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EARLY WITHDRAWAL FROM MENTAL HEALTH TREATMENT: IMPLICATIONS FOR PSYCHOTHERAPY PRACTICE

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Abstract

Despite more than 50 years of research on client attrition from therapy, obstacles to the delivery and success of treatments remain poorly understood, and effective methods to engage and retain clients in therapy are lacking. This article offers a review of the literature on attrition, highlighting the methodological challenges in effectively addressing the complex nature of this problem.

Current interventions for reducing attrition are reviewed, and recommendations for implementing these interventions into psychotherapy practice are discussed.

Keywords

dropout; psychotherapy; community mental health; review

Despite decades of investigating factors contributing to client attrition from mental health treatment, obstacles to the delivery and success of treatments remain poorly understood, and effective methods to engage and retain clients in therapy are lacking. Although early treatment withdrawal has repeatedly been linked to placement on a waiting list, economic disadvantage, minority status, or limited education, interventions such as community-based mental health clinics have not significantly altered rates of retention. Remarkably, clients continue to disengage from mental health services at a rate comparable to that found more than 50 years ago (Rogers, 1951). Because most clients disengage from services during their initial contacts with the provider, it is essential to understand why someone requesting service does not follow through.

We begin this article with a review of the literature on attrition. We then present the varying definitions of attrition, discuss how these definitions have affected empirical investigations of attrition, and highlight two conceptual models of attrition as a way to make sense of the conflicting findings and focus our discussion of interventions. Finally, we summarize current interventions for reducing attrition, offer recommendations for implementing these interventions in the practice of psychotherapy, and end with suggestions for future research.

Why Is Attrition Problematic?

Premature termination of treatment hinders the effective delivery of mental health services across various settings, consumer populations, and treatment modalities. Early studies of attrition (e.g., Affleck & Medwick, 1959; Hiler, 1958; Rogers, 1951) reported roughly 50% dropout by Session 3, with approximately 35% of patients ending therapy after a single session (Brandt, 1965). In a review by Baekeland and Lundwall (1975), reports of dropout after the first session ranged from 20% to 57%, with others estimating early withdrawal from treatment at 47% across various settings (Garfield, 1994; Lorion & Felner, 1986; Sparks, Daniels, & Johnson, 2003; Wierzbicki & Pekarik, 1993) and among various populations (Baekeland & Lundwall, 1975). More than 65% of clients end psychotherapy before the 10th session (Garfield, 1994), with most clients attending fewer than 6 or 8 sessions (Phillips, 1985). High rates of dropout from therapy are particularly troubling in light of current research suggesting that a minimum of 11 to 13 sessions of evidence-based interventions are needed for 50%–60% of clients to be considered recovered (Hansen, Lambert, & Forman, 2002; Lambert, 2007). Thus, many clients entering treatment do not receive an “adequate dose” of therapy such that the likelihood of obtaining the desired symptomatic relief is limited.

In addition to concerns about client improvement, attrition wastes limited mental health resources. The problem of attrition is particularly acute in agencies that provide mental health services to those who are economically disadvantaged. For instance, a single no-show can exact a significant financial burden in terms of staff salaries, overhead, and lost revenue in addition to personnel losses resulting from low morale and high staff turnover (see Klein, Stone, Hicks, & Pritchard, 2003; Tantam & Klerman, 1979). Furthermore, missed appointments waste staff time, deny access to others in need, and limit the number of people an agency or practice can serve (Joshi, Maisami, & Coyle, 1986). Patient no-show also contributes to unnecessarily long waiting lists and can negatively influence community perception of the agency or practice and mental health treatments. Families are affected in that delays may result in a worsening of symptoms for a family member or diminish the person’s willingness to pursue needed treatment. This seemingly intractable problem is of even greater concern given that the primary purpose for creating community mental health centers was to bring needed mental health services to minority and economically disadvantaged people— those most likely to disengage from treatment (Hollingshead & Redlich, 1958; Lorion & Felner, 1986; Rennie, Srole, Opler, & Langner, 1957).

Methodological Problems in Studying Attrition

Although many studies have explored the problems of attrition and early treatment withdrawal, methodological problems obscure definitive answers. Primary among these is the range of definitions investigators use for attrition. Even though most studies have defined dropout as leaving therapy before a specified number of sessions, the actual cut-off varies across and within studies (e.g., Beckham, 1992; Frayn, 1992; Hatchett, Han, & Cooker, 2002; Kolb, Beutler, Davis, Crago, & Shanfield, 1985; Tryon & Kane, 1993). For instance, whereas Kolb et al. (1985) defined dropout as the point at which two consecutive sessions were missed, Hatchett et al. (2002) defined it as failure to attend the last scheduled

session, and Frayn (1992) defined it as termination of therapy any time within the first 9 months. Dropout has also been defined as failure to return after an intake assessment (Longo, Lent, & Brown, 1992) or consumer-initiated termination without therapist agreement regardless of the number of sessions completed (Berrigan & Garfield, 1981; Pekarik, 1992; Richmond, 1992; Tutin, 1987). This variability is of particular concern because at least one study has shown that differing definitions represent contradictory constructs and thus confound investigations of attrition (Hatchett & Park, 2003).

Variation in definition also influences the resulting findings. For example, Wierzbicki and Pekarik (1993) conducted a meta-analysis of 125 studies examining psychotherapy dropout. Consistent with previous literature, they found an overall dropout rate of nearly 47%, with racial status, education, and income significantly affecting these rates. However, the way in which each study defined dropout influenced the resulting rates. Significantly lower rates of attrition were found when dropout was considered a no-show at a scheduled session (i.e., 36%) as opposed to therapist judgment of dropout (48%) or number of sessions attended before ending treatment (48%).

Attrition research is further complicated by differing therapist and client perceptions of treatment or outcome (Garfield, 1994). Frequently, therapists' assumptions about treatment goals and expectations differ from those of their clients (see Hunsley, Aubry, Verstervelt, & Vito, 1999; Lorion & Felner, 1986; Todd, Deane, & Bragdon, 2003). For example, the client may end treatment because "enough" relief has been obtained, whether or not criteria for "clinical improvement" or recovery have been met (Hynan, 1990; McKenna & Todd, 1997; Todd et al., 2003). In fact, a recent study of the relation between duration of treatment and outcome (Barkham et al., 2006) found that more than 50% of clients achieved a reliable and clinically significant change in symptoms after attending only one or two sessions. Although these were planned terminations, other research has confirmed that most patients leaving treatment unilaterally achieve reliable improvement (70%), with a small number (13%) reaching clinically significant change (Cahill et al., 2003).

