CHAPTER 6: TREATING PATHOLOGICAL GAMBLERS

The treatments and interventions for pathological gambling that have been developed and reported in the literature are quite similar to methods of treating other disorders or addictions. Substantial progress has not been made in understanding the treatment of this disorder or the characteristics of those seeking help for it, nor is there research basis for matching clients to treatments. Most published investigations are case studies or studies with small samples of clients whose circumstances may not be generalizable to larger populations (Knapp and Lech, 1987; Murray, 1993). Moreover, treatment approaches have not been subjected to rigorous and detailed empirical research (Blaszczynski and Silove, 1995). Given the lack of national attention to the treatment of pathological gambling, it is difficult to estimate the scope of intervention services available in the United States.

We begin with a discussion of the definition of treatment and challenges in treating such disorders as pathological gambling. We then discuss what is known about the characteristics of those who seek treatment for pathological gambling. We then turn to treatment models that have been applied for helping pathological gamblers, what is known about treatment effectiveness, whether treatment is warranted, and issues related to treatment availability, utilization, funding, and treatment providers in the United States. We also identify priorities for further research, including treatment effectiveness, cost-effectiveness, how patients should be matched to treatments, and prevention strategies.

DEFINING TREATMENT AND CHALLENGES TO TREATMENT

In the committee's view, the definition of treatment needs to be a broad one. We define treatment as: (1) activities directed at individuals for the purpose of reducing problems associated with problem or pathological gambling and (2) activities aimed at groups of individuals (e.g., communities) to prevent gambling problems from arising in the first place. Comprehensive treatments move through three stages: acute intervention, followed by rehabilitation, and ending with maintenance. These three stages can vary according to the philosophy of the providers, the settings in which treatment takes place, and the specific approaches employed. No systematic compilation of treatment services for pathological gambling has been made in the United States. Treatment is provided in many ways and in many settings, although outpatient treatment is probably the most common; no single treatment approach dominates the field. In fact, it appears to be common for approaches to be combined in most clinical settings. It is important, as well, to recognize that recovery from pathological gambling can take place without formal treatment. Such individuals have been classified by various descriptors, for example, so-called spontaneous recovery and natural recovery. Although the subject of natural recovery from psychoactive substances, such as alcohol and opiates, has received some attention in the professional literature (McCartney, 1996), no such attention has been given to gambling.

Functionality of Addictive Behaviors

All addictions, by their nature, pose special problems to treatment providers. Like other purposive human behavior, addictive behaviors have adaptive or functional value, with the result that efforts to change these behaviors often fail.

Ambivalence is at the core of addiction (Shaffer, 1997). Those who are addicted and thinking about change want to free themselves from their addiction. At the same time, they crave the satisfactions that their addiction provides. As they become aware of the harm their addiction is doing, they begin to say that they want to quit. Of course, wishing or expressing a desire to quit a behavior is not the same as doing it. Despite the obvious harmful consequences, people in the throes of addiction cling to the part of the experience that they like: the part that was adaptive originally and may have even produced positive consequences, such as relief from painful emotions (Khantzian et al., 1990). The key to change comes when those addicted begin to realize that the costs of their addiction exceed the benefits, as when pathological gamblers identify gambling as a destructive agent in their life. It is at this point that addicted people often ask those who they trust to help them stop, and they take the first steps to seek professional help. This turning point is but the first step of a complex dynamic process, including the possibility that bouts of abstinence and relapse may occur for some time (Marlatt and Gordon, 1985).

Preventing Relapse

A challenge in the treatment of pathological gambling is preventing relapse. For example, few people who stop using drugs remain abstinent thereafter (REFERENCES). Marlatt and Gordon examined how slips, that is, single episodes of drug use, can lead to a full-blown relapse (Marlatt and Gordon, 1985). Many personal and environmental factors interact to influence the risk of relapse for any individual trying to recover from an addiction. Successful recovery also involves the development of new skills and lifestyle patterns that promote positive patterns of behavior. The integration of these behaviors into day-to-day activities is the essence of relapse prevention (Brownell et al., 1986). Successful quitters substitute a variety of behavior patterns for their old drug-using lifestyle. For example, many take up some form of exercise. Spiritual conversions sustain others. In some patients, new behavior can become excessive, almost another addiction. We do not know whether the same substitute behaviors occur in pathological gamblers determined to quit.

CHARACTERISTICS OF TREATMENT SEEKERS[1]

Understanding the characteristics of those who seek help for a given disorder can assist in developing effective treatments. As already noted, most clinical investigations in this field are case studies or studies with small samples of clients whose data may not be generalizable to larger populations. Thus, establishing an accurate profile of those seeking treatment is difficult. We can say a few things, however.

Demographics

Treatment seekers tend to be white middle-aged men (Blackman et al., 1989; Ciarrocchi and Richardson, 1989; Volberg, 1994; Volberg and Steadman, 1988), although more recent investigations suggest that admissions of women are increasing (Moore, 1998; Stinchfield and Winters, 1996). The majority tend to be in their 30s and 40s and have graduated from high school and attended some college (Blackman et al., 1989; Moore, 1998; Yaffee et al., 1993;

[1] The committee thanks Randy Stinchfield for his written summary and presentation of the literature in this section.

Stinchfield and Winters, 1996).

Gambling Severity

Most clinical studies indicate that, before pathological gamblers come in for treatment, they gamble either every day or every week (Moore, 1998; Stinchfield and Winters, 1996). Little is known at this time about their preferences for types of gambling. One factor that may influence preference is proximity of certain games to gamblers; for example, one study showed that the preferred game of gamblers in Maryland was horse racing at Maryland tracks (Yaffee et al., 1993), and for Oregon clients, it was the video poker that is widely available there (Moore, 1998). Game availability does not simply translate to preference. Minnesota gamblers have been shown to prefer to gamble in casinos, which may be far from their homes, over purchasing lottery tickets, which can be bought almost everywhere in the state (Stinchfield and Winters, 1996).

Legal and Financial Consequences

Although clients may be reluctant to fully disclose their legal entanglements, most clinical studies indicate that a sizeable percentage reports having criminal charges pending as a result of engaging in illegal activity to fund their gambling or pay off their debts (Yaffee et al., 1993; Stinchfield and Winters, 1996; Taber et al., 1987). Some reports indicate that from half to two-thirds of pathological gamblers have committed an illegal act to get money to gamble (Dickerson, 1989; Dickerson et al., 1990; Lesieur et al., 1986). Large debts, most often in the tens of thousands of dollars, are also part of the picture (Blackman et al., 1989; Moore, 1998; Stinchfield and Winters, 1996). One study reported that 10 percent of 128 gamblers ages 20 to 68 treated as outpatients at a gamblers' treatment clinic had debts in excess of $100,000 (Blackman et al., 1989).

Other Characteristics

Additional personal and social consequences reported by those seeking treatment include work absenteeism and lost productivity on the job, presumably because they either skip work in order to gamble or are involved in gambling-related activities while at work; and marital discord and family estrangement, due to the deception, lying, and stealing associated with their gambling (Ciarrocchi and Richardson, 1989; Ladouceur et al., 1994; Lorenz and Yaffee, 1988; Stinchfield and Winters, 1996).

