

2007 APHA Conference Presentation

Washington, DC

**Mental health treatment disparities among adults
aged 18 or older in the United States, National Survey
on Drug Use and Health (NSDUH), 2005**

Presented by

Kim Dobson Sydnor, PhD

Co-Presenters

M. Bazle Hossain, PhD

Isidore S. Obot, PhD

**Morgan State University
School of Community Health and Policy**

Learning Objectives

At the conclusion of the session, the participants in this session will

- Be familiar with levels of mental health treatment disparities among adults aged 18 or older
- Understand the factors associated with mental health treatment disparities among adults aged 18 or older
- Understand the moderating influences on the relationships between race and mental health treatment.

Overview of the Research

The purpose of the research is to explore mental health treatment among adults aged 18 or older, focusing on racial/ethnic disparities.

The data come from the 2005 National Survey on Drug Use and Health (NSDUH) for ages 18 and older.

Multivariate weighted logistic regression models are used to assess factors associated with mental health treatment using STATA.

Logistic regression models provide unadjusted and adjusted results for the relationship between race and mental health treatment

Background & Significance

- Despite efforts to improve the detection and treatment of mental health services, and increases in treatment utilization numbers, mental health disorders continue to be under-diagnosed and under-treated
- These disorders represent a continuum ranging from mild to severe; the most serious cases being among those with co-morbidities

Background & Significance

- Modifications to policy regarding treatment provision for mental health services focus on support for those with more severe forms of mental health disorders, placing barriers to treatment for less severe cases
- In making such a determination, further information is needed to understand the patterns of mental health treatment utilization and what disparities already exist
- To that end, the current research focuses on treatment seeking behavior utilizing the 2005 National Survey on Drug Use and Health (NSDUH) and examining the differences by race and moderating effects.

Methodology

Study Design

- The NSDUH 2005 utilized a multi-staged random probability sampling design to interview individuals aged 18 and older from US households, oversampling for younger age groups
- Researchers conducted face-to-face interviews utilizing
- Excluded from the analyses are all respondents under age 18 and all cases with incomplete data for the variables included
- Total of 36,852 of the original sample of 55,905 are included in the current analysis

Data Analysis

- The current analysis consisted of N=36,852 participants. Excluded from the analyses were ...?
- The outcome measure was interviewees indication of whether or not they had received mental health service treatment in the past 12 months (yes/no)
- Logistic regression analyses were conducted in three stages utilizing STATA (adjusted for sampling design):
 - Model 1 race only
 - Model 2 race adjusted for gender, age, SES, marital status, insured status and drug use
 - Model 3 interaction of race with key predictors from Model 2

Figure 1: Race, Gender, and Age (percentages)

