RESEARCH QUESTIONS
What is the prevalence of common comorbid disorders (e.g., alcohol/substance use disorder, depression, nicotine dependence, anxiety disorders and antisocial personality disorder) in population-representative samples of problem and pathological gamblers?

PURPOSE
Variation exists in the reported prevalence of conditions that are comorbid with problem or pathological gambling. To date, no study had systematically reviewed and synthesized general population surveys to estimate the prevalence of comorbid disorders in the problem and pathological gambling population. The purpose of the present study was to review results from all population studies indicating the prevalence of common comorbid disorders in problem and pathological gambling.

HYPOTHESIS
None stated.

PARTICIPANTS
Not applicable.

PROCEDURE
A systematic search was conducted for peer-reviewed and unpublished articles reported between 1 January 1998 and 20 September 2010. Only studies which examined the prevalence of comorbid conditions in problem and/or pathological gamblers from a general population sample using randomized sampling methods and standardized measurement tools were included.

MAIN OUTCOME MEASURES
Information was extracted from each included study on: broad study characteristics including country of origin and sample size; study methodology, including the measurement instruments used; and relevant quantitative data, including the prevalence of problem and pathological gambling in the study sample and prevalence of a comorbid condition in the problem and pathological gambling sample. Meta-analysis techniques were performed to synthesize the data from the included studies and estimate the weighted mean effect size and heterogeneity across studies.

KEY RESULTS
The prevalence estimates of past-year and life-time problem and pathological gambling ranged from 0.1 to 3% and 0.4 to 4%, respectively. Problem and pathological gamblers had high rates of other comorbid disorders. The highest average prevalence was for nicotine dependence (60%), followed by a substance use disorder (58%), any type of mood disorder (38%) and any type of anxiety disorder (37%). The prevalence of antisocial personality disorder (ASPD) was 29%.

LIMITATIONS
There was moderate heterogeneity across studies which should be considered when interpreting the mean prevalence estimates. General population prevalence studies in problem and pathological gambling are relatively rare, have been conducted predominantly in the United States and Canada, and the total sample size of gamblers was still quite small (n = 21–265). Previous research has suggested that gamblers commonly have multiple comorbid conditions and future research should consider the co-occurrence of comorbid disorders in problem and pathological gambling.

CONCLUSIONS
Overall, the results suggest that problem and pathological gamblers have high prevalence rates for many comorbid disorders, thus treatment providers should assess for comorbid conditions. The presence of comorbid conditions may produce difficulties for treatment and it may be beneficial to tailor treatments to different types of gamblers.

KEYWORDS: comorbidity, meta-analysis, pathological gambling, systematic review, prevalence