

Health, mental health, substance use, and service utilization among rural and urban incarcerated women

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Introduction

- Female inmates report poor physical health.
- Mental health problems are common.
- Substance use contributing factor.
- Data limited on how issues differ for incarcerated women from rural and urban areas.

Introduction

- Services accessed for the first time in prison.
- Limited service utilization associated with gender-specific factors.
- Literature is limited on service utilization in different geographical areas.

Study objectives

This study has three primary objectives:

- (1) To profile the health, mental health, substance use, and service utilization among rural and urban incarcerated women.
- (2) To examine the relationship between the number of self-reported problems and service utilization among urban and rural incarcerated women.
- (3) To examine self-reported health and mental health problems in prison as associated with pre-incarceration health-related problems and service utilization.

Methodology

Participants

- Rural/urban stratified random sample of 100 women
- Sample closely resembled the overall female inmate population
 - Average age of 37.4
 - Majority were white (71%)

Data collection

- Study information
- Informed consent
- Face-to-face interviews
- Timing, compensation
- Confidentiality

Measures

- Health problems
- Mental health problems
- Substance use
- Service utilization

Objective 1

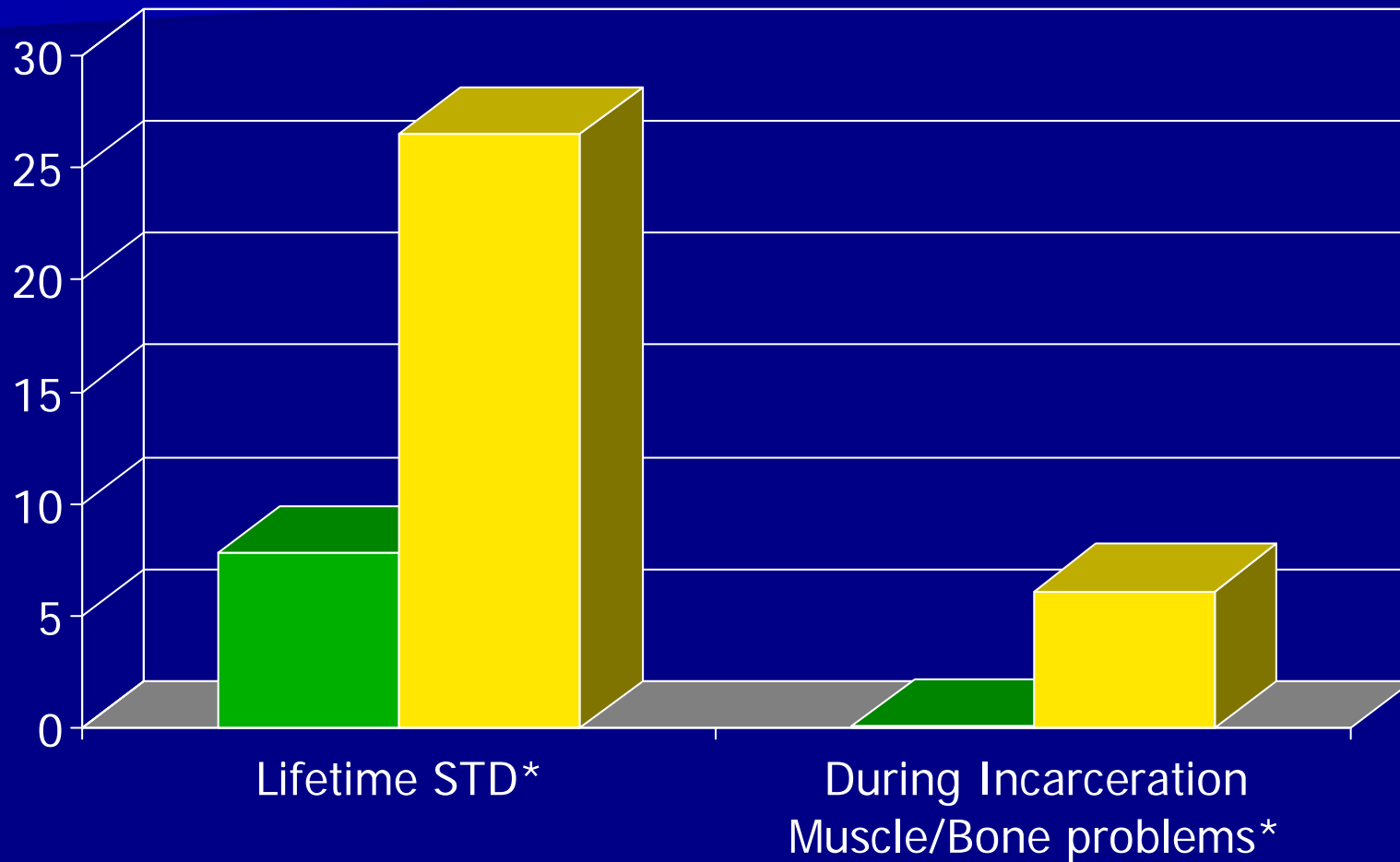
To profile the health, mental health, substance use, and service utilization among rural and urban incarcerated women.

