Sleep Health of Nigerian Adults Living With HIV: Looking beyond the absence of disease
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Background
Sleep research among persons living with HIV (PLWH) has historically focused on identifying and treating sleep disorders. Sleep health is a positive framework to view sleep of individuals. It is a multidimensional construct of sleep and wakefulness that operationalizes optimal sleep as more than the absence of disease. Six important dimensions of sleep include sleep regularity, subjective satisfaction, appropriate timing, adequate duration, high sleep efficiency, and sustained alertness during the day. These six constructs a well-measured by the RU-SATED scale.[2] Research on sleep health of PLWH is limited in Africa. This study assessed sleep health of treatment-experienced PLWH, mostly on dolutegravir (DTG) based therapies, and associated factors of sleep health.

Methods
Questionnaires were administered to 300 adult participants recruited from the Infectious Diseases Institute, Ibadan, Nigeria (IDI). We collected data regarding sociodemographic, sleep health (RU-SATED scale where higher scores indicate more optimal sleep), sleep disturbance (PSQI), depression (Patient Health Questionnaire; PHQ-9), and anxiety (Generalized Anxiety Disorder-7; GAD-7). HIV-specific data were retrieved from IDI’s medical records. Pearson correlation coefficient was used to assess factors associated with sleep health.

Results
For the sample, mean age was 44.5 years ±11.4 with 230 females (76.7%) and 95% were on DTG-based ART regimens. Mean duration of HIV diagnosis was 8.3 years±5.1. Average sleep health score was 6.3±2.4. Depression and anxiety were present in 14% and 17.3% respectively. Prevalence of sleep disturbance (PSQI) score of 6 or more) was 21.7%. Higher sleep health scores were associated with younger age (r = -0.15; p = 0.007), longer duration of HIV diagnosis (r=-0.12, p=0.041) lower PHQ-9 scores (r = -0.34; p < 0.001), lower GAD-7 scores (r=-0.33; p<0.001) and lower PSQI (r=-0.15, p=0.009). There was no significant association between sleep health and most recent viral load count.

Conclusion
PLWH report average sleep health scores using validated measures. Age, sleep disturbance, depression and anxiety are significant factors associated with lower sleep health scores and as such, addressing these factors may improve the sleep health of PLWH.

References
1. Dale SC. Sleep disturbances in persons living with HIV/AIDS. NIDA Res Monogr. 2012;246: