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Depression, Substance Use and Adherence among Latin American Youth Living with HIV

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BACKGROUND

- Adolescents and young adults living with HIV experience complex behavioral, developmental, and care transitions that complicate optimal healthcare delivery.
- Depression and substance use may impact antiretroviral therapy (ART) adherence, but data from Latin America are scarce.
- We evaluated the prevalence and factors associated with depression, substance use, and self-reported adherence among youth in HIV care.

METHODS

- Cross-sectional study of adolescents (10 to <18 years) and young adults (18 to <25 years) on ART for ≥6 mo. in the Caribbean, Central and South America network for HIV epidemiology (CCASAnet) at sites in Brazil, Chile, Haiti, Honduras, Mexico, and Peru.
- Individuals were screened for depression (Patient Health Questionnaire, PHQ-2/PHQ-9/PHQ-A), substance use (the Alcohol, Smoking and Substance Involvement Screening Test, ASSIST) and ART adherence (the Pediatric HIV/AIDS Cohort Study Adolescent Master Protocol, PHACS-AMP).
- Multivariable logistic regression models were used to evaluate factors associated with depression, alcohol, tobacco, and any illicit drug use in previous 3 months, and missed ART doses in previous week.

RESULTS

- Among 592 participants, 308 (52%) were female, 235 (40%) were 10-17 years old, and 355 (60%) had undetectable viral load.
- The prevalence of depression was 16% (n=94).
- Regarding substance use in previous 3 months, 338 (57%) used alcohol, 170 (29%) tobacco, and 110 (19%) illicit drugs.
- Non-adherence in previous week was reported by 213 (36%) participants.

Table: Factors associated with depression, substance use, and non-adherence to ART among Latin American adolescents and young adults (n=536) in multivariable logistic regression analyses, 2018-2019*

	Depression	Alcohol use in previous 3 months	Tobacco use in previous 3 months	Any illicit drug use in previous 3 months	Missed ART doses in last week
Factor	aOR(95%CI)	aOR (95%CI)	aOR (95%CI)	aOR (95%CI)	aOR (95%CI)
Sex: Female vs. Male	**2.89 (1.65–5.07)**	1.25 (0.80–1.96)	0.57 (0.32–1.01)	**0.34 (0.17–0.68)**	1.38 (0.94–2.03)
Age: 18-24 vs. 10-17	3.66 (0.86–15.56)	1.87 (0.63–5.54)	0.86 (0.20–3.74)	0.91 (0.17–4.74)	0.85 (0.32–2.27)
Education: (vs. 0-6 years)					
7-8 years	1.86 (0.72–4.84)	1.11 (0.58–2.12)	1.35 (0.46–4.01)	1.08 (0.25–4.63)	1.37 (0.75–2.49)
9-12 years	1.49 (0.61–3.66)	1.23 (0.64–2.38)	**2.99 (1.13–7.91)**	0.67 (0.18–2.41)	**2.09 (1.16–3.77)**
>12 years	1.14 (0.41–3.13)	**3.86 (1.69–8.83)**	1.66 (0.55–5.01)	0.45 (0.11–1.80)	1.47 (0.71–3.03)
Alcohol use: Yes vs. No	1.44 (0.72–2.89)	-	**10.45 (4.57–23.92)**	**6.92 (1.81–26.45)**	1.08 (0.68–1.72)
Tobacco use: Yes vs. No	1.45 (0.71–2.96)	**10.25 (4.48–23.42)**	-	**19.2 (8.73–42.21)**	**1.82 (1.02–3.22)**
Sedative use: Yes vs. No	**3.99 (1.57–10.14)**	1.64 (0.70–3.86)	2.60 (0.91–7.38)	0.78 (0.20–3.04)	1.89 (0.94–3.80)
Any illicit drug: Yes vs. No	1.36 (0.65–2.84)	**7.86 (2.19–28.19)**	**19.65 (8.94–43.19)**	-	1.71 (0.91–3.21)
Depression: Yes vs. No	-	1.45 (0.71–2.94)	1.72 (0.84–3.54)	1.64 (0.78–3.47)	1.05 (0.62–1.80)
ART doses missed last week: ≥1 vs. none	1.03 (0.60–1.76)	1.13 (0.71–1.81)	**2.00 (1.10–3.65)**	1.87 (0.95–3.67)	-
Viral load: Detectable vs. Undetectable	-	-	1.01 (0.55–1.84)	0.59 (0.30–1.18)	**2.28 (1.54–3.39)**

*Variables associated with outcomes with p≥0.20 in bivariate analysis and observations with missing data were not included in the multivariable logistic regression models.
All models were adjusted for country and the presence of a parent/guardian during the interview.
aOR: adjusted odds ratio; CI: confidence interval. Bold font indicates p<0.05.

RESULTS (cont'd.)

- Females were more likely to report depression (adjusted odds ratio (aOR)=2.89, [95% confidence interval (CI): 1.65-5.07]) and less likely to report illicit drug use (aOR=0.34, 95%CI: 0.17-0.68) than males.
- Alcohol use in previous 3 months was associated with the use of tobacco (aOR=10.45, 95%CI: 4.57-23.92) and illicit drugs (aOR=7.86, 95%CI: 2.19-28.19).
- Tobacco was the only substance associated with non-adherence.

CONCLUSIONS

- Substance use prevalence among youth was high in this Latin America cohort.
- Although alcohol and illicit drug use was not associated with ART adherence, youth using these substances may be at increased risk for exposure to trauma and violence.
- Youth reporting alcohol and tobacco use should likely be screened for illicit drug use.
- Additional studies and interventions for substance use prevention and treatment targeting this population are needed.

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