Effectiveness of Intervention on Improvement of Drug Use among Methadone Maintained Adults

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Abstract

The purpose of this study is to evaluate the effectiveness of three programs delivering motivational interviewing (MI) one-on-one, by group or by nurse-led hepatitis health promotion (HHP) on identifying predictors of drug risk behavior and reducing drug use. A randomized, controlled trial was conducted with 256 Methadone Maintained (MM) moderate-to-heavy alcohol-using adults attending one of five MM outpatient clinics. Drug use in the overall sample was significantly reduced from baseline to six month follow-up as assessed by a 30-day recall ($p < 0.0001$), with a trend apparent for six-month recall ($p = 0.09$). The MI group and one-on-one revealed significant decreases in drug use at the 30-day recall.

Keywords

Drug use among Methadone Maintained clients; Motivational Interviewing; Nurseled Hepatitis Health Promotion

Introduction

The conventional wisdom is that opioid dependence is a chronic illness and withdrawal from opioids is generally followed by relapse[1]. Nonetheless, methadone maintenance (MM) treatment remains the cornerstone of treatment for opioid dependence as MM is associated with reductions in criminal activity, mortality, illicit drug use[2] and reduction in

hospitalization secondary to illicit opioid use[3]. However, longitudinal studies have revealed that despite treatment, opioid-dependent persons often relapse[4]. It has been suggested that the effectiveness of MM treatment could be improved by the inclusion of adaptive treatment models providing more substance abuse and psychiatric services[5]. While Motivational Interviewing (MI) has been shown to be effective in the reduction of drug use[6,7,8] and nursing interventions have been associated with improvement in drug behavior[9–11], to date there have been no studies comparing nurse-led interventions to MI among clients receiving MM.

The purpose of this pilot study was to evaluate the effectiveness of three interventions designed to reduce drug use among clients undergoing MM: Individual-MI, Group-MI and Nurse-Led Hepatitis Health Promotion (HHP). The primary outcome of the study was to determine whether any one strategy was more effective than another in terms of reduction in drug use. The secondary outcome of the study was to identify predictors of reduction in drug use.

Nurse-Led Drug Counseling Programs

It has been suggested that nurses may be ideally suited to conduct substance abuse interventions because of their proven effectiveness in the setting of health promotion[12]. Nurse-delivered self enhancement has been found to be effective in the reduction of alcohol abuse behaviors in the general hospital settings[13], as well as among participants attending primary care clinics[12]. Nurse-provided screening and brief intervention has been found to be effective in the management of alcohol abuse among persons attending sexual health clinics[14]. Most recently, nurse-led intervention has been found to result in significant reduction of alcohol use among MM populations; this reduction is similar to that obtained by therapist-trained MI programs[15]. However, information is lacking about the impact of nurse-led intervention designed to reduce drug use among adults enrolled in MM programs. As nurses may be optimal health promotion agents, their expanded role in MM programs is worthy of investigation.

Motivational Interviewing

MI, a non-confrontational process designed to improve willingness to consider behavior change[16], can be delivered either on a one-to-one basis (individually), or in a group setting. Individually-delivered MI has been shown to be effective in the reduction of substance abuse and HIV risk behaviors among men who have sex with men[17]. A recent meta-analysis has shown individual-MI to be effective for problem drinking behavior among college students[7,18] and among adults who have a history of alcohol abuse[19]. Individual-MI has been associated with reduction in drug use behavior among young people 16–20 years of age[20]; it has also been shown to be effective in the reduction of cocaine use among adult substance users[21]. Further, it has been found to be therapeutic in the management of persons with a history of dependence on prescription drugs[22].

Several studies have shown that group-MI is effective in the reduction of substance use. Group-MI has been associated with improved treatment engagement and decreased drug abuse among adults attending outpatient clinics across five sites in the United States[23]. Further, it has been associated with reduction in drinking among college students[24,25], and has been found to be effective in the reduction of substance use among people with psychiatric disorders[6,8]. Most recently, Nyamathi and colleagues[15] found that MI-individual, MI-group and Nurse-led interventions equally and significantly reduced alcohol use among MM adults

Predictors of Treatment Outcome

While relatively little is known about predictors of successful treatment outcomes targeting drug using clients enrolled in drug management programs[26], factors such as gender, age, and employment status are important to understand[27]. In a review article designed to examine factors influencing the course of opiate addiction, findings revealed that psychosocial factors (i.e., peer-group relationships, employment and social support) moderately predicted treatment outcome[28]. Additional factors positively associated with drug treatment referral uptake and drug treatment referral included recent sex work, daily or greater injection drug use, and completion of a high school education[29]. Among MM participants, Coviello et al.[30] found that, among other factors, treatment site and substance use were significantly associated with a successful counseling and employment intervention program.

