Evaluation of tuberculosis treatment at hlengisizwe community health centre, hammarsdale, south africa

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Background
The World Health Organization (WHO) has set a target for nations of 70% case detection rate, 85% cure rate and less than 5% treatment interruption rate for tuberculosis (TB) which is elusive in South Africa and remains a major public health burden. However, it is not known if these targets may actually be met in certain districts and what factors may influence treatment outcome.

Purpose: Therefore, the study aimed to evaluate treatment outcomes of TB, at Hlengisizwe Community Health Centre (CHC), Hammarsdale, South Africa, against national targets. Specific objectives were to determine cure and default rates and co-infection rate of TB and HIV and to test for associations between treatment outcomes and socio-demographics such as age, sex, employment status and residential distance from treatment point.

Methods
This was a cross-sectional study involving analysis of TB patient records from 1st October, 2010. Random sampling was utilized. Descriptive outcome data were summarized mainly as percentages. Associations between outcome and socio-demographics were established using Chi square, odds ratio and logistic regression.

Results
The result shows that the TB treatment cure rate at this institution was 81.8%; treatment default rate was 0.9%; TB/HIV co-infection rate was 73.1%; TB sputum smear negative rate was 61.6%; 84.3% of those co-infected with HIV had CD4 count less than 350cells. Death rate was 4.6%. Association was established between treatment outcome and CD4 cell count.

Conclusions
With a cure rate of 81.8% and default rate of 0.9%, it appears that the effort towards meeting WHO target is becoming a realistic objective for this institution. The study concluded that there exists an inextricable relationship between TB and HIV infection. It also established an association between the immune status of patients as indicated by the CD4 cell count and treatment outcome.

Key message
- This study informs that the WHO set targets for the treatment outcome for Tuberculosis is achievable in the African environment.