A Systematic Review of Centralised Chronic Medication Dispensing and Delivery on Antiretroviral Therapy Collection Rates for Stable Patients in Harare, Zimbabwe

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Abstract

In Zimbabwe, sustaining high antiretroviral therapy (ART) collection rates is essential for viral suppression. Stable patients on ART often encounter barriers to regular clinic attendance for medication refills. Centralised chronic medication dispensing and delivery (CCMDD) models have been introduced in Harare to mitigate this burden, but their effect on collection rates requires systematic evaluation. This systematic review aimed to assess the effect of the CCMDD system on ART collection rates for clinically stable patients in Harare. Its objective was to synthesise evidence comparing medication pick-up adherence between the CCMDD intervention and standard facility-based collection. A systematic literature review was conducted according to established guidelines. Multiple electronic databases were searched for relevant studies. Included publications were peer-reviewed articles or official reports evaluating the CCMDD system in Harare, with ART collection rates as an outcome. Study screening, selection, and data extraction were performed by two independent reviewers. The quality of included studies was appraised. The search identified a limited number of studies meeting the inclusion criteria. The available evidence, while not extensive, consistently indicated a positive association between CCMDD use and improved ART collection rates. One notable study reported a collection rate exceeding 95% among patients enrolled in the programme, suggesting a decrease in missed collections. Preliminary evidence suggests the CCMDD system in Harare may facilitate high ART collection rates among stable patients by reducing access barriers. However, the current evidence base is limited in both scope and methodological robustness. Further high-quality operational research is needed to strengthen the evidence. Programme implementers should consider expanding the CCMDD model while integrating rigorous monitoring and evaluation to document its long-term impact on patient retention and health outcomes. antiretroviral therapy, medication adherence, health services accessibility, patient-centred care, Zimbabwe, chronic disease management, differentiated service delivery. This review consolidates the existing evidence on a key differentiated service delivery model in Zimbabwe, highlighting evidence gaps and informing policy and practice decisions for optimising chronic HIV care.

Keywords: *antiretroviral therapy adherence, differentiated service delivery, task shifting, Sub-Saharan Africa, health systems strengthening, community-based interventions, medication collection rates*

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