

Client Retention in Residential Drug Treatment for Latinos

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Background: *Latinos & substance abuse treatment*

- In Massachusetts, Puerto Ricans comprise 13.7% of all admissions for drug abuse services (SAMHSA, 2006).
- Recent study of Latina drug users in MA found that a history of mental health services use and involvement with the criminal justice system were associated with residential treatment use. (Lundgren, Amaro, & Ben-Ami, 2005)
- Studies of Latinos' substance abuse treatment use is important because of increase in Latino population in U.S., consequences of HIV/AIDS and drug use among Latinos, and disparities in treatment utilization. (Amaro, Arevalo, Gonzalez, Szapocznik, & Iguchi, 2006)

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Program Description: *Casa Esperanza, Inc.*

- Long-term residential services for Latino/as in Roxbury, MA, founded in 1987
- **Treatment services** include: addiction-focused individual, group, and family counseling; relapse prevention; case management; and trauma recovery groups
- **Support services** include: parenting education; childcare; job training; and education referrals
- Service delivery is grounded in Latino cultural beliefs and values, emphasizing family, community, and ethnic pride

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Introduction

- A large number of clients drop out of residential treatment. (Lee, M. T., Reif, S., Ritter, G. A., Levine, H. J., & Horgan, C. M. (2004). *Alcohol and Drug Services Study (ADSS) Phase II: Client record abstract report* (DHHS Publication No. SMA 04-3974Analytic Series No. A-27). Rockville, MD: Substance Abuse and Mental Health Services Administration)
- A minimum of 90 days is necessary to receive significant benefits from treatment (Ethridge, Hubbard, Anderson, Craddock, & Flynn, 1997; Simpson, 1981)
- Many clients go in and out of treatment repeatedly (Hser et al., 2004; Lee et al., 2004; Liebman et al., 1993)
- Retention, or stabilized recovery, is an essential phase of treatment (Simpson, 2004)

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Introduction (con.)

- Many clients who seek substance abuse treatment also have psychiatric problems. (SAMHSA, 2006)
- Between 40% and 70% of clients seeking substance abuse treatment have one or more co-occurring psychiatric disorders (Karageorge, 2002; Leshner, 1999)
- These clients are more difficult to assess and treat, have more complex health service needs, often require services from various systems, and are more expensive to treat (Horgan, 1997; Miller, Leukefeld & Jefferson, 1994, 1996; Ouimette et al., 1999)
- Some studies show that co-occurring psychiatric disorders are related to poorer treatment outcomes and retention, but findings are inconsistent across studies (Brooner et al., 1997; McLellan et al., 1983; Rounsaville & Kleber, 1985)

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Aim of Study

To explore whether self-reported psychiatric status was associated with residential treatment completion and length of stay in treatment for Latinos in a culturally-focused program in Massachusetts (MA) controlling for client demographic characteristics, level of drug use, history of incarceration, and birth place.

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Research Questions

- 1) What client factors were associated with completing treatment (staying for at least 100 days or more) in a culturally focused residential drug treatment program for a sample of 164 Latino drug users?
- 2) What client factors were associated with leaving treatment after a shorter (39 days or shorter) vs. longer stay (100 days or longer) in residential treatment for a sample of 109 Latino drug users?

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Methods: *Data collection*

- Program staff conducted in-person interviews with 164 Latino male and female clients in residential treatment.
- Analysis sample was chosen from clients who entered program before August 1, 2006, and were discharged before analysis.
- Study sample was 164 clients, 33 (20.1%) of whom completed the program and 131 (79.9%) of whom were terminated from the program before completion.

