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HIV Status and Psychiatric Diagnoses Among Transgender and Gender Diverse Individuals

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BACKGROUND

- **Transgender and gender diverse (TGD) people with HIV** may experience a high prevalence of psychiatric diagnoses due to the convergence of two marginalized social identities, HIV infection and gender minority.
- This study aimed to examine the impact of **HIV status** on **psychiatric diagnoses** among **TGD individuals**.

METHODS

- Data source: Multi-sourced controlled tier data, version 7, from the **All of Us (AoU) research program**, which included individuals enrolled in AoU from May 31, 2017, to July 1, 2022.
- A **comprehensive computational phenotyping algorithm** incorporating both electronic health records (EHRs) and survey data was used to identify suspected TGD participants in AoU.
- Then, **four broad clusters of psychiatric disorders**, including “Any mood disorder,” “Any anxiety disorder,” “Any substance use disorder,” and “Any stress-related disorder,” were identified based on ICD codes from EHR data.
- **Multinomial logistic regression models** were used to explore the association of HIV status with the number of psychiatric diagnosis clusters when adjusting for some social determinants of health characteristics.

RESULTS

- **4,781** TGD individuals identified
- **1,344 (28.11%)** had a diagnosis in at least one cluster of psychiatric disorders, and among them, **458 (34.08%)** had one cluster, **416 (30.95%)** had two clusters, **306 (22.77%)** had three clusters, and **164 (12.20%)** had four clusters.
- **195** out of 4,781 TGD individuals (4.08%) were with HIV
- **Significant correlations** were observed across four clusters of disorders, with the values of correlation coefficients ranging from 0.59 to 0.91.

Comprehensive healthcare support that integrates HIV treatment and psychotherapy is needed for transgender and gender-diverse people with HIV

RESULTS

- TGD individuals with HIV had **higher odds of having diagnoses** in at least two clusters (Adjusted Odds Ratio [aOR] = **4.50**, 95%CI: 3.06~6.61) or one cluster (aOR = **2.44**, 95%CI: 1.45~4.11) compared to TGD individuals without HIV.

CONCLUSIONS

- The HIV epidemic continues to negatively affect the mental health of TGD people.
- The significant co-existence among different types of psychiatric disorders with **substance use disorders** indicates that patients who suffer from psychiatric disease have an increased risk of engagement in high-risk behaviors, limiting their accessibility to appropriate psychiatric care.
- TGD people who were **Hispanic or non-Hispanic Black**, **sexual minority**, **not covered by health insurance**, and **higher annual income** were less likely to have records of the four types of psychiatric disorders.
- It’s imperative to **integrate mental health needs into HIV care services** to address the poor mental health of TGD people with diagnosed HIV.
- In addition, future research could draw on the vast lifestyle, genomic, and other social data to explore the **causes of consequences of different psychiatric conditions among TGD people** to improve their mental health and overall well-being.

RESULTS

Table 1 Association between socio-demographic characteristics and the number of psychiatric diagnoses

Characteristics	The number of psychiatric diagnoses	
	>=2 vs. None	1 vs. None
	Adjusted OR (95%CI)	Adjusted OR (95%CI)
HIV status		
Negative	Ref	Ref
Positive	4.50*** (3.06, 6.61)	2.44*** (1.45, 4.11)
Race/Ethnicity		
Non-Hispanic White	Ref	Ref
Non-Hispanic Black	0.60*** (0.48, 0.75)	1.06 (0.76, 1.46)
Hispanic	0.51*** (0.38, 0.68)	0.75 (0.53, 1.06)
Sexual orientation		
Heterosexual	Ref	Ref
Sexual minority	0.78** (0.63, 0.96)	0.56*** (0.43, 0.72)
Insurance coverage		
Yes	Ref	Ref
No	0.49*** (0.33, 0.72)	0.34*** (0.19, 0.60)
Unknown	0.68 (0.40, 1.17)	1.16 (0.68, 1.99)
Income		
< 25,000	Ref	Ref
25,000-50,000	0.64*** (0.51, 0.82)	0.83 (0.61, 1.15)
> 50,000	0.47*** (0.37, 0.59)	0.67** (0.49, 0.91)
Unknown	0.75** (0.58, 0.99)	0.91 (0.66, 1.27)

Notes: only selected key variables were displayed in the table due to limited space; Other controlled variables include sex at birth, age at enrollment, education attainment, and housing security.

ADDITIONAL KEY INFORMATION

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Acknowledgments: We gratefully acknowledge All of Us participants for their contributions, without whom this research would not have been possible. We also thank the National Institute of Health's All of Us Research Program for making available the participant and cohort data examined in this study.

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