Demographics

	Rural (n=51)	Urban (n=49)
Age	36.4	38.1
% White **	84.3%	59.2%
% Single, never married *	25.5%	49.0%
Years of education	11.4	11.6
Current charges		
Violent	45.1%	40.8%
Drug-related†	33.3%	18.4%
Weapons offense	6.0%	0%
Property offense†	25.5%	42.9%

Note: **p<.01, *p<.05, †p<.10

Percent reporting health problems



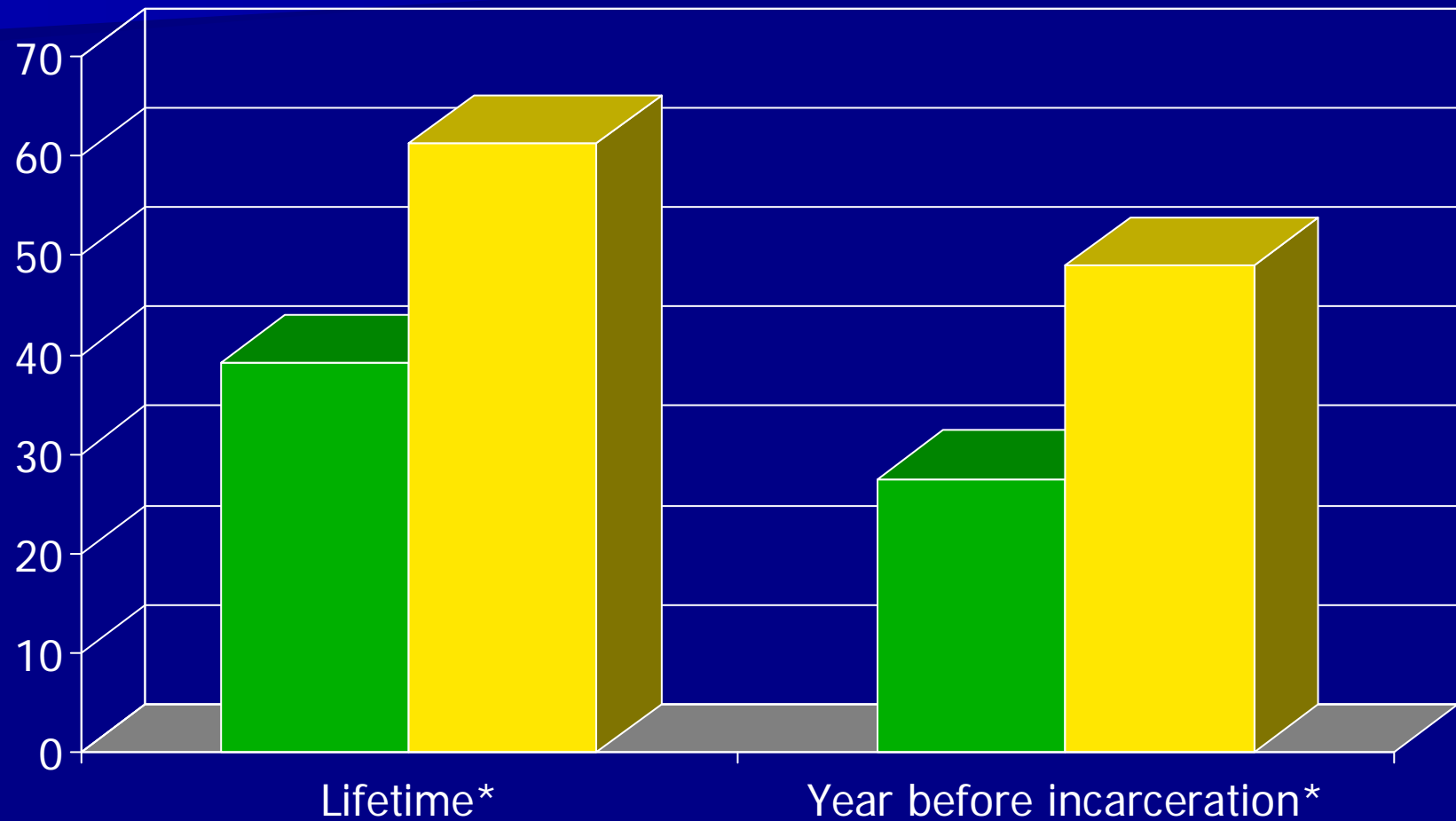
Note: *p<.05

■ Rural ■ Urban

Mental health problems

	Lifetime		Past Year	
	Rural (N=51)	Urban (N=49)	Rural (n=51)	Urban (n=49)
Depression	66.7	63.3	49.0	51.0
Anxiety	51.0	49.0	43.1	38.8
Hallucinations	15.7	12.2	9.8	10.2
Cognitive impairment	33.3	38.8	29.4	28.6
Trouble controlling violent behavior	33.3	34.7	9.8	20.4
Thoughts of suicide	29.4	36.7	9.8	6.1
Attempted suicide	35.3	36.7	3.9	2.0

