



Barriers to mental health care, anxiety and depression, and HIV care engagement among people with HIV in rural Florida

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Background

- Untreated mental health symptoms are associated with poor HIV outcomes
- Individuals in the South have increased incidence and prevalence of HIV and also worse HIV outcomes
- People with HIV (PWH) in the rural South may face unique barriers to mental health care that may impact HIV outcomes

Gonzalez et al. JAIDS. 2011

Centers for Disease Control and Prevention. HIV Surveillance Report. 2019

Gant et al. Ann Epidemiol. 2022

Remien et al. AIDS. 2019

Ref et al. AIDS Care. 2006

Heckman et al. AIDS Care. 1998



Study objectives

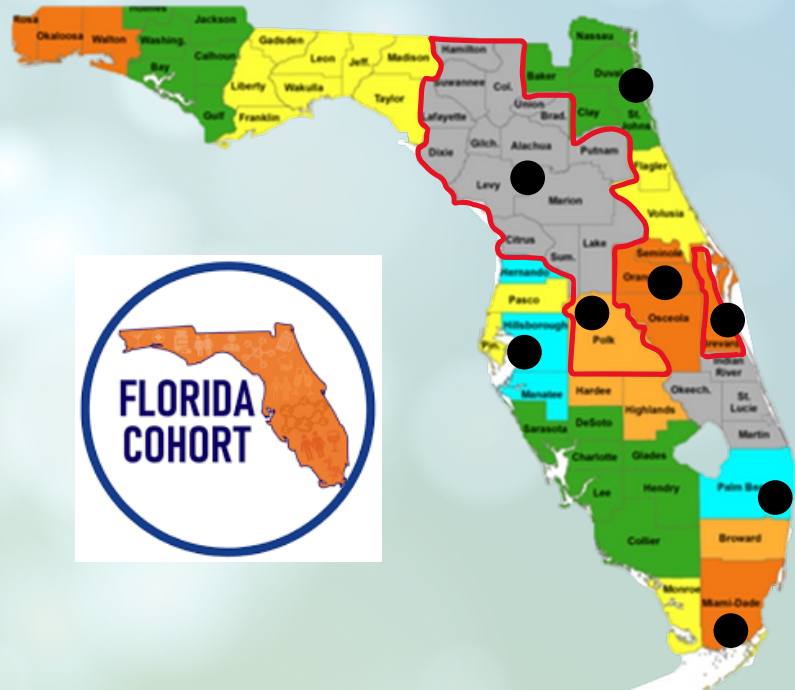
In this study, we sought to:

- 1) Determine the prevalence of unmet mental health care needs, mental health symptoms and missed HIV care visits among a sample of PWH from rural and urban Florida
- 2) Determine associations between unmet mental health care needs and HIV outcomes
- 3) Describe barriers to mental health care among a sample of PWH from rural and urban Florida



Methods

- The Florida Cohort study enrolled a convenience sample of PWH, ≥ 18 years, from community, public health, and academic clinics across Florida between March 2022 – January 2023
- Questionnaires include items about sociodemographic, clinical and behavioral characteristics
- Rural areas were defined by county of enrollment in north and central Florida
- Urban areas were defined by county of enrollment in Jacksonville, Tampa, Orlando, Palm Beach, and Miami





Methods

- Outcomes:
 - **Unmet mental health care need:** not receiving mental health care despite wanting care in lifetime or in the past year
 - **Moderate-severe depression or anxiety:** PHQ-8 or GAD-7 score ≥ 10
 - **Missed HIV care visit:** self report of missing ≥ 1 HIV appointment in last year
 - **ART nonadherence:** self report of missing ≥ 2 doses of ART in the last 30 days
 - **Viral non-suppression:** self-reported detectable viral load in last year
- Simple logistic regression models assessed associations between:
 - Rural residence and experiencing an unmet mental health care need; moderate-severe depression or anxiety; and HIV outcomes
 - Unmet mental health care needs and HIV outcomes
- Additionally, participants who experienced an unmet mental health care need were asked what barriers prevented receipt of care



