



HIV STIGMA AMONG SUBSTANCE ABUSING PLWH: IMPLICATIONS FOR HIV TREATMENT, ARV ADHERENCE AND DIVERSION

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ABSTRACT

Aims: HIV related stigma has a major impact on quality of life and health outcomes among people living with HIV (PLWH); higher levels of HIV-related stigma are associated with lower antiretroviral (ARV) adherence and uptake of medical care, making it difficult for PLWH to receive the benefits of treatment. This paper examines the impact of HIV stigma on care access and ARV adherence and diversion among substance abusing PLWH.

Methods: Using targeted sampling we recruited 503, substance abusing, PLWH in South Florida to complete a single computer assisted interview assessing demographics, substance use/dependence, and mental health. Stigma was measured with the HIV Internalized Stigma Measure which has 4 subscales: stereotypes about HIV, self-acceptance, disclosure concerns, and social relationships.

Results: Those reporting severe substance dependence (55.3%) endorsed higher mean HIV stigma on stereotypes (8.2 vs. 7.3, p=.00), disclosure (4.2 vs. 3.6, p=.00), self acceptance (7.8 vs. 6.3, p=.00), and social relationships (5.6 vs. 4.6, p=.02). Nearly 50% of the sample reported recent ARV diversion; diverters endorsed significantly higher stigma on disclosure (4.1 vs. 3.7, p=.04). 54.1% of the sample reported 95% ARV adherence; these individuals reported significantly lower stigma on disclosure (3.7 vs. 4.1 p=.05), self acceptance (6.8 vs. 7.4, p=.05), and social relationships (4.9 vs. 5.4 p=.04). Those reporting more access to HIV treatment had significantly lower stigma on stereotypes (7.3 vs. 8.4, p=.00), self acceptance (6.4 vs. 7.8, p=.00), disclosure (3.4 vs. 4.5, p=.00) and social relationships (4.5 vs. 5.9, p=.00).

Conclusions: Higher levels of HIV stigma are associated with substance dependence, mental health issues, and ARV diversion; lower levels of stigma are associated with better adherence and access to HIV treatment. Our findings have critical public health implications, including the importance of intervention development to decrease HIV related stigma among vulnerable populations.

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INTRODUCTION

Stigma is a complex social process encompassing labeling, stereotyping, separation, status loss and discrimination ¹.

Stigma has a major impact on quality of life and overall health outcomes among PLWH ^{2,3}.

Higher levels of HIV-related stigma are associated with: decreased ARV adherence and uptake of medical care; increased mental distress including depression, anxiety, and hopelessness; and HIV related symptoms ^{2,4-9}, impeding PLWH from receiving optimal benefits of HIV care and treatment ¹⁰.

Little is known about how HIV-stigma may impact understudied PLWH, particularly those with intersecting stigmas, including indigent, non-IDU substance abusers, and PLWH with high levels of competing needs.

The purpose of this paper is to examine the demographic, mental health, behavioral, and HIV care related correlates of specific internalized HIV stigma domains among a sample of socioeconomically disadvantaged substance abusing PLWH, in order to identify potential intervention targets to increase uptake of care and ARV adherence.

METHODS

503 indigent, HIV positive heroin and cocaine users ages 18 and over in South Florida were recruited using targeted sampling strategies for a comprehensive health and social risk assessment using a modified version of the Global Appraisal of Individual Needs ¹¹. Other standardized instruments were also used to measure attitudes toward HIV providers and ARV medications and HIV treatment access.

HIV stigma was assessed through a modified version of the HIV Internalized Stigma Measure; ¹² higher scores reflect greater levels of stigma. Our adapted measure included 4 subscales: stereotypes about HIV (three items, scores range from 3 to 12), self-acceptance (three items, scores range from 3 to 12), disclosure concerns (two items scores range from 2 to 8), and social relationships (three items, scores range from 3 to 12). Participants were retained on the subscales where they had complete data, and those with missing values were not included.