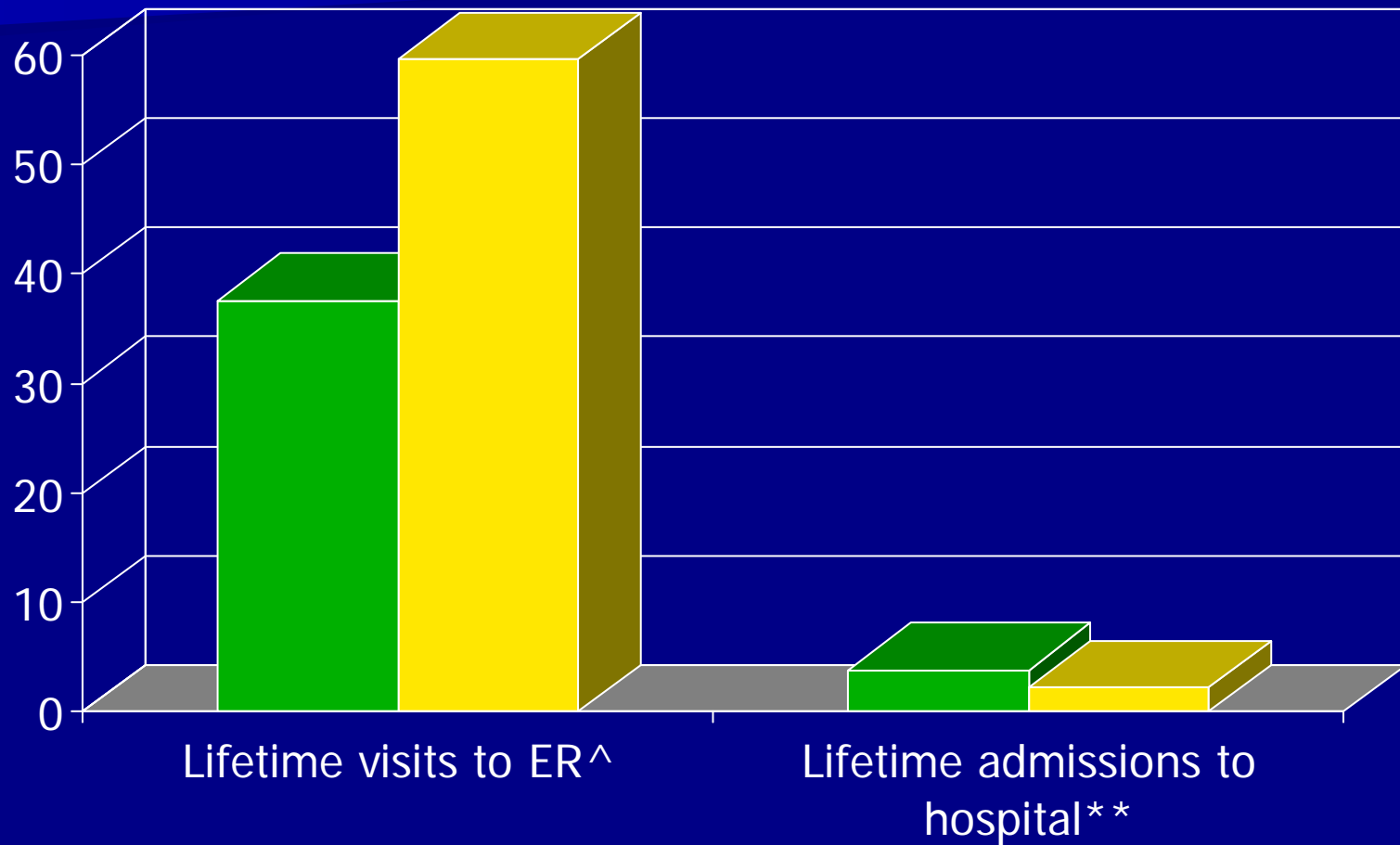
Percent reporting crack use



Note: *p < .05

■ Rural ■ Urban

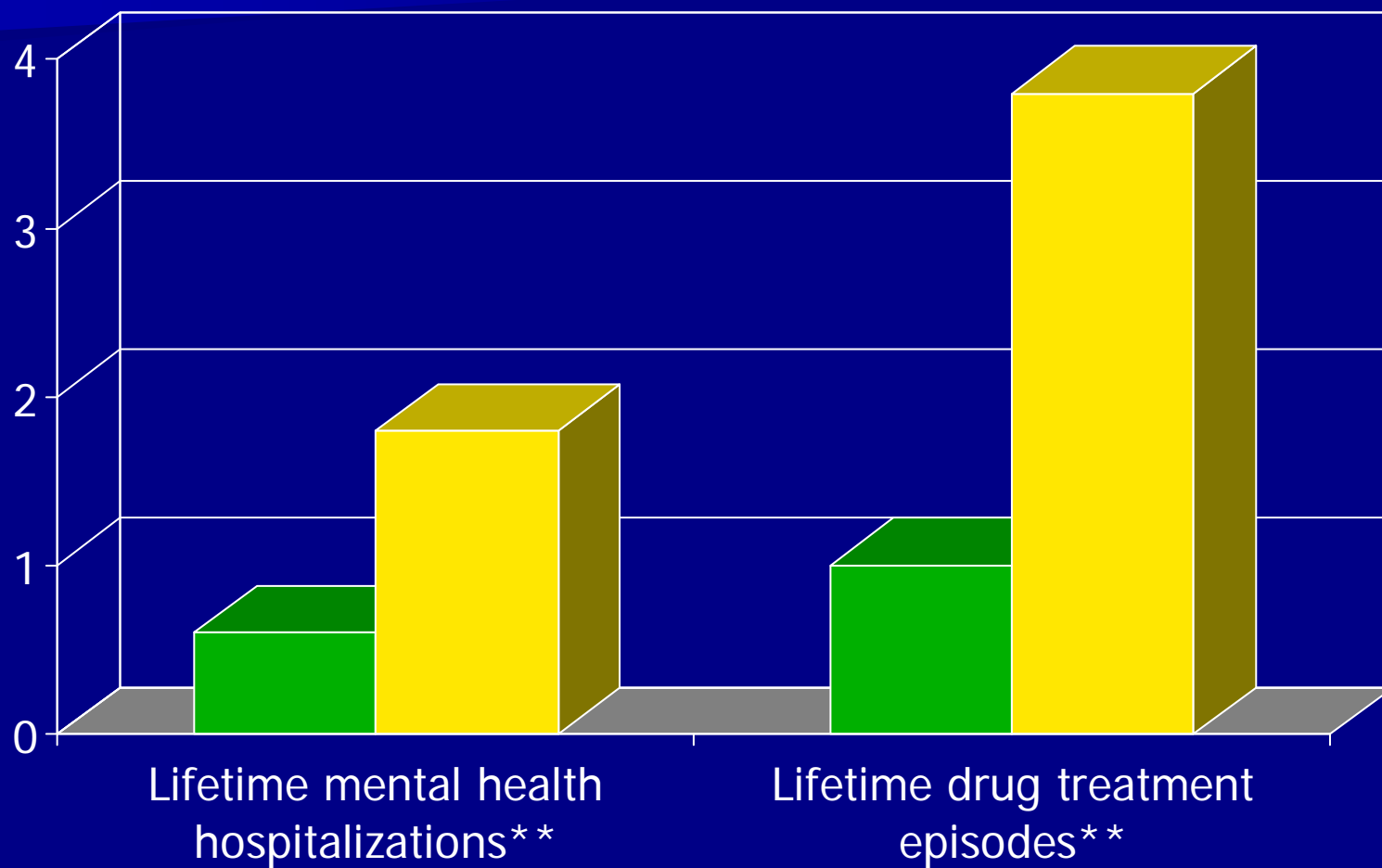
Health service utilization



Note: ** $p < .01$, [^] $p < .10$

■ Rural ■ Urban

Behavioral health service utilization



Note: **p<.01

■ Rural ■ Urban

Objective 2

To examine the relationship between the number of self-reported problems and service utilization among urban and rural incarcerated women.

Correlations between problems and service utilization

For urban women:

- Lifetime health problems positively associated with the number of lifetime emergency room visits.
- Lifetime mental health problems positively associated with psychological treatment in a hospital and as an outpatient.
- Number of years of regular drug use not related to the the number of times in substance abuse treatment.

Correlations between problems and service utilization

For rural women:

- Lifetime health problems not correlated with the use of health services.
- Lifetime mental health problems positively associated with the number of psychological treatment episodes in a hospital and as an outpatient.
- Years of regular substance use was positively associated with the number substance abuse treatment episodes.

