

**Antiretroviral Therapy Among HIV Positive Adolescents**

Isabella Durochia and Kayla Davis

Alliance University

Evidence for Nursing Practice NUR 302

Professor Lima

April 24th, 2023

## **Antiretroviral Therapy Among HIV Positive Adolescents**

### **Qualitative Study**

#### Introduction:

In Peru, AIDS deaths among adolescents are steadily increasing, emphasizing the need to identify barriers and facilitators to antiretroviral therapy (ART) adherence amongst the population. Adolescents with HIV are facing unique challenges that can affect their adherence to ART. This research aimed to investigate the individual, caregiver/family, and hospital-level factors that affect ART adherence among adolescent Peruvians living with HIV. (This study aimed to understand the factors related to cART adherence among hiv-positive peruvians adolescents. The factors related to treatment adherence derived from the study)

#### Methods:

A qualitative approach was taken in this study which included support groups with 24 (sample was 18) adolescents (aged 13-17) (18 adolescents who participated in 24 focus groups [psychosocial support groups]) and 15 in-depth interviews with individuals receiving ART. (with professionals or parents/caregivers). This study additionally included interviews with their caregivers and ART providers (the 15 individual interviews were with these). The interviews were transcribed and analyzed through a social-ecological model to pinpoint barriers and facilitators to ART adherence at different levels. The social-ecological model (social ecological systems theory) was only used to guide the study (to guide the researchers interpret the results). The analysis was done by performing a content analysis (2 researchers read, constructed codebooks, and did the content analysis to identify the themes).

#### Results and Discussion:

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The research identified that barriers and facilitators to ART adherence were mostly correlated at the individual and family/caregiver levels, with hospital-level factors playing a smaller role.

Factors that hindered ART adherence included side effects from the antiretroviral drugs, a history of declining health due to less-than-ideal adherence, stigma, and misguided thoughts about ART. The factors that facilitated ART adherence included social support systems from family members and peers, receiving counseling and education about ART, and a positive attitude.

The findings from this study highlight the importance of addressing individual and family-level factors that influence ART adherence within the Peruvian adolescent community existing with HIV. Interventions should mainly focus on providing adequate social support and counseling, addressing misconceptions about ART with teaching, and promoting a positive outlook on the treatment. These interventions should be tailored based on each individual's needs. The research findings additionally point out the need for continued efforts to improve accessibility to ART and quality of care for adolescents living with HIV, when looking at the global increasing cases of HIV deaths in this population.

### **Critique and Appraise:**

#### Study Design:

The study used a qualitative approach, which allowed for **focus groups and** in-depth interviews and navigation of the barriers and facilitators to ART adherence amongst Peruvian adolescents living with HIV. One strength was the use of a social-ecological model to guide the analysis. It **allowed for**(helps) an understanding of the complex relationship between the individual, family/caregiver, and hospital-level factors that influence ART adherence.

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### Sample Size:

The sample size of 24 adolescents(it was 18 adolescents), along with family/caregivers, and ART providers, was fitting for a qualitative study. Although, the study was performed in a single location in Peru, which does limit the findings. This provides less of an opportunity for generalization to other settings.

### Data Collection:

The data collection methods were appropriate for a qualitative study, with in-depth interviews of adolescents individually(focus groups with the adolescents, and in-depth interviews were used with healthcare provider and parents or caregivers) it allowed for a great exploration of experiences the adolescent with HIV had along with family/caregivers, and ART providers. The information gained from interviews with all affected parties helped to gain an understanding of the barriers and facilitators to ART adherence.

### Findings:

The study found that factors hindering ART adherence included side effects from antiretroviral drugs, a history of declining health due to less-than-ideal adherence, stigma, and misguided thoughts about ART. The factors that facilitated ART adherence included social support systems from family members and peers, receiving counseling and education about ART, and a positive attitude. These findings were consistent with previous research in this particular area.

### Conclusion:

This study's findings demonstrate the importance of individualized interventions that address the individual and family-level factors influencing ART adherence among adolescent Peruvians living with HIV. Providing adequate social support, and counseling, addressing misconceptions

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about ART, and encouraging positive attitudes towards treatment is crucial. The researchers stress the need for continued efforts regarding ART accessibility and quality of care for adolescents with HIV around the globe to prevent AIDS-related deaths. Although the study's findings allow valuable insights, the small sample size and single location should be noted as limitations.

## **Quantitative Study**

### Introduction

This study focuses on depression as a prominent health problem and a growing public health concern, specifically in HIV-positive youths located in Jimma, Ethiopia. In general, there is a lack of evidence of prevalence of depression associated factors among HIV- positive Ethiopian youths, which is why this study was conducted.

