Results from a NIAAA-NHCHC study: Women's alcohol, drug, health, mental health risks, implications for improving care









NATIONAL HEALTH CARE for the HOMELESS COUNCIL

Family Medicine and Community Health

## PRESENTERS

- Claudia Davidson, MPH, Research Associate, National Health Care for the Homeless Council, Nashville TN
- Christina Stehouwer, PA, MPH, Physician Assistant, Care Alliance Health Center, Cleveland OH
- Geraldine Kennedy, APRN, Nurse Manager, Mercy Medical Center, Springfield MA



Substance Abuse and Mental Health Needs

## **CARE ALLIANCE**

- FQHC
- HCH grantee
- Provides:
  - Medical and dental care
  - Mental Health and Behavioral health services
  - Podiatry
  - Physical therapy
  - Patient advocacy and linkage with social support services

Number of patients in 2015	Count
Total (all)	12,178
Total (women)	5,167
Homeless (women)	1,699



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## **MERCY MEDICAL CENTER**

- Health Care for the Homeless is a subcontractor for Springfield Health Services for the Homeless (FQHC)
- HCH grantee
- Provides
  - Primary care
  - Behavioral health
  - Dental
  - Social support services

Number of patients encounters in 2014	Count
Medical	7,398
Case management	2,379
Mental health	957
Homeless women	1,111



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## **WORKSHOP OVERVIEW**

- Background
- Study Aims
- Methodology
- Results
- Implications
- Next steps
- Discussion Questions





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## **BACKGROUND (NATIONAL DATA)**

- 88,000 people die from alcohol related causes annually
- Alcohol consumption- 4<sup>th</sup> leading preventable cause of mortality
- 16.3 million adults had an alcohol use disorder (AUD) in 2014
- Past month use of any illicit drugs (2014):
  - 22% of 18-25 years old
  - 15% of 26-34 years old
  - 7% of 36 years and over
- Past month use of marijuana (2014):
  - 20% of 18-25 years old
  - 13% of 26-34 years old
  - 5% of 36 years and over



# BACKGROUND (NATIONAL DATA-FEMALES)

- 5.7 million women had an AUD in 2014
- 2.5% women met diagnostic criteria for past year alcohol dependence
- I 5.8 million women have used illicit drugs in the past year in 2013



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- Women equal or surpass men in the number of consequences from drinking
  - E.g Death rates 50-100% higher among women alcoholics including deaths from suicides, alcoholrelated accidents, heart and stroke, overdose, and liver cirrhosis
  - E.g. Increased risk of falling victim to violence



- Compared to housed low-income women or the general pop. homeless women have high rates of:
  - Substance use
  - Mental and physical health comorbidities
- 1991 study found that:
  - 63% of homeless women abused alcohol
  - 26% abused drugs



- 2001 study comparing homeless women to housed low income women found:
  - the rate of binge drinking (17%) and drug use (17%) among low income women who are housed is lower compared to the rate of binge drinking (33%) and drug use (50%) among homeless women
- Substance use among homeless women is frequently accompanied by:
  - Mental health conditions and poor physical health
  - Victimization
  - High risk sex practices
  - Negatives impacts on children



## GAP

- Women experiencing homelessness or at risk of homelessness are at high risk of alcohol or drug use problems
- Women are less likely than men to enter substance abuse treatment
- More men than women represented in existing substance use studies
- Existing studies on women and substance use sampled from street and shelters
- Existing studies on women and substance use are 20 years old



## **STUDY AIMS**

- Describe prevalence and correlates of past year risky drinking and/or illegal drug use, including co-morbidity with health and mental health issues
- Describe access and barriers to treatment services for substance use problems
- Identify potentially innovative approaches to serve women with substance use issues seeking primary care in HCH clinics



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## METHODOLOGY



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## PARTNERSHIP

- Lead researchers are at University of Massachusetts Medical School
  - Carole Upshur, EdD, Professor, Dept of Family Medicine and Community Health
  - Linda Weinreb, MD, Professor, Dept of Family Medicine and Community Health
  - Kate Sullivan, BA, Project Coordinator, Dept of Family Medicine and Community Health
- National Health Care for the Homeless Council (NHCHC)
  - Darlene Jenkins, DrPH, Site PI, Dir. Research and Evaluation
  - Claudia Davidson, MPH, Project Coordinator/ Research Assoc.
  - Molly Meinbresse, MPH, Project Specialist
  - John Lozier, MSSW, Executive Director



## PRACTICE BASED RESEARCH NETWORK (PBRN)

- Groups of primary care clinicians and practices working together to:
  - answer community-based health care questions
  - translate research findings into practice

PBRNs engage clinicians in quality improvement activities + an evidence-based culture in primary care practice to improve the health of all Americans.