Methods

A randomized controlled trial was conducted to compare the effectiveness of a three-group intervention with 256 moderate and heavy alcohol-using adults receiving MM treatment in Los Angeles. While the original study design was focused on reduction of alcohol use,[15] this paper is focused on reduction of drug use. The threeprograms were MI-Single, MI-Group, and Nurse-Led HHP. Baseline data were collected from February 2007 to May 2008. Follow-up data was collected at six months; at this time, subjects were asked to consider their drug use during the last 30 days, as well as over the last six months. An Institutional Human Subject Protection Committee approved the study and all study-related documents.

Sample and Setting

Eligible participants met the following criteria: a) received methadone for at least three months; b) were 18–55 years of age; and c) reported moderate-to-heavy alcohol use based on questions from the Addiction Severity Index (ASI). Recruitment was conducted in five MM treatment sites in Los Angeles and Santa Monica.

Procedure

MM clients were made aware of the study by means of posted flyers. For those interested, after informed consent for the screening had been read and signed in a private area on site, trained research staff administered a brief two-minute structured questionnaire composed of socio-demographic characteristics, a screen for alcohol use and severity, and a hepatitis-related health history. If determined as eligible, reinforced information was provided about the study and consent for blood testing and for enrollment in the study was performed. The MI sessions were delivered by two trained therapists specialized in deliver MI. The Nurse-HP sessions were delivered by a research nurse in conjunction with a trained research staff member. Each program provided three sessions, as well as the HepatitisA Virus (HAV)/ Hepatitis B Virus (HBV) vaccination series for all those found to be HBV seronegative.

Measures

Socio-Demographic information, collected by a structured questionnaire, included age, gender, ethnicity, education, recruitment site, childhood physical abuse, history of substance abuse treatment, and history of trading sex lifetime.

Perceived Health Status was measured on a 5-point scale from "excellent" to "poor" and a dichotomous item inquired about past six-month hospitalization. Health status was dichotomized at fair/poor versus better health.

Depressive Symptoms were assessed with the Center for Epidemiological Studies Depression (CES-D) scale[31], which has been validated for use in homeless populations[32,33].

The 10-item self-report instrument was designed to measure depressive symptomology in the general population[34] and measures the frequency of a symptom on a 4-point response scale from 0 "Rarely or none of the time (Less than 1 day)" to 3 "All of the time (5–7 days)". The individual item scores were summed to form an overall scale with a range of 0 – 30. Overall scale scores were dichotomized at a cutoff value of 8, a frequently used figure to suggest depressive symptomatology with the 10-item short form scale. The internal reliability of the scale in this sample was .80.

Emotional Well-Being was measured by the five-item mental health index (MHI-5); this scale has well-established reliability and validity[35]. Scores were linearly transformed so that they ranged from 0 to 100. A cut-point of 66[36] was used to discriminate participants' emotional well-being. Cronbach's alpha for the scale in this study was .79.

Social support was measured by a single question inquiring about whether social support came primarily from drug users, non-drug users or both.

Alcohol use was assessed by the Time Line Follow Back that assessed the number of standard drinks consumed per day over the last 30 days.

Outcome

Drug use was measured by the Addiction Severity Index – Lite Version. This measure is a shortened version of the ASI[37]. The drugs considered in this instrument were: heroin, methadone, opiates/analgesics, barbiturates, cocaine, amphetamines, cannabis, hallucinogens and inhalants. The instrument asked subjects about frequency of drug use in the past 6 months and past 30 days. It also asked for the route of administration (oral, nasal, smoking, injection drug use (IDU) and non-IDU) for each of the above-mentioned drugs. Oral was considered the least severe, IDU the most severe route of drug administration. Data for both measures (30 day and 6 month recalls) were collected at both baseline and 6 months. From this instrument, a composite drug score was determined for each participant, at both time points, by adding (frequency*severity) for each drug, over all drugs taken. This allowed for the creation of one single measurement that accounted for the frequency of drug use as well as the severity in drug administration route of each drug taken. Two such composite scores were created at each time point, one based on a participant's 6-month recall of drug use and the other based on a 30-day recall. The difference of each of these recall scores between the two time points (baseline-6 month) reflects change in drug intake (based on a 30-day and 6-month recall) during the study period. For ease of interpretation, a per-day score was obtained, which signifies the change in *per-day* drug intake at study follow up.