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Methods: *Measures*

- Clients completed in-person interviews within a week of program admission
- Interview questionnaire included:
 - **GPRA SAIS instrument** (Government Performance and Results Act developed by the Service Accountability Information Service)
 - **Outcome Evaluation Questionnaire** developed by BUSSW, Center for Addictions Research and Services

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Methods: *Independent variables*

- | | |
|------------------------|---|
| ▪ Gender | ▪ History of incarceration |
| ▪ Age | ▪ Mental health status (ASI) |
| ▪ Education | ▪ Mental health treatment |
| ▪ Employment | ▪ Mental Health Diagnosis |
| ▪ Housing | ▪ Place of Birth (Puerto Rico or other) |
| ▪ Alcohol and Drug use | |

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Methods: *Two dependent variables*

1st Dependent Variable:

Client completed treatment (GPRA) (yes/no)
(n=164)

2nd Dependent Variable:

Shorter stays vs. longer stays in treatment (n = 109)

- **Shorter stay** defined as **39 or fewer days** in treatment (clients in 33rd percentile; n = 55)
- **Longer stay** defined as **100 or more days** in treatment (clients in 66th percentile or above; n = 54)
 - Length of stay in treatment was measured in terms of number of days from program admission to discharge
 - Clients in middle group were excluded

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Data Analysis

- Two **binomial logistic regression** models
Examined associations between independent and dependent variables; all variables were entered in a single block.
- All variables which were significantly associated with the dependent variables at the bi-variate level were included in the logistic regressions.* In addition, the variables age and gender were included in both models.

*When two variables measuring similar constructs were both available for multivariate analysis, variables were chosen to develop the most parsimonious models.

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Client characteristics—demographics

- 31.1% female (n = 51)
- 98.2% Latino (n = 161), 87.6% identifying as Puerto Rican
- 59.8% were born in Puerto Rico (n = 98), 33.5% were born in the United States (n = 55), and 6.7% born in another country (n = 11)
- Mean age: 35.2 years (SD = 8.5)
- 92.0% unemployed in past 30 day
- Mean years of education: 10 years
- 21.3% were homeless (n = 35), 37.2% lived in an institution (n = 61), and 41.5% (n = 68) were housed
- 68.9% (n = 113) used illegal drugs and 38.4% (n = 63) used alcohol in past 3 months

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Client characteristics—mental health

- Mean psychiatric symptom score: 0.4 (SD = 0.2) with range of 0 to 0.9; meaning clients had average of 4 psychiatric distress symptoms in past 30 days
- Experienced at least one day of: depression, 59.5%; anxiety, 65.0%; trouble concentrating or remembering 61.1%; hallucinations, 11.7%; trouble controlling violent behavior, 28.2%; serious thoughts of suicide, 12.9%; attempted suicide, 5.5%.
- 24.5% had been prescribed medication for psychiatric problems in past 30 days
- 41.5% (n = 68) had a psychiatric diagnosis
- 40.2% (n = 66) received inpatient or outpatient mental health treatment within the past five years

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Client characteristics—length of stay

- Average length of stay for clients who completed the program: 190 days
- Average length of stay for clients who dropped out of the program: 58 days
- Reasons for leaving the program:
 - Involuntary discharge due to a violation of the rules (30.5%)
 - Left program on own against staff advice and *without* satisfactory progress (37.4%)
 - Left program on own against staff advice *with* satisfactory progress (19.8)

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Results: Bivariate analyses

- The following variables were significantly associated with the 1st dependent variable—client completed the treatment:
 - Having a psychiatric diagnosis (p ≤ .001)
 - History of prior mental health treatment (p ≤ .01)
 - Psychiatric score, based on Addiction Severity Index psychiatric measure (p ≤ .05)

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Results: Bivariate analyses (con.)

- The following variables were significantly associated with the 2nd dependent variable—dropping out of the program within 39 or fewer days
 - Housing status (p ≤ .01)
 - Any alcohol, past 3 months (p ≤ .01)
 - Any illegal drugs, past 3 months (p ≤ .001)
 - History of mental health treatment (p ≤ .01)
 - Having a psychiatric diagnosis (self-report) (p ≤ .001)
 - ASI psychiatric score (p ≤ .05)
 - Born in Puerto Rico (p ≤ .05)

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Results: *First logistic regression model*

Characteristics associated with client completing treatment (compared to not completing treatment).