Research has also shown that therapists expect treatment to last significantly longer than do clients (Garfield, 1994; Pekarik & Finney-Owen, 1987), and client estimates of treatment duration are those most consistent with what happens (Pekarik, 1985). Clients might also end treatment when the challenges of attending sessions become insurmountable or are viewed as exceeding anticipated additional benefits. Moreover, clients prematurely ending treatment may recognize a lack of improvement and believe that additional sessions will not be helpful, a fact often missed by therapists (Hunsley et al., 1999).

Therapists and clients also frequently differ in the reasons they cite for early treatment withdrawal. In a review of 194 client records, Hunsley et al. (1999) found that therapists correctly identified the reasons for termination when the reasons were positive. However, when the reason was negative therapists were significantly less likely to correctly identify client reasons for leaving treatment. These findings are confounded by the fact that even when clients have negative reasons for ending treatment, they tend to report satisfaction with the services in general (Hunsley et al., 1999). Thus, therapists are unable to appropriately attend to negative reactions in treatment either because clients hide these feelings (Hill, Thompson, Cogar, & Denman, 1993) or because therapists are unaware of client reactions and miss potential treatment failures (Hannan et al., 2005). However, it is important to note that even when aware of negative reactions, therapists need to respond appropriately. For instance, therapists responding in a flexible, nondefensive, and direct manner when faced with a therapeutic conflict can improve the relationship (Castonguay, Goldfried, Wisner, Raue, & Hayes, 1996; Foreman & Marmar, 1985; Rhodes, Hill, Thompson, & Elliott, 1994) and decrease the likelihood of early treatment withdrawal. However, as Lambert and

colleagues (Lambert, 2007; Lambert, Harmon, Slade, Whipple, & Hawkins, 2005) have pointed out, therapists are frequently so confident in their own clinical judgment that even evidence to the contrary (via client-report feedback) is dismissed.

Understanding Predictors of Attrition

In an attempt to understand the complexities of attrition, two current models of behavioral health offer a foundation for developing a conceptual framework of this problem. Andersen's (1968, 1995) model of health services utilization focuses on four broad categories of influence on patient use of services: patient characteristics, enabling factors, need factors, and environmental factors. Patient predisposing characteristics are those factors descriptive of the individual seeking services (e.g., ethnicity, age, gender, beliefs, or expectations). Enabling factors are those issues or situations that block or aid a person's use of health care services. Such factors include income level, cost for services, degree of family involvement, and social support networks. A third cluster of factors relate to the person's need for health care services and includes the diagnosis, prognosis, comorbidity, and suggested length of treatment. A final category of influences on service utilization deals with environmental factors such as accessibility or ease of getting care, the type of provider, treatment options, or treatment setting. Together, these four categories help to define the scope of influence on service utilization and offer explanations for disengagement from treatment.

More recently, the problem of health service utilization has been conceptualized in terms of barriers to treatment (e.g., Kazdin & Wassell, 2000; Owens et al., 2002; Todd et al., 2003). For instance, Owens et al. (2002) proposed three domains of factors blocking or impeding service utilization: client perceptions of mental health and mental illness, client perceptions and beliefs about mental health treatment, and structural factors similar to those of Andersen (1995). In contrast to the structural impediments described by Andersen, Owens et al.'s model attends to client perceptions, attitudes, and assumptions about mental health problems and mental health treatment. For example, beliefs that mental health problems are a sign of weakness or poor family dynamics or expectations about the length of therapy sessions or the duration of treatment are considered possible influences on utilization of services. Thus, there are a number of areas potentially exerting an influence on patients' decisions to enter or continue with mental health treatment.

Using these models as a framework for understanding attrition, we examine the research findings within six broad categories of influence: patient characteristics, enabling factors or barriers, need factors, environmental factors, perceptions of mental health and mental illness, and beliefs and assumptions about mental health treatment.

Patient Characteristics

Demographic variables (such as gender, age, socioeconomic status, education, occupation, and race) have been the most frequently studied client factors, yet they present inconsistent findings. For example, most research has shown little relation between dropout and either client age or gender (Cartwright, 1955; Craig & Huffine, 1976; Frank, Gliedman, Imber, Nash, & Stone, 1957; Rubenstein & Lorr, 1956), although two recent studies (Edlund et al., 2002; Thormählen et al., 2003) have shown that younger clients (i.e., those younger than 25–30 years old) are more likely to drop out than older clients. Similarly, most of the research on minority status (e.g., non-White) has shown that minorities have higher dropout rates (Greenspan & Kulish, 1985; Sue, Fujino, Hu, Takeuchi, & Zane, 1991; Sue, McKinney, Allen, & Hall, 1974; Vail, 1978), although results have been inconsistent across studies. In contrast, low socioeconomic status has fairly consistently been associated with

psychotherapy dropout (Baekeland & Lundwall, 1975; Garfield, 1994), demonstrating moderate effect sizes between .23 and .37 (Wierzbicki & Pekarik, 1993).

Regrettably, our understanding of the combined impacts of poverty and ethnicity on accessing and using mental health services remains limited (Garfield, 1994; Sue, Zane, & Young, 1994). Whereas early research in this area implicated social biases of therapists as affecting treatment (e.g., Lorion, 1974, 1978), more recent literature (e.g., Garfield, 1994; Illovsky, 2003; Prilleltensky, 2003; see also Mental Health: A Report of the Surgeon General, 1999) has suggested that obstacles to engagement and retention reflect a complex array of cultural, attitudinal, and experiential differences between both providers and consumers.

Enabling Factors or Barriers

Little has changed in the past 30 years in regard to the influence of external factors on an individual's ability to show up for sessions or continue in treatment. For instance, difficulties in finding mental health services (Parker & McDavis, 1983), greater distance traveled (Fraps, McReynolds, Beck, & Heisler, 1982), placement on a waiting list (Festinger, Lamb, Marlowe, & Kirby, 2002; Stasiewicz & Stalker, 1999), and having a longer wait from intake to first treatment session (Rodolfa, Rapaport, & Lee, 1983) have repeatedly been linked with treatment dropout. More recently, research has shown that referral source has become a significant influence on attrition (Hampton-Robb, Qualls, & Compton, 2003; Sparks et al., 2003). Patients referred by an outside agency or crisis hotline were more likely to no-show at the first treatment session than those referred by religious groups, friends, or insurance companies (Hampton-Robb et al., 2003). Coupled with the growing difficulty many low-income parents face in finding child care, leaving a job that pays on an hourly basis, and arranging the logistics of transportation, it is not surprising that there continues to be a mismatch between providers' expectations and assumptions about treatment and those of their consumers (e.g., Coles & Coles, 1978; Dumont, 1968; Sue et al., 1994).