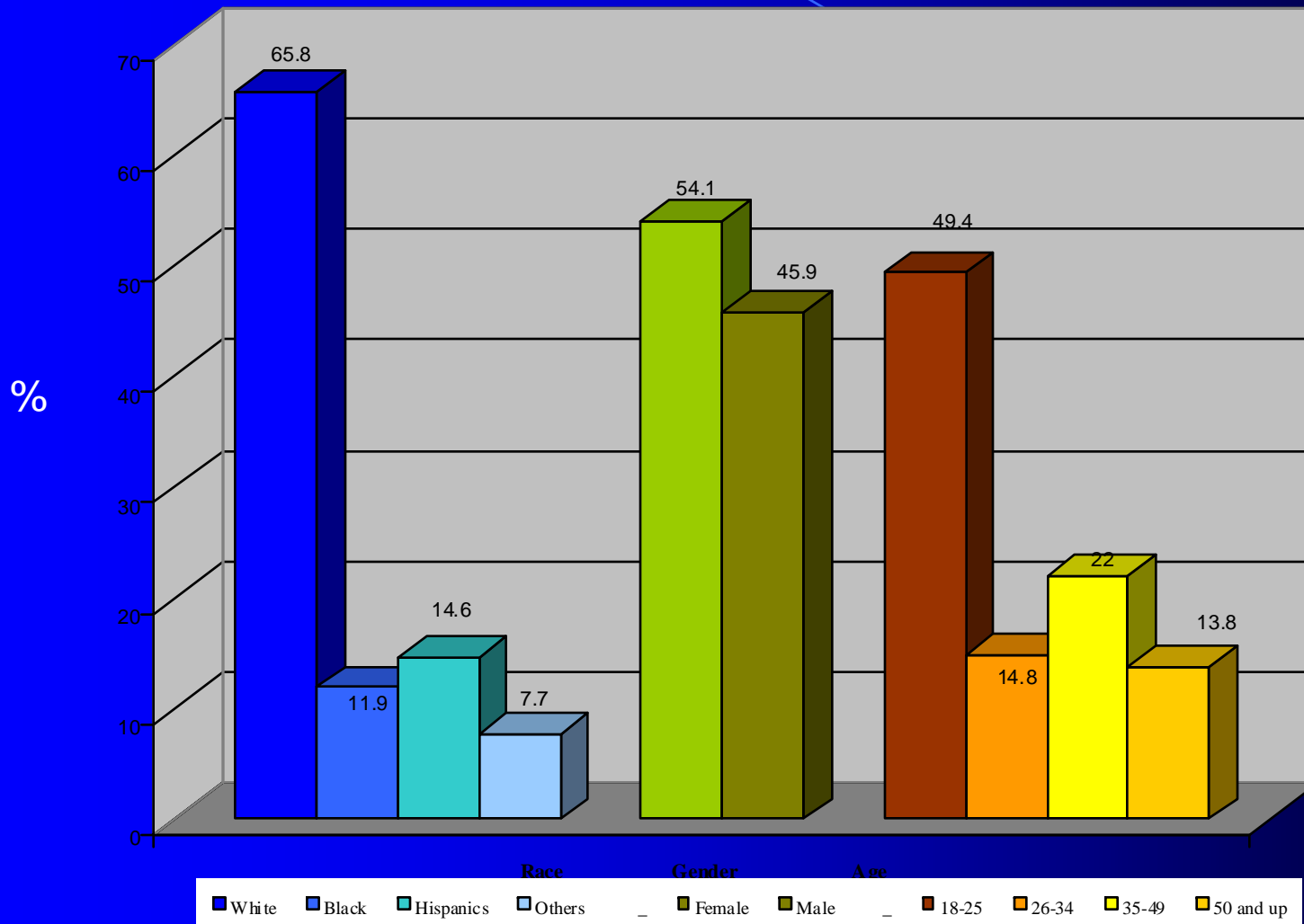


Figure 2: Education, Marital Status, and Family Income (percentages)