Comorbidity

As discussed in Chapter 3, a number of studies have found significant rates of cooccurring mental disorders and psychiatric symptoms among pathological gamblers. Studies have indicated evidence of pathological gambling cooccurring with substance use disorders, depression, suicidal thoughts and attempts, and various personality disorders ([…….cites]).

TREATMENT APPROACHES AND EFFECTIVENESS

Methods for treating pathological gambling include approaches that are psychoanalytic, psychodynamic, behavioral, cognitive, pharmacological, addiction-based and multimodal, and self-help. Often these approaches are combined to varying degrees in most treatment programs or counseling settings. The discussion below briefly describes each method and summarizes what is known from the empirical research about its effectiveness. In doing so, the discussion expands on the other literature reviews of treatment outcome (e.g., Blaszczynski and Silove, 1995; DeCaria et al., 1996; Lesieur, 1998; Murray, 1993; Walker, 1993; Wildman, 1998; Lopez Viets and Miller, 1997; Wildman, personal communication to the committee, 1998). A table summarizing the literature on treatment outcome studies reviewed by the committee appears in Appendix D.

Psychoanalytic/Psychodynamic

Psychoanalysts seek to understand the basis of all human behaviors by considering the motivational forces that derive from unconscious mental processes (Wong, 1989). Psychodynamics refers to the "science of the mind, its mental processes, and affective components that influence human behavior and motivations (Freedman et al., 1975:2601) and how these potentially opposing forces of cognition and emotion are translated into behavior. During the first half of the twentieth century, psychoanalysts provided the first systematic attempts to understand and treat gamblers (Rabow et al., 1984; Rosenthal, 1987).

Psychoanalytic and psychodynamic treatment approaches have not been proven effective through evaluation research. They are briefly described here because they are the most common forms of treatment for pathological gambling at this time. These approaches are based on the principle that all human behavior has meaning and is functional. Even the most self-destructive behaviors can serve a defensive or adaptive purpose. This perspective suggests that pathological gambling is a symptom or expression of an underlying psychological condition. This approach takes the view that, although some individuals don't need to understand why they gamble in order to stop, there are many others whose lives do not improve with abstinence, which is experienced as futile and hopeless (Rosenthal and Rugle, 1994). They then develop a major depression, turn back to gambling, or seek out some other addictive or self-destructive behavior with which to distract themselves.

Psychoanalytic and psychodynamic therapy attempts to help pathological gamblers to understand the underlying source of their distress and confront it. Clinicians have considered psychodynamically oriented psychotherapy useful in treating some of the comorbid disorders and character pathology observed among pathological gamblers, perhaps especially the narcissistic and masochistic subtypes. Although several others have noted the value of psychodynamic treatment for addictive behaviors (Boyd and Bolen, 1970; Kaufman, 1994; Khantzian, 1981; Shaffer, 1995; Wurmser, 1978), there have been no controlled or randomized studies exploring the effectiveness of this approach for treating pathological gamblers.

The psychoanalytic understanding of gambling problems rests on the foundation formulated by Freud (1928), who thought that it was not for money that the gambler gambled, but for the excitement. In fact, Freud speculated that some people gamble to lose. He thought this tendency was rooted in a need for self-punishment, to expiate guilt, and, for the male gambler, because of ambivalence toward the father. Bergler (1936, 1943, 1958) expanded on

this concept of masochism, emphasizing the pathological gambler's rebellion against the authority of the parents and specifically the reality principle they represent.

A number of early psychoanalysts, dating back to Simmel in 1920, emphasized narcissistic fantasies and a sense of entitlement, pseudo-independence, and the need to deny feelings of smallness and helplessness. Other analysts (Greenson, 1947; Galdston, 1960) described early parental deprivation, with the gambler then turning to Fate or to Lady Luck for the love, acceptance, and approval he or she had been denied. Several analysts (Greenson, 1947; Comess, 1960; Niederland, 1967) saw compulsive gambling as an attempt to ward off an impending depression. Boyd and Bolen (1970) viewed it as a manic defense against helplessness and depression secondary to loss. Still others have emphasized the eroticization of tension and fear (Von Hattingberg, 1914), the central role of omnipotence (Simmel, 1920; Bergler, 1936; Greenson, 1947; Lindner, 1950), and problems identifying with parents (Weissman, 1963). More recently, analysts have been investigating deficiencies in self-regulation as they pertain to gambling and other addictive disorders (Krystal and Raskin, 1970; Wurmser, 1974; Khantzian, 1981; Schore, 1994; Ulman and Paul, 1998).

The psychoanalytic literature provides individual case histories of gamblers treated successfully (Lindner, 1950; Harkavy, 1954; Reider, 1960; Comess, 1960; Harris, 1964; Laufer, 1966). The only analyst to present information about a series of treated gamblers was Bergler (1958). In his account of 200 referrals, 80 appeared to be severe cases and, of those, 60 remained in treatment. A critique of his treatment appears in Rosenthal (1986). According to Bergler, 45 were cured and 15 experienced symptom removal. By a cure, he meant not only that they stopped gambling, but also that they addressed core conflicts and gave up their pattern of self-destructiveness. There is no information either on whether "cured" patients were followed up after treatment or relapse.

In the absence of a series of patients followed after treatment, it is impossible to evaluate the relative contribution of these models to treatment effectiveness. Consequently, there is a significant need, not only for randomized treatment outcome studies, but also for clinical vignettes and case histories that discuss what it is that clinicians who use these treatments actually do. It is necessary to deconstruct psychoanalytically and psychodynamically oriented interventions and techniques to see what specific components contribute to favorable treatment outcomes. And of course there are differences between one therapist and another with regard to their capacities for empathy, timing, tact, role-modeling, and support--which can complicate research on treatment effectiveness in general and psychodynamic treatment in particular.

Behavioral

Behavioral treatment methods actively seek to modify pathological gambling behavior on the basis of principles of classical conditioning or operant theory. Several variations of behavioral treatment methods are used today, often in combination. Aversion treatment consists of applying an unpleasant stimulus, such as a small electric shock, while the patient reads phrases that describe gambling behavior. During the procedure's final phrase, the patient reads about an alternative activity to gambling, such as returning home, but receives no shock (McConaghy et al., 1991). Imaginal desensitization consists of two steps. Patients first engage in a procedure to relax. Then they are asked to imagine a series of scenes related to gambling that they find arousing. They learn from this procedure to relax when they encounter opportunities to gamble, rather than to submit to their cravings. An extension of imaginal

desensitization is in vivo exposure, in which relaxation techniques are applied while the patient is actually experiencing a gambling situation.

Behavioral counseling has been used in both individual and group treatment settings. Subjects receive reinforcement for desired gambling behaviors, such as gambling at a reduced level, betting less money, and so on. Specific treatment goals can be more formalized in the form of contingency contracting, in which specific aspects of behavior are rewarded or punished. Other behavioral techniques have been reported in the gambling treatment literature. Two of them, behavioral counseling, in which the gambler is given verbal reinforcement for desired outcome behaviors, and in vivo exposure, in which the gambler is exposed to gambling behaviors but is not allowed to gamble, are mentioned in the literature but have not been empirically tested.