Statistical Analyses

As stated under measures, there were two outcome measures: change in average daily drug intake, based on a 30-day recall and a 6-month recall, since beginning of study. All subsequent analyses will use these change scores as outcome measures. Note that a positive change score (calculated as: baseline – 6 month values) signifies that the average drug intake has *decreased* at study follow up compared to baseline.

Initial examination of the composite change scores showed a normal distribution of the data. Taking advantage of the normality of the outcome variables, bivariate analyses were conducted where the relationship between each potential predictor and eachchange score was assessed by t-tests and ANOVA techniques at a type I error rate (α) of 0.05. To assess whether a change was significant within a treatment group, a two-sided, single sample t-test was performed. Subsequently, for each outcome measure with more than one significant predictor from the bivariate analyses, multiple linear regression models were constructed

using a stepwise procedure. Predictors in the multiple regression models included variables that were associated with an outcome measure at the 0.15 level in preliminary analyses; covariates were retained if they were significant at the .10 level. The inclusion of all two-way and three-way interaction terms was considered and subsequently tested in all models. Multicollinearity was checked and model assumptions were validated. Statistical analyses were performed using SAS and all models and tests were conducted at a significance level of 0.05.

Results

A total of 256 MMT participants were randomized into the MI-S (n=90), MI-G (n=79) or Nurse-led HHP (n=87) group. Table 1 shows the descriptive statistics of the sample. Participants averaged about 52 years of age and they were predominantly men (59%). Most participants were African American (45%) or Latino (27%). Slightly more than half graduated from high school, and reported having a significant other. Only about one in six was employed. Most participants were recruited from the Site A (32%), Site B (25%) and Site C (21%) clinics. There were no differences in participant characteristics at baseline with respect to program type.

In terms of drug use, 40% of participants revealed IDU within 30 days prior to baseline. Health and health behaviors in this sample were very poor. Over 60% reported fair/poor health and symptoms of mental illness were common: 68% reported poor emotional well being, and 81% had depressive symptoms. One quarter of the sample reported physical abuse in childhood and over a third said they had participated in sex trade. In addition, over half of the sample reported having at least one of the following: 90 or more standard alcoholic drinks in the past month (50%), marijuana use or IDU in past month (56%), or smoked at least 1 pack of cigarettes daily (56%). However, only one in five reported attending recent self-help programs. In terms of social support, almost half of the participants received it from primarily non drug-users, and about one-third received it from both drug-users and non drug-users.

Reduction in Average Daily Drug Intake over Study Period – Between-Subject Analyses

As shown in Table 2, reductions in average daily drug intake were apparent in the overall sample at the six-month follow-up assessment, significantly in the 30 day recall (p-value < 0.0001) and trend in the 6 month recall (p-value = 0.09). No significant difference in the outcome measures was observed between the three program types (two interventions and one control).

Participants who had no support or received support from drug users were significantly more likely to show greater reduction in average daily drug intake in the past 30 day recall than those who received support from non-drug users (p = 0.03). In terms of reducing average daily drug intake in the past 6 months, participants in three of the five sites (Sites B, D and E (p = 0.01) showed the greatest reduction; those that had a history of lifetime sex trade and also those that had reported recent IDU at baseline were also associated with greater reduction in average daily drug use (both p < .05). Unemployment was marginally associated with reduction in average daily drug intake at 6 months follow up (p = 0.07). These findings show that those who were in higher risk categories had improved drug risk behaviors (i.e., reduced drug use) at study follow up.

Reduction in Average Daily Drug Intake over Study Period – Within-Subject Analyses

In table 2, we observed that there was a significant change in drug intake within the two MI programs. Specifically, drug intake had significantly reduced within the MI intervention groups (p-value = 0.0003).

