# The factors influencing TB adherence: A meta-synthesis of qualitative research

## Abstract

*Author:* Tazeem Bhatia Theuss

*Profession:* General Practitioner, Public Health specialty registrar

*Supervisor:* Mary Wickendon, Centre for International Health & Development, University College London

*Key words: Qualitative systematic review, tuberculosis, adherence behaviour, directly observed therapy*

**Background**: Tuberculosis is the curable disease with the highest mortality (Dye 2006), effecting predominately Africa and Asia. It remains a disease of poverty, associated with overcrowding, under nutrition and HIV/AIDS (Lonroth 2010). New efforts to control and eliminate TB are being made with the resurgence of TB because of HIV/AIDS, continuing social deprivation and the emergence of MDR TB. Cutting transmission through early diagnosis and treatment is a crucial facet of the strategy and requires adherence to the standard regimen of drugs (STOP TB/ WHO 2006). 1.7 million people die from tuberculosis each year (WHO 2009), many having accessed treatment, but not completed their treatment. Adherence behaviour is a complex, dynamic phenomena, that needs to be better understood in order that it can be influenced.

**Objective:** To synthesise the recent qualitative research findings, since 2005, on experience, attitudes and knowledge of patients and other stakeholders regarding treatment for TB and adherence behaviour.

**Methods:** 1324 citations were sourced from Pub Med, Science Direct, Nuffield Centre for International research, AMED, BioMed Central, BIOSIS previews, CINHAL plus, Cochrane Library, EMBASE, OVID, SCOPUS, UCL Library - Metalib, Web of Science, ASSIA and Google Scholar using free text searches of key words. 87 articles were deemed relevant after a review of the titles and abstracts, from which 19 were finally selected. A predetermined inclusion criterion was used to define the relevance of each study. A quality assessment was undertaken, though no studies were rejected on the bases of these criteria.

Using Noblit and Hare’s approach to meta-ethnography, data was extracted and themes developed through an inductive process. Studies were translated into each other by comparing their commonalities and matching themes. Themes were then merged and collapsed into broader groups. Translations were finally synthesised into a line of argument.

**Findings:** 12 themes and 14 sub themes emerged which could be classified into 3 broad categories: Socio-economic barriers, social and cultural dimensions and health system factors. Underlying poverty, exacerbated by the disease was the most dominant theme. Other structural barriers such as gender and stigma and discrimination; the social context; and failures of the health system were a combination of enablers and barriers which impacted on patients and their ability to adhere. The findings are limited by the quality of the studies included.

**Conclusion:** No single factor is responsible for patients’ decision to take or stop taking medication, but rather a complex interaction of factors shape people’s adherence behaviour. Public health interventions need to consider the needs and priorities of patients not just the service and the elimination of TB will require a broader and more coordinated effort to address the wider determinants of TB.