Factors Related to Need

Shifting from demographic factors and barriers to treatment, several studies have examined the relationship between dropout and psychiatric diagnosis (i.e., need for care). Whereas some studies have suggested that psychotic clients are less likely to drop out of treatment early in the process (Craig & Huffine, 1976; Dodd, 1970; Hoffman, 1985), other studies have found that such patients are more likely to drop out (e.g., Sue et al., 1974). In a more recent study (Thormählen et al., 2003), higher rates of attrition were found for patients with more severe diagnoses and more complex diagnostic pictures (i.e., Axis II comorbidity). Indeed, personality variables such as social isolation and aggressive or passive-aggressive behavior (Baekeland & Lundwall, 1975), hostility (T. E. Smith, Koenigsberg, Yeomans, Clarkin, & Selzer, 1995), and personality disorder diagnosis (e.g., Chiesa, Wright, & Neeld, 2003; Persons, Burns, & Perloff, 1988) have been linked to increases in rates of dropout.

Psychological mindedness is another needs factor influencing engagement in treatment. Referred to as the patient's ability to recognize psychological problems, use psychological terminology, and acknowledge possible psychological causes, psychological mindedness has shown a fairly consistent relation to dropout. In Baekeland and Lundwall's (1975) review of the literature, dropouts were found to be more defensive and less willing to self-disclose on measures of personality and social desirability. Reis and Brown (2006) noted in their review that psychological mindedness predicted continuation in treatment in almost all studies reviewed. Furthermore, characteristics associated with psychological mindedness, such as

low tolerance for frustration, poor motivation, and impulsiveness, also demonstrated an increased association with dropout.

Although clients with low levels of initial distress have been found to be both more (Trepka, 1986) and less likely (Tutin, 1987) to drop out of treatment, there is relatively limited research on dropout and client improvement throughout the course of treatment. One problem in assessing client distress is that objective measures of client-rated symptom change have rarely been used, and those few studies doing so have only taken measurements before and after treatment (Kolb et al., 1985), after a specified number of sessions (Grimes & Murdock, 1989), or several months after the initial data collection (S. L. Johansson, Silverberg, & Lilly, 1980; Pekarik, 1983a, 1983b, 1992). For example, dropouts who attended more than three sessions and nondropouts who attended the same number of sessions were comparable in terms of symptom improvement. However, clients leaving treatment after the first or second session showed significantly less improvement than their counterparts who attended three or more sessions (Pekarik, 1983a, 1992). Assessing client-rated symptom distress before every session, Cahill et al. (2003) found that most patients leaving treatment unilaterally achieved reliable improvement (70%), although more than 71% of patients completing treatment achieved reliable improvement and clinically significant change. These findings suggest that length of stay in treatment may be an important factor in determining the relationship between dropout and client improvement. Without documentation of client distress before, during, and after treatment, there is no way to determine whether improvement, as suggested by Hunsley et al. (1999), or lack of improvement influences a person's decision to withdraw from treatment.

Environmental Factors

Clients disengage from services at various stages of involvement, whether after the first phone call, the intake evaluation, or the first treatment session or during treatment (Armbruster & Kazdin, 1994). Such variability in client disengagement is highly likely to result from a differing set of factors, with environmental factors of perhaps more importance early in engagement (Beckham, 1992; Garfield, 1963). For instance, staff attitudes, the setting of the clinic, or clinic facilities are likely to have the most impact on clients after the initial phone call or intake evaluation (Gunzburger, Henggeler, & Watson, 1985) than after treatment has begun. Simply refurbishing the waiting area and therapy rooms at an urban community mental health clinic resulted in a 10% increase in attendance at the first treatment session (Chua & Barrett, 2007).

Access to care may also affect attrition (McCabe, 2002). In a comparison of mental health service utilization in the United States and Canada, Edlund et al. (2002) found that limited health care coverage was a major predictor of retention in treatment. Somewhat surprisingly, environmental variables, such as lack of transportation and difficulty getting time off work or school (Beck et al., 1987; Cross & Warren, 1984), have fairly consistently failed to show a relation to dropout.

The type of treatment a patient receives also influences rates of dropout. For example, treatments involving both medications and therapy have consistently shown lower rates of attrition than either medication or therapy alone (Arnold et al., 2007; Edlund et al., 2002). In contrast, the type of provider (e.g., lay counselor, clergy, social worker, psychologist, or psychiatrist) has rarely been examined, and no consistent relationship to dropout has been found (Beutler, Machado, & Neufeldt, 1994; Edlund et al., 2002). This situation is likely because of confound between treatment and type of provider (Beutler et al., 1994).

Perceptions of Mental Health

Mental illness is often perceived in a negative way by many ethnic minority groups, including Chinese and Vietnamese Americans (Hampton, Yeung, & Nguyen, 2007), Filipino Americans (Sanchez & Gaw, 2007), African Americans (Thompson, Bazile, & Akbar, 2004), and Latinos (Alvidrez, 1999; González, 1997). Researchers have also suggested that perceptions of mental health likely influence the utilization of services (Kouyoumdjian, Zamboanga, & Hansen, 2003, see also Comas-Diaz & Griffith, 1988). For example, a number of researchers have suggested that African Americans are socialized to be cautious of their surroundings, value social interdependence, and maintain gender role distinctions (e.g., Boyd-Franklin, 2003; Brown & Keith, 2004; Head, 2004). Although women, for instance, are typically raised to be loyal, independent yet interdependent with the family, assertive, and strong, such socialization can have negative effects (Brown & Keith, 2004). By fulfilling the role of strong and independent caregiver, African American women may develop a need to “keep it all together,” thereby decreasing the likely utilization of supportive services. Black men, however, are encouraged to be strong but not so strong as to engender harm (Boyd-Franklin, 2003), resulting in considerable efforts to withhold or hide emotions that may prevent them from seeking treatment, especially psychotherapy (Head, 2004).

In addition to the influences of socialization, explanatory models of illness can be influenced by a combination of socialization factors and self-understanding (Lim, 2006). The way in which a person understands the cause of illness and the treatment sought likely underlies the perceptions of mental health and affects service use. For example, the strong collectivistic characteristics of African Americans coupled with the socialized roles of familial interdependence (women) and avoidance (men) is likely to have an impact on the use of mental health services.

Despite the potential influence of socialization and explanatory models of illness on service use, relatively little research has directly examined the influence of mental health perceptions on dropout other than that related to stigma. One recent study of mental health service use among Mexican American families (McCabe, 2002) found that perception of mental health stigma failed to be associated with dropout. In contrast, a high perception of stigma was found to predict dropout among HIV-positive clients seeking mental health treatment (Reece, 2001). Although cultural factors may influence client perceptions of initial encounters (McCabe, 2002; Sue et al., 1994), we have few definitive answers that would inform the design of culturally sensitive and logistically feasible interventions to increase client engagement (see Lo & Fung, 2003).

