Pathological Gambling Disorder At A Glance

Pathological gambling disorder is distinguished from gambling as a social or recreational activity because it entails compulsive wagering that has a severe negative effect on an individual's job, relationships and well being. The person may continue to gamble even in the face of escalating social, economic, interpersonal, or legal problems resulting from gambling. It is often seen associated with other forms of addictive behaviors with alcohol and/or drug abuse being most common.

Treatment

There is a no universally effective treatment for pathological gambling reported in the literature. The few controlled treatment studies in the literature suggest preliminary direction, but are not sufficiently rigorous to provide evidence for the efficacy of one mode of treatment over another.

Twelve-step programs are likely only successful for those few individuals who stick with them when used as the sole treatment modality. But they may be the optimal approach when used along with behavioral and/or cognitive therapies. It appears that pharmacological interventions are frequently used as an adjunct. The most frequently mentioned are antidepressants, mood stabilizers (including anticonvulsants) and opioid antagonists. Short-term treatment has been shown to be reasonably successful and marital therapy (or at least significant other involvement in therapy) is usually useful to help manage finances.

Various forms of behavioral, cognitive, and combined cognitive-behavioral therapies have been reported effective in pathological gambling, some in controlled studies (Petry and Armentano 1999; Toneatto and Millar 2004). These techniques have included aversion therapies (including electrical aversion), behavior monitoring, contingency management and contracting, covert sensitization, systematic desensitization, imaginal desensitization, in vivo exposure, imaginal relaxation, psychoeducation, cognitive restructuring (especially correction of erroneous perceptions about gambling), problem-solving skills training, social skills training, and relapse prevention.

Discussion

Oakley-Browne et al. evaluated the four randomized controlled trials of behavioral or cognitive-behavioral therapy identified in the literature at the time. Although the studies had limitations, the behavioral or cognitive-behavioral therapy interventions were more effective in the short term in reducing gambling behavior than the control interventions.

Ladouceur et al. (2003) showed that group cognitive treatment was superior to a wait-list control condition and that clinical improvement was maintained at 2-year follow-up.

Although Gamblers Anonymous may be the most popular self-help intervention for problematic gambling, available evidence suggests that it may not be very effective when used alone (Petry and Armentano 1999). Retrospective studies show that 70%–90% of Gamblers Anonymous attendees drop out and that only 8% of attendees achieve a year or more of abstinence from gambling (Brown 1985). Self-help manuals have shown some preliminary evidence of effectiveness (Toneatto and Millar 2004). Dickerson et al. (1990)

The pharmacological agents that have received the most extensive study thus far in the treatment of pathological gambling are antidepressants, mood stabilizers, and opiate antagonists. Initial studies of antidepressants generally reported positive results for these agents.

In a double-blind crossover trial of placebo followed by clomipramine treatment (10 weeks on each) in a woman with pathological gambling, clinician and self-reports of problematic gambling were "minimally improved" following placebo and "much improved" following clomipramine (Hollander et al. 1992). In a 16-week randomized, double-blind crossover study in which 10 patients with DSM-IV pathological gambling completed 8 weeks of fluvoxamine and 8 weeks of placebo treatment, fluvoxamine treatment resulted in a significantly greater improvement in overall gambling severity as assessed by the Clinical Global Impressions scale (CGI) (Hollander et al. 2000).

An 8-week double-blind, placebo-controlled trial of paroxetine in 41 patients with DSM-IV pathological gambling showed that paroxetine was superior to placebo at weeks 6–8 as assessed by the clinician-rated CGI (but not the patient-rated CGI or the Gambling Symptom Assessment Scale [G-SAS]) (Kim et al. 2002).

In an 8-week open-label trial of bupropion in 10 nondepressed pathological gamblers, 9 were found to be much or very much improved (n = 7) in their gambling symptoms at the end of the trial (Black 2004

Mood stabilizers have been reported to be effective in pathological gambling.

Haller and Hinterhuber (1994) described a 12-week double-blind, placebo-controlled crossover trial of carbamazepine in a man who had a 16-year history of pathological gambling that had not responded to behavior therapy, psychoanalysis, Gamblers Anonymous, and benzodiazepines. The patient's gambling stopped with carbamazepine but not with placebo, and the patient remained in "complete remission" for 30 months of continuation carbamazepine treatment.

In a 14-week single-blind trial comparing lithium and valproate in 42 pathological gamblers, both medications performed equally well in reducing gambling symptoms from baseline (Pallanti et al. 2002).

More recently, in a 10-week randomized, controlled trial, Hollander et al. (2005) showed that lithium was superior to placebo in reducing both gambling behavior and manic symptoms in 40 pathological gamblers with bipolar spectrum disorders.

