

of patients reporting these additional symptoms, we anticipate that at least some of them will be prevalent in a majority of the patient population formally surveyed, similar to the trend observed with pelvic pain prevalence. In particular, we anticipate many patients will report significant migraines, as migraine pain severity on a scale of 0-10 with 0 being no migraine pain and 10 being the most severe migraine pain imaginable is one of the elements of the IPSS survey, and 106/178 (59.6%) reported migraine pain of 5 or higher. DISCUSSION/SIGNIFICANCE: Novel treatment approaches for OI are needed, as lifestyle management is the current treatment paradigm. Several patients reporting pelvic pain have undergone targeted workup and subsequent symptomatic treatment that has improved their quality of life. Other targeted symptom approaches to prevalent symptoms could have the same effect.

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Impacts of Racial Discrimination on Cognitive and Affective Processes and Drug-Cue Reactivity

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OBJECTIVES/GOALS: Our overarching aim is to examine, in an African American population, cognitive, affective, and neurophysiological processes, as well as risk-taking behavior, in response to racial stigma cues. While accounting for individual differences, we aim to see how these processes and drug-cue reactivity are impacted or altered by exposure to racial cues. METHODS/STUDY POPULATION: Participants will be African Americans between 18 and 25 years of age, equally distributed across genders. We will recruit 75 participants in order to have adequate power to conduct our intended analyses—particularly pertaining to individual differences in risk behavior outcomes. Participants will be asked to complete demographic and self-report questionnaires. Participants will also be asked to complete computerized tasks while their physiological responses (heart rate, skin conductance, and electroencephalographic (EEG) data) are recorded. The tasks are as follow: resting, gambling, go/no-go, picture viewing (positive, negative, and neutral images), and a drug cue image set. These tasks will be repeated after the participant views a racial stigma image set to evaluate the impact of discrimination. RESULTS/ANTICIPATED RESULTS: Data from 18 participants has been collected. Data will be periodically preprocessed and validated (e.g., 1 participant was removed due to data recording errors, so the current valid N is 17). Generally, we anticipate that behaviors and neural activity will be modulated across all tasks after viewing the racial stigma image set. Specifically, (a) cognitive and affective processing of singular events of racial stigma may indicate a stress response, (b) modulation from chronic experiences of racial stigma render neural systems increasingly sensitive to stigma cues, and thereby less equipped to regulate stress response, (c) the impact of these processes on altering risk behavior (may increase such behaviors), and (d) the impact of these modulations on altering drug-cue reactivity (may amplify reactivity). DISCUSSION/SIGNIFICANCE: The study will identify factors that contribute to stress and risk behavior among African Americans. A substantial gap continues to exist regarding the nature of risk behavior among African Americans, despite the fact that African Americans represent a health disparity population with unique vulnerabilities to health-relevant risk behavior.

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Changes in the Incidence of Respiratory AIDS-Defining Events Among Persons with HIV Before vs. During the COVID-19 Pandemic

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OBJECTIVES/GOALS: The COVID-19 pandemic disrupted HIV care, though it prompted preventive measures for respiratory pathogens, particularly among PWH. We therefore quantified trends in respiratory ADE incidence during vs. before the COVID-19 pandemic to assess effects of these measures on non-COVID-19 illnesses. METHODS/STUDY POPULATION: We included PWH aged ≥ 18 years in care at the Vanderbilt Comprehensive Care Clinic in Nashville, Tennessee from 2017-2023. Individuals contributed time from the last of March 31, 2017 or clinic enrollment until the first of death, March 31, 2023 (study close), or final clinic visit (if there was no visit ≤ 12 months before study close). We described respiratory ADE incidences (per 1,000 person-years) in each year of the study; we used Poisson regression with robust variance to estimate the incidence rate ratio (IRR) and 95% confidence interval (CI) for respiratory ADEs in the three years following vs. before the World Health Organization's pandemic designation for COVID-19 (March 2020). RESULTS/ANTICIPATED RESULTS: Among 4,880 persons contributing 19,510 person-years, 69 (1.4%) developed ≥ 1 respiratory ADE. Median age at cohort entry was 42.6 (interquartile range [IQR]: 32.1, 52.3) years and at first respiratory ADE was 43.6 (IQR: 36.1, 51.2) years. The overall average respiratory ADE incidence in the pre-pandemic period (March 2017-March 2020) was 4.5 (95% CI: 3.3-6.3) per 1,000 person-years and during the post-pandemic period (April 2020-March 2023) was 4.1 (95% CI: 1.8-9.0) per 1,000 person-years. When accounting for repeated outcomes and annual variation, the modeled respiratory ADE incidence was 10% lower (IRR=0.9, 95% CI: 0.6-1.4) during vs. before the COVID-19 pandemic. DISCUSSION/SIGNIFICANCE: Respiratory ADE incidence dropped 10% following the COVID-19 pandemic declaration, though the confidence interval for this change contains the null. It is plausible that nonpharmaceutical COVID-19 mitigation measures drove a brief but impermanent decline, though further research is needed to assess whether diagnostic biases also played a role.

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Trends in Management of Chronic Kidney Disease among Adults with Diabetes, NHANES 1988-2020

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OBJECTIVES/GOALS: Chronic kidney disease (CKD) affects nearly 40% of adults with diabetes. Our objective is to assess trends in risk factor control and use of 2022 ADA and KDIGO guideline-recommended medications. METHODS/STUDY POPULATION: Using