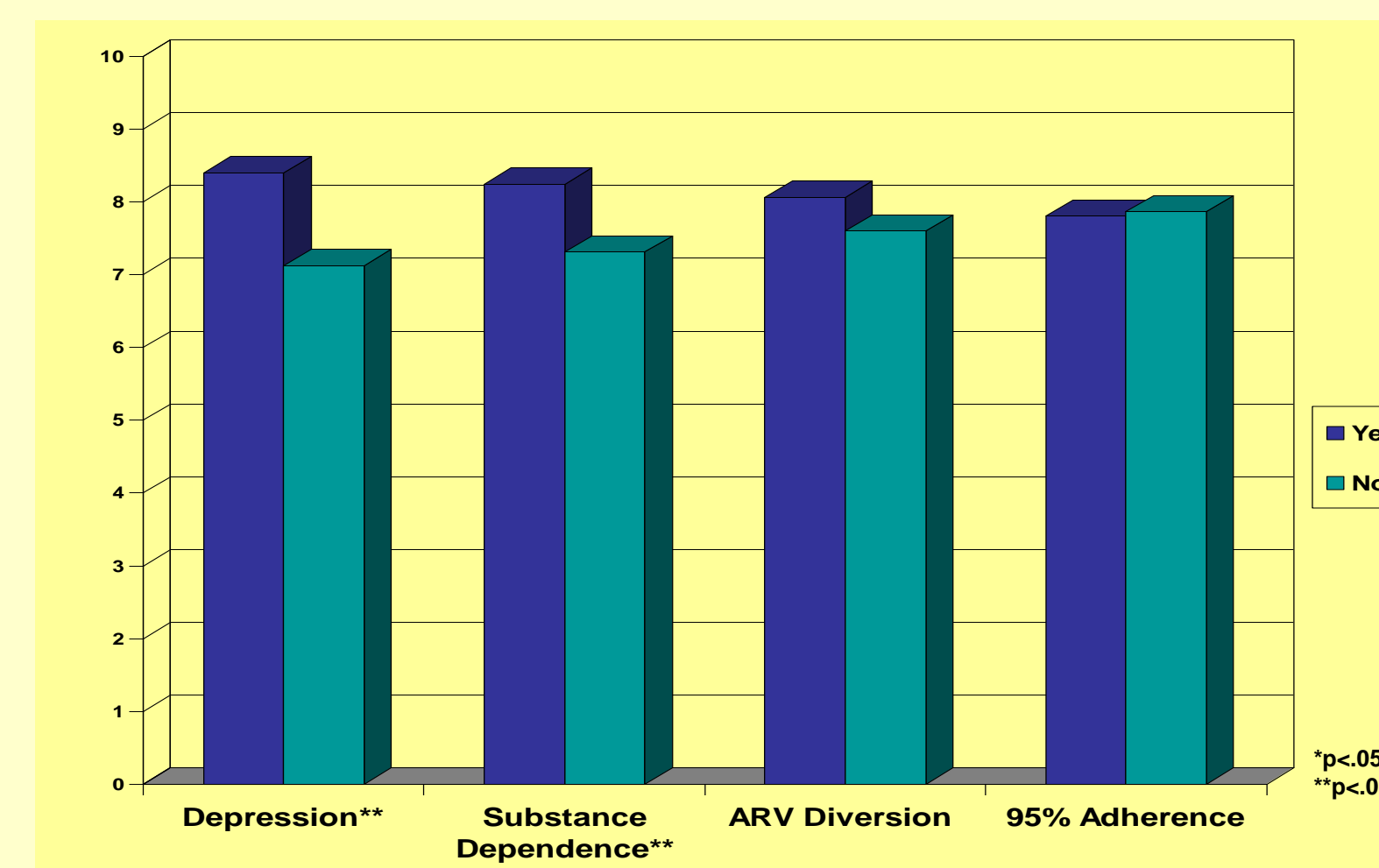
Descriptive statistics were calculated to describe the sample in terms of: demographics; mental health including depression and substance dependence; behavioral factors including recent (past 90 day) ARV diversion and adherence; and, HIV care factors including attitudes toward providers and ARV medications and treatment access.

