

## **Tuberculin Skin Test (TST) Indurations in Smear Positive TB Patients and Healthy Individuals in Calabar, Nigeria**

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**KEYWORDS** Tuberculin Skin Test. Tuberculosis. Control. Nigeria

**ABSTRACT** The tuberculin skin test (TST) is used to detect latent *Mycobacterium tuberculosis* infection. WHO guidelines recommend 10mm as tuberculosis (TB) infection threshold for high risk individuals and 15mm for persons with no risk factors for TB. Nigeria is one of the 22 high burden countries for TB and her population is at risk of exposure to the TB germ. In an attempt to investigate indigenous TST indurations in a local population, 200 apparently healthy new students of tertiary institutions and other residents of Calabar - Nigeria metropolis that required the test for routine medical examination were examined. Each subject was injected intradermally with 0.1mL of 5TU of purified protein derivative (PPD) into the dorsal surface of the forearm. Indurated areas were measured after 48-72 hours of administration and results expressed in millimeters. 200 smear positive TB patients receiving treatment at the treatment center of the National TB Control program were used as the reference group. Results were statistically analysed using Chi square and T-test. Data obtained from the apparently healthy group show that approximately 31% of the individuals had indurations measuring 5-7mm while 29% were non-reactive. At least 25% of these individuals had indurations of >10mm compared to 95% of TB patients. Nine (4.5%) of TB patients have indurations <10mm. The results of this study imply that at least 25% of the healthy subjects are at risk of progressing to active disease when exposed to conditions that lower the individual's immune status.