

Evidence Assessment: Summary of a Systematic Review

Who is this summary for?

For Doctors and Health Personnel, Administrators and managers of health facilities, Community Health Workers and the partners involved in the management of people living with HIV.

Task shifting from doctors to non-doctors for initiation and maintenance of antiretroviral therapy

Key findings

- There is moderate quality evidence from two trials that when doctors initiated therapy and nurses provided follow-up, there was probably no difference in death or number of patients lost to follow up at one year.
- There is low quality evidence from one cohort study showed that death as well as the number of patients lost to follow-up at one year may be lower in the group treated by nurses.
- Compared to doctor led care, there is moderate quality evidence from a single trial that when antiretroviral therapy was provided in the community, by trained field workers, there was probably no difference in death or losses to follow-up.

Background

Human resource shortages play a role in limited access to antiretroviral therapy in low- and middle-income countries. This occurs mostly where the burden of HIV disease is greatest and where access to trained doctors is limited. It is important to know if task shifting of care from doctors to non-doctors provides both high quality and safe care for all patients requiring antiretroviral treatment.

Question

What is the effect (safety and efficacy) of task shifting from doctors to non-doctors on initiation and maintenance of antiretroviral therapy?

Task shifting from doctors to non-doctors for initiation and maintenance of

antiretroviral therapy in Cameroon: The prevalence of HIV in Cameroon is 4.3%. Cameroon suffers significant health worker shortages with only 1 physician per 9245 population. Task shifting may help improve access to care for people living with HIV.

Table 1: Summary of the systematic review

	What the review authors searched for	What the review authors found
Studies	Randomized controlled trials (RCT) and Controlled before-and-after studies (CBAS)	Ten studies met the inclusion criteria. Four were randomised controlled trials, two were prospective cohorts, four were retrospective cohort studies
Participants	HIV-infected patients at the point of initiating treatment. HIV-infected patients on treatment requiring maintenance and follow-up.	Participants were adult HIV infected patients at initiative and maintenance.
Interventions	A model of care that involves the initiation or maintenance of antiretroviral therapy by another category of health worker other than a doctor.	Seven studies compared nurse-led care with doctor-led care, one study compared clinical officer (or non-physician clinician) led care with doctor-led care, while two studies compared care by trained community health workers to doctor-led care.
Controls	Care delivered by a doctor	Care delivered by a doctor
Outcomes	<p>Primary outcomes</p> <p>Quality of care: Death after being considered eligible for treatment, or during treatment</p> <p>Secondary outcomes</p> <p>Clinical</p> <ul style="list-style-type: none"> Loss to follow-up: Any measure of comparative retention between study populations at set time points after the intervention as defined by the study authors Attrition: composite of death and loss to follow-up Time to initiation of antiretroviral therapy Diagnosis of tuberculosis after entry into HIV care Occurrence of a new AIDS defining illness (A newly diagnosed World Health Organization clinical stage 4 illness). <p>Laboratory</p> <ul style="list-style-type: none"> Virologic response to antiretroviral therapy (The proportion of participants that reach or maintain a pre-defined level of viral load suppression, as defined by the study authors) Immunologic response to antiretroviral therapy (The mean change in the concentration of CD4+ lymphocytes from baseline, as expressed in cells/μL). <p>Cost</p> <ul style="list-style-type: none"> Cost of care to the provider Cost of care to the patient and family <p>Programme important outcomes</p> <ul style="list-style-type: none"> Patient satisfaction with care (Defined by the study authors include qualitative analysis if available). Any negative impact on other programme and health care delivery reported by the authors. 	<p>The outcomes reported were:</p> <ul style="list-style-type: none"> Numbers of patients lost Viral load suppression Immunological changes - CD4+ count New tuberculosis diagnosis Patient satisfaction with care Time to initiation of antiretroviral therapy Morbidity Mortality
Date of the most recent search: 28 March 2014.		
Limitations: This is a moderate quality systematic review, AMSTAR =09/11		
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Table 2: Summary of findings

Outcomes	Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)
Death (RCTs) Follow-up: 12 months	0.96 [0.82-1.12]	2770 (1)	High
Death (Cohorts) Follow-up: 12 months	1.23 [1.14-1.33]	39160 (2)	Low
Lost to follow-up (RCTs) Follow-up: 12 months	0.73 [0.55-0.97]	2770 (1)	Moderate
Lost to follow-up (cohorts) Follow-up: 12 months	0.3 [0.05-1.94]	39156 (2)	Very low
Death or loss to followup (RCTs) Follow-up: 12 months	0.89 [0.79-1.01]	2770 (1)	High
Death or loss to followup (Cohorts) Follow-up: 12 months	0.72 [0.48-1.07]	39160 (2)	Very low

Applicability

Four of the 10 studies were conducted in urban, peri-urban and rural settings in South Africa, two were conducted in urban and rural Uganda, one in urban Uganda and Mozambique, one in rural Swaziland, and one study was conducted in urban, peri-urban and rural settings in Ethiopia. These findings may be applied in other low resources settings.

Conclusions

There is moderate quality evidence that shifting responsibility from doctors to adequately trained and supported nurses or community health workers for managing HIV patients probably does not decrease the quality of care and, in the case of nurse initiated care, may decrease the numbers of patients lost to follow-up.

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