Addictive Behaviors 74 (2017) 33–40

Contents lists available at ScienceDirect

Addictive Behaviors

journal homepage: www.elsevier.com/locate/addictbeh

Current suicidal ideation in treatment-seeking individuals in the United Kingdom with gambling problems

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HIGHLIGHTS

- Uses a large clinical sample (n = 903)
- Prevalence rates of current and lifetime suicide ideation are high in treatment seeking pathological gamblers.
- The severity of anxiety disorder is associated with current suicidal ideation.

ARTICLE INFO

Keywords:
Gambling disorder
Pathological gambling
Suicide
Suicidality
Attempt suicide
Suicidal ideation
Predictive factors
Anxiety

ABSTRACT

Background: Studies show higher lifetime prevalence of suicidality in individuals with pathological gambling. However, less is known about the relationship between pathological gambling and current suicidal ideation.
Objectives: We investigated socio-demographic, clinical and gambling-related variables associated with suicidality in treatment-seeking individuals.
Methods: Bivariate analyses and logistic regression models were generated on data from 903 individuals to identify measures associated with aspects of suicidality.
Results: Forty-six percent of patients reported current suicidal ideation. People with current suicidal thoughts were more likely to report greater problem-gambling severity ($p < 0.001$), depression ($p < 0.001$) and anxiety ($p < 0.001$) compared to those without suicidality. Logistic regression models suggested that past suicidal ideation ($p < 0.001$) and higher anxiety ($p < 0.05$) may be predictive factors of current suicidality.
Conclusions: Our findings suggest that the severity of anxiety disorder, along with a lifetime history of suicidal ideation, may help to identify treatment-seeking individuals with pathological gambling with a higher risk of suicidality, highlighting the importance of assessing suicidal ideation in clinical settings.

1. Introduction

Gambling disorder and suicidal behaviors are considered two major public health problems. The World Health Organization estimated that suicide accounted for 1.4% of all deaths, representing the 15th leading cause of death (World Health Organisation, 2014). The average prevalence of gambling disorder across countries has been estimated in some studies to exceed 2% (Williams, Volberg, & Stevens, 2012), while in Great Britain prevalence has been estimated at 0.9% (Wardle et al., 2011). People with gambling disorder often suffer from other psychiatric comorbidities, particularly mood and substance-use disorders (Dowling et al., 2015a,b; Lorains, Cowlishaw, & Thomas, 2011).

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http://dx.doi.org/10.1016/j.addbeh.2017.05.032
Received 11 January 2017; Received in revised form 25 April 2017; Accepted 23 May 2017
Available online 24 May 2017

Individuals with pathological gambling frequently report suicidality, with 17%–48% reporting suicidal ideation and 9%–31% reporting suicide attempts in their lifetimes (Blaszczynski & Farrell, 1998; Hollander et al., 1998; Kausch, 2003; Komoto, 2014; Lee, Guo, Manning, Thane, & Wong, 2011; Manning et al., 2015; Martins, Tavares, Da Silva Lobo, Galetti, & Gentil, 2004; Rossini-Dib, Fuentes, & Tavares, 2015; Teo, Mythily, Anantha, & Winslow, 2007; Thon et al., 2014). To date, only a few studies have explored the prevalence of current suicidal ideation amongst individuals with pathological gambling, reporting it to be present in 11% to 33% of individuals (Maccallum & Blaszczynski, 2003; Sinclair, Pretorius, & Stein, 2014; Weinstock et al., 2014). In one study, the percentage of individuals with suicidal ideation was reported to be 81.4% (Battersby, Tolchard, Scurrah, & Thomas, 2006), and in another, which analyzed gambling help-line data, the percentage was found to be about 90% (Sullivan, 1994). Differences in frequencies may be attributed to the samples being studied or differences in definitions and assessment tools used to assess suicidal behavior, while the timeframe utilized for defining the presence or the absence of current suicidal ideation may also be another factor that could explain differences across studies. Specifically, some research has considered the presence of suicidal ideation only if it was present at the time of the assessment (Sinclair et al., 2014), while others have used a 7-day (Weinstock et al., 2014), a 24-hour (Maccallum & Blaszczynski, 2003), or a past-month (Manning et al., 2015) timeframe. The high rate of attribution of suicidality to gambling problems (Ledgerwood, Steinberg, Wu, & Potenza, 2005; Sinclair et al., 2014; Weinstock et al., 2014) suggests the need to examine more closely the relationships between the clinical characteristics of gambling disorder and suicidality in order to better understand the phenomena, which may prove useful in improving the efficacies of clinical interventions. Prior studies have related sociodemographic, clinical and gambling-related variables to suicidality in pathological gambling. However, findings have been mixed. For example, female gender (Bischof et al., 2015, 2016; Komoto, 2014; Thon et al., 2014) and unemployment (Komoto, 2014; Thon et al., 2014) have been associated with suicidality, but not in all studies (Black et al., 2015; Ledgerwood & Petry, 2004; Petry & Kiluk, 2002; Weinstock et al., 2014). Regarding marital status, a recent study found no significant differences between individuals with gambling problems with and without suicidal ideation (Weinstock et al., 2014), while another found a positive association between being divorced and lifetime suicidal ideation (Ledgerwood & Petry, 2004). Depressive (Bischof et al., 2016; Petry & Kiluk, 2002) and substance-use disorders were the psychiatric comorbidities mostly associated with suicidality in individuals with gambling problems (Bischof et al., 2015; Hodgins, Mansley, & Thygesen, 2006; Ledgerwood et al., 2005). Suicidality may also link importantly to severity of problem gambling (Battersby et al., 2006; Black et al., 2015; Hodgins et al., 2006; Ledgerwood & Petry, 2004; Petry & Kiluk, 2002), as well as to the total amount of losses and debts (Battersby et al., 2006; Bischof et al., 2016; Ledgerwood et al., 2005; Petry & Kiluk, 2002). However, to date, although the relationship between suicidality and gambling disorder has been explored in some epidemiologic and clinical studies, it is far from being well understood. Thus, we conducted this study in order to address existing gaps in knowledge, analyzing data drawn from a large treatment-seeking sample of individuals with gambling problems in the United Kingdom. The main aims of this study were to: 1) assess the prevalence of suicidal ideation and suicidal attempts in a treatment-seeking population in the United Kingdom; 2) examine relationships between sociodemographic, clinical and gambling-related variables and measures of suicidality; and, 3) investigate whether socio-demographic, clinical and gambling-related variables might statistically predict aspects of current suicidality in treatment-seeking individuals with gambling problems. We hypothesized that current suicidal ideation would be frequent amongst individuals seeking treatment for gambling problems, that suicidality would relate to specific factors (female gender, unemployment, psychopathology, and severity of problem gambling), and that these factors would predict suicidality in statistical models.

