This abstract has been withdrawn at the author's request.

583. Demographic Factors and Clinical Outcomes Associated with Mental Health Medication Use in People Living with HIV

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Background. Mental health (MH) conditions and pain are common among people living with HIV (PLWH). An understanding of factors associated with prescriptions for these conditions and clinical impact of the prescriptions may improve care of MH disorders in PLWH.

Methods. The use of mental health/pain-related medications was examined among PLWH within the AIDS Clinical Trials Group A5322 (HAILO) study. Use of medications (any use and class) was compared by sex. Multivariable logistic models estimated the association between MH medications (any/none) with (i) insurance status and race/ethnicity and (ii) baseline and incident slow gait (>1 second/m) and neurocognitive impairment (NCI) over 4 years.

Results. Of 1035 participants, the median age was 51. 81% were men, 30% black, and 20% Hispanic. Similar numbers of men (34%) and women (38%) were on MH medications ($P = 0.19$).Women were more likely to be prescribed opioids (12% vs. 5%; $P < 0.001$); other classes were similar. In multivariable models, MH-medicated PLWH were more likely to have Medicare (odds ratio [OR] 2.50, 95% CI 1.50–4.16, $P < 0.001$) or public insurance (1.85; 1.23–2.78, $P = 0.003$) vs. no/unknown insurance; and less likely to be Hispanic vs. white (0.48; 0.33–0.69; $P < 0.001$). MH-medicated PLWH had greater odds of baseline slow gait (1.80; 1.34–2.40; $P < 0.001$). The sex-specific ORs for NCI were qualitatively different (men: 1.70; 1.09–2.66; women: 0.96; 0.43–2.18); but this difference was not significant in the multivariable model (P interaction = 0.227). There was an increased risk of incident slow gait among MH-medicated men but not women (hazard ratio 1.74; 1.22–2.48 vs. 0.76; 0.38–1.52, P interaction = 0.038), and a trend toward increased risk of incident NCI (1.76; 0.91, 3.39, $P = 0.09$) for both sexes.

Conclusion. Our results highlight socioeconomic and ethnic differences in prescription of MH medications. The higher proportion of opiate prescriptions among women needs confirmation and should be a priority for intervention. The greater risk of baseline NCI and incident slow gait among men may be the result of differences in toxicity, drug interactions, or persistent mental health symptoms; further investigation is needed to optimize outcomes in PLWH and prescription of mental health medications.

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584. Investigation of the Association Between Neurocognitive Function and Depression in HIV Infection

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Background. In the era of antiretroviral therapy, HIV-infected patients are living longer generating life expectancies similar to HIV uninfected individuals. Depression has been described as the most common neuropsychiatric complication among people living with HIV. Our primary aim was to examine any association between neurocognitive function and depression among individuals with HIV infection. Our secondary aim was to investigate any association between heightened inflammation and neurocognitive function and depression in HIV infection.

Methods. We performed a cross-sectional study among patients living with HIV who receive care at the Drexel University Partnership Comprehensive Care Practice and who participate in the Drexel Medicine CNS AIDS Research and Eradication Study (CARES) Cohort Study. We included individuals who underwent a comprehensive neurocognitive assessment between September 1, 2013 and June 1, 2015. Chart reviews were conducted for all eligible participants to elicit diagnosis of depression based on ICD10 codes, presence of antidepressant medication and for engagement in psychiatric care Subject characteristics were described overall and by depression status. Categorical variables were evaluated using Fisher's exact tests and continuous variables were described using Mann–Whitney *U* tests.

Results. One hundred ninety-seven participants with available neurocognitive evaluation were included, 64% male, mean age of 53 ± 7.8 and 88% African American. Overall 23% of patients had a diagnosis of depression based on medication, diagnosis code, and engagement in psychiatric care. We did not find an association between eurocognitive score and diagnosis of depression. Among individuals with available lab values for interleukin (IL)-6 and C-reactive protein (CRP) we did not find an association between level of inflammation and depression.

Conclusion. As individuals with HIV are living longer, we are seeing a higher prevalence of comorbidities such as depression, but it is not clear what role HIV itself plays in comparison to traditional risk factors, and this needs further evaluation. In our study we did not find an association between neurocognitive impairment and depression in people living with HIV infection.

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585. Hospitalization Rates and Diagnoses Vary by Age Group Among Persons with HIV (PWH) in 2014–2015

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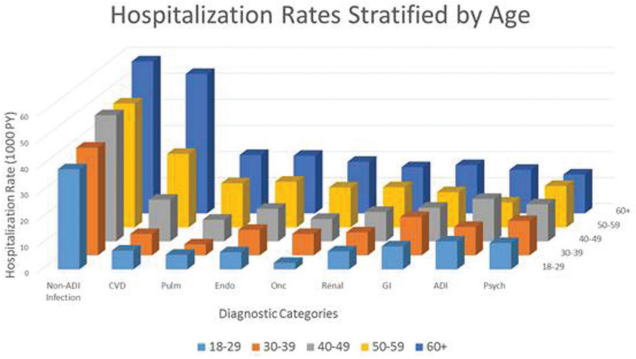
Background. Effective antiretroviral therapy has increased survival in persons with HIV (PWH). Over 45% of PWH are now over 50 years old, and comorbidities of aging are becoming more prevalent. The objective of this study was to evaluate hospitalization rates and causes for hospitalization among PWH in longitudinal HIV care by age.

Methods. Hospitalization rates and diagnoses were determined in PWH receiving longitudinal care at 13 sites in the HIV Research Network between 2014 and 2015. Using AHRQ Clinical Classification Software, we divided inpatient ICD9 discharge diagnoses into diagnostic categories. Multivariate negative binomial regression was performed to assess for factors associated with overall hospitalization and for each diagnostic category.

Results. The sample included 20,608 patients, 73% male, 46% black, 21% Hispanic, 47% MSM, and 12% IDU. Median age was 48 yo [range 18–89] of which 32% were 50–59 yo, 12% were ≥ 60 yo. 75% had CD4 ≥ 350, 81% had HIV-1 RNA < 50 copies. 20% had private insurance, 36% Medicaid, 10% Medicare, and 5% were uninsured. All cause hospitalization rate for 2014–2015 was 201/1000 person-years (PY). Non-AIDS defining infection (non-ADI) was the leading cause for admission (47/1,000 PY), followed by cardiovascular disease (CVD) (22/1,000 PY), psychiatric (14/1,000 PY), endocrine (14/1,000 PY) and ADI (13/1,000 PY). In multivariate analysis, the incidence rate ratio (IRR) for all-cause hospitalization increased by age group (18–29 yo reference): 30–39 yo IRR 1.05 (95% CI 0.88, 1.26), 40–49 yo IRR 1.28 (1.08, 1.51), 50–59 yo IRR 1.43 (1.22, 1.69), and 60 yo or greater IRR 1.97 (1.64, 2.37). Hospitalization rates increased significantly by age group for CV, GU, pulmonary, endocrine, and oncology diagnostic categories. Rates did not differ by age for non-ADI infection, GI and mental health diagnostic categories.

Conclusion. The hospitalization rates for noncommunicable diseases (NCDs) increase as PWH age. There is an increase CV hospitalizations among older PWH. ADI accounted for fewer hospitalizations than many chronic diseases. Our results suggest that HIV experts, primary care providers and other specialists may need to work together to optimize the care of older PWH.



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