Perceptions of and Assumptions About Treatment

Along with demographics, environment, psychological need, and perceptions of illness, clients' perceptions of and assumptions about mental health treatments have also been suggested to influence engagement and retention in treatment. Complicating this picture, these perceptions may determine whether clients disengage from services after the first phone call, the intake evaluation, or the first treatment session or during treatment (Armbruster & Kazdin, 1994). Moreover, the attitudes and expectations that people hold about mental health treatment may determine whether they even contact an agency or practice (Edlund et al., 2002; Lorion & Felner, 1986; Mojtabai, Olfson, & Mechanic, 2002; Sue et al., 1994). Edlund et al. (2002), for example, found that dropout was more likely to occur for patients who viewed mental health treatment as relatively ineffective and for those uncomfortable with seeing a mental health professional. Moreover, concern about the need for emotional disclosure was shown to better predict attitudes and intent toward counseling than either psychological distress or social support (Vogel & Wester, 2003). Additionally,

Sue et al. (1994) have suggested that increased discomfort with mental health services or lack of family support may explain why ethnic minorities seek mental health services less often than White Americans.

Although the reasoning for these perceptions has not been fully delineated, a major influence on attrition may be the interaction between client perceptions of treatment and what happens when treatment is sought (Phillips, 1985). For instance, distractions during an initial conversation or subtle indications that the person's problems are not severe could reinforce perceptions of treatment ineffectiveness or discomfort resulting in early dropout (see Gunzburger et al., 1985). In fact, two early studies of social class (Brill & Storrow, 1960) and attitudes (Lorion, 1974) suggested that negative beliefs and attitudes of intake workers and therapists about economically disadvantaged individuals influenced not only dropout but also the likelihood of a negative outcome. More recently, arguments have been made that therapists are hindered in effectively treating clients because of their unexamined assumptions about social class (L. Smith, 2005).

In contrast to these influences on early dropout, perceptions about therapist expertise, agreement on goals, or expectations for length of treatment likely influence attrition once therapy has begun. For instance, a number of studies (Beck et al., 1987; Sledge, Moras, Hartley, & Levine, 1991) have shown that client expectations for length of treatment predict dropout. Clients who expected to stay in therapy for at least 1–2 sessions were found to do so (Jenkins, Fuqua, & Blum, 1986; Pekarik & Wierzbicki, 1986), suggesting that the number of sessions a client expects to attend predicts the number of sessions actually attended. One very interesting study (Beck et al., 1987) examined the relationship between expectation for treatment length and dropout using two definitions of dropout. When dropout was defined as mutual or nonmutual termination, expectations for duration of treatment were unrelated to dropout. In contrast, when dropout was defined by the number of sessions attended (more or fewer than four sessions), expectations for duration of treatment accurately predicted dropout status more than half the time. This prediction held even when therapist expectation for number of sessions was used.

In addition to the duration of treatment, perceptions of “social influence” such as therapist expertise, attractiveness, and trustworthiness have repeatedly been associated with dropout. For example, studies have demonstrated that clients who dropped out of treatment viewed the therapist as less expert or competent and trustworthy (Acosta, 1980; Dyck, Joyce, & Azim, 1984; Grimes & Murdock, 1989; Kokotovic & Tracey, 1987) and less attractive (Acosta, 1980; Beckham, 1992; McNeill, May, & Lee, 1987; Mohl, Martinez, Ticknor, Huang, & Cordell, 1991). Further studies found that clients who drop out of treatment are more dissatisfied than those who do not (Cross & Warren, 1984; Denner & Halprin, 1974; Dyck et al., 1984; Kokotovic & Tracy, 1987; McNeill et al., 1987), although a few retrospective studies using telephone and mail surveys reported relatively high levels of satisfaction among dropouts (Denner & Halprin, 1974; Kline, Adrian, & Spevak, 1974; Pekarik, 1983b; Silverman & Beech, 1979). These latter results should be interpreted with caution, however, because most had very low response rates, thereby increasing the probability for response bias.

Without careful examination of each point of engagement, our understanding of the processes contributing to attrition is likely to be incomplete at best and simply incorrect at worst. To put these concerns in a practical context, consider that roughly 50% of individuals scheduling an initial outpatient mental health appointment actually attend (Garfield, 1994; Lorion & Felner, 1986; Sparks et al., 2003; Wierzbicki & Pekarik, 1993). Of those completing the intake, approximately 35% fail to attend the first therapy session (Phillips, 1985), and roughly 40% attend fewer than three (Pekarik, 1983a). As the number of sessions

increase, fewer and fewer patients attend, with an additional subset of patients considered “revolving door” clients (those who drop in and out of treatment periodically). To state these findings another way, of 100 prospective clients contacting a mental health clinic, only 50 will attend the initial evaluation, 33 will attend the first treatment session, 20 will remain by Session 3, and fewer than 17 will remain by Session 10. Given that attrition rates have been shown to decrease if patients attend 3 or more sessions (Salta & Buick, 1989), focusing on attrition during the early stages of engagement seems crucial.

Strategies to Reduce Attrition

Although a review of the attrition literature may lead one to believe that interventions targeting dropout are numerous, this is not the case. In a recent review of 39 articles discussing strategies for preventing or reducing attrition in outpatient populations, Ogrodniczuk, Joyce, and Piper (2005) found that only 15 of the articles were research studies of the suggested interventions, and most of these focused on pretherapy preparation sessions rather than specific techniques or strategies. In this section, we highlight four well-defined interventions for reducing attrition. Although therapeutic alliance is not considered a formal intervention for reducing attrition, we include a discussion of it because it is central to nearly all of the domains influencing dropout. For example, because of the dyadic nature of therapy, whether dismissing or attending to client perceptions, expectations, barriers, or need, the therapeutic relationship is going to be influenced.

Role Induction

One of the earliest strategies for reducing dropout was based on the idea that preparing clients for what would happen in therapy would improve attendance and reduce early dropout. Consisting of education about the nature and process of therapy, pretherapy preparation (whether referred to as role induction, vicarious pretherapy training, or experiential pretraining) offers clients an expectation of therapeutic success, dispels therapy misconceptions, and has been shown to improve client attendance (Walitzer, Dermen, & Connors, 1999). More specifically, 11 of 16 studies reviewed by Walitzer et al. (1999) found that pretherapy training positively reduced rates of attrition. Indeed, techniques that include clarification of therapist and client roles and give an overview of therapy have been shown to improve attendance (Hoehn-Saric et al., 1964) and decrease drop out (Jacobs, Charles, Jacobs, Weinstein, & Mann, 1972).

