#1004

Uptake and adaptation of community adherence groups in Zambia

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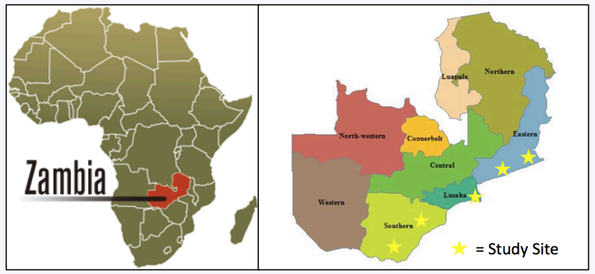
BACKGROUND

- Community-based HIV treatment models are being increasingly employed to off-load overburdened primary health care facilities and to improve long-term retention in care (by reducing opportunity costs of frequent clinic visits and leveraging social support in the community).
- The community adherence group (CAG) is a community-based HIV treatment model in which groups of six established HIV patients rotate visiting the clinic each month for individual monitoring and group medication pickup. A subsequent group meeting in the community to distribute medications to other CAG members reduces the number of individual clinic visits and provides a platform for disease self-management and social support.
- Existing data suggest that retention in HIV care is higher in CAGs compared to facility-based care.
- However, the overall public health impact of CAGs depends on the fraction of eligible patients who take up the model.

OBJECTIVES

1. To describe uptake of the community adherence group model (CAG) in Zambia using an implementation cascade for individuals offered CAGs
2. To identify adaptations to the CAG model during early implementation in Zambia

Figure 1. Map of Zambia and Community Adherence Group (CAG) study sites

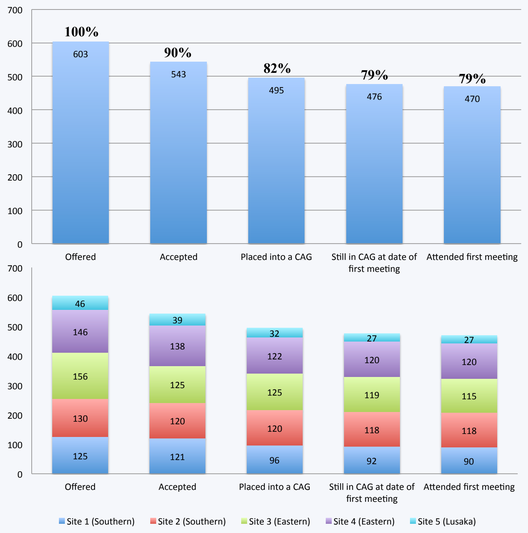


METHODS

- **Setting**: The Centre for Infectious Disease Research in Zambia (CIDRZ) is an NGO that supports HIV care and treatment services at a network of clinics across four of ten provinces in Zambia. Five rural primary health care clinics in Lusaka, Southern, and Eastern provinces were selected as intervention sites for a cluster randomized trial of the CAG model.
- **Population:** A systematic sample of eligible patients (HIV positive, on antiretroviral therapy greater than 6 months, not acutely ill, and CD4 >=200 ul) were offered CAG participation at one of the five study studies.
- **Data/Analyses**: We recorded number of persons that were: (a) Offered CAG group membership (b) Accepted CAG group membership (c) Successfully placed into a CAG group (d) Retained during the assembly process (e) Attended first CAG group meeting. We additionally characterized adaptation by documenting changes to intended group size (n=6) and drug-pick up frequency.

RESULTS

Figure 2. Uptake of the CAG model (a) overall and (b) by study site



RESULTS continued

Table 1. Characteristics of patients who accepted CAG participation

	N (%)
Total	543 (100)
Male	170 (31)
Invited by study staff	160 (30)
Identified friends to invite	142 (89)
Invited by enrolled patient	382 (70)
	Median [IQR]
Age at Enrollment (years)	45 [39 -52]
Most recent CD4 (cells/mm^3)[1]	472 [365-664]
Time since ART initiation (years)[2]	5.5 [2.9 – 7.9]
Median number of friends identified	5 [1-8][3]

[1]Of 219 participants with a CD4 count available from Jan 1, 2015 to date of enrollment
[2]Of 351 participants with available data
[3]Total range

Table 2. Characteristics of CAG groups successfully formed

	N (%)
Total	84 (100)
By site	
Luangwa Bhoma	6
Kalomo	17
Magoye	20
Nsadzu	21
Nyimba	20
Formed autonomously	74 (88)
Formed with assistance of study staff	10 (12)
Adapted group size	29 (35)
Sustained until first meeting	82 (98)

KEY FINDINGS

- Among 603 individuals offered a CAG, 543 (90%) accepted, 495 (82%) were placed into a CAG, 476 (79%) were retained during assembly, and 470 (79%) attended their first CAG group meeting
- CAG acceptance varied by site (range: 80-97%, median: 92%)
- The primary documented reasons for not accepting a CAG included fear of HIV status disclosure in the community and concern over needing to find members within their community to join their group.
- The primary reason for not being placed into a CAG was difficulty in finding other eligible members in the enrolled patient's community.
- Of 84 CAG groups formed, 74 (88%) formed autonomously, while only 10 (12%) were formed with the assistance of study staff. In addition, 29 (35%) groups adapted group size from intended size of six (range: 3- 8). Overall, 82 (98%) groups were sustained until the first group meeting.
- CAG uptake was lowest at a site with a high proportion of fishermen and migrant workers. Frequency of drug-pick up was adapted from monthly to bi-monthly at this site.

CONCLUSIONS

- Community Adherence Groups (CAGs) demonstrated high but heterogeneous uptake at rural primary health care facilities in Zambia.
- The proportion of self-forming groups (as opposed to group formation by study staff) was high and adaptation of CAG group size was common.
- At the site with the lowest uptake of CAGs and the fewest number of CAG groups formed, livelihood (fishermen who frequently migrate) was identified as a key barrier.
- Further qualitative work of site-specific challenges with patient acceptance of the CAG model and feasibility of CAG group formation are needed in order to optimize the public health benefit of this model at scale.

IMPLICATIONS

- As scale-up of community-based models of HIV care continues, adaptations to the CAG model and alternative ART delivery strategies will be necessary using a patient-centered approach to ensure long-term retention in care.

INVESTIGATORS

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