Although behavioral treatment methods have been used and evaluated, such studies typically have had small sample sizes and no control groups. Case studies using various combinations of behavior treatments are common (e.g., Dickerson and Weeks, 1979; Cotler, 1971; McConaghy, 1991; Rankin, 1982; Greenberg and Marks, 1982; Greenberg and Rankin, 1982). However, findings from these limited studies are not consistent enough to reach conclusions about treatment effectiveness. Early studies of effectiveness on behavioral forms of treatment for pathological gamblers focused on aversion treatment. The studies involved single patients and provided minimal evidence of treatment success (e.g., Barker and Miller, 1966; Goorney, 1968). Subsequent research on aversion treatment using electric shock for pathological gamblers had only slightly larger samples (e.g., Seager, 1970; Koller, 1972; Seeger et al., 1966; Salzman, 1982) and produced equally questionable findings.

Larger outcome studies have been undertaken and provide more evidence for treatment effectiveness. In a study of 110 German pathological gamblers, Iver Hand (1998) described a behavioral treatment that begins with an extensive assessment of the client's motivation for treatment, symptoms, the consequences of his or her gambling, and social competence. This assessment is followed by client training in emotional awareness, coping with negative emotions, and social and problem-solving skills. An uncontrolled evaluation of this approach revealed favorable treatment results (Hand, 1998).

The most rigorous work on behavior treatments with pathological gamblers has been published in a series of study reports by McConaghy, Blaszczynski, and colleagues (McConaghy et al., 1983, 1991; Blaszczynski et al., 1991). The earlier studies by this group compared imaginal desensitization with either aversion treatment or behavioral approaches. In a 1988 study (McConaghy et al., 1988), the effectiveness of imaginal desensitization was compared with imaginal relaxation (teaching the client general relaxation techniques). Although the early studies by this group had relatively small sample sizes, otherwise strong methodologies revealed that treatment techniques were successful at one month and also at one year following treatment.

Using a large sample and expanding the comparisons of behavioral approaches, McConaghy et al. (1991) randomly allocated 120 participants to one of four techniques: aversion treatment, imaginal desensitization, imaginal relaxation, or in vivo exposure. A total of 63 clients were recontacted two to nine years later (a 53 percent follow-up response rate). The group that received imaginal desensitization benefited more than those receiving the other three behavioral approaches when abstinence and controlled gambling were combined as the outcome variable. (The authors defined controlled gambling as gambling in the absence of the subjective sense of impaired control and adverse financial consequences, based on self-rating and confirmation from a spouse or significant other). If just abstinence was considered, imaginal

desensitization was equivalent to the other treatments' combined rate of abstinence (30 percent and 27 percent, respectively).

In a further investigation of this sample, Blaszczynski and colleagues (1991) found that the abstainers and controlled gamblers showed a significant reduction in arousal levels, anxiety, and depression during the follow-up period compared with those who could not control their gambling. Also of significance are the study's findings pertaining to the controlled gamblers. The pattern of gambling suggested that controlled gambling is not necessary a temporary response followed by a relapse to heavier gambling (Blaszczynski et al., 1991:299). Because the sample sizes of the McConaghy and Blaszczynski studies are relatively small and because only about half of the original sample was contacted for follow-up (although the long follow-up periods used were laudable), these results should be interpreted with caution.

Cognitive and Cognitive-Behavioral

Several clinicians and researchers have convincingly argued (see Blaszczynski and Silove, 1995; Walker, 1992; Gaboury and Ladouceur, 1989) that pathological and problem gamblers share irrational core beliefs about gambling risks, an illusion of control, biased evaluations of gambling outcomes, and a belief that gambling is a solution to their financial problems (Ladouceur et al., 1994; Toneatto, personal communication to the committee, 1998). Cognitive treatment aims to counteract underlying irrational beliefs and attitudes about gambling that are believed to initiate and maintain the undesirable behavior (Gaboury and Ladouceur, 1989). Treatment typically involves teaching clients strategies to correct their erroneous thinking. Many, for example, do not understand the concepts of probability and randomness, believing that they can exert some control over whether they win or lose.

The effectiveness of cognitive treatments has received limited attention by researchers and, as for other studies of treatment success, most have small sample sizes and no control groups (e.g., Gaboury and Ladouceur, 1989; Sykvain and Ladouceur, 1992), from which little can therefore be concluded. However, a push for more comprehensive models to explain the origins of problem gambling (Sharpe and Tarrier, 1993) has elicited investigations of the efficacy of combining cognitive and behavioral approaches. Investigations combining these treatments include case studies (Bannister, 1977; Sharpe and Tarrier, 1992), small and uncontrolled studies (Arribas and Martinez, 1991), and controlled studies with larger samples (Echeburua et al., 1994). Combined cognitive-behavioral approaches have been successful for both adolescent problem gamblers (Ladouceur et al., 1994) and adult pathological gamblers (Bujold et al., 1994; Sylvain et al., 1997). The Sylvain study (1997) is noteworthy in that it expanded the cognitive-behavior treatment to include a waiting-list control group. The study found that the cognitive behavioral group improved vastly more than the control group. However, 11 of the original 40 individuals dropped out of the study and the follow-up data suffered from appreciable attrition.

Another cognitive-behavioral controlled investigation with a waiting-list control group was done by Echeburua and his colleagues (1994). They compared the effectiveness of cognitive and behavioral techniques in a Spanish sample of 64 men and women who met DSM-III-R criteria for pathological gambling. Participants were randomly assigned to one of four treatments: individual stimulus control and in vivo exposure with response prevention; group cognitive restructuring; a combination of the first two; and a waiting-list control group. At six-month follow-up, the outcome data indicated that the most favorable outcome was associated with the first two groups; these groups significantly outperformed the control group and reported

therapeutic success rates (abstinence or 1 or 2 gambling episodes in which the amount gambled did not exceed the amount gambled in the week prior to treatment) of 75 percent and 63 percent, respectively. However, the combined individual and group treatment condition showed significantly poorer results compared with the other treatment groups.

Pharmacological

Pharmacotherapy is a relatively new approach to the treatment of pathological gambling. There are only a few studies and reports in the literature. In 1980, just prior to the introduction of DSM-III, Moskowitz (1980) described the treatment of three compulsive gamblers with lithium carbonate. Significant abstinence was achieved in all three cases, with improvement documented by long-term follow-up. However, two of the three were clearly manic depressive, and the third had a bipolar spectrum disorder. Twelve years later, Hollander et al. (1992) described the treatment of a single patient with clomipramine. When the patient entered the study, she had been gambling consistently 2 to 3 times per week for the previous 6.5 years, although she had periods of abstinence in the past. The study's design was double-blind, placebo controlled, 10 weeks to each phase. She was minimally improved on the placebo, then became abstinent on the medication and didn't gamble for the duration of the trial. Except for a relapse at week 17, she remained abstinent on open maintenance for an additional seven months. Significant in her personality were compulsive features, including perfectionism and hoarding, and a history of social phobia, all of which respond well to such drugs as clomipramine.

Haller and Hinterhuber (1994) published a double-blind, controlled study (12 weeks each phase) of one gambler treated with carbamazepine. The patient's gambling continued on placebo, with no improvement, but he became abstinent on carbamazepine by week 2 and did not gamble for the duration of the trial. In fact, he remained abstinent on open maintenance (600 mg/day) for 2.5 years. The results are particularly impressive given his prior history of treatment failures. Despite years of behavior therapy, psychoanalysis, and Gamblers Anonymous, his longest previous period of abstinence was three months. Carbamazepine is an anticonvulsant that has been used as a mood stabilizer, particularly in patients with bipolar disorders. There is no mention in the report of emotional instability. We are told only that the patient played roulette to relieve stress and depression. The authors postulated that the efficacy of the medication may have been due to its limbic antikindling effect or its effect on the noradrenergic system.

