

TUBERCULOSIS SOUTH AFRICA PROJECT

Investigation of non-conversion of bacteriologically confirmed tuberculosis in Emfuleni Sub-District, Gauteng, South Africa

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The USAID Tuberculosis South Africa Project

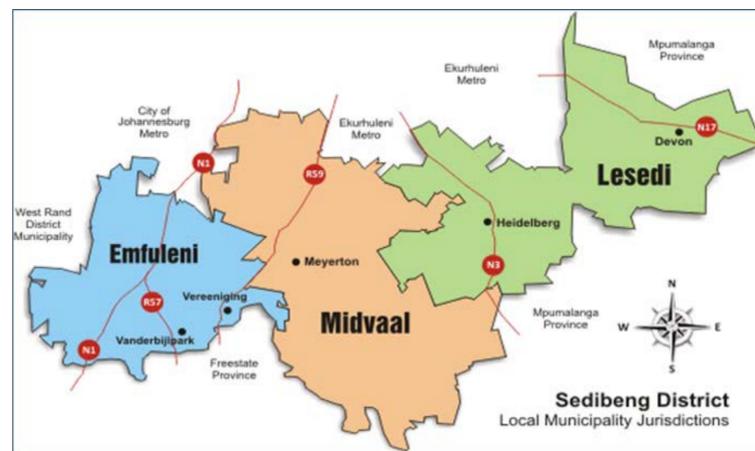
The USAID Tuberculosis South Africa Project (TB SAP) (2016-2021) is implemented with the goal of reducing TB infections. The project builds on interventions and achievements from the USAID TB CARE II South Africa project (2014-2015), and the prior USAID TB Program South Africa (2009-2013). Both programmes supported the South Africa National Department of Health's TB prevention and control efforts to close identified gaps and strengthen sustainable systems aimed at improving TB and drug-resistant TB (DR-TB) diagnosis, care and treatment services.

Introduction

The USAID TB CARE II South Africa project provided technical support to selected facilities in Sedibeng District, Gauteng Province, South Africa. Support consisted of facility mentoring on TB and TB/HIV recording and reporting, routine record audits and monitoring of programme progress through the application of a district rapid assessment tool.



A study was conducted to assess the management of patients with newly-diagnosed, bacteriologically-confirmed drug-sensitive tuberculosis (TB) whose sputum did not convert after two months of treatment. South Africa's National Tuberculosis Management Guidelines recommend that the examination of sputum from such patients should be investigated using line-probe assay (LPA) and culture and drug susceptibility testing.



Methodology

Medical and laboratory records of new and re-treatment bacteriologically-confirmed TB patients registered between January and October 2015 were reviewed. The electronic TB register - ETR.net - was used to generate a list of patients remaining smear-positive after two months of treatment.

Pre-treatment bacillary load and types and frequency of investigations performed during the course of treatment, including LPA and culture investigations, were assessed. Resistance pattern and rate was also measured.

Results

The number of patients whose sputum did not convert at two months was 66, of these 37(56.1%) Patients were diagnosed with a high Bacillary load. All 66 had an HIV test; 33 (50%) tested positive for HIV. In total, 32 (96.9%) of 33 HIV/TB co-infected patients received both antiretroviral therapy (ART) and Cotrimoxazole Preventive Therapy (CPT). Twenty eight (42.4%) non-converters had their sputum examined using line-probe assay and culture.

Drug resistance was found to be low, with only two cases of drug resistance, one of Isoniazid mono-resistance and another of Rifampicin mono-resistance detected.

Conclusion and Recommendations

The investigation found that there was sub-optimal adherence to national guidelines by participating facilities when monitoring newly diagnosed bacteriologically confirmed TB patients who fail to convert after two months of treatment. Ongoing mentoring and on-the-job training are needed to improve the quality of TB services provided in these facilities. Patients presented late for health seeking, thus continuous increased public awareness should continue in the community.

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