

COMPARISON OF DIABETES MELLITUS PREVALENCE BETWEEN UNIVERSAL AND TARGETED SCREENING AMONG TUBERCULOSIS PATIENTS IN RESOURCE LIMITED SETTINGS

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ABSTRACT

BACKGROUND: Diabetes Mellitus (DM) increases the risk of active Tuberculosis (TB) infection and treatment failure. Therefore, screening of DM is important in TB patients. However, it may not be possible to screen all patients where resources are limited. This study aimed to compare the sensitivity of universal screening and targeted screening methods in the detection of DM among TB patients.

SUBJECT AND METHODS: TANDEM study was conducted from February to June 2016. This project consisted of prevalence study and clinical trial on TB-DM. A sample of TB patients aged ≥ 35 years old was selected for this study. The prevalence of the universal screening method was compared with that of the targeted method in the detection of DM among the TB patients.

RESULTS: By universal screening, 128 out of 748 (17.11%) TB patients were confirmed to have DM. By targeted screening, 30 out of 85 (35.29%) TB patients were confirmed to have DM. This difference in prevalence between the two screening methods was statistically significant ($p < 0.001$). Mean age (year) of TB patients with DM was 53.38 (SD=9.72), whereas mean HbA_{1c} was 10.77% (SD=3.10).

CONCLUSION: The prevalence of targeted screening method in the detection of DM among TB patients was higher than that of universal screening method. The targeted screening method has the potential to be used in resource-poor settings.

Keywords: prevalence, diabetes mellitus, universal screening, targeted screening, tuberculosis