ADHERENCE CLUBS (ACs)

Evidence-Based Structural Intervention
Evidence-Based for Retention in HIV Care

INTERVENTION DESCRIPTION

Goals of Intervention
- Improve retention in HIV care
- Improve viral suppression

Intended Population
- Patients with advanced HIV
- Patients with failing ART regimen

Brief Description

Adherence Clubs (ACs) is a group-level intervention to improve retention in HIV care and sustain viral suppression for clinically stable persons with HIV in South Africa. ACs comprise clinically stable ART patients who meet at facilities or community locations in groups of up to 30 persons every 2 to 3 months to receive group counseling, brief symptom screening, and prepacked medications. Clubs are managed by lay staff and nurses at the facility with support from community health workers. The goal is to keep patients engaged and adherent by providing social support and facilitating medication delivery and treatment monitoring while reducing patient burden at the clinic. The intervention sites allow clinically stable patients to choose between three prescription collection strategies available: ACs, Decentralized Medication Delivery (DMD) (i.e., prepacking and distribution of medication to pick-up points which are at locations other than the clinic pharmacy), or spaced fast-lane appointments, which the authors did not evaluate or elaborate on. Switching between strategies is also allowed, but this is monitored. Patients cannot enroll in more than one approach at the same time.

Theoretical Basis
- None reported

Intervention Duration
- 12 months

Deliverers
- National Department of Health staff (South Africa) at intervention facilities
  - Clinicians
  - Nurses
  - Community Health Workers

Intervention Setting
- Primary health care facilities

Delivery Methods
- Counseling
- Education
- Group counseling
- Screening

Structural Components

- Access – HIV medical care
  - Increased access to HIV medical care
- Capacity Building – Provider/supervisor training
  - Trained staff on AC and DMD intervention delivery
- Physical Structure – Services provided in non-traditional settings
  - Participants received group counseling, brief symptom screening, and prepacked medications at community locations

INTERVENTION PACKAGE INFORMATION

Intervention materials are available at the following:

South Africa's National Department of Health: **Standard Operating Procedure**

Email: mfox@bu.edu for details on intervention materials.

EVALUATION STUDY AND RESULTS

Study Location Information

The original evaluation study was conducted in 24 primary care health facilities in Gauteng, KwaZulu Natal, and Limpopo provinces of South Africa between 2015 and 2018.

Key Intervention Effects

- Improved retention in HIV care

Study Sample

The baseline study sample for the Adherence Club (AC) group of n = 569 is characterized by the following:

AC Intervention (n = 275)

- *75% female persons, 25% male persons*
- *21% persons 18-29 years old, 36% persons 30-39 years old, 26% persons 40-49 years old, 16% persons ≥ 50 years old*
- *Median CD4 count at ART initiation was 256, Interquartile range (IQR): 148-355*
- *Median viral load was 50 copies/ml, IQR: 20-124*
- *Median Log_{10} viral load 1.70 copies/ml, IQR 1.30-2.09*
- *Median time on ART at enrollment was 839 days, IQR: 551-1163*

AC Control (n = 294)

- *69% female persons, 31% male persons*
- *21% persons 18-29 years old, 37% persons 30-39 years old, 23% persons 40-49 years old, 19% persons ≥ 50 years old*
- *Median CD4 count at ART initiation was 278, IQR: 168-355*
- *Median viral load was 50 copies/ml, IQR: 20-124*
- *Median Log_{10} viral load 1.70 copies/ml, IQR 1.30-2.09*
- *Median time on ART at enrollment was 577 days*

Percentages may not add up to 100% due to rounding.

Recruitment Settings

- Medical records from primary health care clinics were used to identify eligible participants

Eligibility Criteria
Individuals over the age of 18 years old, who resided in the health facility's catchment area, had no documented plan to transfer facilities, and who were neither pregnant nor eligible for prevention of mother-to-child transmission services were eligible for participation in the study. Additionally, patients had to be eligible for a repeat prescription collection strategy by 1) being on the same ART regimen for at least 12 months, 2) having had their most recent viral load checked in the past 3 months, and 3) having had two consecutive undetectable viral loads (<400 copies/mL).

Assignment Method
The study used an unblinded, cluster-randomized design. For the AC intervention arm, matched clinic pairs were randomized 1:1 (by computer) by the South Africa National Department of Health to intervention and control arms. Sites were matched on district, total on ART, proportion virally suppressed, setting (rural/urban/formal/informal) and location.

Comparison
Participants in the control group received the standard of care. Standard of care included a visit usually every other month. Counseling may have been offered to patients during visits, and some facilities may have offered support groups or group counseling in the waiting areas. Four control sites implemented AC-like interventions as part of standard care.

Relevant Outcomes Measured
- Sustained viral suppression (defined as <400 copies/mL at 12 months)
- Retention in HIV care at 12 months after eligibility was defined as the percent of kept visits calculated as 100% minus % attrition, with attrition as the sum of reported deaths and loss to follow-up and transfers. Loss to follow-up was defined based on clinic definitions – failure to attend the clinic within 90 days of a scheduled appointment.

Participant Retention
Because participant retention is not a criterion for the Structural Intervention (SI) chapter, the Prevention Research Synthesis project does not evaluate that information.

Significant Findings on Relevant Outcomes
- Using difference in differences (DiD) analyses, there was an increase in 12-month retention in HIV care among those in ACs (89.5%) compared to participants in the control arm (81.6%; Risk Difference [RD] = 7.4%; 95% Confidence Interval [CI]: 2.9% - 11.9%).*
    - When adjusting for clustering and individual characteristics, an increase in 12-month retention in HIV care among those in ACs was observed (adjusted RD = 8.3%; 95% CI: 1.1 % - 15.6%).*

*Adjusted for sex, age, and CD4 count at ART initiation

Considerations
Additional significant positive findings on non-relevant outcomes
- None reported

Non-significant findings on relevant outcomes
- There were no significant differences in viral suppression between groups.

Negative findings
- None reported

Other related findings
- This intervention is also determined to be evidence-based for the Linking to, Retention in, and Re-engagement in HIV Care (LRC) chapter.
- ACs were associated with a crude 7.8 (95% CI: 2.1% - 3.6%) percentage-point increase in 12-month retention in HIV care.
- Retention in HIV care effects were higher among men compared to women (men RD: 13.1%, 95% CI: 0.3% 23.5%; women RD: 6.0, 95% CI: -0.9% -12.9%).
- The DMD intervention was not tested with an RCT, and the findings were not evaluated.

Implementation research-related findings
- None reported

Process/study execution findings
- None reported

Adverse events
- None reported

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REFERENCES AND CONTACT INFORMATION

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