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National gambling experiences in the US: Will history repeat itself?

Nancy M. Petry^a and Carlos Blanco^b

^aUniversity of Connecticut School of Medicine

^bColumbia University

Abstract

Aims—The aim of this paper is to offer an account of the history and current status of gambling research in the United States (US).

Methods—A review of the literature.

Results—Gambling has been a part of society in the US since its early history. However, it was not until 1980 that the medical profession in the US first recognized pathological gambling as a psychiatric disorder. Today, it is still rarely diagnosed or treated and relatively little federal funding is available to support research in this area. With the upcoming fifth revision of the Diagnostic and Statistical Manual of Mental Disorders, pathological gambling is likely to be included alongside substance use disorders, as the first non-substance related addictive disorder. This change may represent an opportunity to expand research on gambling and treatment of pathological gambling.

Conclusions—We provide 10 suggestions for reducing societal and personal harm associated with this disorder.

Keywords

gambling; treatment; substance use disorders

Pathological gambling was recognized as a psychiatric disorder in the United States (US) in the third revision of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III) in 1980 [1]. However, it is rarely diagnosed or treated [2]. Currently, pathological gambling is being recommended for inclusion as a non-substance related addictive disorder in the fifth revision of DSM (DSM-V) [3]. This change may represent an opportunity to expand research and treatment for gambling. In this paper, we briefly review the background of gambling in the US, outline the current status related to treatment and research, and provide suggestions for minimizing adverse consequences of this disorder.

Background and history

Gambling has a long and tumultuous history in the US [4]. The first states and some of the most famous universities were founded on the proceeds of lotteries, and gambling was rampant during the migration westward through the late 19th and early 20th centuries.

Address all correspondence to: Nancy M. Petry, Ph.D., Calhoun Cardiology Center, MC-3944, University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030-3944, USA, Phone: 860-679-2593 Fax: 860-679-1312 npetry@uchc.edu, Carlos Blanco, M.D., Ph.D. is at Department of Psychiatry, Columbia University/New York State Psychiatric Institute, New York, NY, USA.

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However, because of corruption and violence associated with gambling, many states began banning gambling in the early 1900's. Even Nevada passed antigambling legislation in 1910.

A resurgence of gambling began in the 1960's, when states began re-interpreting their laws related to gambling. New Hampshire was the first to institute a lottery in 1964, and many other states quickly followed suit. New Jersey casinos emerged in 1978. Other states began allowing casino style gambling on riverways and Native American reservations over the next two decades. By 2000, 48 of the US states allowed some form of legalized wagering [5].

Prevalence rates and need for services

The widespread legalization of gambling over the past several decades has allowed for greater social acceptance of gambling. Children are growing up, for the first time in generations, amidst multiple gambling opportunities, ranging from lotteries, to casino gambling, televised poker games, and internet gambling. With lottery and scratch tickets available at grocery stores and gas stations, daily opportunities exist to gamble.

Given these marked changes, an understanding of how prevalence rates of pathological gambling have changed with gambling opportunities would be beneficial. Although several states commissioned prevalence surveys before and after casino gambling emerged in specific localities, none were sufficiently large or appropriately designed to assess the extent to which pathological gambling changed in response to new gambling venues [6]. However, in the past 10–15 years, four nationally based surveys have been conducted. The lifetime prevalence rate of pathological gambling in the general US population is 0.4% to 2% [7–10], depending on the survey used. Past year prevalence rates range from 0.2% to 1% [7–10]. Some subgroups have substantially higher prevalence rates, including substance abusers, members of racial/ethnic minorities, and adolescents and young adults [7–10].

Nationally representative data indicate that very low proportions (<10%) of those with gambling problems have received treatment [2], and youth and young adults are the least likely to present for treatment [11]. About half of individuals with a lifetime history of pathological gambling do not report current problems, suggesting that natural recovery from gambling problems, similarly to substance use, is the norm [2,12]. Nevertheless, the best predictor of future gambling problems is prior gambling problems [13], indicating that greater access to and receipt of effective treatments is needed.

