Outcomes of patients on antiretroviral therapy managed through community-based "Adherence Clubs" in South Africa

Anna Grimsrud, Joseph Sharp, Cathy Kalombo, Linda-Gail Bekker, Landon Myer

Background:
Adherence Clubs (ACs) have been implemented in the Western Cape of South Africa to help decrease the clinic burden of stable patients on antiretroviral therapy (ART) in primary care and maintain high levels of retention over the long term. One year after implementing ACs at a large, urban, primary care ART clinic, our objective was to evaluate outcomes of patients referred to AC in Gugulethu, Cape Town.

Methods:
From May 2012, patients were recruited to join ACs who were on treatment for at least one year, virologically suppressed and a CD4 cell above 200. ACs were counsellor-driven and nurse-supported with patients returning every 2-months and bloods are taken 4-months after AC initiation and then annually. Questionnaires were administered to patients at the time of their referral to ACs to document demographics and attitudes towards decentralized care. Outcomes included defaulting from the AC, loss from the AC (defaulting, referred back to mainstream care, recruited but not enrolled, or death) and not being virologically suppressed. Kaplan-Meier methods were used to describe outcomes and multivariable Cox’s proportional hazards models to assess associations with patient characteristics.

Results:
Between date May 2012 and May 2013, 1964 unique patients were initiated into one of 64 ACs contributing 1018 years of patient time. Patients in the ACs were primarily female (70.7%), with a median age of 39 years [Interquartile range (IQR): 34-44]. One third of patients lived within a kilometre of the clinic (33.4%) and 58.7% reported being unemployed. Referral of patients back to a doctor was made for 5.0%, 3.9%, and 3.1% of patients at the AC initiation visit, Month 2, and Month 4, respectively. Overall, 96.2% (IQR: 95.0-97.0) of patients were retained in an AC 6 months after their first AC attendance. Blood results at Month 4 showed that 97.6% of AC members were virologically suppressed. In univariate analysis, patients who were lost to the clubs were less likely to send a buddy [Hazard ratio (HR): 0.5, 95%CI 0.3-0.8] or have ever been late for a club visit (HR 0.7, 95% CI 0.5-0.9), compared to patients retained in an AC. In the final multivariate model, there was no association with sending a buddy or being late, but those who lived 1-3 kilometres from the clinic were 2.9 times more likely to be lost to the club compared to those who lived within 1km of the clinic (95% CI 1.1-7.7). No significant associations were found between patient characteristics (age, gender, patient demographics and attitudes) and defaulting from the clubs or not being virologically suppressed.

Conclusions and Recommendations:
The Adherence Club model was successfully implemented at a large primary care clinic. More data is necessary to have sufficient power to determine risk factors
for defaulting from Adherence Clubs. Decentralization of Adherence Clubs into community venues is currently underway with the aim to continue decongestion of the main clinic. Further research is necessary to establish if Adherence Clubs successfully ensure long-term retention and decongest the main clinic.
The impact of circular migration support utilising 4-month versus 2-month ARV refills on ART Adherence Clubs outcomes

Anna Grimsrud, Gabriela Patten, Joseph Sharp, Landon Myer, Lynne Wilkinson, Linda-Gail Bekker

Background:
Migration is common in sub-Saharan Africa where patients move away from home for economic reasons resulting in circular migration patterns that impact adherence and retention in antiretroviral care. Antiretroviral therapy (ART) Adherence Clubs (ACs) have been implemented in the Western Cape of South Africa to improve long-term retention in care for stable ART patients by providing quick and patient friendly access to treatment and care whilst decreasing the burden on overstretched healthcare facilities. Most patients in the Western Cape receive a maximum of 2-months of ART per visit. To support ART patients who most commonly migrate over year end, ACs that were scheduled to meet between mid-December 2012 and mid-January 2013 were given 4-months ART in their October/November 2012 AC visit. Data is limited on how long ART dispensing intervals should be to optimise retention in care. The objective was to compare outcomes among AC members who received 2-months ART (normal standard of care) to 4-months ART.

Methods:
All adult ACs at the Gugulethu Community Health Centre and Ubuntu Site B Clinic in Khayelitsha who were enrolled in an AC before the end of 2012 were included in the analysis. Counselling and AC procedures at the two sites are similar. Outcomes of patients who received 2 x 2-months (4-months) of ART (group A) are compared to those who received the standard 2-months of ART (group B). Outcomes include the proportion of patients defaulting from ACs 4 months after their last 2012 visit, and for those with blood results in 2013, the proportion of patients who were not virally suppressed (viral load above 400). Associations by group were assessed with chi-squared tests.

