## Nutrition Support Practices and Nutritional Status of Adolescents Receiving Antiretroviral Therapy in Selected Hospitals in Ethiopia

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Abstract: Background: Adolescents living with HIV (ALHIV) in Ethiopia face significant health challenges, particularly related to nutrition, which is essential for optimizing antiretroviral therapy (ART) outcomes. This population is vulnerable to nutritional deficiencies due to increased energy demands and the adverse effects of HIV, alongside rapid growth and low socio-economic status. Despite advances in ART, research on nutritional care for ALHIV in Ethiopia is limited. Integrated nutritional interventions are critical for improving health outcomes, yet comprehensive guidance is lacking. This study aimed to evaluate healthcare workers' practices in ART clinics, assess the nutritional status of ALHIV, and provide recommendations for enhancing nutritional care. Method: Cross-sectional surveys were conducted, recruiting 44 healthcare professionals and 384 ALHIV across ten public hospitals in Addis Ababa and Oromia regions. Participants were selected using purposive sampling for healthcare workers and proportionate random sampling for ALHIV engaged in ART services. Data was collected using a pretested structured questionnaire with quantitative and qualitative components facilitated by trained healthcare workers through the Kobo Toolbox program. Results: Findings revealed that while most healthcare workers conducted basic nutritional assessments, more sensitive methods were rarely used. Only 36.4% assessed dietary intake and 27.3% evaluated food security. Nutrition counseling was limited, with only 38.6% providing such services regularly. Health Care worker participants expressed dissatisfaction with the integration of nutrition services due to a lack of training and resources. Nutritional assessments revealed that 24.2% of ALHIV were classified as thin, 21.7% as stunted, and 34.9% as malnourished based on midupper arm circumference, with 19.4% experiencing severe acute malnutrition. These results highlight the urgent need and opportunities to improve nutritional support tailored to ALHIV-specific needs. Conclusion and Recommendations: Study findings identified evidence of substantial nutritional deficits and critical gaps in nutritional care for ALHIV in Ethiopian ART clinics. While basic assessment and counseling were generally practiced, limited use of more sensitive methods and inadequate integration of nutrition services hindered care effectiveness. To improve health outcomes, it is essential to enhance training for healthcare workers, develop standardized nutrition guidelines, and allocate resources effectively. Conducting further research with large, diverse samples and integrating comprehensive nutritional care alongside ART services will enable better matching of the nutritional needs of this vulnerable population.

**Keywords:** adolescents living with HIV(ALHIV), antiretroviral therapy (ART), HIV, Ethiopia, malnutrition, nutritional support, stunting, thinness

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