Current status of gambling treatment and prevention services

Many state governments receive revenues from their lotteries and casinos, and a portion of these proceeds are sometimes used to fund gambling services, including free or sliding-fee gambling treatment. Numerous states have prevention campaigns that involve displaying billboards, commercials and flyers about harms associated with gambling. According to the National Council on Problem Gambling [14], about half of the 50 states have a state-funded gambling treatment program, and 29 have a Council on Problem Gambling. However, the amount of money devoted to treatment services or the Councils is seldom a set percentage of the gambling revenues and varies markedly across states, raising concerns that services are underfunded. Further, how moneys are allocated across prevention, treatment, and research may not optimize potential benefits.

Prevention campaigns, for example, may educate about gambling, but they are not based upon scientific evidence demonstrating efficacy in preventing or minimizing gambling problems. Similarly, treatment offered in most programs is based on clinical experiences,

rather than empirically-tested interventions. Drop out rates and outcomes of those who participate in gambling treatment programs rarely are tracked systematically, and data derived benchmarks are not established.

Further, access to treatment is often limited. Many states that do support a treatment program have just a single clinic serving the entire state, and some have just one part-time clinician. In some cases, treatment is provided by substance abuse counselors who may have a general knowledge of addiction, but limited knowledge about gambling. The extent to which existing prevention campaigns and treatment services are exerting beneficial effects on the residents of states providing these services is unknown.

Much treatment for addictions, including gambling, in the US is 12-step oriented. Gamblers Anonymous (GA) meetings are available in every state, although some have limited meeting availability, and geographical distances render GA meetings inaccessible to many pathological gamblers. Some data suggest that individuals who become involved in 12-step fellowships have better outcomes than those who do not [15], but trials of the efficacy of GA are non-existent. A randomized study [16] finds that providing cognitive-behavioral therapy in conjunction with encouragement to attend GA improves outcomes relative to GA referral alone, suggesting that a combination of professional-delivered treatment and GA may be effective.

Funding and research

To date, the US federal government has provided limited funding for research on pathological gambling, its etiology, or treatment. No institute in the National Institutes of Health (NIH) considers pathological gambling to be within its purview, making it particularly challenging to secure research funding. In 2011, only five studies related to gambling treatment were funded by the NIH, and no gambling prevention research has been supported. With the current fiscal crisis and reduced NIH budget, funding for gambling is likely to continue to suffer.

The only other nationally available funding source for gambling research in the US is the National Center for Responsible Gaming. The amount of support provided per project is low relative to NIH grants. Further, this institute is funded mainly by the gambling industry, and some universities have formal or informal policies discouraging industry-sponsored research. In contrast, our northern neighbors have far greater access to gambling funding, with provincial research programs available throughout Canada.

Publication of gambling research is also hindered by the precarious position of gambling in the context of other addictive behaviors. Numerous gambling specialty journals exist, but some are not indexed by Pubmed; many have low impact factors or have not obtained impact factor ratings. Further, some journals focused on addictions do not accept manuscripts devoted exclusively to gambling, and publishing gambling research in journals geared toward substance abuse has been challenging. Some substance abuse journals will only consider gambling papers if they directly address issues related to substance abuse (e.g., including a comparison group of substance abusers, or gamblers with comorbid substance abuse), and some have officially, or unofficially, refused to consider gambling papers. Although *Addiction* has a long-standing history of publishing gambling research, the number of articles is relatively low. General psychology and psychiatry journals occasionally publish results from gambling studies, but gambling research is often considered to have lower priority than other mental disorders.

Plans and suggestions for the future

With the plan to move pathological gambling to the Substance Use and Related Disorders section of the DSM-V [3], journals that focus on substance use may alter policies to be more inclusive of gambling. The hope is that more gambling articles— including those that do not directly address substance use— will find homes in prestigious and widely read journals. Similarly, with the proposed merger of National Institute of Drug Abuse and National Institute of Alcohol Abuse and Alcoholism, the new “addictions” institute at NIH may fund more gambling research, although there is no official policy. Furthermore, without set aside funding, research related to gambling may get passed over in favor of more traditional substance abuse or mental health research.

Given the history of gambling problems and research in the US, we offer ten recommendations to enhance understanding of gambling and minimize its impact on persons afflicted with this disorder, their families, and society. These suggestions are not ordered by importance, but with respect to logical similarities for discussion purposes.