Results – Sample socio-demographic characteristics by rural and urban status

Characteristic	Total, n=312	Rural, n=216	Urban, n=96
Age in years, median (IQR)	54 (42-60)	52 (39-59)	57 (49-62)
Male, n (%)	179 (57)	123 (57)	56 (58)
Black, n (%)	150 (49)	83 (39)	67 (71)
White, n (%)	131 (43)	107 (51)	24 (25)
Hispanic, n (%)	55 (18)	41 (19)	14 (15)
Annual household income < \$20,000, n (%)	181 (58)	110 (51)	71 (74)
Education level: high school or less, n (%)	160 (51)	109 (50)	51 (53)
Currently unemployed or disabled, n (%)	213 (68)	131 (61)	82 (85)



Results – Mental health and HIV characteristics by rural and urban status

Characteristic	Total, n=312	Rural, n=216	Urban, n=96
Moderate-severe depression symptoms, n (%)	76 (24)	60 (28)	16 (17)
Moderate-severe anxiety symptoms, n (%)	66 (21)	54 (25)	12 (13)
Current use of medications for depression, n (%)	79 (25)	49 (23)	30 (31)
Current receipt of counseling for depression, n (%)	66 (21)	36 (17)	30 (31)
Current use of medications for anxiety, n (%)	72 (23)	49 (23)	23 (24)
Current receipt of counseling for anxiety, n (%)	55 (17)	32 (14)	23 (24)
Unmet mental health care need, lifetime, n (%)	96 (31)	76 (35)	20 (21)
Unmet mental health care need, last year, n (%)	62 (20)	48 (22)	14 (15)
Missed HIV care visit, n (%)	58 (19)	45 (21)	13 (14)
ART adherence < 95%, n (%)	74 (24)	51 (24)	23 (24)
Detectable viral load, n (%)	61 (20)	43 (20)	18 (19)



Results – Associations between rurality, unmet mental health care needs, mental health symptoms and missed HIV care visits

	Rural, n (%), n=216	Urban, n (%), n=96	Odds ratio (95% CI)
Unmet mental health need (lifetime)	76 (35)	20 (21)	2.1 (1.2 – 3.6)
Unmet mental health need (last year)	48 (22)	14 (15)	1.7 (0.9 – 3.2)
Moderate-severe depression/anxiety	71 (33)	20 (21)	1.9 (1.1 – 3.3)
Missed HIV care visit	45 (21)	13 (14)	1.7 (0.9 – 3.3)



Results – Associations between unmet mental health care needs and HIV outcomes

	Unmet mental health care need in last 12 months		
	Yes, n (%), n = 62	No, n (%), n = 250	Odds ratio (95% CI)
Missed HIV care visit	22 (35)	36 (14)	3.3 (1.7 – 6.1)
ART nonadherence	21 (34)	53 (21)	1.9 (1.0 – 3.4)
Viral non-suppression	21 (34)	40 (16)	2.6 (1.4 – 4.9)



Results – Predominant mental health care barriers by rural and urban status

<i>Why didn't you get mental health care?</i>	Total, n=95	Rural, n=75	Urban, n=20
Didn't know where to go, n (%)	35 (37)	28 (37)	7 (35)
Didn't feel comfortable talking to a provider about my mental health, n (%)	31 (33)	24 (32)	7 (35)
Didn't want to be prescribed medications for my mental health, n (%)	21 (22)	17 (23)	4 (20)
Not covered by my insurance or cost was too high, n (%)	20 (21)	17 (23)	3 (15)
No mental health providers available, n (%)	17 (18)	17 (23)	0 (0)
My medical provider didn't refer me to a mental health provider, n (%)	15 (16)	12 (16)	3 (15)
No transportation, n (%)	13 (14)	9 (12)	4 (20)



Results – Open ended responses from rural participants reporting barriers to mental health care

I went to a clinic in Lady Lake and the only opening they had for a mental health counselor was in Ocala [45-minute drive] and the next available appointment wasn't until next year.

I felt abandoned and slipped through the cracks from my therapist. The clinic just stopped scheduling me after 3 visits.

I've been disappointed in the past with mental health providers. I saw 2 different providers and they were less interested in my problems and more interested in prescribing medication.



Limitations

- Rural/urban categorization and definitions
- Self-reported data
- Bivariate analysis with simple logistic regression
- Relatively small sample size
- Generalizability



Conclusions

- A sample of PWH from rural areas in Florida were more likely than those in urban areas to experience unmet mental health care needs
- Experiencing unmet mental health care needs was associated with worse mental health and HIV outcomes
- Barriers to mental health care in rural areas included barriers at the individual, clinic and health system level
- Interventions addressing these barriers are needed

Thank you!

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