Typically occurring within a single 1-hr session, these role induction strategies have not only increased client self-disclosure (Annis & Perry, 1978), reduced distress (Childress & Gillis, 1977), and improved the therapeutic relationship (Hoehn-Saric et al., 1964; Piper & Perrault, 1989), but they have also decreased dropout (Orlinsky, Grawe, & Parks, 1995; Piper & Perrault, 1989; Stark & Kane, 1985; Wickramasekera, 1988) and improved work, social, and sexual adjustment (Sloane, Cristol, Pepernik, & Staples, 1970).

Role induction techniques have also been combined with presentation of a therapy session via video- or audiotape (Annis & Perry, 1978; Corder, Haizlip, Whiteside, & Vogel, 1980; Doster, 1972). This combined orientation to therapy has been shown to improve outcome (Curran, 1976), enhance a client’s perception of therapy (Coleman & Kaplan, 1990), increase motivation for treatment, and aid the client’s knowledge of therapist and client roles (Strupp & Bluxom, 1973) as well as decrease attrition (Walitzer et al., 1999). In fact, use of a brief, 12-min videotape on pretherapy preparation resulted in significantly fewer dropouts from treatment (Reis & Brown, 2006).

Motivational Interviewing

Rather than focusing on education as a way to decrease attrition, other researchers have suggested a relation between attrition and motivation. Defined as the likelihood that an individual will begin, continue, and adhere to a program of change, motivation is thought to be a key factor in determining a patient's retention in treatment. Working in the area of substance abuse, Miller and Rollnick (Miller, 1983; Miller & Rollnick, 1991) were among the first to develop a focused, goal-oriented approach to treatment that motivates patients for change. Based on the principles of motivational psychology, client-centered therapy, and the transtheoretical model of change (Prochaska & DiClemente, 1982; see also Prochaska, DiClemente, & Norcross, 1992), motivational interviewing (MI) offers a general and practical approach for changing behaviors by enhancing and facilitating a client's internally motivated change process.

MI seeks to elicit behavior change by helping clients explore and resolve their ambivalent feelings toward treatment. Using a client-centered approach, MI encourages change without direct persuasion, relies on the client to resolve the ambivalence, and recognizes that individuals move through a series of stages to achieve and maintain change (i.e., transtheoretical model of change). For example, the earliest stage of change, precontemplation, describes individuals not yet considering a change in their problems. The contemplation stage entails the individual's beginning to consider both the existence of a problem and the feasibility and costs of changing the problem behavior. As the individual progresses, he or she moves to the preparation stage, in which the decision is made to take action and change. Once the individual begins to modify the problem behavior, he or she enters the action stage, in which specific steps are taken to bring about change. Thus, ambivalence about change is recognized as a natural part of making a commitment to treatment.

Six factors that consistently describe the active ingredients of brief MI are summarized by the acronym FRAMES (Bien, Miller, Tonigan, 1993; Miller & Sanchez, 1994) and consist of *feedback* on personal risk or impairment, an emphasis on personal *responsibility* for change, offer of clear *advice* to change, development of a *menu* of alternative change options, encouragement of therapist *empathy*, and facilitation of client *self-efficacy* or optimism. It is through these mechanisms that the two major goals of MI can be achieved: to help patients state (a) their reasons for concern and (b) why they might or might not want to change.

Consistent with expectations, MI has shown a positive relation with engagement in treatment and outcome (Joe, Simpson, Greener, & Rowan-Szal, 1999). In fact, studies in the substance abuse literature have repeatedly demonstrated the positive effects of MI (Chanut, Brown, & Dongier, 2005). However, the findings of MI in effectively changing behavior in other populations have been inconsistent. Whereas some studies found MI to have a positive effect on outcome (Belcher et al., 1996; Carey, Kalichman, Forsyth, Wright, & Johnson, 1997), other studies failed to demonstrate such an effect (Baker, Kochan, Dixon, & Heather, 1994; Colby et al., 1998; Feld, Woodside, Kaplan, Imsted, & Carter, 2001; D. E. Smith, Heckemeyer, Kratt, & Mason, 1997).

Although there are a number of limitations with the MI research, there are a number of advantages that make MI particularly well suited for independent practice and community mental health settings. For instance, MI has been shown to be effectively provided by nondoctoral-level personnel (Dunn, Deroo, & Rivara, 2001) and is particularly well-suited for use with minority populations, in which there is a higher than normal rate of early treatment withdrawal (Sue, 1977). MI can also be easily adapted to brief formats that can be integrated into existing treatments. For instance, brief MI (Rollnick, Heather, & Bell, 1992)

was designed for use in primary care settings and is conducted in a single 40-min session. Because of the time demands in a practice setting, this brief model uses a set of quick, concrete techniques for encouraging behavior change yet retains the empathic and person-centered spirit of MI. Integrated into the initial intake evaluation, brief MI has demonstrated nearly 50% reductions in dropout rates (Carroll, Libby, Sheehan, & Hyland, 2001) and has increased clients' motivation for and attitudes about treatment (Humfress et al., 2002).

Treatment Services Model

In an attempt to meet the changing demands of mental health treatment and managed care, as well as high rates of dropout and client dissatisfaction, Wilford Hall Medical Center, the largest U.S. military hospital, introduced a treatment services model designed to increase access to cost-efficient and effective services (Kelleher, Talcott, Haddock, & Freeman, 1996). Recognizing potential barriers to treatment such as client motivation and long waiting lists, as well as the potential benefit of pretherapy role induction, the Wilford Hall model offers a multidimensional approach to treatment that focuses on active involvement of the client, encourages autonomy, highlights strengths rather than deficits, and normalizes patient problems. Beginning with a group orientation session, patients are welcomed to the clinic, supported in their decision to seek treatment, given a description of the clinic philosophy, provided with an overview of services, and assisted in decision making regarding appropriate treatment options. Following the orientation, patients either can go directly to a treatment program or may consider additional individual assessment if unsure of the appropriate treatment. Each treatment program is problem focused (e.g., grief, anxiety, stress management, or depression) and time limited (4–16 sessions), such that patients may choose to enter a second program after completion of the first. Although early assessments (Kelleher et al., 1996) reported significant reductions in wait lists, complete elimination of the need for outside referrals, increased patient satisfaction, and increased retention, no studies have assessed the long-term effects of this program.