1.) Increase awareness

The public, along with many researchers and mental health and addiction treatment providers, remain unfamiliar with pathological gambling. The plan to include pathological gambling in the chapter on substance use and related disorders in the DSM-V should enhance awareness of this psychiatric disorder. In earlier versions of the DSM, pathological gambling was included in the section on impulse control disorders, not otherwise specified. That classification hindered research and treatment of gambling, which shares few similarities with other disorders similarly classified such as intermittent explosive disorder and trichotillomania. Although psychiatric disorders in general, including mood and anxiety disorders, increase the risk for development of pathological gambling [8], there is strong evidence that pathological gambling and substance use disorders share comorbidity, genetics, physiology, and outcomes to substance use disorders [17–19]. By listing pathological gambling alongside substance use disorders, greater opportunities exist for expanding treatment for and research of this disorder.

An important direction for future research, particularly in light of the research domain criteria [20], is an examination of the commonalities and differences between pathological gambling and substance use disorders, and the biological and psychological dimensions underlying these disorders. It will be also be important to continue to refine diagnostic criteria to distinguish the core features of pathological gambling from its consequences. For example, the recommendation to eliminate the committing illegal activities criterion because it is rarely endorsed and adds little to diagnostic accuracy [3] has drawn some controversy in the gambling field [21], although less so for substance use disorders. The DSM-V workgroup recommends that committing illegal acts be subsumed as a specific (but not exclusive) example of lying to others to conceal the extent of gambling, a criterion to be retained when diagnosing pathological gambling. A better understanding of the parallels between pathological gambling and substance use disorders ultimately could enhance diagnosis and treatment efforts. Nevertheless, recognition of the differences and inherently unique aspects of pathological gambling and its treatment is also important as awareness of this disorder grows.

2.) Better monitor changes in gambling with the expansion of legalized gambling

Historically, the US experienced substantial individual, family and societal problems related to gambling, including suicide [22], violence and crime [23–24]. Because gambling problems develop in individuals over the course of years, prevalence surveys conducted

immediately before and soon after the introduction of legalized gambling opportunities are unlikely to demonstrate changes in prevalence rates over short time frames [but see 6,25]. Changes are more likely to be seen over decades, and with appropriately designed and powered studies. It would be a tragic example of US history repeating itself if pathological gambling increased markedly over the next several decades, and its association with adverse individual, social, political and economic consequences went unrecognized. Inclusion of pathological gambling in major federal epidemiological studies is crucial for this effort, including studies evaluating socioeconomic and legal factors related to gambling. This recommendation not only applies to studies of adults, but also to those of adolescents and young adults, given the high prevalence of pathological gambling in those age groups [5,6,26].

3.) Design, test and implement effective prevention campaigns

Given the relative dearth of gambling research, it is not surprising that little is known about the etiology or prevention of pathological gambling. More research is needed to develop efficacious prevention campaigns, especially for high-risk populations. Once empirically validated, funding should be set aside to ensure delivery of effective prevention efforts. Because they share many risk factors, prevention campaigns for pathological gambling potentially could be coordinated with those for substance use disorders. Nevertheless, if found to be important, some aspects may need to be specifically targeted for gambling. For example, cognitive biases associated with probability and chance may relate to gambling, but the extant literature is not clear on whether restructuring biases prevents or minimizes gambling [27].

4.) Enhance screening and early intervention efforts in high-risk populations

Pathological gambling, similarly to substance use disorders, predominately impacts lower socioeconomic groups [8,9]. A reliable and valid brief screening tool could help uncover gambling problems [e.g., 28], especially when targeted toward high-risk groups. When identified early, brief intervention and motivational efforts may arrest development of more significant gambling problems [29–32]. Perhaps similarly to substance use disorders [33], brief interventions may be most effective when delivered to individuals with less severe problems.

5.) Develop and disseminate empirically validated treatments

In the absence of large-scale and long-term intervention studies, empirically-validated treatments for individuals with gambling problems are lacking. Nevertheless, cognitive-behavioral interventions show promise [17,34], and training of providers should focus on interventions with at least some empirical support. As a growing number of states support gambling treatment programs, providers are increasing in numbers, they are in need of tools to assist them in treating gambling disorders. Manuals for delivering treatment are available [6], but few providers in the US are familiar with delivery of manualized interventions [35]. Training in treatment of pathological gambling may represent a good opportunity to introduce the use of manualized interventions into the training experiences of clinicians, given the general lack of familiarity with this disorder.