T-tests were utilized to examine differences in mental health, behavioral and HIV care factors by each stigma subscale.

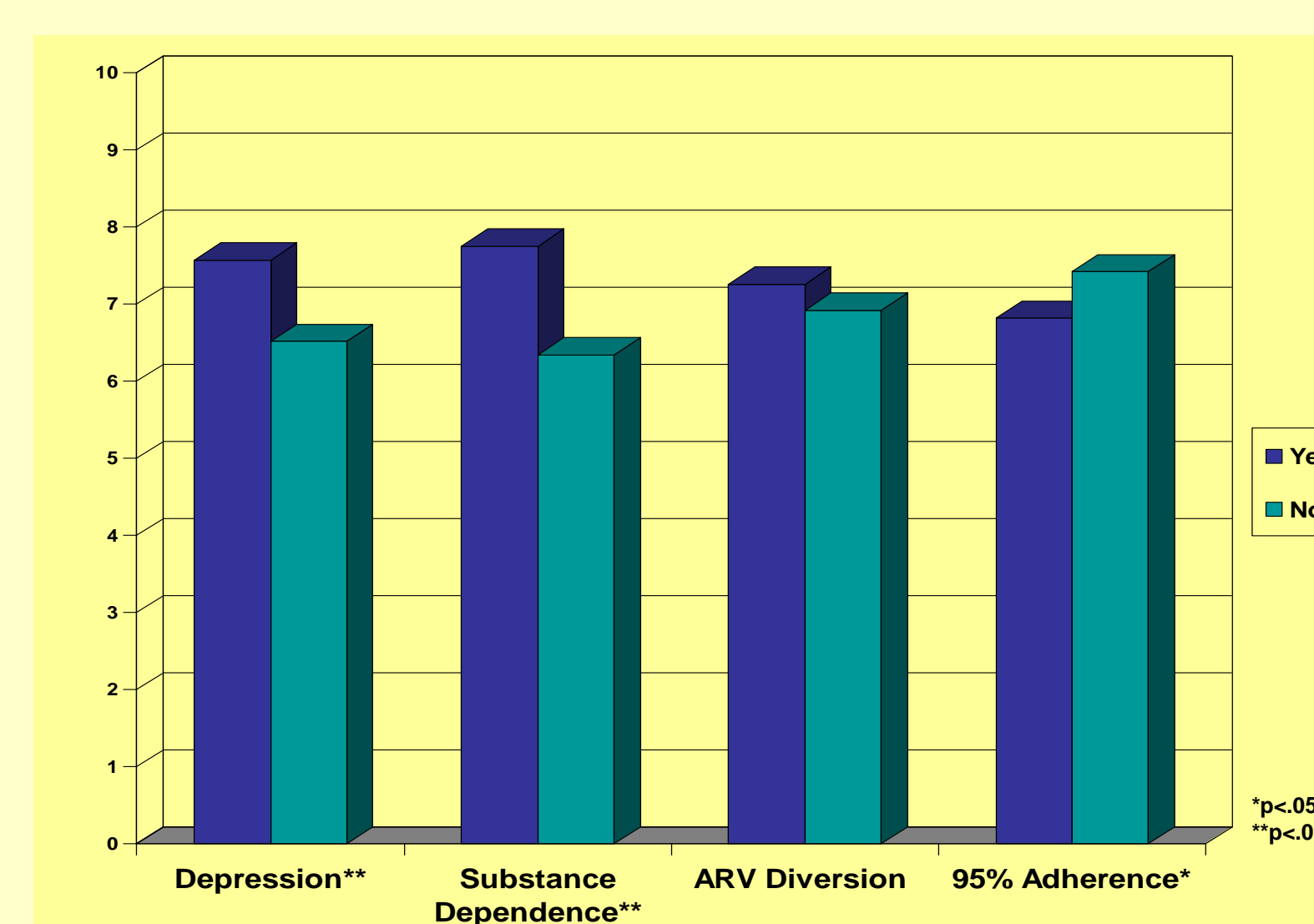
RESULTS Descriptive Sample Characteristics N=503