More recently, Hollander et al. (1998) presented the results of a single-blind placebo lead-in (8 weeks each phase) fluvoxamine study. Of 19 pathological gamblers, 9 dropped out during the placebo phase. Of the 10 who remained, 7 responded with significant improvement, as measured by a marked decrease in cravings and the achievement of abstinence. Two of the three nonresponders also had emotional instability. Since fluvoxamine and the other selective serotonin reuptake inhibitors (SSRIs) can switch depressed patients into a manic phase or bring out an underlying bipolar disorder, there was concern that the medication might exacerbate their emotional instability, particularly in the higher dose (250 mg/day) administered to the nonresponders. The authors recommended that, in future studies in which pathological gamblers are to be given SSRIs, subjects with bipolar disorder should be excluded. Overall, these results suggest that medication may be of some benefit, but more systematic randomized studies are clearly needed. Long-term follow-up (one to two years) is also recommended.

Neurobiological studies (also discussed in Chapter 4) suggest the involvement of serotonin, norepinephrine, and dopamine in pathological gambling. The medications used in the

above studies target one or more of these neurotransmitter systems. The norepinephrine system has been associated with arousal and novelty-seeking, dopamine with reward and motivation, and serotonin with impulsivity and compulsivity (Hollander et al., 1998). Another avenue of approach suggested by these studies is the use of medication to treat comorbid conditions. In practice, this is probably the most frequently cited reason for putting gamblers on medication. Comorbid disorders for which medications are commonly prescribed include depression, bipolar disorder, and attention-deficit hyperactivity disorder.

Rosenthal (1997) has reviewed medications in the treatment of pathological gamblers. Although some patients experience withdrawal symptoms, including prominent physical symptoms, (Wray and Dickerson, 1981; Meyer, 1989; Rosenthal and Lesieur, 1992), they do not need to be medicated. Also, some gamblers report frequent and intense cravings. Rosenthal (1997) reviewed several approaches to a pharmacotherapy of cravings. One of the most promising involves agents that block the excitement or pleasure of the addictive drug. The best known of these blocking agents is naltrexone, an opioid antagonist used in the treatment of alcoholism. It has also been used in treating those addicted to cocaine and heroin. The effectiveness of the drug in treating pathological gamblers is currently being investigated under controlled conditions by Suck-Won Kim at the University of Minnesota (Kim, 1998).

However, medication is useful only if the patient takes it. It is estimated that, 50 percent of all patients don't take the medications their doctors give them. Greenstein et al. (1981) found that fewer than 10 percent of patients who began naltrexone treatment for opioid dependence were still taking it after two months. For pathological gamblers, compliance is an issue because they are often ambivalent about giving up their gambling or altering long-standing patterns of coping, no matter how ineffective. When they stop gambling, they often feel something has being taken away from them (Taber, 1985).

Addiction-based and Multimodal

This category of treatments, which has a relatively long tradition, includes a broad range of techniques used by inpatient and outpatient programs. The first gambling inpatient program, which started in 1972 at the Brecksville, Ohio, Veterans Administration hospital, was based on a preexisting program for alcoholics. Similarities with substance abuse programs continue and include the use of recovering gamblers as peer counselors, an emphasis on Gamblers Anonymous and other 12-step meetings, and an educational component about addiction, including relapse prevention (Kruedelbach, personal communication to the committee, 1998). This latter component focuses on how to avoid high-risk situations, being able to identify specific gambling triggers, and developing problem-solving skills for dealing with urges or cravings. McCormick (1994) believes that pathological gamblers are deficient in the number of coping skills they have available and in their ability to flexibly choose the skill most appropriate to the stressful, or potentially relapse-triggering, situations they face. In a comparison with nongambling substance abusers, he found that substance abusers with a gambling problem utilize significantly more avoidance and impulsive coping styles.

There are other therapeutic components commonly employed by addiction-based programs. One is autobiography (Adkins et al., 1985). Each patient writes a history of their gambling problem incorporated into a narrative of the significant events in their life, and then reads it to the therapy group. Feedback focuses on the role gambling has played in the person's life, as well as how his or her behavior and perceptions contributed to the development of the

problem. The reading of one's autobiography is often a very emotional experience, and many view it both as a rite of passage in the treatment program and as a turning point in their recovery (Adkins et al., 1985).

Joint or family therapy is another therapeutic component of addiction-based treatment. This element is important when dealing with pathological gamblers, because families are often loath to forgive the gambler. Clinical wisdom suggests that it is not until after the individual has stopped gambling that the anger of family members begins to surface. This may be so because gambling can be easy to hide and the financial and interpersonal damage can be swift; those close to the gambler remain distrustful and hold on to their anger to protect themselves. Franklin and Thoms (1989) note that the return of the gambler into the family is often met with resentment and resistance. The spouse and children often are depressed and have problems of their own that are in need of therapy. Alternatively, because the gambling offers intermittent rewards (Heineman, 1994), family members may be angry that the patient has *stopped* gambling.

Another key aspect of the addiction-based approach is after-care planning. This may include identification of a support system, continuing involvement in Gamblers Anonymous, relapse prevention strategies, a budget and plan for financial restitution, a plan for addressing legal issues, ongoing individual or group therapy, family therapy, and medication.

The literature contains several outcome studies of addiction-based treatments. For studies that reported six-month and one-year outcome data, abstinence rates for those contacted were roughly 50 percent (Russo et al., 1984; Taber et al., 1987; Lesieur and Blume, 1991; Stinchfield and Winters, 1996). All studies found that those who abstained from gambling reported greater improvement in interpersonal and intrapersonal functioning than those who returned to some level of gambling; some studies found decreased substance use as well at follow-up (Lesieur and Bloom, 1991; Taber et al., 1987; Stinchfield and Winters, 1996).

Whereas most of the studies involved small samples, a Minnesota study of six state-funded multimodal programs described the outcomes of several hundred clients (Stinchfield and Winters, 1996). This investigation found abstinence rates of 43 percent (at 6 months) and 42 percent (at 12 months), and rates of gambling at less than once a month for 29 percent (at 6 months) and 24 percent (at 12 months) of the contacted subjects. Interestingly, gamblers who started treatment but did not complete it, or who received only an intake evaluation, also reported improvement in virtually all variables related to gambling and psychosocial functioning, even though the extent of change was less dramatic than for those who completed treatment (Rhodes et al., 1997; Stinchfield and Winters, 1996).

Some of the multimodal approaches have been evaluated for long-term effectiveness. Hudac and colleagues (1989) assessed 26 male gamblers four years after they were treated. Of the 26, 8 were abstinent and the others showed less gambling compared with the period prior to treatment. However, the gamblers contacted at the four-year follow-up represented only about one-third of the original treatment sample of 99 pathological gamblers. Schwartz and Linder (1992) found that, after two years following inpatient treatment with a client-centered approach, 13 of 25 assessed clients remained abstinent (33 original subjects were not contacted).