2. Method

2.1. Participants

Data were collected over a period of 4 years from individuals who were voluntarily seeking treatment at the National Problem Gambling Clinic (NPGC) in the United Kingdom. The total sample consisted of 903 individuals with problem/pathological gambling who provided data on current or past suicidal behavior and with a Problem Gambling Severity Index (PGSI) score ≥ 8. Sociodemographic data was obtained from the referral form, while clinical and gambling-related variables were obtained during initial formal assessment. Individuals were informed that information collected from the referral and assessment forms would be analyzed by researchers in order to increase understanding about gambling disorder, and oral consent was obtained. Formal institutional review board approval was not obtained as collected data were part of the clinic's standard battery of assessment forms. The main treatment provided by the NPGC is cognitive behavioral therapy, which is delivered in three different ways: in a group setting, individually, and remotely over the phone for those who are unable to travel weekly to the clinic. Cognitive behavioral therapy is composed of 8 sessions of 90–120 min. At the end of the cognitive behavioral therapy sessions, group support sessions, delivered once a month, were offered to all patients.

2.2. Measures

2.2.1. Socio-demographic variables

Socio-demographic variables were obtained from the referral form. They included: gender (male/female), age, ethnicity (white/non-white), marital status (married or cohabitating, never married, or other), education level (none, General Certificate of Secondary Education –GCSE- or equivalent, college degree or higher, or other), and employment status (employed, unemployed, or other).

2.2.2. Problem Gambling Severity Index

The Problem Gambling Severity Index (PGSI) is a 9-item questionnaire which measures gambling severity over the previous year (Ferris & Wynne, 2001). Validated previously (Holtgraves, 2009), scores for the nine items are summed and range from 0 to 27, defining four types of gamblers. A score of 8 or above indicates problem gambling.

2.2.3. Patient Health Questionnaire-9 (PHQ-9)

The Patient Health Questionnaire (PHQ-9) is a 9-item instrument which is widely used to measure severity of depression and suicidality (Simon et al., 2013) over the previous two weeks. The questionnaire evaluates each of the 9 DSM-IV criteria for depression (Kroenke, Spitzer, & Williams, 2001) and has been observed to have high sensitivity and specificity for diagnosing depression (Kroenke, Spitzer, Williams, & Lowe, 2010). A PHQ-9 score ≥ 10 has a sensitivity of 88% and a specificity of 88% for major depression (Kroenke et al., 2001). Scores for the nine items are summed and range from 0 to 27, defining 4 different categories; a score of 20 or above indicates severe depression (Kroenke, Spitzer, Williams, Monahan, & Lowe, 2007).

2.2.4. Suicidal ideation and suicide attempts

The presence of current suicidal behaviors was assessed by the PHQ-9 (Patient Health Questionnaire) item 9: 'thoughts that you would be better off dead or of hurting yourself in some way'. If a person responded 'not at all,' we coded individuals as not having current suicidal ideation. If a person responded 'several days, more than half the days, or nearly every day,' we coded individuals as having current suicidal