

Introduction

Tuberculosis is an infectious disease primarily caused by *Mycobacterium tuberculosis*. It affects mainly the lungs (pulmonary TB) but can attack any part of the body (extra-pulmonary TB) (**WHO, 2006**).

More than two billion people – one third of the world's total population – are infected with TB bacilli, the microbes that cause TB. One in every 10 of those people will become sick with active TB in his or her lifetime. People living with HIV are at a much greater risk. (**WHO, 2008**).

Diagnosis of tuberculosis in children is difficult and poses problems that are not present in adults. Children are less likely to have obvious symptoms of tuberculosis. In addition, sputum samples are difficult to collect from children (**American Lung Association, 2007**).

The risk factors for TB are multifactorial but one contributory factor may be vitamin D deficiency, notably among groups in whom diet, cultural behavior, skin pigmentation, and gene-environment interaction contribute to reduced serum 25-hydroxyvitamin D concentrations (**Anderson et al., 2008**).

The best indicator of vitamin D status is the concentration of circulating 25-hydroxyvitamin D (**Wharton and Bishop, 2003**).