



Pathological and problem gambling in substance use treatment: A systematic review and meta-analysis

Sean Cowlshaw, Ph.D. ^{a,b,*}, Stephanie Merkouris, PGradDip ^c,
Anna Chapman, B. App Sc/B. Nutrition & Dietetics ^c, Harriet Radermacher, D.Psych. ^c

^a Division of Health Research, Faculty of Health & Medicine, Lancaster University, United Kingdom

^b Centre for Gambling Research, ANU College of Arts and Social Sciences, School of Sociology, the Australian National University, Australia

^c School of Primary Health Care, Faculty of Medicine, Nursing and Health Science, Monash University, Australia

ARTICLE INFO

Article history:

Received 5 April 2013

Received in revised form 6 August 2013

Accepted 14 August 2013

Keywords:

Gambling

Comorbidity

Substance use treatment

Prevalence

Systematic review

ABSTRACT

Pathological and problem gambling refer to a class of disorders, including those meeting criteria for a psychiatric diagnosis (i.e., pathological gambling), and others comprising a spectrum of severity defined by significant personal and social harm (i.e., problem gambling), that may be common in substance use treatment but are frequently unrecognized. This paper presents a systematic review and meta-analysis of available evidence indicating the prevalence of such gambling disorders in substance use treatment. It provides weighted mean estimates from across studies of clinical samples of substance users, and suggests around 14% of patients that demonstrate comorbid pathological gambling. Around 23% suffer conditions along the broader spectrum of problem gambling. The review also highlights important limitations of existing evidence, including scant data on current versus lifetime comorbidity, as well as reliance on convenience samples and self-administered measures of gambling problems. Notwithstanding a concomitant need for caution when applying these results, the findings suggest a strong need to identify and manage gambling comorbidity in substance use treatment. Strategies for identification of gambling disorders, and therapies that may provide useful adjunctive interventions in substance use treatment are discussed.

© 2013 Elsevier Inc. All rights reserved.

1. Introduction

Large studies of patients in treatment for substance use problems document high rates of co-occurring conditions, with data suggesting between 40% and 70% of patients that demonstrate one or more additional psychiatric diagnoses (Brooner, King, Kidorf, Schmidt, & Bigelow, 1997; Castel, Rush, Urbanoski, & Toneatto, 2006). The term diagnostic comorbidity is used commonly to refer to such co-occurring disorders, and subsumes conditions that occur simultaneously (i.e., current comorbidity), and disorders that occur independently in time (i.e., lifetime comorbidity; Petry, 2005). High rates of comorbidity in substance use treatment may reflect several factors, including natural levels of co-occurrence in the community (Kessler, Chiu, Demler, & Walters, 2005), as well as selection effects, whereby multiple conditions increase likelihood of seeking treatment (Castel et al., 2006). Given these selection effects that partly determine the composition of clinical samples (see Galbaud du Fort, Newman, & Bland, 1993), studies of patients in treatment do not necessarily indicate associations among disorders (whereby one condition

increases risk of another; Krueger & Markon, 2006). Rather, they highlight potentially important secondary conditions, including mood and personality disorders (Brooner et al., 1997; Miller, Klamen, Hoffman, & Flaherty, 1996), which may adversely affect treatment and risk of relapse (Hasin et al., 2002). Notwithstanding this, there remains limited awareness of certain disorders that occur at low rates in the community, and are frequently assumed to occur at negligible levels in clinical settings as well. These assumptions contrast with findings from small studies of presumably rare conditions (e.g., impulse control disorders; Lejoux, Feuche, Loi, Solomon, & Ades, 1999), which indicate additional comorbidities that can affect many substance users in treatment, but often go unrecognized.

Pathological and problem gambling refer to one class of impulse control or addictive disorders that affect around 0.5% to 2.0% of the community across western countries (Hodgins, Stea, & Grant, 2011). These disorders are commonly comorbid with other psychiatric diagnoses, including substance use disorders (Lorains, Cowlshaw, & Thomas, 2011), and are characterized generally by “persistent and recurrent maladaptive gambling behaviour” (American Psychiatric Association, 1994; p. 615) that leads to significant personal and social harm (e.g., financial difficulties, relationship breakdown). Although there is no consistent nomenclature associated with such disorders, the term pathological gambling is commonly reserved for conditions that meet full diagnostic criteria under the *Diagnostic and Statistical Manual*

* Corresponding author.

E-mail address: s.cowlshaw@lancaster.ac.uk (S. Cowlshaw).

of Mental Disorders (American Psychiatric Association, 1994).¹ In contrast, the term problem gambling refers frequently to a broader spectrum of conditions that range in severity from moderate difficulties (meeting some but not all diagnostic criteria) to extreme levels of harm that could otherwise be classified as pathological gambling (although, for alternative usages, see Hodgins et al., 2011). Various other terms have been used to encompass these gambling conditions, including disordered gambling (Shaffer & Martin, 2011), compulsive gambling (Blume, 1988) and level 2 (subclinical) or level 3 (severe) gambling (Shaffer, Hall, & VanderBilt, 1997). Data suggest that a range of such gambling disorders across a spectrum of severity are associated with adverse outcomes, including poor health and psychological maladjustment (e.g., Morasco et al., 2006).

