

Models of Integration of TB and HIV Services and Factors associated with Perceived Quality of TB-HIV integrated Service Delivery in OR Tambo District, South Africa.

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Abstract

Background

Tuberculosis is the leading infectious cause of death among people living with HIV. Reducing morbidity and mortality from HIV-associated TB requires strong collaboration between TB and HIV services at all levels with full-integrated people-centred models of care.

Methods: This qualitative study design applies the aggregate complexity theory and ethnographic principles. Five primary healthcare facilities hosted a total of 54 individual interviews with healthcare professionals and patients. Till data saturation, the subjects were purposefully chosen, and all interviews were captured on tape. After categorizing ethnographic data, searching for emergent trends, counting the number of times a qualitative code appeared, quantitative analysis of qualitative data was used. The perceived effectiveness of TB/HIV integration was evaluated using a Likert scale. With a type I error of 0.05, regression models and canonical discriminant analysis were employed with SPSS® version 23.0 (Chicago, IL) to examine the relationships between independent predictors of interest and the perceived quality of integrated TB and HIV service delivery.

Result: Of the 54 participants, 39 (72.2%) indicated that TB and HIV services were only partially integrated, whereas 15 (27.8%) indicated that they were fully integrated. Using a Likert scale gradient, 23 (42.6%) individuals thought the quality of integrated TB/HIV services was low, whereas 13 (24.1%) and 18 (33.3%) thought it was intermediate or excellent. The results of multiple linear regression analysis demonstrated that the following equation was significantly and independently correlated with the perceived quality of integrated TB/HIV services: $Y = 3.72 + 0.06 X$ (adjusted $R^2 = 23\%$, p -value = 0.001). With functions' coefficients ranging from 9.175 in Mhlontlo to 16.514 in KSD, canonical discriminant analysis (CDA) revealed that in all 5 municipal facilities, travel time to healthcare facilities considerably reduces access to services (Wilk's Lambda = .750, $p = .043$).

Conclusion: HIV and TB integration is inadequate with limited accessibility. Full integration (one-stop shop services) is recommended.