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### **PARTICIPATING SITES**

	# WOMEN	TARGET
SITE NAME	SEEN/YR	SAMPLE SIZE
Atlanta, GA	2073	96
Mercy Care		
Cleveland, OH	1545	72
Care Alliance Health Center		
Houston,TX	1179	55
Health Care for the Homeless		
Hyannis, MA	1260	59
Duffy Health Center		
Los Ángeles, CA	2384	111
JWCH Institute		
Manchester, NH	399	19
Health Care for the Homeless, Manchester		
Martinez, CA	645	30
Contra Costa County Health Services		
New York City, NY	2377	110
Care for the Homeless		
Omaha, NE	585	27
Charles Drew Health Center		
Phoenix, AZ	2802	130
Maricopa County Health Care for the Homeless		
Springfield, MA	893	41
Health Care for the Homeless Mercy Medical Center		

## **PARTICIPATING SITES**

- Sites are using staff, volunteers and students
- Each site has input to a site-specific data collection manual with details about that site
- All participating site staff or volunteers must sign a confidentiality agreement
- Sites have to commit to participating in bimonthly check in calls until data are all collected
- Sites need to answer questions about incomplete surveys or ambiguous answers—incomplete surveys need to be replaced by completed ones



## **RESOURCES AND INCENTIVES**

- Study manual adapted to site
- Fact sheet
- Survey copies
- Tracking sheets
- Postage paid return envelopes
- Funds for \$20 gift certificates (transportation, grocery store etc.) for number of participants at site (plus extras)
- Honorarium of additional \$20 per sample size for sites (range of \$380-\$2600)
- Training webinar
- Bimonthly check in phone calls for site liaisons



## **DATA COLLECTION**

• Self-report survey

• Random chart audit of clinical records



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## DATA COLLECTION (SURVEY)

- Proportional systematic random sampling strategy specific to each site- 750
- Pre-screening questions
  - Pregnancy status
  - Age 18-64
  - Literacy level
  - Verbal consent



## DATA COLLECTION (SURVEY)

- Self-report survey items:
  - Standard demographics including housing status (selfreport)
  - Substance abuse screening for both alcohol and drugs
    - Consequences of substance use
    - Barriers to substance abuse treatment
    - Motivation to obtain treatment



## DATA COLLECTION (SURVEY)

- Self-reported survey items
  - Mental health standard screenings
  - Other general health conditions
  - Acceptability and interest in addressing substance use and mental health issues with their HCH primary care provider
  - Suggestions for helpful services



## DATA COLLECTION (CHART AUDIT)

- Supplement prevalence data from surveys
- Similar sampling method as survey protocols
- No identifying information was pulled
- Unlinked from surveys
- Auditors used an abstraction form that would pull information from problem list



## DATA COLLECTION (CHART AUDIT)

- Chart audit items:
  - Standard demographic information including housing status
  - Current problem list or from ICD-9 codes of substance use and mental health issues



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### RESULTS



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### DEMOGRAPHICS

• 780 completed and partially completed surveys

Site	Target sample	# of surveys returned	Percent
Atlanta, GA-Mercy Care	96	97	101%
Cleveland, OH-Care Alliance	72	75	104%
Houston, TX-Health Care for the Homeless	55	57	104%
Hyannis, MA-Duffy Health Center	59	63	107%
Los Angeles, CA-JWCH Institute	111	113	102%
Manchester, NH-Health Care for the Homeless	19	20	105%
Martinez, CA-Contra Costa County Health Services	30	30	100%
New York City, NY-Care for the Homeless	110	120	109%
Omaha, NE-Charles Drew Health Center	27	30	111%
Phoenix, AZ-Maricopa County Health Care for the Homeless	130	134	103%
Springfield, MA-Health Care for the Homeless Mercy Health Center	41	41	100%



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## DEMOGRAPHICS

- Mean age: 43.5
- Ethnicity: 42% Black, 31% White, 18% Latina, 7% multiple or other, and 2% Native American
- Have children w/ them: 17%
- Education: 36% some post high school education, 31% high school only, and 29% < high school</li>
- Insurance status: 55% Medicaid, 7% Medicare, 3% private, and 3% other



## DEMOGRAPHICS

- Homelessness status:
  - Slept last night: 63% shelter, 18% own apt/home, 11% with family/friends, and 4% on the streets
  - Total time homeless since 18: 3.1 times
  - Total time homeless since 18: 20% < 3 months,</li>
    24% up to one year, 24% 1-4 years, 14% 5 or more years