Self-Help

Gambler's Anonymous

Gamblers Anonymous (GA) is believed to be the most commonly used of all approaches

to deal with pathological gambling, and it is routinely included in multimodal strategies (Lesieur, 1998). The data suggest that relapse rates tend to be quite high for participants. Stewart and Brown (1988) found that total abstinence was reported by only 8 percent of members surveyed one year after their first attendance and by 7 percent at two years. When those who continued to gamble were compared with those who dropped out of Gamblers Anonymous, Brown (1987) found that dropouts were more likely to perceive that they had less of a gambling problem, found themselves in personality clashes with the members who did attend, and reported that Gamblers Anonymous was too rigid in its abstinence-only policy. Other researchers have examined the role of Gamblers Anonymous in maintaining abstinence. Taber and colleagues (1987) found that 74 percent of abstinent gamblers in their sample attended at least three meetings in the prior month, compared with only 42 percent of those who continued to gamble.

The therapeutic effectiveness of Gamblers Anonymous has also been explored with respect to participation by the gambler's spouse. Johnson and Nora (1992) found that there was a trend for higher abstinence rates for gamblers whose spouses were present at meetings compared with gamblers whose spouses did not attend. Although not statistically significant, the results revealed that 20 out of 44 gamblers whose spouses were present at meetings stopped gambling for at least four years, compared with 13 out of 46 gamblers whose spouses did not participate. In sum, Gamblers Anonymous may be increasing in popularity (Lopez Viets and Miller, 1997), but whether participating in meetings makes a significant and lasting impact is still not known (Brown, 1985; Rosecrance, 1988).

Other Self-Help

Related to the Gamblers Anonymous approach is the use of self-help and psychoeducational literature for pathological gamblers. Dickerson et al. (1990) conducted a preliminary investigation in which he compared use of a self-help manual only with use of the manual plus an interview with an experienced therapist. The manual focused on the definition and underlying causes of problem gambling and how the individual could monitor the problem behaviors and replace them with incompatible but healthier behaviors. The group that received the manual plus interview experienced more rapid improvement during the first three-month follow-up, but progress was not sustained at the six-month follow-up. One interesting aspect of this study was that most clients chose abstinence as their goal rather than a reduction of gambling.

Natural Recovery

Recovery from pathological gambling need not require formal treatment. Understanding how natural recovery occurs is important. First, the factors associated with such natural recovery can be integrated into treatment services. Second, policymakers need to know how many gamblers will recover naturally if they are to estimate the social costs associated with gambling disorders. Natural recovery rates and processes provide the baseline against which social costs and treatment effects and effectiveness can be judged. Thus, estimates of social effects (Prochaska, 1996) and treatment cost-effectiveness cannot be computed until the rates of natural recovery from pathological gambling become calculable. Some economists, for example, compute social cost estimates as if there is no recovery without treatment (Institute of Medicine, 1996). If we assume some rate of natural recovery among pathological gamblers, the social costs

of gambling will be lower than estimates that assume no possibility of natural recovery.

Since Winick (1962) first described the process of "maturing out" of narcotics use, the idea of natural recovery has caught the imagination of many clinical investigators. Indeed, natural recovery has become increasingly recognized as a common phenomenon (Institute of Medicine, 1996; McCartney, 1996). Studies about natural recovery have been reported for alcohol problems (e.g., Cunningham et al., 1995; Humphreys et al. 1995; Sobell et al., 1996), smoking (Bernstein, 1970; Declamente and Prochaska, 1982), cocaine use (Shaffer and Jones, 1989; Toneatto et al., in press), and opiate use (Biernacki, 1990; Klingemann, 1991).

Some investigators have speculated that prevalence studies provide indirect evidence of natural recovery from gambling problems. Volberg (1995) has observed that the difference between higher rates of youth gambling disorders and lower rates of adult gambling disorders suggest the presence of natural recovery, although prospective longitudinal studies would be needed to confirm this conclusion. Wynne's (1994) survey of a Canadian community revealed that 36 percent of respondents who reported a prior gambling problem reported no problems in the past year. In a more direct investigation of natural recovery, Hodgins and el-GueBaly (submitted for publication) used publicity to recruit problem gamblers who had resolved their gambling problems either with or without the help of treatment. Among the subjects in their sample, about half reported that they recovered without treatment. The sole variable that significantly discriminated those who sought treatment from those who did not was the number of DSM-IV pathological gambling symptoms. Those who sought treatment reported about two more symptoms compared with the nonseekers (about eight versus six symptoms). Nevertheless, although research during the past decade has advanced knowledge to some degree about natural recovery from psychoactive substances, natural recovery from gambling has not been examined.

HEALTH CARE SERVICES AND PREVENTION

Although the effectiveness of various treatment approaches is not well substantiated in the literature, it is the committee's view that treatment for most, but perhaps not all, pathological gamblers is warranted. This position is based on three assumptions: First, pathological gambling is a serious disorder associated with several negative consequences. Second, the evidence is that self-help groups alone are not very effective (Brown, 1987). Third, pathological gambling can be a chronically relapsing disorder, often persisting indefinitely even after periods of remission. Yet these assumptions are in need of substantial and rigorous research testing. At this point, we do not know which treatments work best and why they work, and we do not know the extent to which gamblers can recover naturally.

Availability and Access of Treatment Services[2]

Whereas substance abuse has the attention of policymakers, the need to provide treatment for pathological gambling has not been widely recognized. It is difficult to know the extent to which insurance coverage exists for this illness, because consistent reporting by treatment providers and by jurisdictions on how much they spend treating pathological gamblers is not available. For example, Svendsen (1998), in a survey conducted for the committee, contacted

[2] The committee thanks Roger Svendsen and his team for their investigation of the extent of treatment services.

the 20 largest insurance companies in the United States to determine how much they spent on gambling treatment. The companies reportedly would not release the information, arguing that information about reimbursement for any specific disorder would be provided only to participating members or their physicians. Nevertheless, in the same survey, all 34 state affiliates of the National Council on Problem Gambling confirmed their understanding that most health insurers and managed care providers do not reimburse individuals receiving treatment for pathological gambling (Svendsen, 1998). This exclusion from reimbursement occurs despite the fact that pathological gambling has been recognized by the American Psychiatric Association as a mental health disorder since 1980 (American Psychiatric Association, 1980). Such practices not only keep many from seeking treatment, but also require many of those who do seek treatment either to pay out of their own pocket--unlikely for a debt-ridden gambler--or to obtain coverage under the guise of another diagnosis often associated with pathological gambling, such as depression or substance abuse (Letson, 1998).

Current treatment for pathological gambling in the United States, in many ways, may parallel the treatment of substance use disorders (Blume, 1986). Many approaches have been employed in the service of pathological gamblers, although most of the treatment is probably delivered on an outpatient basis. Inpatient care is generally limited to patients with severe acute crises, treatment failures, and severe comorbid disorders, particularly depression (Lesieur, 1998; Blume, 1986). Although there is a growing tendency for treatment programs to focus on pathological gambling, many still operate as specialized tracks within existing substance abuse programs (Lesieur, 1998). Furthermore, despite the growing trend in the United States toward harm reduction strategies and controlled behavior approaches for addiction problems (Marlatt and Tapert, 1993), most gambling treatment programs, like those that treat substance abuse, favor abstinence. Some programs, however, particularly those dealing with problem gamblers in their early stages, do aim at reducing and controlling rather than stopping gambling (Lesieur, 1998).