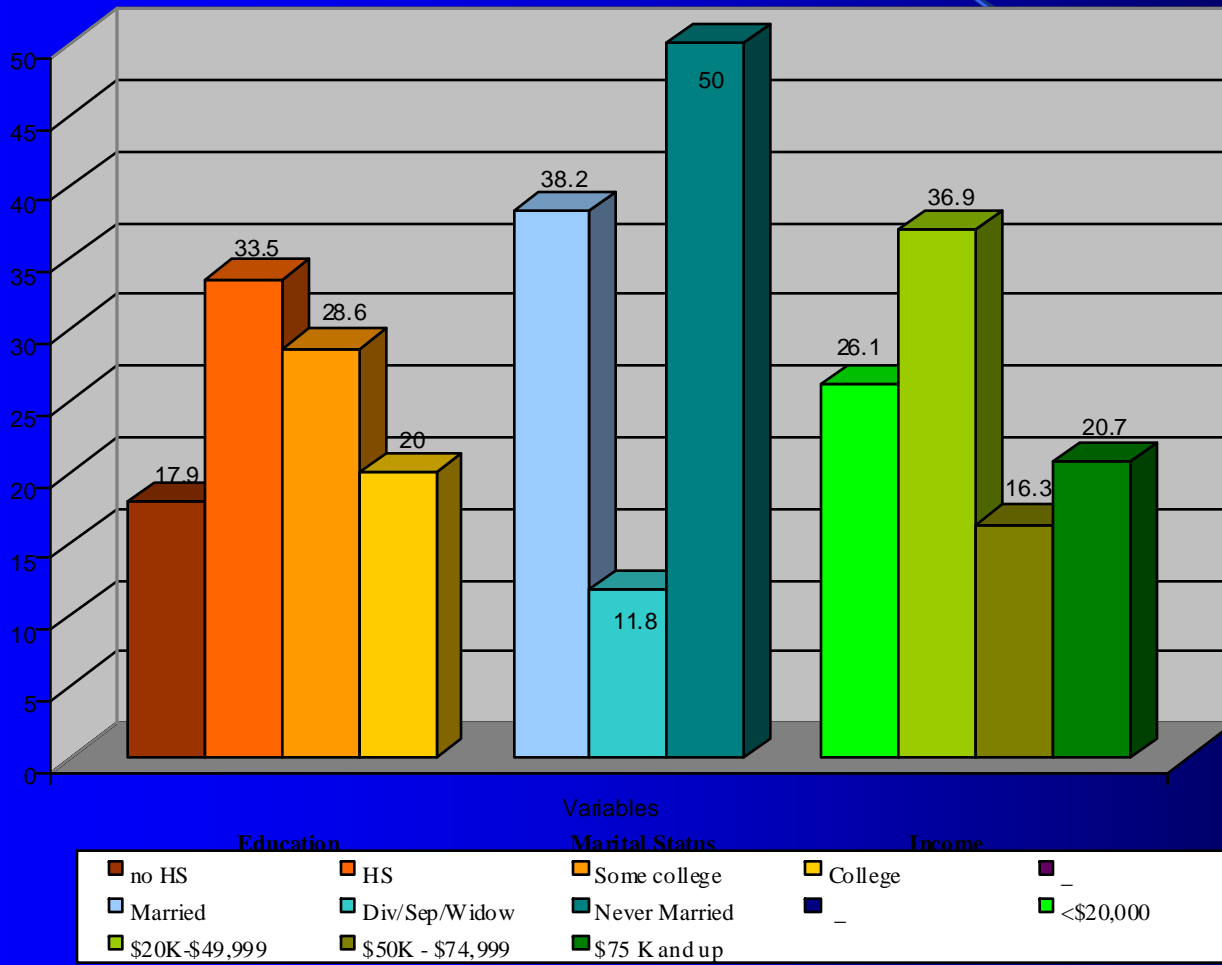


Figure 3: Health Insurance and Self-Reported Health percentages)