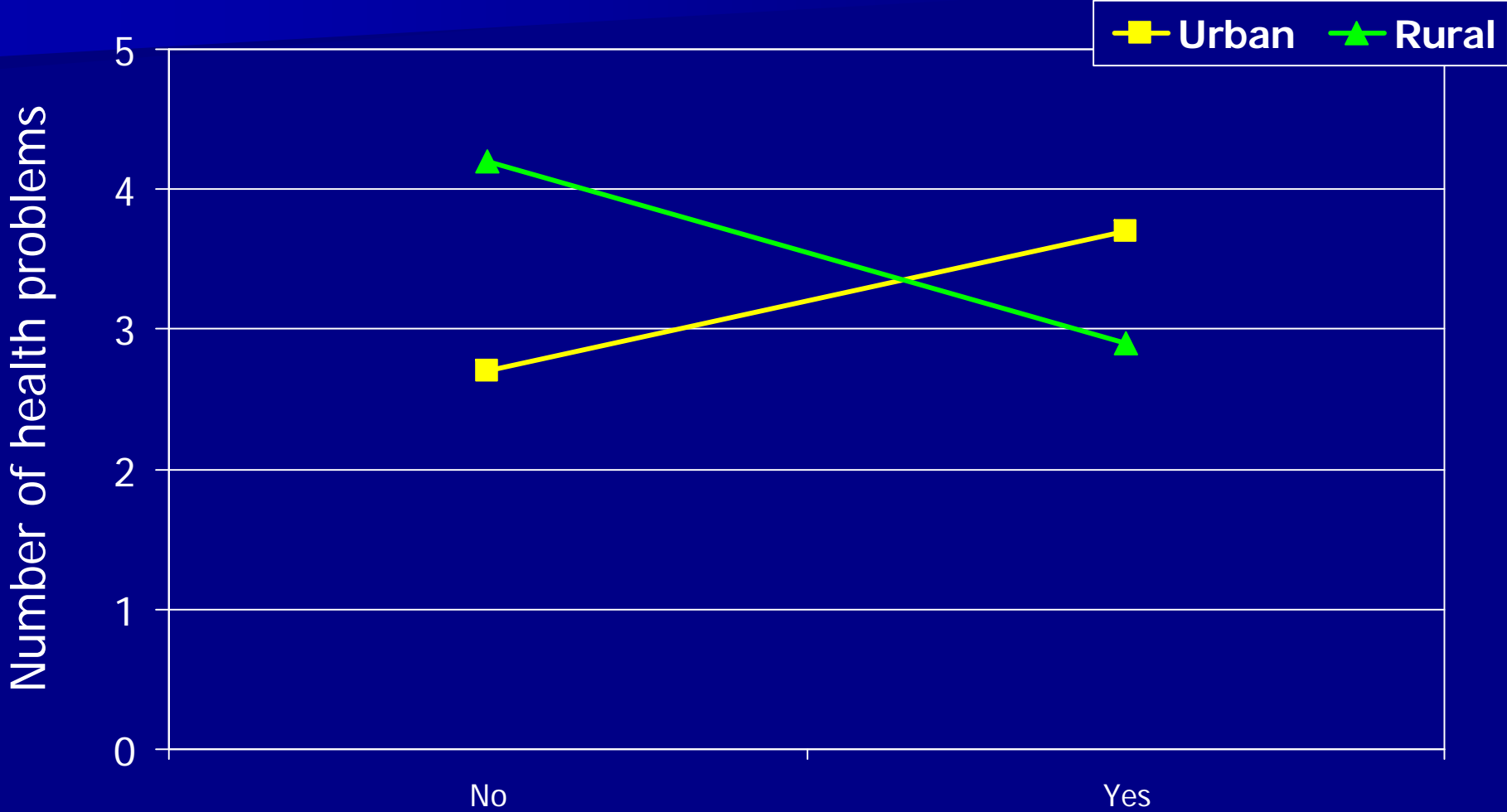
Objective 3

To examine self-reported health and mental health problems in prison as associated with pre-incarceration health-related problems and service utilization.

In-prison health and mental health

- In general, women who had more problems before prison also reported more health problems while incarcerated.
- A significant “urban/rural county of conviction” by “needed service utilization” interaction was found.

Needed services and health problems



Accessed needed services prior to incarceration

Conclusions

Conclusions

■ Urban women

- Higher percentage of STDs
- Higher percentage reporting lifetime and past year crack use
- More mental health and substance abuse treatment admissions

■ Rural women

- More hospital admissions

Conclusions

■ Urban women

- lifetime health problems positively associated with number of ER visits

■ Rural women

- substance use positively associated with number of treatment episodes

- Relationship between the number of mental health problems and mental health service utilization were similar for urban and rural women.

Conclusions

- In general, women with more health problems before prison also reported more health problems during their current incarceration.
- For rural women, accessing needed service utilization before prison led to significantly fewer reported health problems while in prison.

Limitations

- Rural classification
- Cross-sectional design
- The small sample size
- Generalizability

Future research

- Replicate findings in larger controlled trials.
- Corroborate self-reported health problems with medical records.
- Examine the relationship between health problems and service utilization among rural and urban women.
- Examine the relationship between service utilization and service access, service availability, and treatment need, as well as cultural and/or economic factors