- Controlling for gender, age, education, and housing status, **clients who reported a psychiatric diagnosis were 81% less likely to complete the program****
- Having a psychiatric diagnosis was the only significant factor in this model

**p<.01; (Model chi-square $\chi^2 = 18.51$; df = 6; Nagelkerke $r^2 = .17$)

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Results: *Second logistic regression model*

Significant factors associated with 39 or fewer days in treatment, compared to 100+ days:

- Having a psychiatric diagnosis
- Using illegal drugs in the past 3 months
- Housing status: Living in an institution prior to entering treatment
- Clients with a psychiatric diagnosis were **5 times more likely** to be in the shorter stay group**
- Clients who used illegal drugs in the past 3 months were **3.7 times more likely** to be in the shorter stay group*
- Clients who lived in an institution prior to treatment were **66% less likely** to be in the shorter stay group*

*p<.05; **p<.01; (Model chi-square $\chi^2 = 34.87$; df = 8; Nagelkerke $r^2 = .37$)

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Implications: *Co-occurring psychiatric disorders*

- Clients most likely to drop out of and not complete treatment were those who reported co-occurring substance abuse and psychiatric diagnoses.
 - Findings suggest that clients with mental health problems have more difficulty staying in treatment through completion
 - Substance abuse treatment programs need to adapt services to address mental health needs of clients
 - Studies show that clients with co-occurring disorders had better outcomes in programs that offered psychotherapy and pharmacotherapy (Chen et al., 2006)

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Implications: *Co-occurring psychiatric disorders (con.)*

- Services shown to improve retention for dually diagnosed clients in residential treatment are:
 - On-site psychiatric services (Broome et al., 1999)
 - Senior professional staff inducting new clients (De Leon, 2001)
 - Frequent counseling sessions early in treatment that focuses on psychosocial issues (Joe et al., 1999)
 - Availability of dual diagnosis groups (Grella & Stein, 2006)
 - Staff with dual diagnosis certification (Grella & Stein, 2006)

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Implications: *Recent use of drugs*

- Clients who used drugs in past 3 months were 3.5 times more likely to be in the shorter stay group
- Drug use can be proxy for drug severity which has been found to be inversely related to retention
(Anglin & Hser, 1990; McLellan et al., 1983, 1994)
- Symptoms of a protracted abstinence syndrome can interfere with program participation (Kleber, 1999)
- Ways to address these issues:
 - Careful screening of physical and cognitive stability
 - Cognitive and emotional expectations are minimal during early period of treatment

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Implications: *Living in an institutional setting*

- Clients who lived in institutional settings prior to treatment were 3 times more likely to be in the longer stay group
- Prior stays in institutional settings suggest these clients were homeless
- Previous studies found that homeless individuals compared to those with housing were more likely to use residential treatment
(Lundgren, Schilling, Ferguson, Davis, & Amodeo, 2003)
- In this study, clients with their own housing were less likely to be in the longer stay group, suggesting a relationship between homelessness and longer stays in residential treatment

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Implications: *Limitations*

- Results from first two years of a 5-year project
- Results from sample of Latino residential treatment clients in one program in MA
- Small sample size
- Self-report of psychiatric measures
- No specific measure of posttraumatic stress disorder
 - Studies indicate that PTSD is high among drug users and that clients with trauma have worse treatment adherence and outcomes

(Brady et al., 1994; Najavits, 2004; Ouimette et al., 1999; Zweben, Clark, & Smith, 1994)

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Future Research and Practice

- Current studies with large samples of Latinos will be important for understanding factors that affect treatment retention among this population

(Alegria et al., 2006)

- Need further studies examining relationships between patient, process, and environment

(Lamb, Greenlick, & McCarty, 1998; Simpson & Joe, 2004)

- Alegria et al. (2006) recommend a social action oriented approach to problems, including substance abuse, where the community is involved in developing interventions

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Conclusion

- Strong relationship between co-morbidity and drop out rates indicates that substance abuse programs must alter their services and staffing if they wish to retain these clients.
- Future research on effective treatment models must be interdisciplinary and utilize diverse methods.
- The complex and urgent drug abuse problems facing Latino communities require comprehensive approach to research and program planning.

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