A Treatment Engagement Model Based on Motivational Interviewing Approach for Hispanic/Latino Women with Co-Ocurring Conditions

Tomas D. Matos, MS, Rafaela R. Robles, EdD, Ibis Carrion, PhD, Carmen R Rodriguez, BA

CENTER FOR ADDICTION STUDIES, SCHOOL OF MEDICINE, UNIVERSIDAD CENTRAL DEL CARIBE, BAYAMÓN, PUERTO RICO

PO Box 60-327, Bayamón, PR 00960-6032 Tel. (787) 288-0200 Fax. (787) 288-0242 email: tmatos@uccaribe.edu

Introduction: One of the major gaps in the research community is the lack of culturally appropriate science based model to help women dealt with their drug use and its health consequences. In response to this issue Women-Specific Community-Based Substance Abuse and HIV/AIDS Outreach Program for high-risk substance-using women in Puerto Rico was developed. The model was based in two theoretical concepts: engagement and embeddedness. The program comprised seven face to face interventions with multiple contacts both in the community and at the assessment center to engage (access and retain) women in the program and to integrate (embedded) women with social support networks and service organization systems in an effort to developed a more scientific approach to Hispanic women multiple needs

Methods: The population was women living in five communities of the San Juan metropolitan area, ages 18 to 65, not in drug treatment, who reported drug use in the past 30 days previous the interview. Data was collected through face to face interview. Some of the measures used were: Health utilization-UCLA Research Center, Drug use patterns and HIV risk-Risk Behavior Assessment (NIDA), Addiction consequences - Addiction Severity Index (ASI), and Mental health-Composite International Diagnostic Interview (CIDI).

Analysis: Frequency distributions were used to describe the study sample. Bivariate analyses, using the chi-square test of homogeneity, were used to follow-up measures of HIV risk behaviors, entrance into drug treatment and patterns of drug use. Multivariate logistic regression analysis was used to identify the factors associate to enter drug treatment.

Figure 1 Interventions and professional needed

Intervention	Professional
I. Role inducement in the community to enter and continue in the intervention; HIV Testing Counseling for HIV risk behaviors, including demonstration and practice	Community Counselors Nurse Drug Counselors
II. Role inducement in the project's center to enter health care services - Visits to primary care physicians and other activities related to health status (e.g., immunology clinics, laboratories)	Drug Counselors
III. Counseling to continue inducement to enter and complete drug treatment.	Drug Counselors
IV. Evaluation of women needs: family problems, employment, education, financial aids, etc.	Community & Drug Counselors
V. Identification and integration of a family member or other significant person to support behavioral change plan..	Community & Drug Counselors
VI. Integration of sexual partner or person support sexual changes.	Community & Drug Counselors
VII. Continuous outreach contacts in the community or in treatment and booster sessions.	Community & Drug Counselors

Table 1 Sample profile (n=214)

	n	percent
Age – mean (std. dev.)	35.5	(9.9)
High school education	78	37.1%
Employed	17	7.9%
Living with children	53	26.5%
Depression/Anxiety	115	54.2%
Injector	53	24.9%
Crack user	129	60.8%
HIV positive	36	16.9%

Table 2 Safe practices at 6 months follow-up

	n	percent
Condom use	44/85	51.8%
No share paraphernalia	15/25	60.0%
No share water	6/8	78.0%
No share needle	8/11	72.7%
No share cotton	5/9	55.6%
No share cooker	6/15	40.0%

Table 2 Among protective behaviors, use of condom for vaginal and oral sex was increased twice when compared with the proportion that discontinued the behavior. The only statistically significant changes by type of sexual partner were the increased use of condom for vaginal and oral sex. Drug injecting women reported discontinuation of this behavior. Non significant changes in drug injection risk behaviors were observed. However, except the sharing cooker, a discontinuation pattern in the other risk behaviors was reported.

Table 3 Drug abstinence at 6 months follow up

	n	percent
Any drug	41/214	19.2%
Injection use	12/53	22.6%
Cocaine	38/47	80.9%
Heroin	39/67	58.2%
Marihuana	31/64	48.4%
Speedball	16/41	39.0%
Alcohol	46/104	44.2%
Crack	26/129	20.2%

Table 3 shows the drug abstinence by type of drug. Cocaine, heroin and marihuana presents the major percent of abstinence among this sample of women. The results of the McNemar Test comparing cessation versus initiation were statistically significant for all drugs except marihuana (p=.059).

Table 4. Logistic analysis shows that women who completed the intervention, injecting drugs, living alone, had depressive/anxiety symptoms, had previous experience with drug treatment and having health insurance were significantly associated with entering drug treatment.

Table 4 Logistic regression results: Factors associated to enter drug treatment.

Variables	OR	95%CI	p-value
Completed Interventions	5.9	2.6 – 13.4	<0.001
Injector drug use	5.5	2.3 – 13.0	<0.001
Living alone	2.5	1.1 – 6.0	0.038
Age	1.1	1.1 – 1.2	0.041
Depression/Anxiety symptoms	2.1	0.9 – 4.4	0.065
Previous Drug treatment	2.5	0.7 – 8.6	0.158
Health Insurance	1.9	0.9 – 4.1	0.091

Conclusions:

Counseling intervention and case management was effective in helping participants to:
- Discontinue drug injection
- Reduce needle sharing
- Enter drug treatment
- Condom use

Double dose of support => more comprehensive intervention

Interactions between clients and the case manager before and after each counseling session assessed participants' satisfaction with the counseling sessions. This model could be another strategy to arrest the HIV epidemic by preventing HIV risk behaviors, entering drug users in treatment, and decreasing drug injection.

References:

Robles, RR., Reyes, JC., Colon, HM, Sahai, H., Marrero, CA, Matos, TD., Calderon, JM., Shepard, EW. (2004). Effects of combined counseling and case management to reduce HIV risk behaviors among Hispanic drug injectors in Puerto Rico: a randomized controlled study. Journal of Substance Abuse Treatment Vol. 27 Pages 145-152.

Miller WR. ***Motivational interviewing: research, practice, and puzzles.*** Addict Behav. 1996;21:835-42.

Miller WR, Rollnick S. ***Motivational interviewing: Preparing people for change***. New York: Guilford Press. 2002

This study was funded by Grant No. 1 H79 TI14540 of the Center for Substance Abuse Treatment (CSAT/SAMHSA).

Presented at the National Hispanic Science Network 2006, September 12-16, 2006 Scottsdale, AZ.