Antiretroviral dispensing groups as a measure to improve adherence: cost-effectiveness analysis in Zambia

James Simukoko, Catholic Relief Services, Lusaka

Background:

Zambia is one of the countries in sub-Saharan Africa with high HIV/AIDS prevalence at 13.34%. This has led to an increase in the number of people accessing antiretroviral therapy. Despite this, there is no corresponding increase in infrastructure and number of healthcare workers. As a result, patients must walk long distance and spend long waiting times at health centers, often causing some to miss their pharmacy appointments. Concerns about incomplete adherence among patients are an important consideration in expanding the access to antiretroviral therapy in sub-Saharan Africa.There is evidence that differentiated service delivery models, such as patient adherence groups, improve adherence to treatment and are cost effective.

Objectives: The study investigated the cost effectiveness of community adherence groups on adherence when compared to standard of care.

Methods: The study is a cost-effectiveness analysis from the patient’s perspective. The study was a cost-effectiveness analysis from the patient’s perspective.

I.) Cost: The cost of transport was a bus round trip. Labour cost were based on an average time of (6hrs).

ii.) Mean days for late pharmacy refill information was retrieved retrospectively. incremental cost-effectiveness ratios were obtained. Two-way sensitivity analyses were conducted on costs and adherence. The study was conducted at Mahatma Gandhi and Kasanda Clinics in central Zambia.

Results

The total number of clients was 378. 201 on the standard of care and 177 on adherence groups. The average costs per clinic visit was US$4.02 on the standard of caret compared to only US$ 0.7 for clients on intervention. The average days late for pharmacy refill for the standard of care was 4.18 days while those on the intervention where late for only 0.19. The Incremental Cost Effectiveness Ratio was US$ -0.8 per one day improvement in adherence. One was Sensitivity analysis showed robustness in incremental cost effectiveness ratio.

Conclusion: It was ten times costlier for patients on standard of care to visit the clinic. They were also more likely to be late for refills, compared to those on the adherence groups. Belonging the adherence groups was more effective in reducing the number of days late for pharmacy pick-ups.