HIV IS NOT ASSOCIATED WITH SLEEP-DISORDERED BREATHING

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Pharmaco-nic and clinical observations in people over 50

BACKGROUND
Sleep-disordered breathing (SDB) and related intermittent hypoxaemia are associated with increased risk of cardiovascular disease, cognitive dysfunction, malignancy, and impaired quality of life. Although high SDB prevalence has been observed in persons living with HIV (PLWH), studies have been small, lacking relevant HIV-negative controls, relied on risk scores or self-reported sleep apnoea rather than objective testing, and/or selectively enrolled PLWH with sleep symptoms potentially biasing findings.

AIM
Compare overnight oximetry measures in PLWH and HIV-negative persons with similar lifestyle parameters in the POPPY study.

METHODS

Participants
We recruited POPPY study participants from all seven POPPY sites to participate in this nested substudy, without regard to sleep symptoms or risk of sleep disorder with HIV.

Sleep Assessments
Participants wore a portable fingertip pulse oximetry device overnight for one night.

RESULTS

The prevalence of SDB amongst all groups of POPPY participants. More severe SDB was associated with expected risk factors, including age and obesity. The association between HIV status and SDB was assessed using linear regression; multivariable models included HIV status, age, race, sex, BMI, marital status, and hypertension.

CONCLUSIONS

We observed a high frequency of SDB amongst all groups of POPPY participants. More severe SDB was associated with expected risk factors such as obesity and older age, but importantly, we observed no association between HIV status and SDB. Further research will determine the effect of SDB and nocturnal intermittent hypoxaemia on relevant HIV outcomes such as cognition, systemic inflammation, and immune activation.