamic therapy

Psychodynamic psychotherapy helps gamblers to gain self-awareness and to understand the meaning of gambling in their lives with the aim of changing behaviours.⁹⁰⁻⁹²

There is currently insufficient evidence for a recommendation regarding the use of psychodynamic psychotherapy in the treatment of gambling disorders.

4.4.7 Self-help support group

Social support has been utilised in self-help groups, such as Gamblers Anonymous (GA), to provide fellowship and mutual support to members with gambling-related problems. GA is based on the principles of Twelve Steps, and views total abstinence as the treatment goal. However GA is presently not active locally. Due to insufficient evidence regarding self-help groups, such groups should only be considered as complementary services to professional treatment for individuals with gambling-related problems.

GPP Self-help support groups should only be considered as complementary services to professional treatment for individuals with gambling-related problems.

GPP

4.5 Practical management

Limiting access to money and restricting admission into gambling venues (e.g. self- and family exclusion orders to bar entry into local casinos) are useful approaches for those with gambling-related problems.

Gambling-related debt and financial difficulties are common concerns among individuals with gambling disorders. Financial counselling can assist gamblers to make a financial plan, manage monetary budgets, and develop a debt repayment plan. It addresses their financial concerns and may be able to reduce distress due to debt.

GPP Financial counselling, limiting access to money and restricting admission into gambling venues are complementary and practical approaches that should be considered for those who have gambling-related problems.

GPP

5.1 Adolescents

Adolescents may be more vulnerable to gambling exposure given that risk-taking behaviours are generally common in this developmental age, thus increasing the likelihood of developing gambling problems later in life.⁹³ Evidence indicates that early adolescent onset of gambling is a risk-factor for psychiatric, interpersonal, and substance abuse problems in adulthood.⁹⁴⁻⁹⁵ Epidemiological surveys have shown that adolescent gamblers are more likely to become problem or pathological gamblers than adult gamblers.⁹⁶⁻⁹⁸

Risk factors for youth problem gambling include low self-esteem, conformity and self-discipline, sensation seeking and associated significant anxiety, feelings of depression and substance abuse.⁹⁹⁻¹⁰¹ Clinicians need to be sensitive to these risk factors associated with gambling in adolescents and to screen for gambling in high risk adolescent populations.

Several tools are available for screening of gambling disorders in adolescents, such as South Oaks Gambling Screen–Revised for Adolescents (SOGS-RA), DSM-IV Adapted for Juveniles (DSM-IV-J) and Massachusetts Adolescent Gambling Screen (MAGS).¹⁰²⁻¹⁰⁴

C Screening tools that are specific to the adolescent population (e.g. SOGS-RA, DSM-IV-J) should be used in the screening for gambling disorders among adolescents.

Grade C, Level 2+

Empirical data pertaining to pharmacological treatment of adolescents with gambling-related problems is currently lacking.⁹⁹ Therefore, there is insufficient evidence for a recommendation regarding pharmacotherapy in adolescents with gambling disorders.

Cognitive behavioural therapy (CBT) has been shown to be useful in adolescent pathological gamblers.⁷⁴ Also, treatment that included clinical components such as acceptance of the problem, establishment of mutual trust, involvement of family, restructuring of leisure time, cognitive restructuring of erroneous beliefs and enhancement of effective coping skills has been found helpful for adolescents with gambling-related problems.¹⁰¹

D Cognitive behavioural therapy may be used in the treatment of adolescent pathological gambling.⁷⁴

Grade D, Level 3

D Therapy for adolescent gambling disorders should include components such as acceptance of the problem, establishment of mutual trust, involvement of family, restructuring of leisure time, cognitive restructuring of erroneous beliefs and enhancement of effective coping skills.¹⁰¹

