Community Adherence Groups for Virologically Unsuppressed ART-treated Patients: Early Lesson Learned from Lusaka, Zambia

Daniel Mwamba[1], Rusike Thulani,[1] Mwanza wa Mwanza[1], Michael Herce[1,2], Monika Roy[1,3], Helene Smith[1], Mpande Mwenechanya[1], Izukanji Sikazwe[1]
[1] Centre for Infectious Diseases Research in Zambia, [2] University of North Carolina, USA;[3]University Of California, USA

BACKGROUND

Problem: Despite progress with ART scale up, 10.8% of people living with HIV (PLHIV) on treatment do not achieve virological suppression in Zambia.[1] Barriers to patient engagement in care and, ultimately, viral load (VL) suppression include clinic-related, psychosocial, and structural factors. While standard Community Adherence Groups (CAGs) are tailored to fit the need of stable patients, unstable (viremic) patients still face increased clinic visit frequency and longer waiting hours. In September 2017, the Centre for Infectious Disease Research in Zambia (CIDRZ) adapted an existing CAG model operating in one first-level hospital in Lusaka to accommodate the specific needs of viremic patients.

Hypothesis: Our hypothesis is that CAGs can provide psychosocial support to viremic patients to improve ART adherence and achieve virological suppression.

Aim: For this preliminary analysis, we aimed to assess uptake of CAG services along a cascade of steps for patients with "unsuppressed" viral load (defined as a viral load > 1,000 copies/ml).

[1]Zambia Population-Based HIV Impact Assessment 2015-16, Zambia Ministry of Health (MOH).

METHODS

Setting: CIDRZ is a Zambian NGO that supports HIV prevention, care, and treatment services across a network of Ministry of Health (MOH) clinics located in four of ten provinces in Zambia. One urban first-level hospital in Lusaka was selected as a pilot site.

Population: Eligible patients included all HIV-positive clients aged ≥14 years, on ART for ≥6 months with a recent documented viral load >1,000 copies/ml. Characteristics of unsuppressed patients eligible for our intervention are described in Table 1.

Intervention: Our intervention consisted of offering CAG services alongside close clinical follow up in a "Viral Load" clinic. We identified viremic patients and invited them to join a routine CAG of their choosing, already operating in the pilot site catchment area. In addition, clinical management was provided via a dedicated Viral Load clinic offered one afternoon per week. Other core elements included:

- A dedicated team comprised of:
  - 1 Clinical officer (CO)
  - 1 Nurse
  - 2 Community volunteers.
  - The CO managed patients; the nurse supported patient eligibility screening for CAGs and Viral Load clinic; and volunteers ensured viremic patients were placed in a CAG and received enhanced adherence counseling.
- Clinical and demographic details for patients were entered in a Viremic Patient register, which also includes the date for each Viral Load Clinic visit. Standard CAG registers were used to document attendance at CAG meetings.
- Site-level performance was reviewed fortnightly on selected process indicators.