Results:
By the end 2012, 2033 patients were active members in one of 76 Adherence Clubs. Over the holiday period, 42 Adherence Clubs were given 4-months of ART and 34 Adherence Clubs were given 2-months ART. Outcomes among all patients were very good. Four months after the final club visit in 2013, 3.4% had defaulted care [Group A: 41 of 1054 (3.9%), Group B: 33 of 808 (4.1%)]. There was no difference in the risk of defaulting from and Adherence Club in the group who received 4-months of ART compared the Group B who received 2-months of ART (Risk Ratio: 0.95, 95% CI 0.61-1.49, p-value=0.8232). Of the 1507 patients with a blood visit as their first or second 2013 visit, 3.6% were not virally suppressed [Group A: 31 of 842 (3.7%), Group B: 23 of 665 (3.5%)]. No significant associations were observed between viral suppression and group (p-value=0.817).

Conclusions and Recommendations:
Longer ART supply refill intervals over holiday periods characterised by extensive circular migration amongst patient populations is possible to support patients during times of travel without increasing the risk of defaulting from ARTs or viral suppression. These findings also suggest that less frequent visits for stable ART patients should be evaluated as regular practice in order to alleviate an unnecessary burden on clinic resources and patients.
Title – Come and join an ART Adherence Club – Overview of the Adherence Clubs model for stable patients and lessons learned from implementers

Body –
Background
The rapid scale-up of ART programmes in resource-limited settings has put growing pressure on health care services. In order to address the burden of stable ART patients on congested facilities, Adherence Clubs were designed to make it easier for stable patients to remain adherent long-term. Starting in 2007, stable patients were recruited into pilot Adherence Clubs at the MSF supported Ubuntu Site B clinic in Khayelitsha. Following successes of pilot Clubs, in 2011, the Adherence Club model was adopted by the Provincial Government of the Western Cape for phased roll out. To date, Adherence Clubs has been started at 36 facilities in the Western Cape Province.

Workshop Overview
ICASA delegates interested in innovative models of ART delivery for expanding ART programmes in Africa are invited to attend the workshop. The workshop is designed to provide health facility managers, clinicians, nurses, counsellors and treatment supporters with an orientation to the Adherence Clubs model. Divided into the three parts, the workshop will seek to introduce attendees to the Adherence Club model, hear from local implementers about the challenges and successes involved in starting Adherence Clubs, and run-through a typical Adherence Club session with an interactive role-play exercise.

Workshop Outline
I. Background & Overview of the Adherence Clubs Model (Lynne Wilkinson)
II. Lessons learned from the field
   - Gugulethu Community Health Centre (Anna Grimsrud & Dr Cathy Kalombo)
   - Hout Bay Main Road Clinic (Beth Harley)
III. Role play club session (Facilitated by Kholiswa Hlakanyana, Fanelwa Gwashu and Pumeza Sele.)

Details of the Workshop:
Lynne Wilkinson, MSF project coordinator for Khayelitsha, will facilitate the overview of the Adherence Club system. The overview will provide the background to why and how the Adherence Club model was developed. All participants will receive the comprehensive and colourful Adherence Club toolkit to take home. The toolkit provides templates of the necessary monitoring and evaluation documents, details of the scheduling and staffing, and a CD with all the relevant materials in an electronic format. In “Lessons learned from the field”, staff from two sites that have implemented Adherence Clubs will provide context and insight into how the model has worked at their respective facilities. Issues including staffing, management, and logistics will be discussed. The two sites chosen to present offer different perspectives. The Gugulethu Community Health Centre is a large clinic with more than 60 Adherence Clubs started in a
single year. The ART clinic is supported by the Desmond Tutu HIV Foundation and will speak about relocating the Adherence Clubs off-site to a community venue. The Hout Bay Main Road Clinic operates in the South Peninsula Health District and details of the Adherence Club implementation at a smaller facility without direct support from a non-governmental organization will be presented. The final component of the workshop will be an interactive role-play with all attendees. Adherence Clubs counsellors from 3 Clinics will facilitate a mock Adherence Club session. This will provide workshop attendees the opportunity to experience an Adherence Club first hand. Present at the session will be Adherence Club Mentors, managers, clinicians from facilities, and counsellors who lead Adherence Clubs. There will be plenty of time for questions and comments so that attendees can discuss Adherence Clubs with all the cadres of staff involved.

Speakers:
Ms Lynne Wilkinson¹
Dr Cathy Kalombo²
Ms Anna Grimsrud³
Ms Kholiswa Hlakanyana⁴
Ms Pumeza Sele⁵
Ms Panelwa Gwasha⁴
Dr Beth Harley⁵

¹Médecins Sans Frontières South Africa, ²Provincial Government of the Western Cape, ³University of Cape Town, ⁴Desmond Tutu HIV Foundation, ⁵City of Cape Town