Grade D, Level 3

5.2 Older adults

Gambling has been identified to be a frequent social activity among older adults.¹⁰⁵ An older adult is defined as someone who is aged 60 years and above. With significant losses at this stage of life, such as employment, health, relationships and independence, gambling provides an avenue for older adults to escape from negative emotions, to relax, relieve boredom and socialize with their peers.¹⁰⁶⁻¹⁰⁷ Older adults who gamble are more likely to develop a gambling disorder.¹⁰⁷

There is an elevated rate of psychiatric comorbidities in older adults with pathological gambling, such as mood, anxiety and substance use disorders.¹⁰⁸⁻¹⁰⁹ There is also an association with poorer physical health.¹⁰⁹⁻¹¹⁰ Negative social effects include disruptions in family relationships, serious financial debts and domestic abuse.¹¹¹ With such a wide range of adverse gambling-related consequences, there is a need to screen for a gambling disorder in older adults.

Currently there is limited data on the pharmacological and psychological treatment of gambling disorders in older adults.

C Screening for gambling disorders is recommended in older adults who engage in gambling activities.

Grade C, Level 2+

C Clinical assessment of older adults, who are suspected or diagnosed to have a gambling disorders, should include a comprehensive evaluation of physical, psychiatric and social histories.

Grade C, Level 2+

GPP Empirical treatment using best practices in adult problem/pathological gamblers is recommended for the treatment of older adults with gambling disorders.

GPP

5.3 Psychiatric comorbidities

High rates of comorbid psychiatric conditions have been consistently found in individuals with gambling disorders. Common psychiatric comorbidities include depression, anxiety, alcohol and substance use disorders, and personality disorders.^{6, 14, 112-116} Psychiatric emergencies especially suicidal ideations and suicide attempts are frequently associated with gambling disorders.^{14, 116} Therefore, a comprehensive assessment to screen for psychiatric comorbidities is essential. Appropriate treatment for the identified comorbid psychiatric disorders should be instituted and integrated into the overall treatment plan for the gambling disorders.

C Screening for comorbid psychiatric conditions in individuals with gambling disorders is highly recommended.

Grade C, Level 2+

GPP Appropriate treatment for the identified comorbid psychiatric disorders in individuals with gambling disorders should be instituted.

GPP

5.4 Families and significant others

Gambling disorders not only affects the gamblers, but also their family members and significant others.^{5, 117-118} Adverse effects on family include financial difficulties, emotional distress, spousal and relationship conflicts, divorce, violence and abuse.^{13, 119-120} Participation of the family and significant others in gambling treatment has been found to improve treatment outcome of the gamblers.¹²¹ Interventions, such as family therapy and couple therapy, may be useful when gambling-related interpersonal problems exist.¹²²

B Family members and significant others of individuals with gambling disorders should be engaged in treatment as far as possible.

Grade B, Level 2++

6 National Problem Gambling Helpline

A National Problem Gambling Helpline (1800-6668668) is currently available 24 hours a day. It provides essential information and advice pertaining to problematic gambling. Phone calls are kept confidential and managed by experienced gambling addiction counsellors. Individuals with gambling-related concerns, or family members who are concerned about their loved ones' gambling behaviour, can call this helpline for support.¹²³

7 Cost-effectiveness issues

A systematic search for cost-effectiveness studies and related economic analyses of interventions for gambling disorders found only one relevant study.¹²⁴

In 1985, the John Hopkins center for pathological gambling studied the cost-effectiveness of treatment for pathological gambling using data from 102 people receiving various treatments for pathological gambling (e.g. a 40-hours residential programme, team counselling, group/family therapy, legal/financial counselling) at the centre. The benefit to cost ratio of treatment was calculated to be 21.3:1, based on estimates of dollars saved against the cost of treatment. The study's authors concluded that pathological gambling was one of the most expensive illnesses afflicting society, but treatment was effective and relatively inexpensive.

The generalisability of the existing research is limited but it is logical that if pathological gambling can be effectively managed, there would be gains from money saved and social problems avoided.

8 Clinical quality improvement

The desired treatment outcome for gambling disorders is total abstinence from the problematic gambling activities and restoration of mental, physical and social health as well as other important areas of functioning.