Demographic factors	N (%)
Age (mean, SD)	46.07 (7.77)
Male Gender	299 (59.4)
Monthly income ≤ \$1,000	408 (81.1)
Race	
African American	340 (67.6)
All other races	163 (32.4)
Years with HIV (mean, SD)	12.94 (7.31)
Mental health factors	
Severe depression	
Yes	275 (54.7)
No	228 (45.3)
Severe substance dependence	
Yes	278 (55.3)
No	225 (44.7)
Behavioral factors	
Recent ARV Diversion	
Yes	251 (49.9)
No	252 (50.1)
95% ARV Adherence	
Yes	272 (54.1)
No	231 (45.9)
Care Related Factors	
Attitude toward HIV providers (mean, SD) Range: 12-48	43.80 (5.34)
Less favorable (45 and below)	238 (47.3)
More Favorable (46 and above)	265 (52.7)
ARV medication attitudes ¹ (mean, SD) Range: 1-10	8.45 (1.92)
Negative (8 and below)	238 (47.3)
More Positive (9 and above)	264 (52.5)
HIV treatment access ² (mean, SD) Range: 9-28	23.79 (4.31)
Less Access (24 and below)	235 (46.7)
More access (25 and above)	268 (53.3)

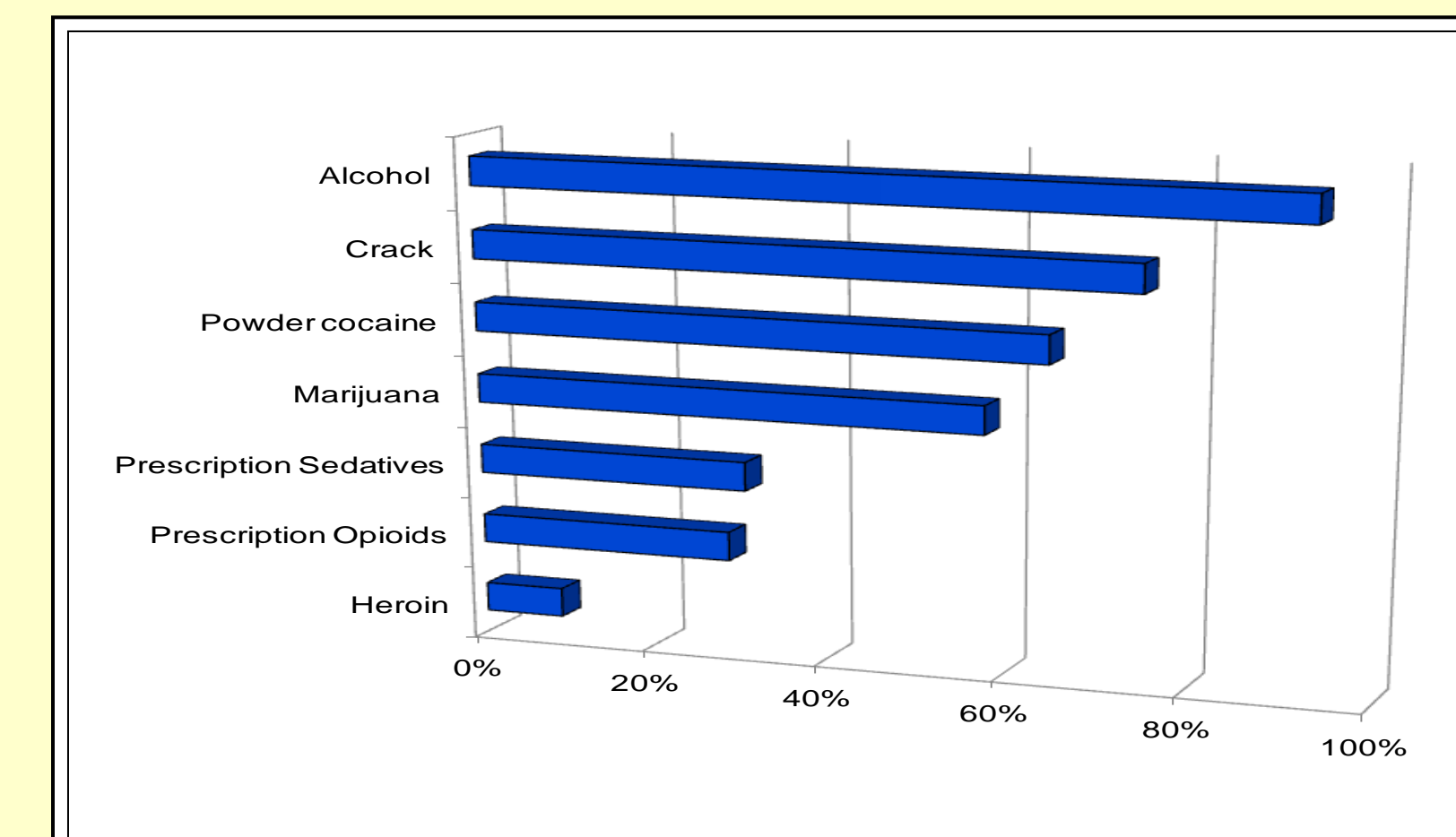
Internalized Stigma Mean Scores Related to Stereotypes N=494



