Association Driven Care and Treatment: An Innovative Model for Delivery of HIV / AIDS Healthcare in resource-limited settings

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Introduction
Treatment of HIV/AIDS in resource-limited settings remains a challenge. AIDS Empowerment and Treatment International (AIDSETI), a transnational organization with independent associations of PLWHA in 14 sub-Saharan and Caribbean countries, has developed a model of Association Driven HIV/AIDS Care and Treatment (ADCT). Community-driven development of healthcare results from outreach of the primary stakeholders (PLWHA) to local health care structures. We present an analysis of health care delivery using this model.

Methods
Retrospective cohort study characterizing demographic, clinical, and laboratory data stored in an electronic web-based Patient Monitoring Information System. Where available, WHO clinical stage and CD4+ count are described. Paired CD4+ counts were assessed using t-tests, and CD4+ count to WHO clinical stage correlations assessed using the Fisher test.

Results
Of 3041 patients in the database 60% are female, 40% male, and 5% < 15 years of age. 703 CD4+ counts were performed on X patients, 33% were > 200/mm³ and 66% < 200/mm³. 18% of those with CD4 < 200/mm³ were WHO clinical stage IV, compared to 9.2% of those with CD4 > 200/mm³ (P=0.0056). 689 patients were receiving antiretroviral therapy. The median CD4+ count at the initiation of ART was 149/mm³, while those awaiting treatment had a median CD4+ count of 290/mm³. The median increase in CD4+ count on antiretroviral therapy was 6/mm³ per year (S.D.9). Those awaiting treatment had an annual decline in CD4+ count of 29/mm³.

Conclusion
Despite limited resources and dedicated funding, these data suggest that ART can be delivered through the ADCT model. These data indicate the feasibility and replicability of this innovative approach. Dedicated funds for APLWHAs is urgently needed to scale-up quality and cost-effective care, and to test the sustainability and scalability of the ADCT model.