The following are some suggested clinical quality indicators of gambling treatment that can be monitored for the purpose of clinical assurance:

1. Proportion of patients who show a reduction in the severity of gambling symptoms (e.g. 50% shows symptom reduction after 3 months of treatment)
2. Proportion of patients who improve in their quality of life (QoL) (e.g. 50% shows improvement in QoL scores after 3 months of treatment)
3. Reduction in the number of gambling days
4. Reduction in the amount of money gambled

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Self assessment (MCQs)

After reading the Clinical Practice Guidelines, you can claim one CME point under Category 3A (Self-Study) of the SMC Online CME System. Alternatively, you can claim one CME point under Category 3B (Distance Learning - Verifiable Self Assessment) if you answer at least 60% of the following MCQs correctly. You can submit your answers through the SMJ website at this link: <http://smj.sma.org.sg/cme/smj/index.html> (**the link will only be available once the June 2011 issue of the SMJ becomes available**). The answers will be published in the SMJ August 2011 issue and at the MOH webpage for this CPG after the period for submitting answers is over.

Instruction: Indicate whether each statement is true or false.

	True	False
1. Regarding screening for gambling disorders:		
A) Patients frequently volunteer information about their gambling behavior.	<input type="checkbox"/>	<input type="checkbox"/>
B) Healthcare providers do not commonly ask patients about gambling problems.	<input type="checkbox"/>	<input type="checkbox"/>
C) Screening should be routinely performed as part of psychiatric assessment.	<input type="checkbox"/>	<input type="checkbox"/>
D) Patients with gambling problems may present with depressive complaints.	<input type="checkbox"/>	<input type="checkbox"/>
2. DSM-IV Criteria for Pathological Gambling include:		
A) Chasing losses	<input type="checkbox"/>	<input type="checkbox"/>
B) Lying about the extent of gambling	<input type="checkbox"/>	<input type="checkbox"/>
C) Gambling to seek thrill	<input type="checkbox"/>	<input type="checkbox"/>
D) Ability to stop gambling with ease	<input type="checkbox"/>	<input type="checkbox"/>
3. The following medications have been found to be effective in the treatment of pathological gambling:		
A) Paroxetine	<input type="checkbox"/>	<input type="checkbox"/>
B) Fluvoxamine	<input type="checkbox"/>	<input type="checkbox"/>
C) Olanzapine	<input type="checkbox"/>	<input type="checkbox"/>
D) Naltrexone	<input type="checkbox"/>	<input type="checkbox"/>

- | | | True | False |
|----|--|--------------------------|--------------------------|
| 4. | Regarding psychological interventions for pathological gambling: | | |
| | A) Behavioural therapy identifies and corrects erroneous beliefs about gambling. | <input type="checkbox"/> | <input type="checkbox"/> |
| | B) Superstitions and illusion of control are examples of cognitive errors. | <input type="checkbox"/> | <input type="checkbox"/> |
| | C) Cognitive-behavioural therapy is empirically the most effective psychological treatment. | <input type="checkbox"/> | <input type="checkbox"/> |
| | D) Motivational enhancement therapy is an effective brief intervention. | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. | Please state whether the following statements are true or false: | | |
| | A) Screening tools for gambling disorders in the adolescents are available. | <input type="checkbox"/> | <input type="checkbox"/> |
| | B) Depression and alcohol abuse are uncommon amongst older adults with pathological gambling. | <input type="checkbox"/> | <input type="checkbox"/> |
| | C) Screening for comorbid psychiatric conditions in patients with gambling disorders is essential. | <input type="checkbox"/> | <input type="checkbox"/> |
| | D) Engaging family members in gambling treatment is not useful. | <input type="checkbox"/> | <input type="checkbox"/> |

Workgroup members

The members of the workgroup, who were appointed in their personal professional capacity, are:

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ISBN 978-981-08-9145-9