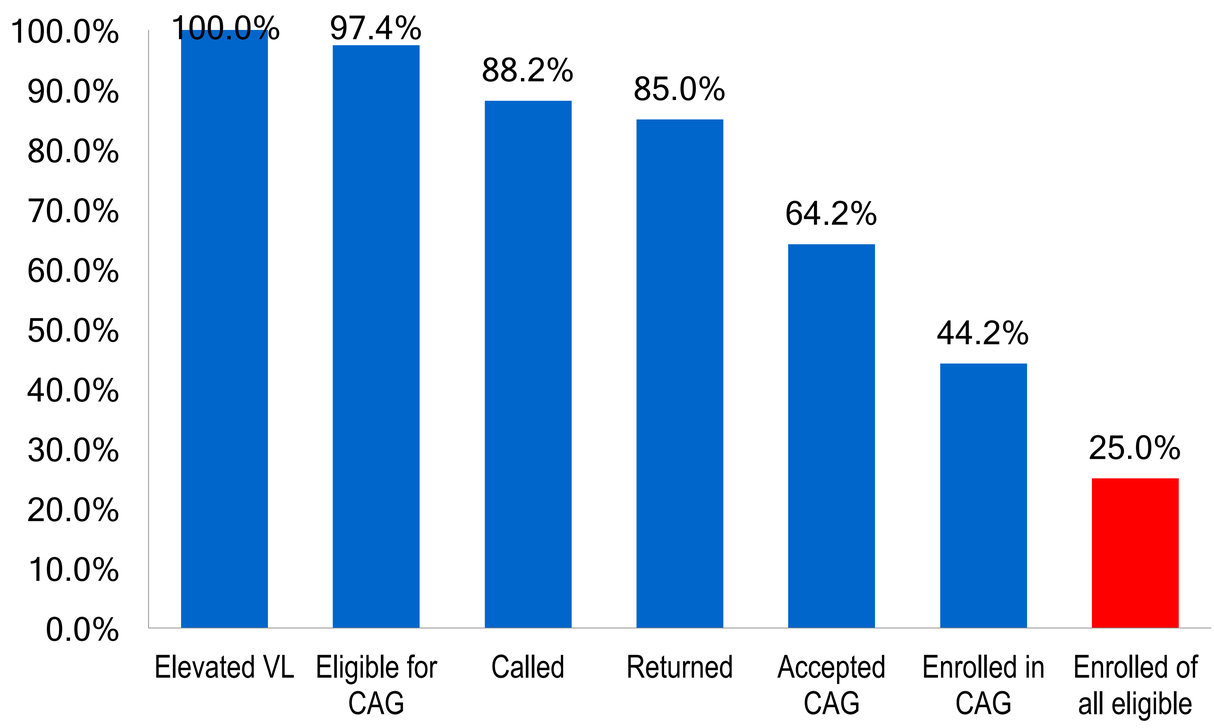
Table 1. Characteristics of Unsuppressed Patients (N=78).

Characteristic, n (%)*		
Sex	Male	29 (37.2)
	Female	49 (62.8)
Age^	14-24	12 (15.3)
	25-34	22 (28.2)
	35-44	27 (34.6)
	>45	16 (20.5)
ART Regimen#	First-line	49 (68.1)
	Second-line	23 (31.9)
^1 patient had no age data		
#5 patients had no regimen documented		

RESULTS

- 1,035 patients had a documented VL result at our pilot site.
  - Of these, 78 (7.54%, n/N=78/1035) had an "unsuppressed" VL.
- 76 of 78 (97.4%) unsuppressed patients were eligible to join an unstable patient CAG.
- 67 of 76 (88.2%) eligible patients were called about their test results and were sensitized about CAGs. 9 eligible clients could not be reached because of missing contact details.
- 57 of 67 (85.0%) patients returned and were offered the intervention.
  - Of these, 64.2% (n/N=43/57) accepted.
- 19 of 43 (44.2%) who accepted the offer were successfully placed in a CAG.
- Overall, 25% (n/N= 19/76) of *all* eligible clients were successfully placed in a CAG.
- Of 57 clients who returned to the facility, all 57 (100%) attend the Viral Load clinic.

Figure 1. CAG Service Cascade for Unsuppressed Patients (N=78).



DISCUSSION

- CAG acceptance among eligible viremic clients stands at approximately 64%.
- Anecdotally, the primary reasons patients gave to providers for not enrolling in a CAG included fear of HIV status disclosure in the community and lack of time to attend CAG meetings.
- Patients expressed a preference for one-on-one meetings with their health care providers. This preference was reflected in the high acceptance rate of Viral Load clinic enrollment. Of note, to date, no missed visits have been recorded in the Viral Load Clinic.
- Only 44.2% of the 43 clients who accepted a CAG have been successfully placed into one. Placement in a CAG requires finding a suitable group for the client. Suitability is mainly determined by finding a CAG that is located near the client's home.
- Prolonged result turnaround time for VL testing slows down identification of clients with unsuppressed VL who might benefit from our intervention, and delays clinical decision-making.

NEXT STEPS/WAY FORWARD

Moving forward, our programmatic and implementation research work will focus on:

- Assessing virological suppression at three months post-CAG enrollment for viremic clients receiving our intervention, as well as assessing retention-in-care at six months post-enrollment.
- Quality improvement efforts with our CIDRZ lab team to fast-track samples sent for repeat viral load testing among viremic patients enrolled in Viral Load clinic.

for a healthy Zambia

REPUBLIC OF ZAMBIA

February 2018