Multivariate Results

Table 3 presents predictors of the change in the average daily drug intake based on the 30 day recall using a generalized linear regression model (glm). Having support from non-drug users was the only significant predictor associated with decreased average daily drug intake in the past 30 days (p = 0.04). This is after controlling for potentially confounding factors such as program type and alcohol use. An R-square of 0.17 and a significant model fit (p-value = 0.01) indicated a satisfactory goodness of fit of the model. Similarly, table 4 presents predictors of the change in the average daily drug intake based on the 6 month recall using a glm. After controlling for program types, factors such as recruitment site, no lifetime traded sex, and no IDU at baseline showed to be significant predictors associated with reductions in average daily drug use in the 6 months recall (p = 0.001, p = 0.05, p = 0.03, respectively, Table 4). Also, an R-square of 0.18 and a significant model fit (p-value = 0.01) indicated a satisfactory goodness of fit of the model.

Discussion

The results of this study show that the two MI interventions (MI-Single and MI Group) were effective in promoting significant improvement in substance use behavior i.e., decreased average daily drug intake, at six-month follow-up using a 30 day recall. When participants were asked to consider drug reduction for the entire six-month recall, a trend for a significant reduction of drug use was also apparent. These findings are consistent with the results of other studies showing that individually delivered MI[7,19,20,21,22] is effective in the reduction of drug use. Furthermore, group-delivered MI[23–25] has also been shown to be effective with respect to substance abuse reduction. To our knowledge, this is the first study to report findings of reduction in drug use in MM programs wherein both group- and single-delivered MI performed equally well. Theses findings have implications for studies on cost effective treatments delivered within MM programs.

From our study, within group analysis also revealed that the MI interventions, both group- and individually-delivered, resulted in significant reductions in drug use from the baseline to six-month period. Thus, the nurse-led HHP intervention program was not found to reduce drug use significantly from baseline to six months. To date, there are no studies comparing nurse-led interventions in the setting of MM treatment programs. While nurses have been shown to be effective at promoting substance abuse reduction[13,38]; most studies have focused on nurses supporting physician-led interventions[12]. As the nurse-led HHP program performed as well as the MI interventions in relation to reduction of alcohol use in the parent study[39], the lack of significance in the current study may be related to the fact that the focus of the parent study was on alcohol reduction. Thus, the reduced focus on reducing drug use may have led to the less powerful impact by the nurse-led HHP intervention. Another possibility is that since the nurseled HHP intervention was successful in reducing drug use, albeit not significantly, there may be a need for a more powerful program or a program longer than one delivered over three sessions for it to be effective.

This study also examined a number of variables that might have an impact on drug reduction behavior. At 30-day recall, participants who had no social support system, or those who received social support from drug users were significantly more likely to reduce drug use, compared with those who received support from non-drug users. Thus, those at greater risk

showed greater improvement in drug risk behavior than their counterparts. These findings contradict those from Van De Mark[40] which revealed that among substance abusing women, lack of support was a predictor of relapse[40] as well as Scherbaum & Specka[28] providing evidence that support is an important component of treatment success, among those with a history of opiate addiction.

Our findings also revealed that at 6-month drug use recall, those who were able to significantly reduce drug use were more likely to be recruited from one of two clinical sites (Site A or Site C), had no lifetime sex trade history, and had no recent IDU at baseline. Our findings are unique. Recently, Kang & Deren[41] identified several factors associated with treatment utilization among Puerto Rican drug users. They found that recruitment site, having health insurance, and prior methadone treatment was significant predictors of enrollment in drug treatment. While we did not find health insurance to be a predictor of outcome, we did find that recruitment site was positively associated with reduction in drug risk behavior. A detailed assessment of particular characteristics of these sites is warranted.

There have been some published studies examining predictors of substance abuse reduction; however, findings have not been comparable. Morrissey et al.[42] found that age, years of drug use, and mental health status baseline scores were associated with substance use reduction following counseling. Voshaar et al.[43] found that benzodiazepine abstinence was positively correlated with having undergone a tapering-off program, less severe benzodiazepine dependence at baseline, and no history of alcohol use. Among teens, not having smokers within the family, being more motivated, and having less of an addiction history were associated with smoking cessation[44].

We found that having no history of lifetime sex trade was significantly associated with drug use reduction. This is consistent with findings revealing that participants with a history of prostitution and who became abstinent reduced drug use significantly[45]. Our analysis did not address changes in lifetime trade sex over time.

