

An investigation into the psychological impact of the COVID-19 Pandemic for People living with HIV (PLWH)

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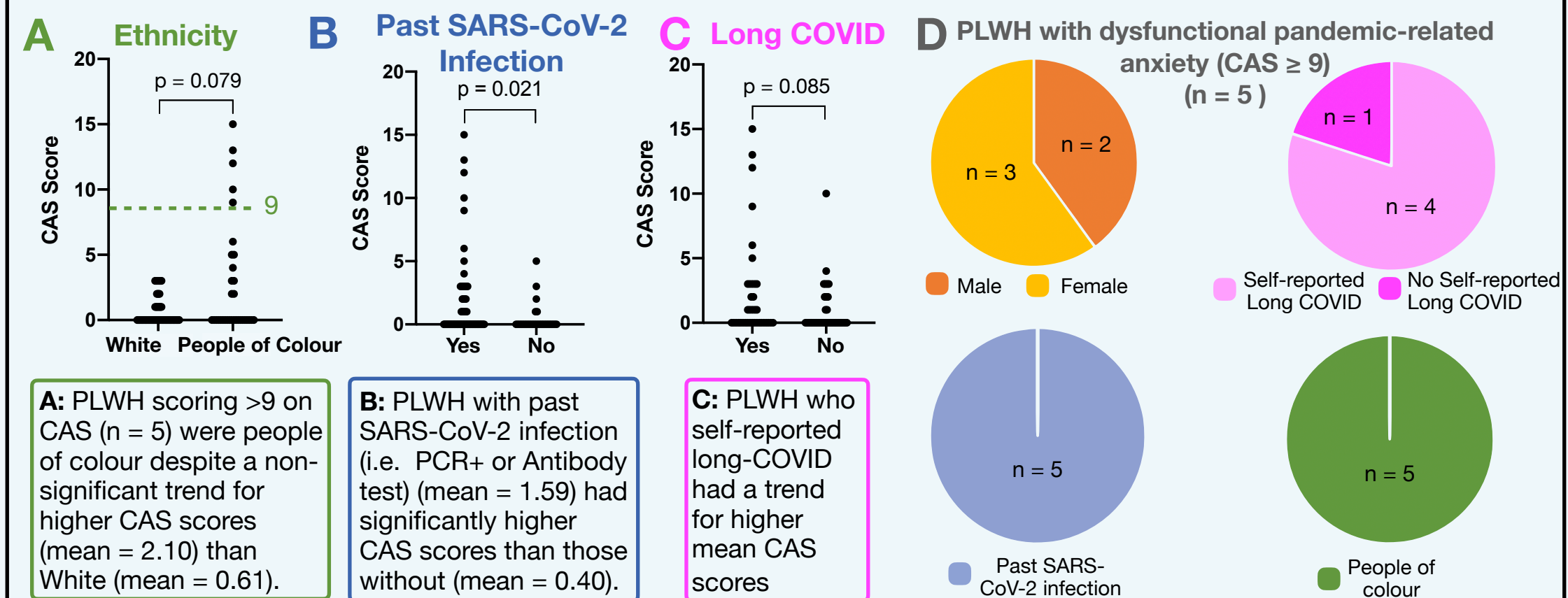
BACKGROUND

- There is a well-documented **psychological impact** of HIV infection¹ due to the stresses of having a **long term condition**², **stigma/discrimination**³ and the prevalence of **pre-existing mental health conditions**⁴. This has direct implications for care, with worse mental health being associated with negative health outcomes throughout HIV care⁵.
- The COVID-19 pandemic has been shown to have a psychological impact on the general population⁶, with a predicted disproportionate effect on PLWH due to **shielding** and **clinical vulnerability**.
- Mental health** of PLWH has been shown to **deteriorate** during the pandemic in other studies, citing reasons such as altered healthcare access, heightened fear of status-disclosure and social isolation⁷⁻¹⁴.
- To investigate the **psychological impact** of the pandemic on PLWH, 115 participants were recruited from two Central London HIV outpatient clinics during the first wave of the pandemic prior to vaccine roll out (March 2020).

METHODS: This is a sub-study of the Jenner II study designed to look at immune responses to vaccination.

- Through a **self-completed questionnaire** at time of recruitment, **socio-demographic** (age, gender, ethnicity, household, education, economic situation, history of anxiety/depression, pandemic concerns) and **HIV/COVID-related** information (HIV viral load, CD4+ T cell count, past SARS-CoV-2 infection, long COVID) were collected to determine factors that **correlated with greater psychological impact**.
- The **Coronavirus Anxiety Scale (CAS)** was used to screen for pandemic-related anxiety. When a participant scores **≥9 out of 20**, this signifies dysfunctional pandemic-related anxiety).

RESULTS: The cohort consisted of 115 PLWH and 114 completed the CAS. Median age was 51 (range 22-93), 83% identified as male (n = 95), 58% Caucasian (n = 66) and mostly controlled on ART with decent CD4+ T-cell counts (median = 595 cells/mm³, range = 100-1260cells/mm³).



A: PLWH scoring >9 on CAS (n = 5) were people of colour despite a non-significant trend for higher CAS scores (mean = 2.10) than White (mean = 0.61).

B: PLWH with past SARS-CoV-2 infection (i.e. PCR+ or Antibody test) (mean = 1.59) had significantly higher CAS scores than those without (mean = 0.40).

C: PLWH who self-reported long-COVID had a trend for higher mean CAS scores

Overall, **mean CAS score was low for the cohort (1.18)** suggesting low levels of dysfunctional anxiety for the cohort of PLWH.

STRENGTHS & LIMITATIONS

- Small** sample size, particularly for women
- Reliance on **self-reported outcomes** (including long-COVID and economic stability)
- Study population was **majority white, male-identifying, educated** and reporting **economic stability**

CONCLUSIONS

- PLWH**: We found that **PLWH of colour with past SARS-CoV-2 infection and self-reported long COVID** reported **greater CAS scores**.
- Anxiety for PLWH**: CAS score was not associated with HIV parameters, the presence of comorbidities or a history of pre-pandemic anxiety and depression.
- Overall Impact**: The majority of CAS scores were **low**, suggesting PLWH did not necessarily experience heightened COVID-related anxiety.

RESEARCH & CLINICAL IMPLICATIONS

- Due to a limited sample size, our findings serve to **inform future research aims** in identifying characteristics of PLWH who report higher prevalence of **dysfunctional pandemic-related anxiety**.
- Clinicians should be aware of these **at-risk subgroups**, and ensure they **consider the psychological impact** of the pandemic on PLWH, and the subsequent impact on their health.

References: [1] Parcesepe et al. AIDS Behav. 2018 [2] Freeman et al. AIDS Care. 2007 [3] Waterfield et al. BMC Public Health. 2021 [4] Marziali et al. AIDS Behav. 2020 [5] Cook et al. AIDS Behav. 2018 [6] Pierce M et al. Lancet Psychiatry. 2020 [7] Parisi et al. AIDS Behav. 2022. [8] West et al. AIDS Behav. 2022 [9] Devlin et al. BMC Women's Health. 2022 [10] Jones et al. AIDS Behav. 2021; [11] Kalichman et al. Curr HIV/AIDS Rep. 2022 [12] Pantelic et al. AIDS Behav. 2020 [14] Marbaniang et al. BMC Public Health. 2020