In addition to a lack of understanding about effective psychotherapies, there is also a need to foster research on dual diagnoses and pharmacological treatment of pathological gambling. Psychiatric comorbidity is associated with increased gambling severity [6], and treatments that target both gambling and psychiatric symptoms should be developed and tested. Although a few medications have shown promise in treating gambling [36–38], no medication is approved by the Food and Drug Administration for this indication. Similarly to psychotherapy studies, additional research is needed to confirm initial findings, assess

long-term benefits, and develop more effective treatments, especially for dual diagnosis gamblers.

6.) Expand treatment services

Gambling treatment is not covered under many insurance plans in the US, and most gambling services are provided within the context of state-supported programs. There is no logical reason why treatment for gambling should be reimbursed differently than other mental health disorders. Therefore, treatment for gambling should be paid for by insurance, including Medicaid and Medicare, and services should be readily available. Clinics that provide services to high-risk patients, such as substance abuse treatment centers [39,40], should screen for and treat gambling problems when identified.

7.) Enhance federal funding for gambling research with set aside funds

As pathological gambling is considered part of substance use and related disorders in DSM-V, the NIH should consider funding gambling research within its portfolio for substance use research, although other agencies may also be appropriate. The National Institute on Mental Health had funded gambling research in the early 2000s, but its gambling portfolio is now greatly reduced, which is disconcerting given the high rates of co-morbidity and growing interests in impulsivity, decision-making and risk-taking with mental and physical health.

The primary funding source for research related to gambling, similarly to tobacco and alcohol, should not be left to industry-related organizations. Although industry-funded research may help advance some knowledge, studies may in some cases be directed toward causes and interventions congenial to industry, and results from industry-sponsored research may offer less credibility to the public and policy-makers than government-supported research. Studies should be appropriately designed and powered to address important societal issues, and the best method for ensuring this is by making funding for gambling on par with other mental health disorders.

8.) Establish scientific meetings

In the US, there are two national conferences dedicated to gambling each year. One is sponsored by the National Center for Responsible Gaming, and the other is the National Conference on Problem Gambling, primarily geared toward gambling treatment providers. An annual conference dedicated to research topics in gambling, drawing investigators across different disciplines and topic areas, has the potential to stimulate more research and guide the field. Further, greater representation of gambling research in substance abuse conferences, those dedicated to other mental health disorders, and even medical disorders that have been associated with pathological gambling [41,42] will also stimulate interest in gambling.

9.) Increase outlets for gambling research in academic journals

Difficulties associated with publishing gambling research in high quality journals can limit readership and awareness of gambling issues. Given the substantive overlap between pathological gambling and substance use disorders, journals that focus on issues related to substance abuse should encourage, rather than discourage, publication of gambling studies. In this manner, a larger group of interdisciplinary researchers will become aware of gambling and its potential association with other conditions.

10.) Consider the young

Gambling participation and problems can begin at young ages, with research finding that some children initiate gambling at elementary school ages, often in the context of the family

[43]. Early gambling experiences are predictive of greater likelihood of developing pathological gambling and more severe gambling problems [44]. It is imperative that educators and parents recognize the potential harms associated with gambling, similarly to the negative consequences related to cigarette smoking and substance use. Unfortunately, the media can sensationalize gambling and minimize its potential for problems, the same way it once did with smoking.

Conclusion

In summary, the US is at a crossroads in terms of gambling. Research efforts and treatment services have proliferated rapidly in the past decade, but they still lag far behind those of substance use disorders. The NIH is the world's largest funder for medical research, including research on addictions, but it provides extraordinarily limited support for gambling research. To bring gambling in par with other addictive disorders will require greater recognition of this potentially devastating disorder along many dimensions. Minimizing potential harms will necessitate foresight in monitoring and considering federal, state and industry policies and practices related to gambling, lest we end up in a similar situation as our ancestors.

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