Therapist Feedback

Taking a slightly different perspective, Lambert et al. (2005) have sought to bridge the gap between research and practice through “patient-focused” treatment. Using data about client distress, Lambert et al. have developed a system whereby therapists are provided feedback about client progress on a regular basis. This regularly provided feedback or “signal-alarm system” is then used to guide ongoing treatment such that therapists can modulate interventions to address potential problems before early termination occurs. Using the Outcome Questionnaire–45 (Lambert & Ogles, 2004), information about client progress is assessed across three domains (symptoms of distress, interpersonal problems, and social functioning), offering a quantitative estimate of overall functioning. Therapist feedback consists of a graph charting patient progress from intake to the current session. Additionally, a color-coded “alert status” is used to indicate whether the patient is “functioning in the normal range,” change is “adequate,” the rate of change is “less than adequate,” or progress is not as expected and the client may leave treatment. Along with these alert levels, the therapist is offered guidance as to a particular course of action. For instance, if the patient is making adequate change, the therapist is told that no alteration is needed in the current treatment plan. However, if the patient is not progressing as expected (or is worsening) and risks early termination, the therapist is instructed to carefully review and discuss the case, consider a new treatment plan (e.g., alternative therapy or medication), or intensify the current intervention.

Examining the outcome of four studies using therapist feedback with more than 2,500 patients, Lambert et al. (2005) found that patients who were identified as not progressing or worsening showed significantly better outcomes when the therapist received this

information and was able to alter treatment (effect sizes ranged from 0.34 to 0.92). In fact, when receiving such feedback, therapists tended to keep patients in treatment longer. It should also be noted that patients identified as not progressing or worsening were also those determined to be more severe at the onset of treatment, further emphasizing the need for intervention to reduce early termination. Unfortunately, as Lambert et al. pointed out, clinicians often fail to appreciate the value of frequent assessments and place greater confidence in their own clinical judgment. On the positive side, therapist feedback can fairly easily be implemented into an existing practice through the use of a software program, the OQ-Analyst, and a handheld computer, thereby reducing practical barriers to implementation of this model.

Therapeutic Relationship

The therapeutic relationship, or alliance, encompasses three central ideas: a collaborative relationship, an affective bond between the therapist and patient, and the ability of the therapist and patient to agree on treatment goals (Martin, Grasko, & Davis, 2000). One of the most consistent findings in psychotherapy research is that a strong therapeutic alliance predicts treatment outcome (Baldwin, Wampold, & Imel, 2007; Horvath & Symonds, 1991; Martin et al., 2000; Siqueland et al., 2000) even when symptomatic differences are controlled. Furthermore, the alliance accounts for roughly 5% of outcome variability (Castonguay et al., 1996; Horvath & Bedi, 2002), more than nearly any other identified factor. In the past several years, research has increasingly demonstrated that weak or poor alliances are associated with increased dropout (H. Johansson & Eklund, 2005; Lingardi, Filippucci, & Baiocco, 2005; Meier, Donmall, McElduff, Barrowclough, & Heller, 2006; Mohl et al., 1991; Samstag, Batchelder, Muran, Safran, & Winston, 1998; Tryon & Kane, 1993), particularly so when measured from the client's perspective (Tryon & Kane, 1993). Thus, several researchers have suggested that attending to deterioration or ruptures in the alliance can enhance outcome and likely decrease early treatment withdrawal (Castonguay et al., 2004; Safran, Muran, Samstag, & Stevens, 2001; see also Strauss et al., 2006).

However, the process of recognizing and addressing weak alliances is difficult. For example, Regan and Hill (1992) found that both therapists and clients tended to leave negative things unsaid, particularly negative feelings. Leaving negative things unsaid is especially troubling because, in one study, therapists were aware of only 17% of what clients withheld. Even long-term experienced therapists were able to identify hidden negative feelings less than 50% of the time (Hill et al., 1993). Despite this lack of awareness of potential weakening or "ruptures" in the alliance, a number of studies have suggested that when therapists are aware of the problem and address it in a nondefensive, direct manner, the alliance improves (e.g., Castonguay et al., 2004; Foreman & Marmar, 1985).

In fact, many researchers and clinicians have begun to suggest that alliance ruptures and repairs are so frequent as to form an intrinsic part of the change process (Safran et al., 2001). Coupled with the findings that the stage at which a patient is ready for change predicts dropout (Brogan, Prochaska, & Prochaska, 1999; K. J. Smith, Subich, & Kalodner, 1995), it seems imperative to examine alliance ruptures during treatment. Tracey (2002) has outlined a stage model of change focused on behavioral complementarity in the relationship between therapists and clients. In the initial phase of treatment, attention is focused on building rapport (i.e., alliance collaboration and bond) through validation and acceptance of the client's behavior (similar to the remoralization phase of the model by Howard, Moras, Brill, Maretinovich, & Lutz, 1996). Once the client begins to recognize that the behavioral interaction with the therapist is problematic, the "true" problem emerges and the therapist can begin to challenge the client's behavior and shift the focus of treatment. It is during this period of conflict that ruptures or weaknesses in the alliance have been suggested to occur (Gelso & Carter, 1994; Westerman & Foote, 1995). If such ruptures are able to be addressed

and repaired, it is hypothesized that improvement will occur and complementarity with the therapist will be reestablished.

Despite knowing when ruptures are likely to occur and being sensitive to negative feelings, how is a clinician to repair relational rifts and improve the therapeutic alliance? To some extent, repair of the alliance depends on the cause of the rupture. For example, if the rupture occurred as a result of contradictory goals, direct discussion of the goals held by the client and therapist, the assumptions behind the goals, and mutual development of new goals would demonstrate respect for the client and likely increase the alliance. In other words, patients should be encouraged to express negative feelings about the therapist and therapy and to assert their perspective on the exchange (Safran, Muran, Samstag, & Stevens, 2002). Moreover, empathy, positive regard, caring, empathic listening, assuming a collaborative stance, and reassessing motivation for change are techniques that can be learned by therapists and have been shown to improve the therapeutic relationship (e.g., alliance-fostering therapy by Crits-Christoph et al., 2006).

Implications and Recommendations for Practice

On the basis of the foregoing review, there are a number of specific strategies that the practicing clinician can use to reduce attrition.

Patient Characteristics

Given the fairly strong evidence that minority individuals who are economically disadvantaged and young and have less than a high school education are at high risk for dropout, some researchers (e.g., Ogrodniczuk et al., 2005) have suggested that a different treatment approach may be needed to help such clients develop the skills necessary for remaining in treatment. Community researchers have described a “crisis-reactive” nature of poverty (Lorion, 1974, 1978) in which economically disadvantaged individuals are so burdened by major life needs that only issues reaching a critical level receive significant attention. When the need is immediate and critical, it is a priority, and every effort is expended to get the necessary services. However, when both the severity and the immediacy of the problem are lessened, the problem is no longer preeminent, other crises emerge, and the effort is redirected. To follow through with treatment, individuals must feel the need is so constant and significant that the effort required will be sustained.