Opiate antagonists and topiramate have also been reported to be effective in pathological gambling. Kim et al. (2001) randomized 89 patients with DSM-IV pathological gambling to 11 weeks of double-blind treatment with naltrexone, titrated to 250 mg/day as tolerated, or placebo after a 1-week single-blind placebo lead-in. Data from 45 patients (20 men, 25 women; 20 randomized to naltrexone, 25 to placebo) who completed six or more ratings were analyzed. Statistically significant improvement was found on three measures of gambling symptoms. Average naltrexone dosage at study end was 188 mg/day. Dannon et al. (2005) randomized 31 male pathological gamblers to topiramate (n = 15) or fluvoxamine (n = 16) for 12 weeks. Twelve (80%) topiramate-treated patients completed the trial, as compared with 8 (50%) fluvoxamine-treated patients. At week 12, 12 (80%) topiramate-treated patients were rated as at least much improved, as compared with 8

(50%) fluvoxamine-treated patients. Although comparative statistics were not provided, the CGI improvement score at week 12 relative to baseline was significantly better for the topiramate group but not for the fluvoxamine group.[1]

Some studies have reported promising results with the use of serotonin reuptake inhibitors (de la Gandara 1999; Hollander et al. 1992b, 1998, 2000b; Kim et al. 2002; Zimmerman et al. 2002), serotonin antagonists (Pallanti et al. 2002a), mood stabilizers (Haller and Hinterhuber 1994; Hollander et al. 2002; Pallanti et al. 2002b), opiate antagonists (Kim et al. 2001), and atypical antipsychotics (Potenza and Chambers 2001

Inpatient programs for pathological gambling have included various combinations of individual and group psychotherapy and substance use treatment (Taber 1981), and most strongly encouraged or required attendance at GA meetings. Many patients improved in all programs, and outcome studies have shown 55% of patients reporting abstinence at 1-year follow-up (Russo et al. 1984; Taber et al. 1987).

Behavioral, cognitive, and combined cognitive-behavioral methods have been used in treating pathological gambling. Aversive therapy has been employed to reach the goal of total abstinence of gambling, as have behavior monitoring, contingency management, contingency contracting, covert sensitization, systematic desensitization, imaginal desensitization, in vivo exposure, imaginal relaxation, psychoeducation, cognitive restructuring, problem-solving skills training, social skills training, and relapse prevention. Use of cognitive restructuring facilitates a decrease in the frequency of gambling and irrational verbalizations associated with gambling (Ladouceur 1990).2

Combining professional therapy and GA (Gamblers Anonymous) may improve retention and abstinence compared with GA participation alone. Lesieur and Blume (16) studied outcomes of patients treated for gambling in a combined alcohol, drug, and gambling program. Patients received multimodal individual and group therapy, and GA attendance was strongly encouraged. Of 124 patients admitted with gambling problems, 72 were interviewed between six and 14 months after discharge. Gambling problems decreased significantly compared with pretreatment levels, and 64 percent of patients achieved abstinence.

Blackman and associates (30) described outcomes of 88 gamblers entering a treatment clinic; significant reductions in frequency of gambling and indebtedness were noted. Russo and colleagues (31) contacted 60 of 124 patients who completed a program for veterans combining individual psychotherapy, group therapy, and GA attendance. Abstinence was reported by 55 percent. Taber and colleagues (32) conducted a six-month follow-up of 57 of 66 patients consecutively admitted to the same Veterans Administration facility. Total abstinence was reported by 56 percent, and decreases in psychological symptoms, employment problems, and substance use were noted.

Clinicians have noted that family structures of gamblers are chaotic and turbulent, and couples' treatment has been described. Because debts of gamblers are large, Heineman (36) suggested dealing with finances during therapy. Steinberg (37) described reframing the potentially negative experience of turning finances over to the nongambling spouse. Boyd and Bolen (38) provided treatment focusing on identifying feelings of the partner and understanding gambling within the context of the relationship. Nine gamblers and their wives participated; three achieved abstinence, and most reduced gambling.

Cognitive-behavioral therapies

In one of the few controlled studies directly comparing two treatments, Australian researchers randomly assigned 20 gamblers to one of two therapies: aversion therapy or imaginal desensitization (50). Subjects receiving imaginal desensitization reported significantly less gambling and fewer urges to gamble at one month (50) and up to nine years after treatment (51,52). Although this study is superior to most because of its use of random assignment and clearly defined treatments, imaginal desensitization has been tested only on an intensive inpatient basis (14 sessions a week), and its efficacy has not been tested in typical outpatient settings.

Bujold and colleagues (53) successfully used cognitive restructuring, problem solving, social skills training, and relapse prevention in weekly individual sessions with three gamblers. Sylvian and associates (54) applied a similar treatment in a controlled trial: 29 gamblers were randomly assigned to active treatment or a waiting-list control group. Subjects assigned to active treatment evidenced significant reductions in gambling and reported increased perceived control over gambling compared with control subjects.

Pharmacotherapies

Several case reports suggest pharmacotherapies may be useful in treating gamblers. Haller and Hinterhuber (55) described the use of the anticonvulsant carbamazepine. In another case report, Kim (56) showed beneficial effects of the opioid antagonist naltrexone, which is hypothesized to reduce the high associated with gambling. Others have tried drugs affecting the serotonin neurotransmitter system. In a study in which subjects received placebo for a period before clomipramine was started, clomipramine was found more effective than placebo in treating a pathological gambler with obsessive-compulsive personality features (57). A single-blind study of fluvoxamine demonstrated reductions in gambling in seven of ten gamblers (58).

Moskowitz (59) treated three gamblers with lithium and observed that the drug seemed to blunt the excitement associated with gambling. Although manic episodes are an exclusion criterion for a diagnosis of pathological gambling

Some evidence suggests that self-help manuals may be effective in treating pathological gambling. In Australia, Dickerson and associates (66) found that use of a self-help manual significantly reduced gambling, alone or in conjunction with a single in-depth motivational interview.[3]

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