Methods

• Study population: DC Cohort, an observational clinical cohort of PLWH followed from Jan 2011-Mar 2018 at 14 sites in Washington, DC
• Inclusion criteria: ≥18 years old; ≥6 months total follow-up in the DC Cohort; and received non-HIV-related primary care at HIV care site
• Psychiatric disorders: mood, anxiety, stress-trauma-related, and psychotic disorders defined using ICD-9 and ICD-10 diagnosis codes
• Pharmacologic psychiatric treatment: defined as drug prescriptions for antidepressants, antipsychotics, anticonvulsants, anxiolytics, and beta blockers that are known to treat underlying psychiatric disorders or associated symptoms
• Time with unsuppressed HIV VL: estimated proportion of total days spent with VL ≥200 copies/mL, based on log-transformed values of all available consecutive VL pairs
• Statistical analysis: assessed associations between time-updated psychiatric diagnoses/ prescriptions and time with VL ≥200 copies/mL, controlled for treated and untreated PLWH within each disorder type
• Multivariable Poison regression with generalized estimating equations

Results

Summary of Results:

• Among 5,904 PLWH, 45% had a diagnosed psychiatric disorder, including 38% with a mood disorder, 18% with an anxiety or stress-trauma-related disorder, and 4% with a psychotic disorder
• The proportion of PLWH with each condition who were prescribed pharmacologic treatment was 49% for mood disorders, 62% for anxiety and stress-trauma-related disorders, and 51% for psychotic disorders
• PLWH with untreated major depressive disorder, untreated other/unspecified depressive disorder, untreated bipolar disorder, and treated bipolar disorder spent more time with VL ≥200 copies/mL, compared with PLWH without a mood or psychotic disorder
• PLWH with a treated anxiety disorder spent less time with VL ≥200 copies/mL, than PLWH without an anxiety disorder
• Associations were attenuated and non-significant for treated depressive disorders and untreated anxiety disorders

Conclusions

• Many PLWH with psychiatric disorders lacked documented evidence of pharmacologic psychiatric treatment
• PLWH with mood disorders spent more time, while PLWH with anxiety disorders spent less time, with VL ≥200 copies/mL, but likelihood of viral suppression was greater when pharmacologic treatment was prescribed
• Limitations: validity of data points depends on accuracy of information in medical records; disorders defined using diagnosis codes; treatment defined using medication prescriptions; did not distinguish between classes of medications; and statistical power varied by psychiatric disorder
• The appropriate diagnosis and treatment of psychiatric disorders, particularly for depressive and bipolar disorders, may be important for promoting sustained viral suppression among PLWH

Study Cohort Characteristics (n=5,904) :

- Median age 51 (IQR: 40-60)
- 70% cisgender male; 27% cisgender female; 3% transgender
- 82% non-Hispanic Black; 10% non-Hispanic white; 6% Hispanic; 2% other race/ethnicity
- 11% with unstable housing; 2% homeless
- 81% public insurance; 16% private insurance; 3% no known insurance
- 36% with alcohol use disorder
- 17% with other substance use disorders
- 16% HIV VL ≥200 copies/mL
- 92% prescribed combination ART

Contact:

Matthew Levy, PhD
mattelevy@gwu.edu

Acknowledgements:

This work was supported by the National Institute of Allergy and Infectious Diseases at the National Institutes of Health (grant NIAID AI137551) and NHLBI (grant HL126726). Data on this poster were collected by the DC Cohort investigators and research staff located at: Cerner Corporation (Tina Harris, Dena Luth, Anick Hebou); National Institutes of Health (Carl Dieffenbach, Henry Masur); Providence Hospital (Jose Fuentes, Glenda Buttle); The George Washington University (Kathryn Gershow, Kevin Moran, Robert Federspiel); Whitman-Walker Health (Gebeyehu Teferi); Washington Hospital Center (Maria Elena Ruiz); and MetroHealth (Annick Hebou); National Institutes of Health (Carl Dieffenbach, Henry Masur); Providence Hospital (Jose Fuentes, Glenda Buttle); The George Washington University (Kathryn Gershow, Kevin Moran, Robert Federspiel); Whitman-Walker Health (Gebeyehu Teferi); Washington Hospital Center (Maria Elena Ruiz).