Findings also revealed that those that had recent IDU at baseline were significantly more likely to reduce drug intake at follow up. This is consistent with findings reported by McCambridge & Strang[20] who showed that drug risk improvement following individual-MI was substantially greater for participants who were most at risk (heavy drug users) at study onset.

Limitations

Findings are limited to an urban sample of clients attending MM, although the recruitment approach identified a diverse sample. Our results showed that there were significant differences found with regard to treatment site; this could be explained by the fact that the population differed in each of the sites. Our findings are also limited by self-report data which has clear possibilities for reported bias. Future studies utilizing toxicology findings will contribute further to the field.

Conclusion

This study demonstrated that MI (provided either individually or in a group setting) were both effective in reducing drug risk behavior among MM clients; more so the MI interventions where participants reduced their drug use significantly at follow up compared to the onset of the study. Our findings that improvement in drug risk behavior was impacted by recruitment site, lifetime sex trade, social support and recent IDU can help to construct optimal interventions in this vulnerable populations to those who are most in need.

Acknowledgments

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Table 1

Baseline Sample Characteristics of Methadone Maintained Clients by Program

Characteristics				
	MI-Single (N = 90)	**MI-Group (N = 79)**	**HHP (N = 87)**	**Total (N = 256)**
Background	Mean SD	Mean SD	Mean SD	Mean SD
Mean Age	51.9 % (7.9)	50.0 % (7.4)	51.8 % (8.8)	51.2 % (8.4)
Male	60.0	58.2	59.3	59.2
Ethnicity:				
African American	46.7	44.3	44.2	45.1
White	21.1	24.1	11.6	18.8
Latino	25.6	25.3	29.1	26.7
Other	6.7	6.3	15.1	9.4
High School Grad	62.2	59.5	52.3	58.0
Partnered	51.7	55.7	55.8	54.3
Employed	18.0	12.7	20.9	17.3
Recruitment Site:				
Site A	31.5	37.2	28.6	32.3
Site B	28.0	23.1	23.8	24.7
Site C	16.9	21.8	23.8	20.7
Site D	15.7	9.0	15.7	13.6
Site E	9.0	9.0	8.3	8.8
Fair/poor health	58.9	63.3	59.3	60.4
Childhood Physical Abuse	23.3	27.9	24.4	25.1
Lifetime Trade Sex	31.8	46.7	32.9	36.7
Substance Use				
Recent $^+$ Alcohol Use at Baseline				
0–40	23.3	27.9	24.4	25.1
41–89	21.1	22.8	30.2	24.7
90–180	32.2	22.8	24.4	26.7
> 180	23.3	26.6	20.9	23.5
Recent$^+$ marijuana use	17.8	25.3	5.8	16.0
Recent$^+$ IDU	37.8	45.6	37.2	40.0
Smoke ≥ 1 pack/day	52.2	64.6	52.3	56.1
Recent$^+$ Self-Help Program	23.3	25.3	15.1	21.2
Psychological Resources				
Depressive Sxs[a]	81.1	81.1	80.2	80.8
Poor Emotional Well Being[b]	73.3	65.8	62.8	67.5
Social Support From:				
Primarily Drug Users	7.8	12.7	17.4	12.6
Primarily Non Drug Users	51.1	45.6	48.8	48.6
Both	34.4	38.0	32.6	34.9

Characteristics				
	MI-Single (N = 90)	MI-Group (N = 79)	HHP (N = 87)	Total (N = 256)
No One	6.7	3.8	1.2	3.9

[+] recent refers to past month

[a] Based on a CES-D short form (10 items) score of 8 or more

[b] Based on a score of 65 or less on a 0–100 scale

Table 2

Assessing Changes in Average Daily drug use Over Study Period by Demographic and Behavioral Characteristics of Methadone Maintained Clients