Applying this model to our understanding of engagement and attrition, we would expect that economically disadvantaged individuals would seek mental health services when there is an immediate need. When the crisis has passed, they will withdraw from treatment to attend to other, more pressing needs. Therefore, a treatment approach in which a brief pretherapy socialization video, such as that shown to be effective by Reis and Brown (2006), is offered before the first session could help to educate such patients to the process and goals of therapy (see Whiston & Sexton, 1993). The first session might then include factors making up brief MI, such as identification of what the client wants to change, how that behavior can be changed, barriers that may impede change, and the degree to which the client is ready to make change (see Prochaska & Di-Clemente, 1982; Tracey, 2002). It might also be useful to consider brief or ultrabrief models of treatment for these clients. For example, Barkham and his colleagues at the University of Leeds, England (Barkham, Shapiro, Hardy, & Rees, 1999; see also Stiles et al., 2006), have developed an ultrabrief model of treatment in which clients attend two sessions of therapy 1 week apart. A booster session is then provided 3 months later. This model would seem to fit well into the “crisis-reactive” approach to mental health treatment and has been shown to be effective in reducing client distress.

In addition to patient-focused interventions, therapists, if they are to be effective, must have an awareness of and appreciation for the hardships of poverty, social class, and ethnicity. In fact, one study has demonstrated that intervening with therapists on these issues can enhance retention almost as much as client pretherapy preparation (Lorion, 1974). At a minimum, however, assessments of client satisfaction, the alliance, and symptom distress before treatment and after each session can provide valuable information with which the therapist can alter the focus of treatment (see Lambert et al., 2005).

Enabling Factors or Barriers

In terms of barriers to treatment, one of the most important considerations is to recognize that everyday life events can have a major influence on a person's desire and ability to follow through with treatment. For instance, when a person is in distress, dealing with work, family, home, and/or financial obligations seems overwhelming, and a decision to seek treatment often results in a sense of urgency. Not being able to talk with a professional immediately or having to wait for treatment can significantly affect the likelihood that a person will follow through with an appointment. For instance, in a brief pilot study of attrition (Saporito, Barrett, McCarthy, Iacoviello, & Barber, 2003), failure to return calls or delays of more than 1 day were reported by patients as a significant influence on their decision to leave treatment. Moreover, the longer a client has to wait for services, the more likely the patient is to withdraw, particularly if the wait is more than 1 week (Barrett, Chua, & Thompson, 2007). These factors may prove especially influential for clients referred by hospitals or other service agencies (see Hampton-Robb et al., 2003). Therefore, anything that can be done to respond promptly to clients and reduce the length of time a person has to wait before beginning treatment is likely to reduce early dropout.

One solution to this problem is to have the therapist conduct a brief phone interview with the client within a few days of the first contact. During the interview, the therapist would review the client's presenting concerns, request corrections and/or amplifications, and educate the client about the process, duration, and expectations for treatment. The advantage of such an approach is that it offers immediate attention to the client and simultaneously prepares the therapist and client for the work, initiates the building of rapport, enhances the client's sense of responsiveness from the therapist or agency, and creates a collaborative environment. This interim contact could also serve as an appointment reminder, a strategy found to increase attendance at treatment sessions, especially in the community mental health setting (Turner & Vernon, 1976).

Factors Related to Need

Despite inconsistent findings for many of the variables in this domain, the research does seem clear in suggesting that therapists need to recognize the increased potential for early withdrawal in patients with more severe, complex disorders, as well as in those patients with personality or characterological problems. Because early withdrawal in this population has often been related to poor therapeutic alliance (Lingiardi et al., 2005), reductions in distress (Cahill et al., 2003), or worsening of distress (Lambert et al., 2005), therapists need to be sensitive to patient relational and symptomatic changes.

One way to achieve this sensitivity is through the use of a systematic procedure for therapist feedback (e.g., Lambert et al., 2005), especially in the early sessions of therapy. Furthermore, when there is conflict with patients, therapists who respond in a flexible, nondefensive, and direct manner can improve the relationship (Foreman & Marmar, 1985; Castonguay et al., 1996; Rhodes et al., 1994) and decrease the likelihood of early treatment withdrawal.

In regard to less severe disorders (such as subsyndromal depression and panic disorder), therapists should be aware that planned brief treatments can significantly reduce distress and have been shown to be equally as effective as time-unlimited therapy (Barkham et al., 1999; Newman, Kenardy, Herman, & Taylor, 1997; Shapiro et al., 2003). In regard to interpersonal problems, congruence of expectations between therapist and client seems particularly important given the research indicating that interpersonal changes typically require longer treatment than symptomatic concerns (Barber, Morse, Krakauer, Chittams, & Crits-Christoph, 1997; Barkham, Rees, Stiles, Hardy, & Shapiro, 2002; see also Kopta, Howard, Lowry, & Beutler, 1994). Thus, therapists should discuss with clients the expectations each hold about the process and practicalities of treatment.

Environmental Factors

Although the research about environmental influences on attrition is less conclusive than that on other domains, factors such as the accessibility of the clinic and the office environment are important considerations in seeking ways to increase client retention. Many patients complain that the building is uninviting, waiting rooms are congested and uncomfortable, all patients (adults, children, psychotic patients, etc.) wait in a single room, and treatment rooms are small and poorly ventilated. However, physical changes can make a difference in retention as demonstrated in the study by Chua and Barrett (2007).

Equally as important are the subtle effects caused by the social and cultural biases of agency personnel. For instance, cultural sensitivity, encompassing curiosity, perceptiveness, and respect, has been argued to be particularly influential during the initial stage of engagement (Lo & Fung, 2003) such that incongruence in the understanding of mental health problems and treatments can negatively affect the clinical experience (Duehn & Proctor, 1977). Thus, it seems imperative for therapists and clinic staff to be culturally aware of the differences between themselves and the patients they serve. For example, cultural sensitivity can be increased through didactic training, readings, or experiential groups (Lonner, 1997).

Perceptions of Mental Health and Mental Illness

Although there are few definitive answers that would inform culturally sensitive interventions to reduce attrition, cultural competence is one avenue by which therapists can become more aware of potential cultural and ethnic differences with their clients. For instance, Lo and Fung (2003) have outlined two dimensions of competence for use in therapy. Generic cultural competence refers to the knowledge and skills a therapist must have to work effectively in any cross-cultural situation. According to Lo and Fung, some techniques that may be useful in this area are pre-therapy role induction, negotiation of goals, tolerance for dependency, and/or consideration of ethnic matching between providers and clients. Therapists should also recognize that some styles of therapy may be better accepted by patients depending on their cultural background. For instance, in their review of this literature, Sue and Lam (2002) found that a directive, problem-solving approach was seen as more credible by Asian Americans, family approaches seem particularly effective in Latino cultures, and African Americans may do less well in cognitive-behavioral approaches than other treatments.

