

**A MODEL FOR EFFECTIVE TUBERCULOSIS INFECTION
CONTROL IN PUBLIC HOSPITALS OF VHEMBE DISTRICT,
LIMPOPO PROVINCE OF SOUTH AFRICA**

BY

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KEY CONCEPTS: TB infection transmission, effective TB infection control, administrative TB control, environmental TB control, Personal respiratory protection.

The risk of TB nosocomial infection transmission in hospitals is still a challenge, which needs urgent attention. It was then recommended that the model for effective TB infection control be adopted and implemented at all public hospitals if TB transmissions are to be minimized.

Findings from the analysis of empirical data revealed that administrative, environmental and personal protective measures practiced by HCWs at hospitals of Vhembe district were ineffective and not in line with the WHO policy. The model was developed using Chin and Krammers' methods namely analysis, synthesis, deduction and induction. The model was described using Chin and Krammers' six components of a theory. Dickhoff, James and Widenburg's elements of a practice theory. The model assumes that if hospital managers are trained first regarding TB infection control, they will be able to offer HCWs' the support needed for them to adopt effective TB control measures. The model was evaluated using Fawcett's six criteria for evaluating conceptual models. Model validation was done to test the authenticity and usefulness of the model. The model for effective TB infection control was found to be authentic and useful.

The study had adopted a cross-sectional descriptive study design embracing both quantitative and qualitative research methods of collecting and analysing data. Purposive sampling was used to select participants from a population of HCWs. Data was collected through semi-structured focus groups, semi-structured observation and structured document study. Tesch's eight steps guided the analysis of qualitative data using open coding. Quantitative data was analysed using excel spread sheet to obtain averages. The findings from quantitative data were combined with the findings from the qualitative data to make conclusions, which served as a basis for model development.

Worldwide the risk of becoming infected with tuberculosis is increasing at health care facilities that are visited by patients seeking diagnosis and cure. The overall objective of this study was to develop a model for effective TB infection control at seven public hospitals at Vhembe district of Limpopo province (South Africa).

ABSTRACT