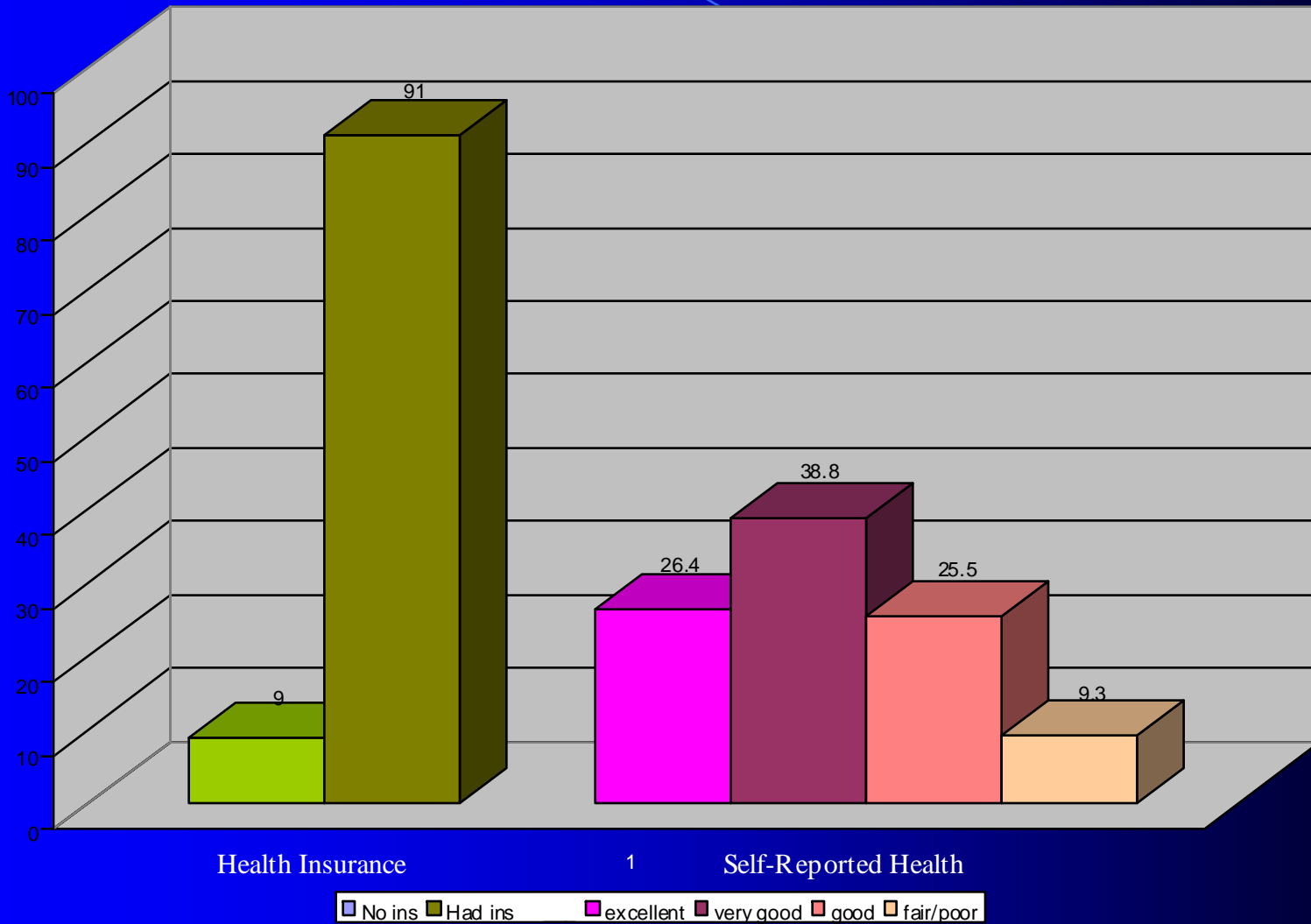


Figure 4: Past Twelve Month Cigarette, Marijuana and Cocaine Use (percentages)

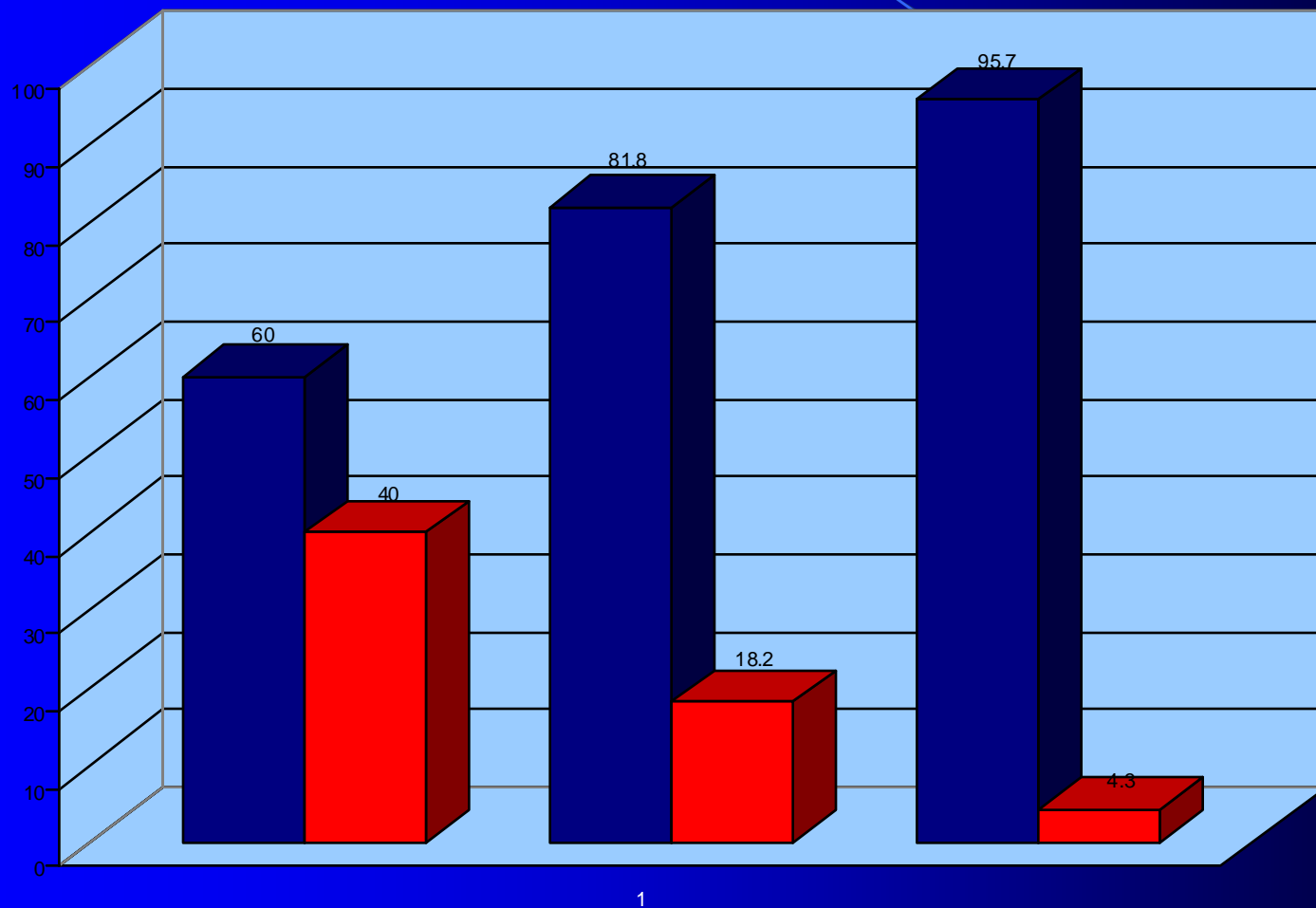


Table 1. Odds ratios for the logistic regression estimates for the relationship between race and past 12 month receipt of mental health treatment for adults 18 and older, NSDUH, 2005.

