

Seven-year experience of a primary care antiretroviral treatment programme in Khayelitsha, South Africa

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### **Abstract**

**Objectives:** We report on outcomes after 7 years of a community-based antiretroviral therapy (ART) programme in Khayelitsha, South Africa, with death registry linkages to correct for mortality under-ascertainment.

**Design:** This is an observational cohort study.

**Methods:** Since inception, patient-level clinical data have been prospectively captured on-site into an electronic patient information system. Patients with available civil identification numbers who were lost to follow-up were matched with the national death registry to ascertain their vital status. Corrected mortality estimates weighted these patients to represent all patients lost to follow-up. CD4 cell count outcomes were reported conditioned on continuous virological suppression.

**Results:** Seven thousand, three hundred and twenty-three treatment-naive adults (68% women) started ART between 2001 and 2007, with annual enrolment increasing from 80 in 2001 to 2087 in 2006. Of 9.8% of patients lost to follow-up for at least 6 months, 32.8% had died. Corrected mortality was 20.9% at 5 years (95% confidence interval 17.9–24.3). Mortality fell over time as patients accessed care earlier (median CD4 cell count at enrolment increased from 43 cells/ $\mu$ l in 2001 to 131 cells/ $\mu$ l in 2006). Patients who remained virologically suppressed continued to gain CD4 cells at 5 years (median 22 cells/ $\mu$ l per 6 months). By 5 years, 14.0% of patients had failed virologically and 12.2% had been switched to second-line therapy.

**Conclusion:** At a time of considerable debate about future global funding of ART programmes in resource-poor settings, this study has demonstrated substantial and durable clinical benefits for those able to access ART throughout this period, in spite of increasing loss to follow-up.