Pathological and problem gambling have been widely overlooked in large studies of comorbidity in substance use treatment (e.g., Brooner et al., 1997; Compton, Cottler, Phelps, Ben-Abdallah, & Spitznagel, 2000; Miller et al., 1996). This is perhaps due to the generally low rate of occurrence in the community, and concerns that outcomes of screening, in terms of number of cases identified, will not justify the expense. However, there are smaller studies which suggest rates of pathological or problem gambling that are substantially elevated in substance use treatment, and as high as 50% in some instances (Weinstock, Blanco, & Petry, 2006). Such findings are consistent with evidence of associations between gambling and substance use problems in the community (Petry, 2005), and high rates of substance related disorders in clinical (Ibanez et al., 2001) and community (Lorains et al., 2011) samples of pathological and problem gamblers. There is additional theoretical literature suggesting an addiction syndrome and common etiology underlying some substance and behavioral addictions (Shaffer et al., 2004) that may also explain their common co-occurrence.

Despite these reasons to anticipate high numbers of pathological and problem gamblers in substance use treatment, scrutiny of the literature reveals varying results and some studies (e.g., Tomasson & Vaglum, 1995) suggesting lower (and even negligible) rates of this diagnosis. Such variable findings are currently difficult to interpret. Most relevant studies are characterized by small samples, and differences could be explained by sampling error alone, whereby findings may converge around a single unknown population value once the imprecision of estimates is taken into account. Conversely, it may also be that rates genuinely vary across settings. For example, the occurrence of comorbid conditions is associated with greater severity of the primary problem (Angst, Sellaro, & Merikangas, 2002; Brooner et al., 1997), and it may be that comorbid gambling problems are encountered more frequently in inpatient treatment, relative to outpatient programs where patients may have lower psychiatric severity (Finney, Hahn, & Moos, 1996). Inconsistent findings may also be explained by variability in assessment procedures and definitions of gambling problems, as well as methodological differences, with some studies (e.g., using self-selected samples) overestimating rates of pathological and problem gambling.

The current paper provides a systematic examination of studies of pathological and problem gambling in substance use treatment. Although general reviews have touched on this literature (see for example, Crockford & el-Guebaly, 1998; Petry, 2007), these have had a broader focus and provided cursory consideration of substance use treatment. None have used systematic strategies to identify available evidence and integrate studies with discrepant findings. No reviews have provided estimates of the broader continuum of problem

gambling or have evaluated heterogeneity across studies. Accordingly, there remains an ongoing need for an up-to-date and focused synthesis of literature on gambling disorders in substance use treatment. The current systematic review will address this need, and provide weighted mean estimates of the prevalence of pathological and problem gambling in clinical samples of substance users. It will examine variability across studies and consider contexts where this comorbidity may be more versus less common, and also evaluate potential biases in available evidence.

2. Method

2.1. Search strategy

A systematic search was conducted to identify all available studies providing estimates of the prevalence of pathological or problem gambling in adult patients seeking substance use treatment. Electronic searches of databases (Medline, PsycInfo and EMBASE) were conducted using a combination of keywords and wildcards relating to gambling and comorbidity, addiction and alcohol or substance use. A selection of relevant journals that were not indexed in these databases was searched manually; including *Gambling Research* (2003 onwards), *International Gambling Studies* (2001–2003), and the *Journal of Gambling Issues* (2000–2006). Finally, the reference lists of included studies were searched manually. The search was restricted to articles published in peer-reviewed journals, from January 1990 to August 2012.

2.2. Inclusion criteria

It was required that patients were adults over 18 years recruited from specialized substance use (illicit drug or alcohol) treatment programs. These included inpatient and outpatient programs and general addiction treatment centers (on condition that patients with gambling as a primary presenting problem were excluded). It was also required that pathological and problem gambling were identified using recognized measurement instruments. These included self-administered scales such as the South Oaks Gambling Screen (SOGS; Lesieur & Blume, 1987). The SOGS is a widely used 20-item questionnaire based on DSM-III criteria, which was developed to screen for pathological gambling in clinical populations. Consistent with other self-administered scales, the SOGS does not provide formal diagnoses of pathological gambling, but rather, is associated with cut-off criteria that identify likely subclinical gambling problems (3–4 symptoms) and probable pathological gambling (5+ symptoms; Lesieur & Blume, 1993). Recognized measurement instruments also included interview measures (e.g., based on DSM-IV criteria) that may provide formally recognized diagnoses of pathological gambling. Studies were excluded if they used significant inclusion or exclusion criteria during recruitment (including clinical trials), drew patients from involuntary (e.g., court ordered) treatment, or were not published in English.

2.3. Data extraction

Data were extracted on descriptive features of studies, including year of publication, sample characteristics (e.g., gender distribution), sample size, as well as the number (or proportion) of participants classified as pathological gamblers or problem gamblers. Other characteristics included treatment setting (e.g., inpatient, general outpatient), recruitment strategy (e.g., random sampling, invitations to participate), and methods of measurement. Two independent raters extracted the data from each study with 93% inter-rater agreement. Any discrepancies were resolved through discussion until consensus was achieved.

¹ Pathological gambling was classified as an impulse control disorder not elsewhere classified in the DSM-IV (American Psychiatric Association, 1994). This diagnostic category has been re-named 'Gambling Disorder' and re-classified under a broader category of Substance-Related and Addictive Disorders in the revised DSM-5 (American Psychiatric Association, 2013). For additional discussion, see Petry et al. (2013).

Download English Version:

<https://daneshyari.com/en/article/329705>

Download Persian Version:

<https://daneshyari.com/article/329705>

[Daneshyari.com](https://daneshyari.com)