## **HEALTH AND RISK BEHAVIORS**

Variable	Mean or Percent
Total number of health conditions checked	2.6
Current smoker	54.5%
PROMIS Global Health Score (50 <sup>th</sup>	39.4
percentile is average)	
PROMIS Mental Health Score (50 <sup>th</sup>	44.8
percentile is average)	
Experienced physical violence (ever)	63%
Sex in exchange for money/drugs (ever)	31.4%
Experienced sexual assault (ever)	49.4%
Exposed to HIV/AIDS	5.4%
# sexual partners last 12 months	1.8
Condom use last 12 months (never)	47%



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## **MENTAL HEALTH**

Mental health issue	Percent
Depression (significant)	43%
Depression (mild)	26%
Bipolar disorder	35%
Psychosis	24%
PTSD	45%



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## SUBSTANCE USE (PAST YEAR)

#### ALCOHOL

- 44% no drinking
- 21% risky drinking
- 19% abuse or dependence
- 16% currently receiving services
- 41% high motivation to change drinking

#### DRUGS

- Mean # illegal drugs: 1.4
- Types of drugs
  - 31% marijuana
  - 22% pain killers
  - 17% tranquilizers
  - 16% Sedatives
  - 15% cocaine
  - 13% stimulants
  - 10% heroin
- 25% abuse or dependence
- 60% high motivation to change drug use



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#### **PREDICTORS OF ABUSE/DEPENDECE**

#### ALCOHOL

- # times homeless since 18
- Years homeless
- Smoking
- Depression
- PTSD
- Bipolar
- Experienced physical violence-from family/known person
- Experienced sexual abuse-family/known person
- Sex in exchange for money

#### DRUGS

- Younger age
- Shelter residence vs other
- More times homeless since 18
- Years homeless
- Smoking
- Depression
- PTSD
- Psychosis
- Bipolar
- Experienced physical violence-from family/known person
- Experienced sexual abuse-family/known person
- Sex in exchange for money
- # sexual partners
- Less condom use



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#### **COMPARISON OF SURVEY AND CHART AUDITS**

\*p=<0.05, \*\*p=<0.001

	μ=<0.03,	p=<0.001	
Variable	Self-Report Rate	Chart Audit Rate	
	TOTAL	TOTAL % (N)	
	% (N)	N=748	
	N=772		
Alcohol use problems			
Current alcohol abuse	6.3% (49)	5.1% (38)	
Current alcohol dependence**	12.2% (94)	4.3% (32)	
Past alcohol abuse or dependence**	44.8% (346)	3.5% (26)	
Drug use problems			
Current drug abuse*	5.3% (41)	7.9% (59)	
Current drug dependence**	18.8% (145)	9.6% (72)	
Past drug abuse or dependence**	43.9% (339)	4.3% (32)	
Mental health issues-screen positive			
Depression**	69.0% (513)	24.6% (184)	
PTSD**	45.0% (334)	6.4% (48)	
Psychosis**	22.9% (170)	6.6% (49)	
Bipolar disorder**	32.3% (240)	11.2% (84)	
Any anxiety/panic	n/a	6.4% (48)	

## SERVICES USED- SUBSTANCE USE TREAMENT

Service	Risky drinking <sup>1</sup> N=32	Alcohol abuse <sup>1</sup> N=15	Alcohol dependence <sup>1</sup> N=63	Any drugs used <sup>2</sup> N=38	Drug abuse <sup>2</sup> N=14	Drug depende nce <sup>2</sup> N=107
Detox	9 (28.1%)	4 (26.7%);	33 (52.4%)	7 (18.4%)	1 (7.1%)	38 (35.5%)
Counseling	12 (37.5%)	6 (40%)	32 (50.8%)	23 (60.5%)	9 (64.3%)	56 (52.3%)
Sober Housing	7 (21.9%)	3(20%)	19 (30.2%)	14 (36.8%)	2 (14.3%)	41 (38.3%)
AA or CA/NA	17 (53.1%)	11 (73.3%)	40 (63.5%)	19 (50.0%)	6 (42.9%)	63 (58.9%)
Medication	6 (18.8%)	3 (20%)	23 (36.5%)	17 (44.7%)	1 (7.1%)	37 (34.6%)
Other	4 (12.5%)	2 (13.3%)	3 (4.8%)	4 (10.5%)	2 (14.3%)	13 (12.1%)

<sup>1</sup>N= 110 women total who reported any alcohol use problem. <sup>2</sup> N=159 women total who reported any illegal drug use problem.