A second dimension of cultural competence focuses on the therapist's ability to work effectively with a specific ethnocultural community. It is in this domain that Lo and Fung (2003) discussed the need to consider the specific effects of culture on the individual. For instance, the Outline for Cultural Formulation in the appendix of the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; American Psychiatric Association, 2000) is one such approach to cultural analysis. Use of the cultural formulation requires attention to five areas: (a) the cultural identity of the individual, (b) cultural explanations of

illness, (c) cultural factors related to psychosocial environment and functioning, (d) cultural elements of the therapeutic relationship, and (e) overall cultural assessment for diagnosis and care. Developing hypotheses about the cultural influences on a patient can help therapists become more responsive to the needs and expectations of ethnic minority clients, potentially increasing alliance and reducing the high rate of early termination (Sue, 1977). In fact, highly ethnocentric therapists (i.e., focused solely on their own cultural experience and perspective) are more likely to lose patients to premature dropout (Baekeland & Lundwall, 1975).

Beliefs and Assumptions About Mental Health Treatment

Given the impact of client beliefs and assumptions about treatment throughout the course of therapy, it seems particularly important to discuss intervention strategies among this domain. First, assessing client expectations before the onset of treatment seems especially warranted. Such assessment should address a client's comfort with treatment, beliefs about effectiveness, support of family or social group, and expectations for treatment or of the therapist. Once aware of these issues, the therapist is then able to directly address each concern, reduce anxiety, increase commitment, and be alert to potential difficulties that may arise in the future. In fact, Gunzburger et al. (1985) found that patients who terminated prematurely were more likely than completers to report that expectations for treatment were not met at the first session. Thus, use of a brief pretherapy training video, motivational interview, or both could dispel many misconceptions and increase the likelihood of retention.

In the first session, it may also prove helpful to address the therapist's expertise and training and approach to treatment. For instance, a recent study of client preference for treatment found that when clients received the preferred treatment (either medication or therapy), alliance improved, whereas no such change in alliance was found when clients received the nonpreferred treatment (Iacoviello et al., 2007). Attending to client preferences for treatment and acknowledging therapist expertise and training could therefore enhance the therapeutic alliance and allow for collaboration on treatment goals and the time needed to reach each goal (see Reis & Brown, 2006). In fact, one might consider setting a specific time with the client for regular review of treatment goals and progress such that goals and the steps necessary to reach the goals can be renegotiated. Regular review of this sort could use the formal feedback system developed by Lambert et al. (2005) or rely on questionnaires or direct in-session discussions. In fact, the use of feedback has been shown to increase prediction of treatment failure by 20% (Lambert et al., 2005).

A second major factor influencing attrition is the often differing expectations about treatment duration. As discussed previously, a number of studies have shown that client expectations for length of treatment are a better predictor of the number of sessions actually attended than are therapist projections. With many clients attending far fewer sessions than are needed to recover (see Hansen et al., 2002; Lambert, 2007; Phillips, 1985), a more critical and long-term solution to the problem may be a reconceptualization of the length of treatment needed, particularly in community mental health settings and in treatments with less severely disturbed populations. Indeed, significant reductions in attrition may be seen if the duration of treatment is clearly articulated and adapted to be more in line with consumers' actual use of services. For example, when patients expected treatment to last 8 sessions they showed more improvement at Session 8 than patients who expected treatment to last 16 sessions (Shapiro et al., 2003). Moreover, therapists should be aware that with nonchronic, less severely disturbed patients, planned brief treatments can significantly reduce distress, are often as effective as time-unlimited therapy (Shapiro et al., 2003), and have lower dropout rates than time-unlimited therapy (Sledge et al., 1991). Even ultrabrief treatments of 2 sessions plus a 3-month follow-up have been shown to be effective in

reducing distress in patients with subsyndromal depression (Barkham et al., 1999). However, it is also important to recognize that brief therapy models require a relatively active therapist who sets achievable goals and develops a focus for treatment early in the process (Messer, 2001). Thus, expectation for length of treatment seems a critical factor to address in conducting effective treatment.

Future Directions

Whatever strategy or technique(s) one chooses to reduce dropout, the need for intervention is clear. Therapists, service administrators, and researchers agree that treatment outcomes (Lyons & Woods, 1991; May, 1984; Pekarik, 1992) and cost-effectiveness (Armbruster & Kazdin, 1994; Condelli, 1994; Sledge et al., 1991) are seriously compromised by the persistent and seemingly intractable problem of attrition. Furthermore, dropout undermines support for treatment effectiveness, discourages present and future patients from seeking treatment, and may create negative self-fulfilling prophecies of the likely outcome of treatment. Thus, well-designed and focused research is needed to address this problem.

Because of the varying stages at which patients disengage from treatment, one of the first areas for investigation is studies that focus on early disengagement from therapy independent of attrition occurring during treatment. Because early dropout may result from a differing set of factors than later dropout, research must identify these differing factors before developing and testing interventions, and interventions must be designed that specifically target attrition occurring early or late in the treatment process. For example, initial studies might focus on the manner in which phones are answered, the timing of appointments, or staff attitudes to better understand factors influencing attendance at initial sessions. Using appointment reminder calls or initiating contact with a patient who was not the person scheduling the appointment are other avenues that need to be addressed to determine why people fail to engage in treatment.

Second, because of the complex nature of attrition and the lack of significant progress in reducing the problem, new and innovative ways to think about and research attrition are needed. For instance, altering the physical appearance of a clinic or office setting may improve patients' initial perceptions and increase their feelings of comfort and confidence in the provider. Investigations of brief, ultrabrief, or single-session treatments are needed to determine whether such approaches improve rates of engagement or offer a better match with the immediate needs of clients and whether various types of clients benefit more or less from such treatments. Incorporating brief models of MI or pretherapy role induction into the initial session could help to educate clients about treatment and more directly confront factors identified as impeding engagement and retention in treatment. On the basis of current research, such interventions are very likely to have a positive impact on rates of attrition but need to be tested in naturalistic environments.

Finally, greater consideration and use of qualitative research methods are needed to explore the influences of culture, socialization, and illness models on patient perceptions of mental health and mental health treatments. Studies that use interviews with potential and current patients or community focus groups can offer a wealth of ideas about engagement and disengagement from treatment that may not be readily apparent to researchers. Similarly, interviewing office staff and therapists can also offer unique perspectives on why patients leave treatment. From these data, quantitative studies can be designed that more specifically assess the needs, perceptions, and expectations of patients. For instance, if it was found that some patients view mental health issues more in terms of somatic concerns, such issues would need to be recognized and addressed in the early phase of any treatment protocol. Regardless of the direction for research, focusing on the reduction of attrition can enhance

the effectiveness of existing treatments and may prove a more fruitful direction in improving therapy outcome than continuing the focus on randomized clinical trials of new treatments.

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