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Brief article

Psychopathology influences treatment retention among drug-dependent women

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Abstract

Three subgroups of drug dependent women (N = 78) were identified through cluster analysis on MCMI-II scores. Group 1 (26%) presented a relatively benign clinical picture. In contrast, Group 2 (37%) evidenced severe addiction, psychiatric (Axis I), and personality (Axis II) problems. Group 3 (37%) was characterized by fewer Axis I problems, prominent addiction and externalizing (Cluster B) personality deficits. Group membership was significantly associated with retention in a gender-specific day treatment program. Group 2 experienced rapid attrition, with only 36% completing treatment, compared to 57% for Group 1 and 76% for Group 3. Results indicate that drug-dependent women with externalizing psychopathology can be retained in treatment when environmental barriers are removed and an adequate ''holding environment'' is maintained. However, women with severe psychiatric problems, unstable mood, and interpersonal deficits are less likely to complete treatment. Early identification of women at risk for drop-out affords an opportunity to intervene to prevent its occurrence.

Keywords: Women; Retention; Attrition; Drop-out; Psychopathology

1. Introduction

Environmental barriers such as inadequate childcare and lack of transportation are contributing factors to treatment drop-out among drug-dependent women (Howard & Beckwith, 1996; Howell, Heiser, & Harrington, 1999; Laken & Ager, 1996; Lewis, Haller, Branch, & Ingersoll, 1996). The inability of mothers to bring young children into treatment with them is another obstacle to treatment participation (Hughes et al., 1995; Szuster, Rich, Chung, & Bisconer, 1996). Conversely, provision of desired, gender-sensitive services such as parenting classes and vocational training can facilitate retention (Howell et al., 1999). The impact of program setting/intensity on treatment retention is less clear. Roberts and Nishimoto (1996) found higher attrition rates for women attending outpatient or residential treatment compared to day treatment. Another study observed higher drop-out rates among women attending day treatment with their children vs. those residing in supportive, drug-free housing while attending the same day treatment program (Haller, Knisely, Elswick, Dawson, & Schnoll, 1997). Thus, treatment variables may interact to influence retention rates.

Psychopathology also influences treatment retention. For example, women with Axis I comorbidity, especially those with severe mental illness, have a tendency to leave treatment prematurely (Brown, Huba, & Melchior, 1995; Brown, Melchior, & Huba, 1999). In addition, several investigators have reported that psychological symptoms including depression, somatization, and hostility are associated with drop-out (Petry & Bickel, 2000; Strantz & Welch, 1995; Williams & Roberts, 1991). Although little has been written about the impact of character pathology on retention, both Brown et al. (1999) and Haller et al. (1997) reported surprisingly high retention of women with Cluster B (American Psychiatric Association, 1994) personality disorders.

The ability to apply findings from previous studies to improve retention of women in drug treatment has been limited by small sample sizes, inconsistent measurement strategies, and the fact that most studies have focused on

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a limited range of psychological problems. Additionally, the relationship between attrition and character pathology has not been examined, with the exception of Cluster B disorders such as antisocial and borderline personality. Accordingly, the purpose of the present study was to identify psychiatric (Axis I) and personality (Axis II) problems associated with treatment drop-out and retention among drug-dependent women. When environmental barriers known to mediate retention in drug treatment (e.g., childcare, transportation) were controlled for through participation in a "model" treatment program, the present study was able to better examine the relationship between psychiatric morbidity and treatment drop-out among drug-dependent women.

2. Materials and methods

2.1. Participants

Participants were 78 drug-dependent women enrolled in day treatment at the Center for Perinatal Addiction (CPA), a NIDA-sponsored treatment research unit. For this study, inclusion criteria were: (a) 18 years of age or older; (b) drug-exposed pregnancy or prenatally exposed infant less than 6 months of age; (c) DSM-IV substance use disorder; (d) completed CPA Intake Form; (e) valid Millon Clinical Multiaxial Inventory-II (MCMI-II); and (f) program participation for one or more days.

Participants were mostly African American (82%) with a mean age of 28.69 years (*SD* = 4.8). Most were pregnant with 10% in their first trimester, 33% in second trimester, and 34% in third trimester; 23% were post-partum. Participants averaged 2.33 (*SD* = 1.56) other children. Sixty-four percent were single, 8% married, 15% separated, 12% divorced and 1% widowed. Most participants (62%) had at least a high school education; however, only 3% were employed. Two thirds (66%) were on probation, parole, or had pending court dates. All participants met formal DSM-III-R criteria for one or more substance use disorders. Crack cocaine was the primary drug of abuse (87%), with heroin/other opioids (9%), and alcohol (4%) also reported. However, 89% of patients were polydrug abusers and 76% were nicotine dependent. Previous treatment experiences included inpatient/residential treatment (80%), partial hospitalization/day treatment (32%), outpatient counseling (60%), and methadone maintenance (4%). All participants were HIV-seronegative, although HIV-risk behaviors were common. The mean number of sexual partners was 18 and 45% freely acknowledged having sex with high-risk partners. Intravenous drug use characterized 19% of the sample. Family history for addictive disorders included 43% with mothers and 68% with fathers who were alcoholic and/or drug dependent. Prevalence of childhood trauma was high, with 59% acknowledging verbal/emotional abuse, 53% physical abuse, and 46% sexual abuse.

2.2. Recruitment

The majority of CPA referrals were from community-based mental health and substance abuse treatment programs (46%). Additional referral sources included the prenatal clinic of the affiliated university medical center (28%), the criminal justice system (10%), and various social services agencies, family members, and friends (16%). The Virginia Commonwealth University Institutional Review Board approved this study and all participants signed informed consent.

2.3. Intervention program

The Center for Perinatal Addiction operated a program for pregnant and parenting drug-dependent women for 5 months, 3 days per week. Those who were psychiatrically unstable or who required a medically-monitored withdrawal from alcohol or drugs were hospitalized prior to admission to CPA. However, many women were transferred from the jails or other treatment facilities and thus were abstinent at time of admission, allowing them to be directly entered into treatment. Treatment services included 24 hr per week of psychosocial interventions, obstetrical, psychiatric, medical, and dental care for participants and pediatric care for children. Methadone maintenance was available, however, all of the opioid-dependent women in this study opted for abstinence-based treatment. Random urine and breath-alcohol tests were conducted several times per week. Support services consisted of emergency housing, food, clothing, on-site childcare, 12-step groups, and transportation. Therapeutic modalities included individual and group therapy and case management. The CPA curriculum was manual-guided and consisted of the following modules, delivered in group format on a weekly basis: Substance Abuse Education, Relapse Prevention, Skills Building, Prenatal Education, Parenting, Mother-Infant Interaction, Home Management, Nutrition, Career Development, Spirituality, and Survivors (trauma group). Therapist adherence to the curriculum was monitored by trained observers, videotaping, and clinical supervision. Clinicians evaluated attendance and participation for each group session.

2.4. Measures

Prior to beginning treatment at CPA, participants were administered a baseline battery of structured clinical interviews and standardized psychological tests. This study employed demographic information extracted from the CPA Intake Form and scores from the Millon Clinical Multiaxial Inventory-II (MCMI-II) only. The MCMI-II is a 175-item self-administered questionnaire intended for use with psychiatric patients. In our experience, it takes 30 to 40 min to complete. The MCMI-II provides information about psychiatric problems (Axis I) and personality functioning (Axis II). The MCMI-II uses Base Rate (BR) scores