It is important to consider that treatment for gambling is most likely to be provided by a combination of specialized and nonspecialized providers--that is, by a combination of those who treat gambling problems as the focus of their work and those who provide general counseling but occasionally work with gamblers. It may be that non specialized providers deliver the majority of addiction treatment services. As an adjunct or alternative to primary treatment, treatment providers often refer gamblers to Gamblers Anonymous and Gam-Anon (Lesieur, 1998; Stinchfield and Winters, 1996). In fact, Gamblers Anonymous appears to be the most readily available form of help for the problem gambler and its out-of-pocket costs are virtually nil. Based on a review of its international services, its Internet web site, and archival records (Svendsen, 1998), Gamblers Anonymous has meetings in all 50 states, with the average number of meetings annually per state being 26 and the median 14, an increase of 36 percent from 1995 to 1998 (see Appendix E).

As already noted, it is the consensus of state affiliates of the National Council on Problem Gambling that the majority of health insurers in the United States do not reimburse those receiving treatment for pathological gambling (Svendsen, 1998). There is nevertheless some funding for gambling treatment, although it is small. Many of the 34 state affiliates, as well as the national organization itself, receive some funding from state or gambling industry organizations (Letson, 1998; Svendsen, 1998). Approximately half of them report public funding specifically to support treatment for problem gambling (Svendsen, 1998); the revenues generated by gambling in the state are used to pay for these services. Amounts for problem

gambling treatment services range considerably (from $100,000 to $1.5 million), although most state appropriations are at the low end. Not surprisingly, the affiliate councils see this level of funding as insufficient (Letson, 1998:53). Even in states that spend a good deal on pathological gambling, the amounts are small in comparison to what they take in from legalized gambling revenues. For example, the amount appropriated by the state of New York to its Council on Problem Gambling represents a mere one-tenth of 1 percent of the state's income from legalized gambling (Letson, 1998). For Minnesota, in 1997, it represents about one-half of 1 percent of the state's income from legalized gambling (Svendson, 1998). Moreover, the majority of state affiliates to the National Council on Problem Gambling probably do not receive this level of funding (Letson, 1998) and, although 47 states have some form of legalized gambling and all 50 states have gambling venues (legal and illegal), only 34 have a council.

Without a good estimate of the number of pathological gamblers in the United States and the actual number of patients in treatment for this disorder, it is nearly impossible to reliably estimate the gap between the need for and use of treatment services. There are four reasons to expect that a significant gap exists between use of treatment and need for treatment in the area of pathological gambling (Letson, 1998): (1) An unwillingness by many gamblers to seek treatment; (2) a lack of recognition by the public that pathological gambling and problem gambling have significant health consequences; (3) failure of health insurers to recognize lay persons and treatment professionals who are certified by a recognized national or state organization as qualified providers of pathological gambling treatment; (4) lack of funding for treating pathological gambling; and (5) a perception that treatment is or may be ineffective.

Help-Line Services[3]

A survey designed and conducted for the committee to provide information on problem gambling help lines in the United States reported that gambling help lines now operate in 35 of the 47 states that have some form of legalized gambling (Wallisch, 1998). In addition, the National Council on Problem Gambling, Inc., has a nationwide toll-free number (1-800-522-4700) that some states use as their state number and that other states advertise separately from their own in-state number.

It is estimated that about 60 to 70 percent of calls to help lines are made by gamblers seeking help for themselves, the rest being made by spouses, family members, friends, therapists, employers, etc., about a problem gambler. Typical services provided by help lines include offering telephone counseling, usually by experienced master's-degree-level counselors (although several help lines lack a professional staff and are concerned about liability issues), information (e.g., about Gamblers Anonymous, Gam-Anon, problem gambling research), referrals to treatment providers, credit and debt counseling referrals, and crisis intervention (some transfer the call directly to a crisis line). Some programs perform other activities, such as gambling education and public awareness, prevention activities, and professional training.

About 60 percent of help lines receive most or all of their funding from the state in which they operate. Funds to operate gambling help lines are also provided by the gambling industry, corporations, and miscellaneous other sources such as memberships, individual contributions, and in-kind donations. Help lines advertise their call-in number in different ways, including running banners on video lottery terminals when not in play (South Dakota); slot machine

[3] The committee acknowledges Lynn Wallisch for her written report and contribution to this section.

stickers, posters, and pens (Delaware); billboards (Delaware and Louisiana); bus tails (Delaware); telephone recordings at the Department of Social Services while the caller is on hold (Delaware); targeted mailings to professionals, clergy, and corrections personnel (Minnesota); back of grocery store receipts (Minnesota); the New York Yankees' official billboard outside the stadium (New York); part of collateral materials provided by other agencies (Texas); church newsletters (Texas); postings at Alcoholics Anonymous meeting sites (Texas); listing in *Card Player* magazine (California); and posters conspicuously located inside casinos.

Most help lines cover the entire state, without restriction as to area or population served, and some take calls from nearby states, particularly when a neighboring state does not have its own help line. Because the national number will attempt to find help for any individual in the United States, in theory, no state is entirely without coverage. This diversity of ways of reaching a help line does not mean that all callers will receive equally effective services, however, and confusion can arise. For example, a problem gambler in Rhode Island may call the Rhode Island problem gambling help line and speak with a counselor at Travelers' Aid, or a counselor at the Connecticut Council (because the Connecticut problem gambling help line is advertised as covering Rhode Island), or a counselor with the Texas Council (which picks up Connecticut calls after hours). Depending on how frequently these entities share and update information, they may each have a different set of referrals or use different counseling techniques. This may well be an embarrassment of riches for the caller, but it could also be a potential source of confusion.

Help lines that report data on the number of calls received distinguish between legitimate calls by or about problem gamblers and inappropriate ones that ask for information on how to gamble or for the winning lottery number. These data were provided to the committee either from responses to our mini-survey or were calculated on a weekly basis from data already reported in summary form in help-line reports or datasheets. It is important to keep in mind that a limitation of the data is that some states reported only the number of calls that generated demographic statistics, which may not represent all help-related calls. With these caveats in mind, weekly call volume ranged from about 10 to several hundred. Some states, such as New Jersey, whose 1-800-GAMBLER number is publicized nationally and receives calls from all over the country, and Texas, which contracts to cover calls from a large number of states, reported several hundred calls per week. New England and Maryland reported 100 or more calls per week, and 6 other states (Florida, Minnesota, New York, Iowa, Pennsylvania, and Wisconsin) reported between 50 and 100 calls weekly.