Covariates	Model 1		Model 2 ^a		Model 3 ^a	
	OR	95% CI	OR	94% CI	OR	95% CI
Race (ref. = whites)	0.59***	0.50,	0.49***	0.40, 0.59	0.44***	0.34,
Blacks	0.51***	0.71	0.50***	0.41, 0.61	0.38***	0.57
Hispanics	0.44***	0.42,	0.38***	0.29, 0.50	0.34***	0.29,
Others		0.61				0.50
		0.34,				0.24,
		0.56				0.49
Gender (ref. = male)	-	-	2.15***	1.92, 2.40	2.16***	1.94,
Female						2.42
Health insurance past 12 months (ref. = yes)	-	-	1.03	0.85, 1.23	1.03	0.86,
No						1.23
Cigarette used in past year (ref. = no)	-	-	1.54***	1.37, 1.74	1.41***	1.24,
Yes						1.60
Marijuana used in past year (ref. = no)	-	-	1.18*	1.02, 1.38	1.15	0.98,
Yes						1.35
Cocaine used in past year (ref. = no)	-	-	1.58***	1.26, 2.00	1.71***	1.32,
Yes						2.22

^a Models 2 and 3 adjusted for age, education, income, and self-reported health; Model 3 is also adjusted for the interaction terms

Note: Significance, * p <0.05; ** p<0.01; *** p<0.001

Table 1. Odds ratios for the logistic regression estimates for the relationship between race and past 12 month receipt of mental health treatment for adults 18 and older, NSDUH, 2005.

Covariates	Model 3 ^a	
	OR	95% CI
Interactions:		
Race and past year cigarette use (ref. = whites)	1.47	0.99, 2.19
Blacks x used cigarette in past year	1.15	0.64, 2.08
Hispanic x used cigarette in past year	1.73*	1.14, 2.63
Other race x used cigarette in past year		
Race and past year marijuana use (ref. = whites)	0.67	0.40, 1.11
Blacks x used marijuana in past year	1.49	0.65, 3.42
Hispanic x used marijuana in past year	1.81*	1.02, 3.21
Other race x used marijuana in past year		
Race and past year cocaine use (ref. = whites)	0.98	0.44, 2.14
Blacks x used cocaine in past year	1.74	0.66, 4.61
Hispanic x used cocaine in past year	0.28***	0.14, 0.58
Other race x used cocaine in past year		

^a Models 2 and 3 adjusted for age, education, income, self-reported health, race, gender, health insurance and substance use main effects
 Note: Significance, * p <0.05; ** p<0.01; *** p<0.001

Summary and Discussion

- The results indicate that all minority groups were less likely to seek treatment than whites, even in the adjusted models
- The largest differential was between whites and “others” (others primarily Native American and Asian Pacific Islanders)
- whites had higher reports of receiving treatment than blacks even though national prevalence data indicate blacks have higher rates of morbidity
- Almost all of the participants in this sample had health insurance; insurance was not a factor in receipt of treatment
- Use of substances appears to moderate the relationships between race/ethnicity and receipt of treatment in that “others” had greater odds of treatment in the presence of past 12 month cigarette, marijuana, and cocaine use.

Limitations

- This is cross sectional data; direction of the relationships noted have not been established
- The survey relies on self-reported information regarding receipt of treatment as well as substance use;
- The analysis did not include an assessment of mental health status;
 - ~ whites in the sample could have had higher rates of more severe single disorders or co-morbidities that may have influenced the relationships noted
 - ~ though this would be inconsistent with generally reported patterns of mental health illness

Conclusions

Data do indicate disparities in utilization of mental health services by race and ethnicity that should raise concern, especially in light of policy changes that seek to limit resources for only the more severe diagnosed cases of mental illness

This policy may be particularly problematic for blacks if indeed they have higher prevalence of severe mental disorders; they appear not to be getting treatment commensurate with need

Further study with larger sampling of ethnic groups and subgroup analyses may be warranted to better understand mental service treatment patterns and predictors for these groups