Changes in Suicidality, Depression, and Anxiety After Integrative Mental Health Care in Thai Youth

1064

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Background:

- Youth living with HIV (YLHIV) are at high risk of mental health challenges that can significantly impact their overall well-being and quality of life
- Screening and ongoing monitoring for mental health disorders are crucial in this population
- Integrating mental health services with HIV care can help alleviate mental health conditions and improve HIV treatment outcomes. However, significant gaps still persist and evidence demonstrating its impact remains limited, particularly in resource-limited settings

Objectives:

- To assess suicidality, depression, and anxiety following the integration of mental health screening and care into HIV services for Thai YLHIV for 6 months

Methods:

- **Study design:** A multicenter prospective cohort study
- **Study population:** YLHIV aged 15-24 years and age- and sex-matched HIV-negative youth (HN-youth)
- **Study sites:** 3 sites (1) Faculty of Medicine, Chiang Mai University, Chiang Mai; (2) Faculty of Medicine, Khon Kaen University, Khon Kaen; and (3) Chiang Rai Prachanukroh Hospital, Chiang Rai in Thailand
- **Statistical analysis:** Comparisons of participants with significant mental health symptoms were performed by Chi-square or Fisher's exact test for YLHIV vs. HIV-negative youth, and McNemar's test for baseline vs. month 6 visit

Assessment and management:

Assessment	Interpretation	Management
Columbia-Suicide severity rating scale (C-SSRS)	**Significant suicidal risk:** suicidal ideation with a specific method, intention, or plan (baseline: lifetime and/or within 1 month; 6-month visit: during the past 6 months) with/without suicide attempts (baseline: lifetime and/or within 3 months; 6-month visit: during the past 6 months)	Participants with significant suicidal risk, depressive or anxiety symptoms were referred to a site psychiatrist for appropriate evaluations and management, which included psychiatric counseling, psychotropic medication, and behavioral interventions
Patient Health Questionnaire (PHQ-9)	**Significant depressive symptoms:** PHQ-9 score ≥ 10 of 27 at baseline or during the past 6 months	
Generalized Anxiety Disorder-7 scale (GAD-7)	**Significant anxiety symptoms:** GAD-7score ≥ 10 of 27 at baseline or during the past 6 months	
Participants demonstrating low suicidal risk or mild depressive or anxiety symptoms received brief mental health counseling by HIV clinic staff		

Results:

- Between December 2022 and October 2023, 200 YLHIV and 200 HIV-negative youth were enrolled (Table 1)

Table 1. Characteristics of study participants at enrollment

Characteristics	YLHIV (n=200)	HN-youth (n=200)	P[a]
Age, years	22 (20-23)	22 (20-23)	0.49
Sex			0.99
Male	118 (59)	118 (59)	
Female	82 (41)	82 (41)	
Home address			<0.001
Urban region	102 (51)	157 (79)	
Rural region	98 (49)	43 (22)	
Monthly household income, USD			0.02
<350	69 (35)	50 (25)	
350 to <1000	110 (55)	113 (57)	
≥1000	21 (11)	37 (19)	

[a]The comparison were performed by Wilcoxon rank-sum test or Chi-square test, as appropriate. HN-youth, HIV-negative youth.

Results (cont'd):

- No significant differences in mental health outcomes at baseline and month 6 visit, by HIV status (Table 2)
- YLHIV showed a significant decline in the proportion of significant suicidal risk (4.5 *vs.* 1.0%; $P = 0.01$), depressive symptoms (12.0 *vs.* 3.1%; $P < 0.001$), and anxiety symptoms (7.5 *vs.* 2.1%; $P = 0.01$) from baseline to month 6 visit
- HIV-negative youth demonstrated a significant decline in the proportion of significant depressive symptoms (7.5 *vs.* 2.0%, $P = 0.01$); and but not for significant suicidal risk (3.0 *vs.* 0.5%; $P = 0.06$) or anxiety symptoms (3.5 *vs.* 0.5%; $P = 0.13$)

Table 2. Changes in suicidality, depression and anxiety after integrative mental health care into HIV services from baseline to month 6 visit

Abnormal mental assessments	Baseline			Month 6		
	YLHIV (n=200)	HN-youth (n=200)	P[a]	YLHIV (n=195)	HN-youth (n=198)	P[a]
Significant suicidal risk	12 (6.0)	6 (3.0)	0.23	**3 (1.5)***	1 (0.5)	0.37
Significant depressive symptoms	24 (12.0)	15 (7.5)	0.32	**6 (3.0)***	**4 (2.0)***	0.54
Significant anxiety symptoms	15 (7.5)	7 (3.5)	0.21	**4 (2.0)***	1 (0.5)	0.21

[a]The comparison of participants with abnormal mental health assessments by HIV status was performed using Chi-square or Fisher's exact test, as appropriate.
*Indicates a significant change in each parameter ($P < 0.05$) from baseline to month 6 within the participant group, evaluated by McNemar's test.

Conclusions:

Providing integrated mental health care in the HIV clinic was associated with subsequent declines in suicidality, depression, and anxiety among Thai YLHIV. This model shows potential benefits for addressing the mental health care gap in routine HIV services

Funding:

This study was funded through TREAT Asia, a program of amfAR, The Foundation for AIDS Research, with support from the US National Institutes of Health's National Institute of Allergy and Infectious Diseases, *the Eunice Kennedy Shriver* National Institute of Child Health and Human Development, National Cancer Institute, National Institute of Mental Health, National Institute on Drug Abuse, the National Heart, Lung, and Blood Institute, the National Institute on Alcohol Abuse and Alcoholism, the National Institute of Diabetes and Digestive and Kidney Diseases, and the Fogarty International Center, as part of the International Epidemiology Databases to Evaluate AIDS (IeDEA; U01AI069907). The content of this publication is solely the responsibility of the authors and does not necessarily represent the official views of any of the governments or institutions mentioned above.