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#### BARRIERS TO ALCOHOL AND DRUG USE SERVICES

- Waitlist too long
- Costs
- Too busy
- No program
- Help not effective
- No programs/children
- Feeling depressed

- Don't know where to find tx
- No one to take children
- Programs don't understand needs
- Hours for tx not convenient
- Facility too far



#### MOTIVATION TO CHANGE SUBSTANCE USE

- 41% highly motivated to change drinking of those who currently drink (n=310)
- 60% highly motivated to change drug use (n=324)



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#### PREFERENCES FOR RECEIVING HELP

Variable	Percent
Asked by program if needed help for alcohol use	35%
Asked by program if needed help for drug use	37%
Asked by program if needed help for mental health	58%
Willingness to discuss alcohol use	45% very willing 12% somewhat willing 19% not willing
Willingness to discuss drug use	46% very willing 12% somewhat willing 19.5% not willing
Willingness to discuss mental health concerns	58% very willing 14% somewhat willing 13% not willing



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# SUGGESTIONS FOR BEHAVIORAL HEALTH SERVICES

- Mental Health Counseling
- Supports groups
- Housing
- Substance abuse treatment referrals
- Medication for mental health issues
- Medical and mental health services for children

- Complementary and alternative medicine options
- Domestic violence assistance
- Exercise classes
- Oral and vision care
- Employment assistance
- Current services satisfactory



#### IMPLICATIONS



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#### **FINDINGS SUMMARY**

- High rates of:
  - Substance abuse- smoking in particular
  - Co-occurring mental health illness
  - Having experienced physical and sexual violence
  - High sexual risk behaviors
- High motivation to change substance use behaviors of those who were current users
- Most participants willing to discuss substance use issues with providers
- Homeless women face some unique challenges in accessing behavioral health services
- Homeless women have unique needs for behavioral health and social support services
- Huge discrepancies between self-reported and chart audit rates of substance use and mental health problems



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#### **PRACTICE IMPLICATIONS**

- Need for comprehensive behavioral health assessment
- Improvements needed in the documentation of substance and mental health issues
- Need to move away from substance use treatment models that are based on male gender norms
- Need for additional or increased access to services for issues often left out like smoking cessation programs



## **STRENGTHS**

- Captures women in primary care setting
- Captures women who are doubled up or in other situations
- Data comparative to national data

- Health centers had insight into current client needs in regards to behavioral health services
- Identified approaches to serve women with substance use issues



## LIMITATIONS

- Not generalizable
- Limitations of length of survey
  - Lifetime drug or alcohol use
  - Temporal histories of development of alcohol., drug, and mental health problems



#### **CHALLENGES FOR PARTICIPANTS**

- Risk of overburdening participants
- Attempt to complete survey more than once
- Emotional response to survey
- Withholding information out of fear of perceived consequences



### **POSITIVES FOR PARTICIPANTS**

- Liked participating and contributing to greater knowledge to help others
- Liked telling their stories
- Liked knowing the someone cares
- Gift cards
- Being able to self-identify substance abuse and mental health needs for the first time



#### **CHALLENGES FOR SITES**

- Coordination and preparation
- Long timeline to prepare and identify resources
- Turnover of staff and volunteer data collectors
- Staff capacity
- Understanding of research protocol sometimes difficult
- Space in which to do surveys difficulties
- Low volume settings so random sampling was difficult



#### **POSITIVES FOR SITES**

- Immediate connections to services
- Feeling of making a difference in client's day
- Opportunity to learn about participant's needs
- Will learn suggestions on how to address substance use and mental health issues
- Increased attention to substance use and mental health issues



#### POSITIVES FOR SITES

- Working with local community college was a plus
- Great experience for volunteers

**CCCC Nursing Students & Faculty**: Nanette Abeid, Joy Haagsma, Laura Scheel, Katsiaryna Tomka, & Alsu Bryant.



**CCCC Nursing Student Honors Project** 





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#### **NEXT STEPS**

- Model building for predictors of abuse/dependence
- Extent to which PCPs ask about substance use
- Comparison of chart audit data to self-report frequencies of alcohol/drug and mental health problems
- Recommendations to improve primary care management of alcohol/drug problems among women using HCH primary care sites



# **QUESTIONS?**



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## **DISCUSSION QUESTIONS**

- Are any of the study results surprising to you? How do you think your clinic/your female patient population compares to the clinics/population in this study?
- As clinicians, what are some barriers that you encounter in addressing your female patient's substance use and mental health needs? How might these barrier be overcome?
- What are some of the programs and processes your clinic has implemented to screen for and address substance use and mental health needs? Do you feel these programs and processes have been effective?
- Has your clinical staff received any formal training in discussing substance use and mental health concerns with patients?



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