	Average change in daily drug use since baseline (last 30 days recall)		Average change in daily drug use since baseline (last six months recall)	
	Mean	Standard Error	Mean	Standard Error
Overall Sample	***			
	0.78	0.19	0.16	0.09
Program Type				
MI-S	0.93##	0.32	0.33	0.18
MI-G	1.07##	0.38	0.04	0.17
HHP	0.35	0.32	0.12	0.16
Gender				
Male	0.70	0.27	0.19	0.13
Female	0.90	0.28	0.12	0.15
Race				
African American	0.63	0.28	0.17	0.13
White	1.42	0.48	0.46	0.25
Latino	0.86	0.40	0.01	0.20
Other	0.68	0.54	0.07	0.46
Mixed	−1.25	0.99	−0.40	0.71
Highest Grade				
Less than high school	0.80	0.23	0.15	0.11
High school graduated	0.73	0.37	0.20	0.19
Employed				
Employed	0.78	0.44	−0.11	0.26
Unemployed	0.77	0.25	0.37	0.13
Retired/Other	0.82	0.43	−0.05	0.17
Recruitment Site			++	
Site A	1.11	0.34	−0.15	0.15
Site B	0.48	0.18	0.78	0.18
Site C	−0.04	0.60	−0.14	0.28
Site D	1.59	0.58	0.16	0.26
Site E	1.05	0.56	0.30	0.24
Health In General				
Good Health	0.60	0.28	0.04	0.14
Fair/Poor	0.92	0.27	0.25	0.13
Childhood Physical Abuse				
Yes	0.83	0.44	0.23	0.24
No	0.77	0.22	0.14	0.10
Lifetime Trade Sex			±	
Yes	0.95	0.29	0.43	0.18

	Average change in daily drug use since baseline (last 30 days recall)		Average change in daily drug use since baseline (last six months recall)	
	Mean	**Standard Error**	**Mean**	**Standard Error**
No	0.70	0.26	0.02	0.12
Substance Use				
Baseline Recent Alcohol Use				
0–40	0.70	0.34	0.30	0.19
41–89	1.05	0.46	−0.11	0.23
90–180	0.70	0.33	0.11	0.17
> 180	0.67	0.43	0.38	0.18
Baseline Recent IDU			+	
Yes	0.89	0.21	0.23	0.10
No	−0.08	0.44	−0.37	0.34
# cig smoked per day				
< 1 pack per day	0.58	0.25	0.10	0.12
≥1 pack per day	1.33	0.41	0.31	0.20
Social Support				
No Support or Drug-User Support	*			
Yes	1.74	0.44	0.17	0.21
No	0.59	0.21	0.16	0.11
Recent Alcohol Use (at 6 months)				
0–40	0.68	0.28	0.16	0.15
41–89	1.35	0.41	0.32	0.19
90–180	0.55	0.38	0.29	0.19
> 180	0.69	0.63	−0.17	0.30
Any Health Insurance				
Yes	0.69	0.24	0.06	0.12
No	0.94	0.33	0.35	0.17
Current Intimate Relationship				
Yes	0.80	0.27	0.17	0.13
No	0.79	0.29	0.17	0.15

Note: Change score is defined as: baseline – 6 month. Positive numbers indicate *decrease* in drug use at study follow up.

[*/+]Significant between subject difference in the outcome based on last 30-day recall/6-month recall, p < 0.05

[**/++]Significant between subject difference in the outcome based on last 30-day recall/6-month recall, p-value < 0.005

[***/+++]Significant between subject difference in the outcome based on last 30-day recall/6-month recall, p-value < 0.001

[#]Significant within subject difference in the outcome based on last 30-day recall (p < 0.05

[##]Significant within subject difference in the outcome based on last 30-day recall/6-month recall, p-value < 0.005

[###]Significant within subject difference in the outcome based on last 30-day recall (p < 0.001).

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Table 3

Linear regression results using the composite score for the 30 day recall

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Program Types (A)	2	3.58	1.79	0.23	0.78
No Support Or Support					
From Drug Users (B)	1	31.41	31.41	3.98	0.05
Alcohol at Baseline (C)	3	26.26	8.75	1.11	0.35
A × B	2	9.51	4.75	0.60	0.55
A × C	6	95.04	15.84	2.01	0.07
B × C	3	8.63	2.88	0.37	0.78
A × B × C	5	49.17	9.83	1.25	0.29

Table 4

Linear regression results using the composite score for the six month recall

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Program Types	2	3.39	1.69	0.88	0.41
Race	4	14.02	3.50	1.83	0.12
Site Type	5	50.04	10.01	5.22	0.001
Sex Trade	1	7.23	7.23	3.78	0.05
Life time IDU	1	9.71	9.71	5.07	0.03