Depression Associated with Lower Executive Functioning in Asian Youth Living with HIV

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BACKGROUND

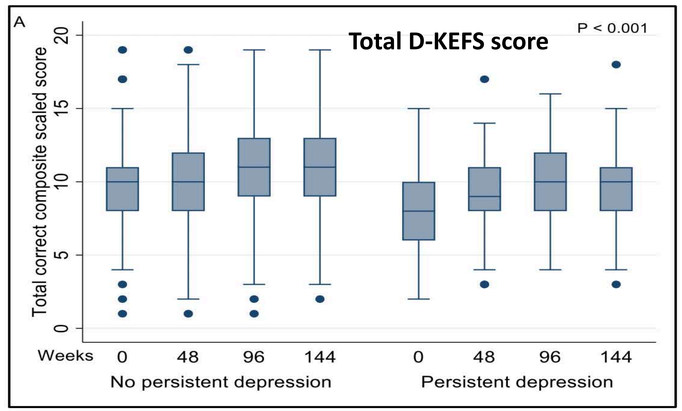
Youth with perinatally acquired HIV (YPHIV) and perinatally HIV-exposed uninfected youth (YPHEU) face developmental, social, and behavioral challenges that may place them at higher risk for depression compared to youth who are HIV-unexposed and uninfected (YHUU).

OBJECTIVE

We described the **prevalence of persistent depressive symptoms** and associated factors – including **age and executive functioning** in a longitudinal cohort of Cambodian and Thai YPHIV, YPHEU, and YHUU.

Persistent depressive symptoms were **prevalent** and associated with ***lower executive functioning*** in Thai and Cambodian youth living with HIV and youth who were HIV-exposed but uninfected.

- **Across 144 weeks of follow-up, youth with PDS performed worse on executive functioning measures compared to those without symptoms.**

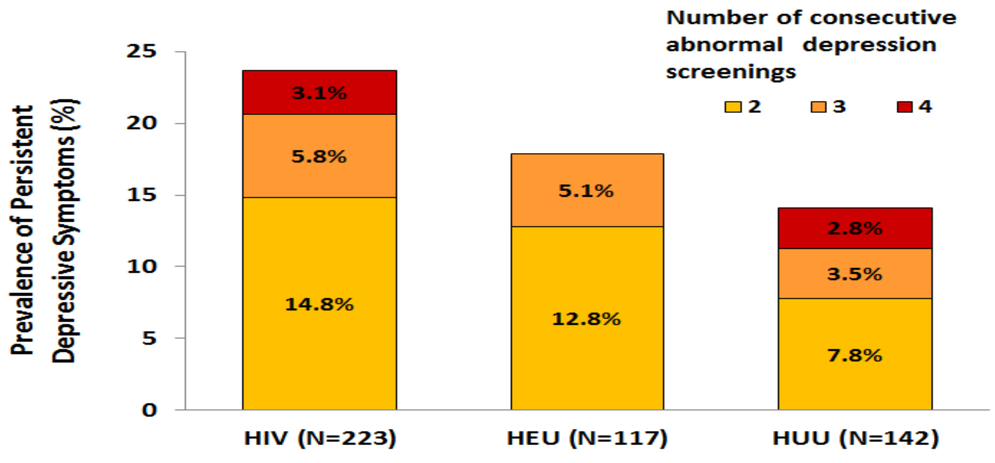


METHODS

- We analyzed data on **482 Cambodian and Thai youth** aged ≥ 10 years from the PREDICT Resilience cohort study who had ≥ 2 annual study visits.
- Depressive symptoms were assessed by
  - **Child Depression Inventory (CDI)** for children aged 10-15 years
  - **Center for Epidemiological Studies Depression Scale (CES-D)** for youth aged >15-24 years
- **Persistent depressive symptoms (PDS)** were defined as CDI or CES-D scores ≥ 16 in ≥ 2 consecutive visits.
- Executive functioning was measured annually by the **Delis-Kaplan Executive Function System (D-KEFS**) verbal and design fluency tests.
- We used generalizing estimating equations with Poisson regression for bivariable and multivariable analysis adjusted for HIV status, nationality, age, and primary caregiver.

RESULTS

- At baseline, 280 (58.1%) were female, mean age was 13.8 years (IQR 11.8-16.1) and 21.6% of participants' highest level of education was high school or higher.
- **Prevalence of persistent depressive symptoms are shown in Figure 1.**
- Adjusted incidence rate ratios (aIRR) of PDS were 2.05 (95% CI=1.03-4.07) among adolescents aged 15-17 years and 2.66 (95% CI=1.21-5.85) among aged 18-24 years compared to those aged 13-15 years.



CONCLUSIONS

- Persistent depressive symptoms were associated with worse executive functioning measures.
- Given reduced executive functioning can adversely impact drug adherence and self-care, integration of mental health care to pediatric and adolescent HIV care services is a potential strategy to improve overall outcomes.

ACKNOWLEDGEMENTS

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