Some help lines have developed information systems about calls and clients. The variability between them is considerable; they ask different questions, do not necessarily ask all questions of all callers, and report data using different summary categories. Some programs make detailed information regularly available, in the form of mailouts, annual reports, or postings to their Internet web site; others report information only as required to do so. Given this heterogeneity of formats and content of data, it is difficult to draw reliable conclusions. However, three systematic investigations of help-line data are worthy of our attention. First, a study by Wallisch and Cox (1997) compared the demographic distribution of callers to the Texas help line with the demographics of problem gamblers in the general population of Texas. The authors found that certain groups of problem gamblers were underrepresented among help-line callers. Notably, gamblers who were younger, female, and Hispanic were less likely to call than would be expected from their numbers in the population of problem gamblers. Given the increasing numbers of statewide prevalence surveys being conducted, extending this type of comparison study between help-line data and prevalence data on the general population would be

useful as a way to further inform help-line services about population groups that they underserve. Second, Stinchfield (1998) reported on South Oaks Gambling Screen data from a sample of consecutive callers to the Minnesota help line. The mean score was about 8, which is considerably higher than the standard cutoff score of 5 for defining probable pathological gamblers (Lesieur and Blume, 1987), although it is lower then the mean score obtained from a Minnesota sample of treatment seekers (Stinchfield and Winters, 1996). This finding is interesting, in that it indicates that, at least for the Minnesota sample, help-line callers appear to be a seriously disordered group. Third, Minnesota's Problem Gambling Division commissioned an outcome report of its state help-line callers. A random sample of consecutive callers was called after one month and evaluated on changes in their gambling and their satisfaction with help-line services (Winters et al., 1996). At follow-up, 97 percent of the sample expressed satisfaction with the services received, and 71 percent reported reduction at follow-up in gambling frequency and gambling-related problems compared with baseline measures. While encouraging, the results can only be considered suggestive, primarily because of the absence of a control group in the study. Apparent improvement over time would be expected because the help line was called at a moment of crisis, whereas the follow-up time was chosen by the investigator.

Gambling Counseling Certification and Services[4]

The general purpose of certification of health care providers is to provide a form of recognition based on the contributions that they have made to a profession or based on the special expertise that they possess within a practice. Although this form of credentialing does not confer any legal status on those being recognized, it is a means for professional, legislative, and regulatory bodies, private industry, third-party payers, and the public to identify individuals who have demonstrated a particular expertise. Currently, three national organizations have developed a certification process for clinicians who specialize in the treatment of pathological gambling: (1) the American Academy of Health Care Providers in the Addictive Disorders, formed in 1989, offers the Certified Addiction Specialist credential in the areas of alcoholism, drug addiction, eating disorders, compulsive gambling, and sex addiction; (2) the National Council on Problem Gambling, an association formed in 1972 to provide information on problem gambling, began certifying gambling counselors in 1989; and (3) the American Compulsive Gambling Counselor Certification Board, affiliated with the Council on Compulsive Gambling of New Jersey, Inc., and formed in 1989, began offering their credential on a national basis in 1993. In addition, several states have formed certification boards requiring only a minimal level of experience and education for certification. An examination of the various organizations involved with the development of national standards reveals that there is no consistency in experiential and educational levels that these boards recognize.

The current debate surrounding the difference between certification and licensure is an arena that deserves attention. There is a trend toward the licensing of health care professionals who treat alcohol and drug addiction. Unlike certification, licensure confers a legal status on those receiving it. Such a process implies that the treatment of substance abuse is a profession in its own right, not an expertise within another discipline. Many of the associations declare that such a license is too narrow and would unnecessarily restrict or bar other qualified professionals, who

[4] The committee thanks Janet Mann and Marcus Patterson for their written contribution to this section.

may have a background in mental health, marriage, and family counseling, social work or psychology, for example, from practicing addiction counseling. Individuals from any of these disciplines may possess expertise in the treatment of addictive disorders and may therefore wish to acquire a specialty certification in recognition of excellence and proficiency.

Prevention

There are several examples of prevention efforts in the field of pathological gambling, among them teaching gamblers about the odds of the games they play, providing help- line services, and developing public and youth awareness campaigns about the potential risks associated with gambling (American Gaming Association, 1998). However, nothing is known yet about the effectiveness of these efforts.

A clear challenge for developing effective ways to prevent problem gambling is the lack of awareness of the dangers of excessive gambling. In one sense, programs to prevent substance abuse have it easy; the dangers of illicit drug use are relatively easy to identify. With gambling, it's not so easy. Placing a bet does not readily produce immediate adverse effects. Family members may find it harder to detect the effects of excessive gambling by a loved one compared with drug use or smoking. Moreover, advertising for state lotteries and casinos suggest that gambling is a harmless form of recreation. Youth programs receive funding from gambling, such as bingo and raffles, thus further lending support to the notion that gambling is a beneficial activity (Wynne et al., 1996). Many states use advertising and promotional campaigns to foster the acceptance of gambling. They do this by (1) portraying gambling as family entertainment or social recreation, (2) emphasizing community needs for the tax revenues generated, (3) altering the norms surrounding the behavior, so as not to make it deviant, and (4) centering gambling advertisements around successful gamblers (Preston et al., 1998).

Perhaps the most concerted prevention efforts have been directed toward adolescents. Targeting young people makes sense from a public health perspective because gambling often begins early, and thus may act as a gateway to future excessive gambling (Shaffer and Hall, 1994). We found only one youth prevention program that has been empirically evaluated. Gadboury and Ladouceur (1993) describe a three-session program in Quebec organized around an alcohol prevention model. It covered an overview of gambling, discussions of legal issues, how the gambling industry manipulates the chances of winning, beliefs and myths about gambling, and the development of pathological gambling and its consequences. It also covered strategies for controlling gambling. A sample of 289 juniors and seniors from 5 high schools completed the program. Whereas the evaluation showed that the students did learn about gambling and coping skills, what they had learned did not significantly influence their gambling attitudes or behavior six months later. The researchers suggested that future programs should increase involvement of both students and teachers and integrate the prevention program into existing drug and alcoholism prevention programs. Indeed, the reasons attributed to young people's involvement in gambling are similar to those linked to drinking or smoking, including vicarious modeling by parents, perceived pressure from peers, and a susceptibility to illusions of control (Derevensky et al., 1994; Jacobs, 1989; Kearney and Drabman, 1992).

CONCLUSIONS

What is known about the treatment of pathological gamblers lags behind even what is

known about its prevalence and etiology. A review of the literature indicates that relatively few outcome studies exist, and most of them lack a clear conceptual model and specification of outcome criteria, fail to report compliance and attrition rates, offer little description of actual treatment involved or measures to maintain treatment fidelity by the counselors, and provide inadequate length of follow-up. "At face value, there are few concrete observations that can be said of the effectiveness of treatment approaches for problem (and pathological) gambling beyond the fact that some are effective to some extent over an unknown follow-up period" (Blaszczynski, personal communication to the committee, 1998). This lack of rigorous research is aggravated by the fact that adequate research funding for pathological gambling treatment has not been made available in substantial amounts by the federal government. In contrast, the substance abuse field, which has benefited from treatment research made possible by expansion of research funding by the National Institute on Drug Abuse (NIDA) and the National Institute on Alcohol Abuse and Alcoholism (NIAAA), can point to numerous investigations supporting the effectiveness and cost-effectiveness of drug abuse treatment (Institute of Medicine, 1996:192).

Nevertheless, the committee views professional treatment as an appropriate response in most cases for individuals with a pathological gambling disorder. However, and especially in the absence of research on treatment effectiveness, it is unlikely that recovery from pathological gambling will involve quick and easy treatment. Rather, the treatment process can be characterized by less than complete compliance, a significant probability of relapse after treatment, and a long-term chronic course of symptoms not uncommon to the recovery patterns of alcoholism, drug addiction, and other chronic medical illnesses, such as hypertension and diabetes (McLellan et al., 1998).

The prevailing sentiment among experts in the substance abuse field, backed by two decades of well-funded research, is that for substance abusers, some treatment is better than no treatment (Institute of Medicine, 1996). At this juncture, there appears to be no compelling evidence in the pathological gambling literature to reject the notion that some treatment is better than none. Naturally, as the treatment literature matures for this disorder, a clearer picture of the incremental value of treatment will come into view.

In the near term, it is essential that a comprehensive research agenda on pathological gambling include policy research to identify alternative and optimal funding mechanisms and structures for financing treatment for pathological gambling. It seems wise to model the funding on the system used in substance abuse, in which financing responsibilities are distributed across state and local governments, the federal government (acting on behalf of selected poor, elderly, and chronically disabled individuals), and private insurers acting on behalf of employers and individuals who purchase health insurance. Indeed, private health insurance is now the largest single source of funding for the treatment of alcohol problems (Institute of Medicine, 1990:8). The major concern now being raised in the field of pathological and problem gambling treatment is over rapidly rising health care costs that have virtually blocked access to reimbursable treatment. Clearly, a more detailed understanding of the effectiveness of treatment for pathological gambling, as well as the cost-effectiveness of varying treatments, is required if a truly nondiscriminatory financing policy is to be realized. Research that identifies what keeps pathological gamblers from undertaking treatment and that informs clinical services about how best to locate, attract, and retain patients through treatment is also important.

It is also important to study the effects of managed care contracts and health insurance policies that place severe limits on services for those with a pathological gambling disorder. The

extent to which gamblers are shortchanged because of limited access to health care has not been well documented. Furthermore, it is not known to what extent treatment for pathological gambling has been carved out from treatment services for other disorders associated with pathological gambling. It is also not clear if the trend by some states to require separate licensing for pathological gambling counselors will have counterproductive results for clients seeking treatment. Some states offer separate licensing for drug abuse and mental health services and the administration of drug abuse treatment independent of psychiatric, medical, family, and other related services. The results of partitioning these practices may result in less service delivery (McLellan et al., in press) and may defeat the principle of matching patients to the most effective treatments.

As noted by Rosenthal (1992), women constitute one-third of the population of pathological gamblers but are underrepresented in treatment study samples. And there is increasing recognition of the need to set up and evaluate treatment programs designed specifically for women and adolescents. Results from such studies will enable the development of programs targeted at these groups. Other client characteristics that require research attention include outcomes for adolescents (only one study to date has reported outcomes for them), as well as outcomes for members of different ethnic groups. Client characteristics may predict differential responsiveness to various treatment approaches, and this line of investigation could be linked to evaluation of community-based response systems.

In the area of gambling counseling certification and services, the committee sees a need for policy research examining controversial issues and viable options. Such research should describe the extent of certified counseling services, the number of counselors with varying levels of expertise, the demand for services provided, and alternative training and certification structures that are or could be established at colleges, universities, institutes, and health care training programs. Research of this type could lead to opportunities in the treatment community to form consensus and create a blueprint for action that will resolve the confusion and fragmentation currently surrounding the credentialing of gambling treatment professionals.

Future treatment outcome studies need greater methodological rigor. The research literature contains only a handful of controlled outcome studies, and most of them suffer from having small sample sizes, which limits their statistical power to detect reliable effects of group differences. Many studies do not provide information about refusals or dropouts, and, when these data are provided, the results can be discouraging (e.g., Sylvian et al., 1997). Gambling treatment studies should focus particularly on treatments that have manual-guided treatments with careful supervision and documentation of procedures. Poor specification of the therapeutic methods used hinders the replication of successful programs. Not only do therapist's manuals guide interventions, but they also facilitate the clarification of the specific contribution of particular treatment components. Clarifying key outcome measures of gambling treatment research is also priority, as is measuring such outcomes on the basis of valid instruments.

More research needs to be carried out to identify types of gamblers who may differ in terms of gambling involvement, consequences, and etiology and for whom special treatments may maximize treatment response. The behavior of some pathological and problem gamblers may be biologically based, the direct result of deficits in the brain's neurotransmitter system (Comings, 1998). Patients may also display transient symptoms that minimally meet diagnostic criteria for pathological gambling or emerge as a reaction to emotional, affective, or anxiety-related difficulties (Blaszczynski, 1998). Matching patients to optimal treatment approaches is an ongoing area of research in the substance abuse treatment field. Limited independent research

on matching patients to treatment settings suggests that outcomes are improved when patients were matched to settings that address their particular needs (McLellan et al., 1983). Clearly, there is no systematic research on the optimal, most cost-effective configuration of services for different groups of problem gamblers. To even conduct patient matching, three elements are needed: (1) comprehensive assessment tools to identify patient problems and needs, (2) placement criteria to ensure placement in the appropriate setting (e.g., inpatient versus outpatient) and intensity of care, and (3) a means of facilitating movement through a continuum of treatment services (Substance Abuse and Mental Health Services Administration, 1995). Because the gambling treatment field does not contain an adequate knowledge base pertaining to these three elements, matching patients to treatments can not be adequately studied until the basic research regarding assessment and placement criteria has first been conducted.

Behavioral and cognitive treatment approaches appear to offer promise as effective treatments for pathological gambling. In a recent special issue of the *Journal of Consulting and Clinical Psychology* on empirically supported psychological treatments, cognitive-based treatments were cited as perhaps the treatment most widely studied and most highly regarded by proponents of clinical trial methodologies (DeRubeis and Crits-Christoph, 1998:38). It has also been observed that cognitive treatments are an emerging approach for the treatment of addictions (Crits-Christoph et al., 1998; DeRubeis and Crits-Christoph, 1998). Nevertheless, this is not to say that eclectic approaches to treating pathological gamblers should be ignored. As Blaszczynski and Silova (1995) and Lesieur (1998) cogently argue, there is growing recognition that multiple treatment components should be considered given the client's specific configuration of problems. Thus, clients with dysphoria should be evaluated for antidepressant medication; marital counseling may be indicated in the presence of extreme family estrangement; and substance abuse counseling may be necessary for those whose addictive behavior also includes alcohol or other drug abuse.

There is a particular need for studies of the role of Gamblers Anonymous in recovery and treatment outcomes. If there is a high dropout rate from Gamblers Anonymous, as the literature suggests, then it is important to investigate its causes and strategies for reducing it. Another important understudied research area is the role of therapist characteristics in the treatment of problem gambling behaviors. In addition, the effect of treatment settings is unclear. Although favorable outcomes have been reported from both inpatient and outpatient programs, their differential effects are still unknown. More research on treating spouses of pathological gamblers is also called for (Lesieur, 1998). It is typical for spouses to be directed to Gam-Anon programs to help deal with their partner's gambling. Given the view that a spouse may be involved in the gambling addiction, it has been argued that the treatment of husband and wife together is a necessary component to the rehabilitation process for married couples (Heineman, 1987; Steinberg, 1993).

Pharmacotherapy research needs to be expanded to determine if this approach has an important role in the treatment of pathological gamblers. We still do not know if medications provide therapeutic effect by ameliorating the pathological gambler's cravings, ruminations, or negative feelings.

Research persuasively demonstrates that one of the most reliable predictors of treatment outcome for substance abuse addiction is the patient's readiness to change, regardless of treatment strategy (Prochaska et al., 1992). Consequently, the pathological gambling treatment field should direct research attention to studying the patients' overall readiness to change and the specific stage of change as predictors of treatment outcome.

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