Impact of a Mobile HIV/TB Service on Pre-ART Retention among Migrant Farm-workers in Musina, South Africa

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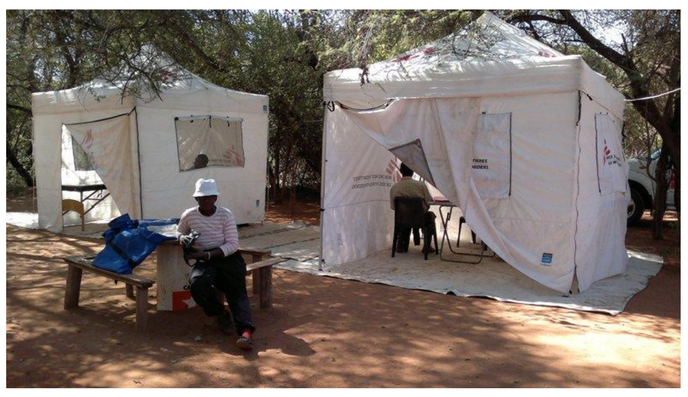
Introduction

Migrant farm workers infected with HIV have limited access to health care services. Many are reluctant to access health care for fear of revealing their migrant status to authorities and risking deportation. Distance from antiretroviral treatment (ART) sites may also limit access to ART. In Musina sub-District, South Africa, on the border with Zimbabwe, migrant farm workers have to travel up to 65 km (40 miles) to access health care in Musina town. At the end of 2010, Médecins Sans Frontières (MSF) and the Limpopo Department of Health introduced an integrated mobile HIV/TB primary health care (PHC) service for migrant workers on six farms. Mobile teams visit each farm weekly.

Methods

- Two clinicians abstracted data from clinic registers for the periods July 2009 to June 2010, and January to December 2011.
- Until June 2011, those with a CD4 count <200 cells/µl were eligible for ART. This was changed to <350 cells/µl in June 2011 due to a change in the national guidelines.
- Point-of-care (POC) CD4 testing, using an Alere Pima CD4 analyser, was introduced in September 2011. Prior to this, CD4 testing was done in the laboratory at the provincial hospital.
- We assessed the impact of the mobile service on pre-ART retention in care by assessing changes in the proportion of newly-diagnosed HIV-positive workers who had CD4 testing and received their results; and the proportion of those found to be eligible for ART on CD4 testing who were initiated on ART, before and after the introduction of mobile TB/HIV/PHC services.

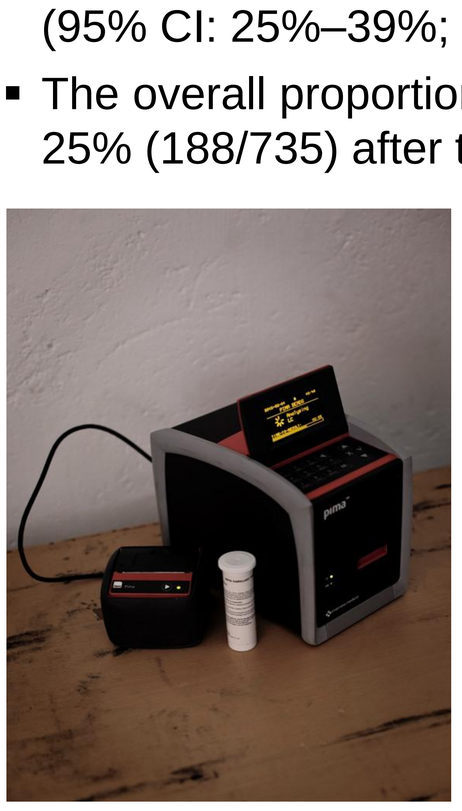


Kayemayema Mobile farm clinic

Health education at Maroi Mobile farm clinic

Results

- 2,906 newly diagnosed HIV-positive farm workers had CD4 testing: 2,171 before and 735 after the introduction of the mobile TB/HIV service.
- The proportion who received their CD4 results increased by 37 percentage points (95% CI: 33%–41%; p<0.0001) from 44% (951/2171) to 81% (594/735).
- The proportion of those eligible for ART who were initiated on ART increased by 32 percentage points (95% CI: 25%–39%; p< 0.0001) from 51% (193/380) to 83% (188/226).
- The overall proportion of HIV-positive farm workers who were initiated on ART increased from 9% (193/2171) to 25% (188/735) after the introduction of the mobile HIV/TB service.



POC PIMA CD4

Adherence counselling with patient-held records

Noordgrens Mobile farm clinic

Discussion

- Prior to the introduction of the mobile service, the majority of farm workers who tested HIV positive were not initiated on ART in this rural border setting.
- Introduction of an integrated mobile HIV/TB PHC service increased access to health care services among farm workers. Potential reasons include elimination of transport costs and prevention of loss of wages due to taking time off work, as well as improved awareness of health services and TB/HIV.
- This led to an increase pre-ART retention in care by increasing the proportion of patients who received their CD4 result, and the proportion of eligible patients who were initiated on ART.
- The introduction of POC CD4 testing is also likely to have contributed to the increase in pre-ART retention in care.
- Integrated mobile HIV/TB services are useful for increasing pre-ART retention in care in rural migrant worker populations with limited access to health care services.

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