Internalized Stigma Mean Scores Related to Self-Acceptance N=492

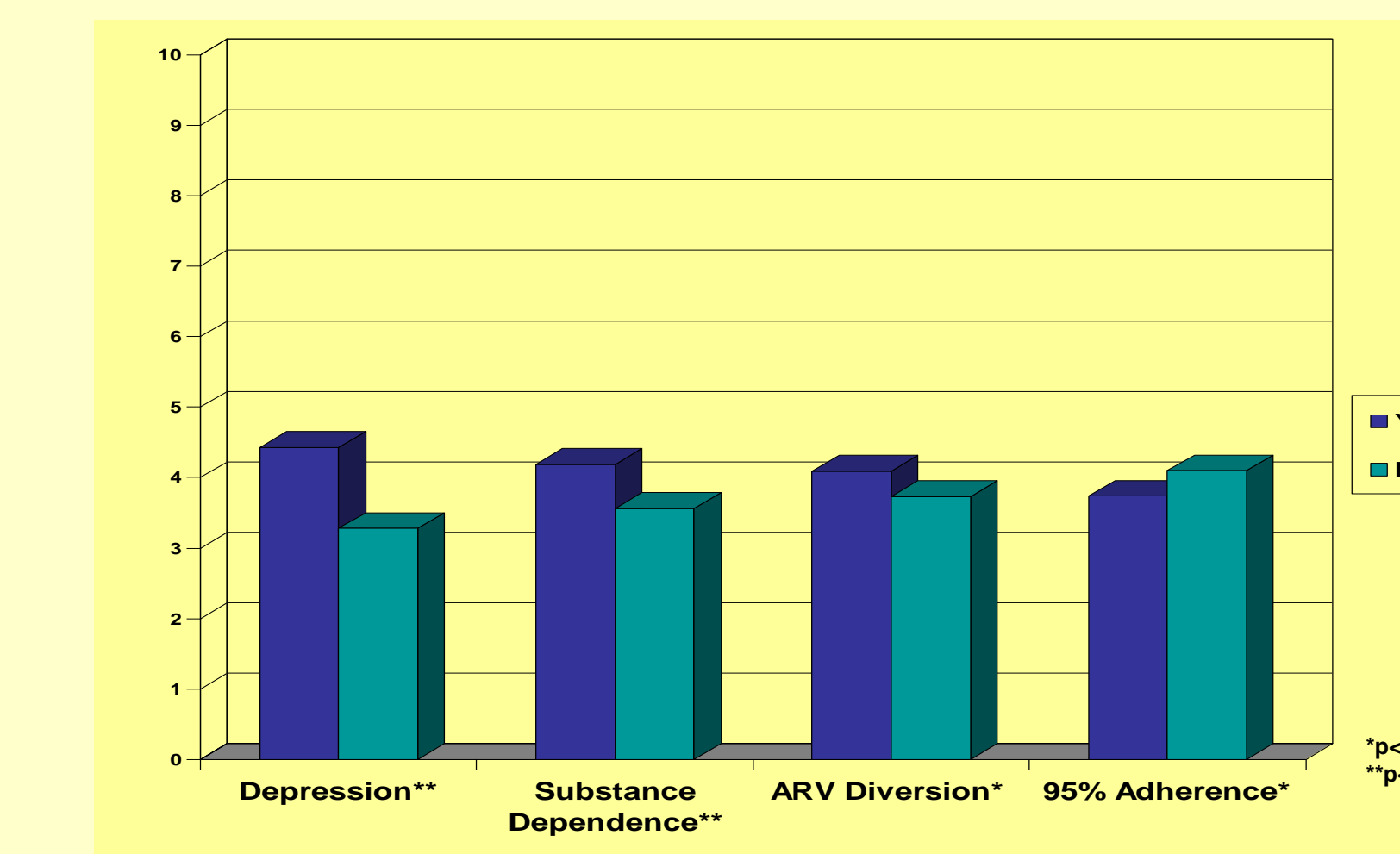


RESULTS Past 90 Day Substance Use

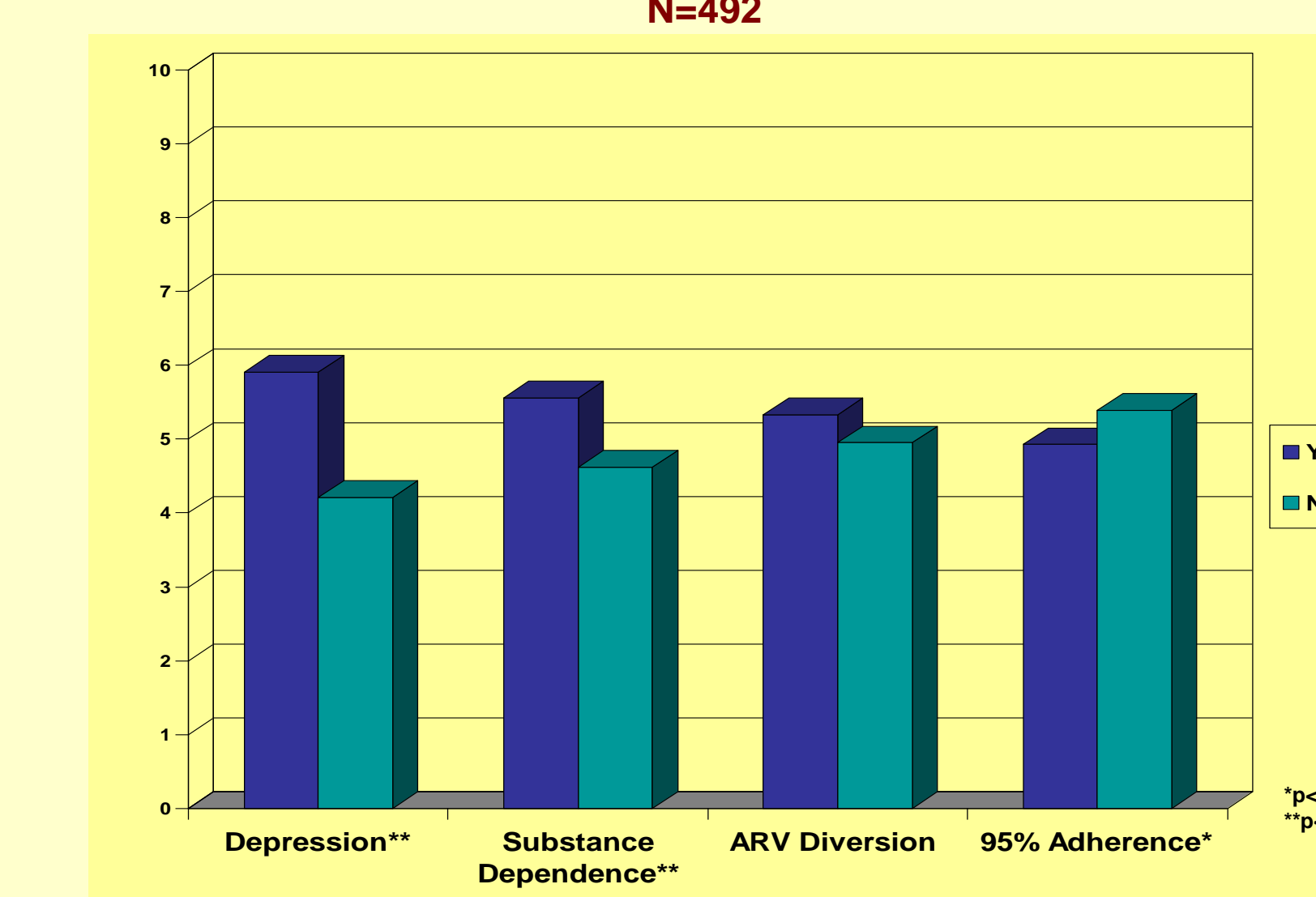


Internalized Stigma Mean Scores: HIV Care Related Factors	Stereotypes ²	Self-Acceptance ³	Disclosure	Social Relationships ³
Attitude toward HIV providers				
Less favorable (45 and below)	8.24**	7.60**	4.35**	5.93**
More Favorable (46 and above)	7.44**	6.64**	3.51**	4.44**
ARV medication attitudes ¹				
Negative (8 and below)	8.28**	7.78**	4.37**	5.89**
Positive (9 and above)	7.41**	6.44**	3.49**	4.45**
HIV treatment access ³				
Less Access (24 and below)	8.41**	7.83**	4.51**	5.86**
More access (25 and above)	7.30**	6.44**	3.38**	4.52**

Internalized Stigma Mean Scores Related to Disclosure N=503



Internalized Stigma Mean Scores Related to Social Relationships N=492



DISCUSSION