### Methods

A cross-sectional study lasted from March 16th to June 1st, 2020. The stigma was measured by a shortened version of the HIV stigma scale. A systematic random sampling technique was used to enroll study participants, with logistic regression being the main method used to identify factors associated with depression diagnoses. The depression diagnoses were measured by structured questionnaire PHQ-9, which contained adequate specificity and sensitivity. Missed pills in the previous 2 weeks accounted for the adherence of the individuals with strict adherence to WHO guidelines; the physical activity of participants was measured by the physical activity assessment tool by asking 2 questions to determine sufficiency of physical activity. The OSS measure was for family and social support. Ethiopian wealth equity index tool was **used to measure** the measurement of wealth. All of these tools were found reliable.

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### Results and Discussion

The prevalence of depression among the majority of the focus group was 30.2%. Factors significantly associated with depression included but were not limited to the female sex, discontinued education due to HIV/AIDS illness, opportunistic infections, and high baseline viral load.

### **Critique and Appraise**

#### Study Design

A cross-sectional quantitative study was conducted at public health facilities that provided HIV/AIDS care, with the total number of HIV-positive youths identified being 664. The age range of all participants was 15-24 years old. Anybody who was attending these anti-retroviral clinics was eligible for this study.

#### Sample Size

The study's final sample size was 331 participants. Out of the total 331 sampled HIV-positive youth, 325 actively participated in the study with a response rate of 98.2%.

#### Data Collections

Data was collected using a preset questionnaire which was administered via face-to-face interviews to collect information on various factors related to depression among HIV-positive youth. Medical records were reviewed by nurses to extract data necessary for the study. Onsite supervision was conducted by psychiatrists on a daily basis.

#### Findings

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The study suggests that nearly one-third of HIV-positive youths were suffering from depression. History of previous hospital admission and non-adherence to treatment were the two factors that most prevalently increased the risk of developing depression and psychological distress.

### Conclusion

This study concluded that there was a high prevalence of depression among HIV-positive youths. Regular screening for depression comorbidity, as well as connection to mental health service providers, was strongly recommended. Additionally, more rigorous integration between mental health services and HIV/AIDS programs is required to help avoid depression among HIV-positive youth.

Would the level of adherence to antiretroviral therapy among HIV-positive adolescents attending specialized clinics in Jimma town be higher than adolescents living with HIV not attending these clinics?

I- Attending specialized clinics

P-HIV-positive adolescents

C-Not attending specialized clinics

O-Level of adherence to ART

**References**

Galea JT, Wong M, Muñoz M, Valle E, Leon SR, Díaz Perez D, Kolevic L, Franke M. Barriers and facilitators to antiretroviral therapy adherence among Peruvian adolescents living with HIV: A qualitative study. PLoS One. 2018 Feb 15;13(2):e0192791. doi: 10.1371/journal.pone.0192791. PMID: 29447226; PMCID: PMC5813958.

Hailu, D., Mariam, D. H., & Lemu, Y. K. (2014). Depression and associated factors among HIV-positive youths attending antiretroviral therapy clinics in Jimma town, southwest Ethiopia. PLoS ONE, 9(3), e95682. <https://doi.org/10.1371/journal.pone.0095682>

RUBRIC/Grading Criteria: Isabella, Kayla  
HIV-positive

<b>ITEM</b>	<b>FEEDBACK</b>	<b>GRADE - total: 94.3 points</b>
<b>SELECTION OF STUDIES</b>	-	-
Selected appropriate QN & QL studies-----10 points	Appropriate articles	10 points
<b>SUMMARY</b>	-	-
<ul style="list-style-type: none"> <li>Summarized each study correctly-----35 points</li> <li>Did not summarize important points-----20-34 points</li> <li>Poor summary of the studies-----10-19 points</li> <li>Summary not correct or very poor-----1-9 points</li> </ul>	QN and QL articles . summarized using IMRAD. . few important points not mentioned . some interpretations are not correct	(88%/35 =31 pts)
<b>CRITIQUE/APPRaisal</b>	-	-
<ul style="list-style-type: none"> <li>Critiqued/appraised each study effectively-----25 points</li> <li>Critique/appraisal not complete-----10-24 points</li> <li>Critique/appraise not correct or very poor-----1-9 points</li> </ul>	. some conclusions are not correct:	93/25 = 23.3 pts
<b>RESEARCH QUESTION</b>	-	-
<ul style="list-style-type: none"> <li>Raised a clear, answerable PICO</li> </ul>	Created a pico format	

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<p>question-----15 points</p> <ul style="list-style-type: none"> <li>• Question not clear/did not use PICO format-----1-14 points</li> </ul>	<p>question</p>	<p>15 points</p>
<p><b>APA/ GRAMMAR/ SPELLING</b></p>	<p>-</p>	<p>-</p>
<ul style="list-style-type: none"> <li>• No errors-----15 pts</li> <li>• 3 or more grammar/spelling errors-----minus 3 pts</li> <li>• 3 or more APA format errors ----- minus 3 pts</li> <li>• Each sentence not clear, or confusing-----minus 1 pt</li> </ul>	<ul style="list-style-type: none"> <li>. Sentences clear</li> <li>. Followed APA format</li> </ul>	<p>15 points</p>

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