Our data highlight the fact that mental health problems, including severe depression, were associated with higher stigma related to stereotypes, disclosure and social relationships, indicating that individuals with psychological distress may be less willing to take their ARV medications due to fears related to disclosing their status. This would appear to constitute a significant risk factor for attending and remaining engaged in regular HIV care.

Substance dependence symptoms for our sample were also tied to significantly higher stigma overall and related to self acceptance; these findings are contrary to some studies which have found lower levels of HIV stigma among substance abusers ¹³.

Those who were adhering to their ARV regimen had lower HIV stigma related to stereotypes, disclosure, and social relationships, suggesting that the adherent experienced less distress related to their HIV status.

Diverters had higher stigma related to disclosure, indicating that perhaps the need or desire to conceal HIV status could potentially play a role in the decision to divert medications. These results may indicate that decreases in stigma related to disclosure would be useful in promoting adherence and reducing diversion among this highly marginalized population of PLWH, making this a potential target for intervention.

Aspects of HIV care including more favorable attitudes toward HIV treatment providers, more positive attitudes toward ARV medications and more HIV treatment access were each significantly associated with lower stigma across all four stigma domains.

CONCLUSIONS

Our findings suggest that those with substance dependence, depression, and lower levels of social support are more vulnerable to experiencing higher levels of HIV related stigma.

These findings have critical public health implications, including the importance of developing specifically tailored interventions to decrease internalized HIV related stigma, and specifically self acceptance stigma.

Among PLWH with high levels of competing needs, these interventions would appear to be potential avenues for increasing adherence and routine utilization of HIV care.

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