

UNIVERSITI TEKNOLOGI MARA

**EXPLORING THE CURRENT MANAGEMENT OF
TUBERCULOSIS AND DIABETES MELLITUS
AMONGST HEALTHCARE PRACTITIONERS
AND PATIENTS: A QUALITATIVE STUDY**

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ABSTRACT

DM is the most common comorbidity in TB patients with prevalence as high as 15-30% in Malaysia. The convergence of these two diseases is linked to poorer TB treatment outcomes, increased chances of relapse, reactivation of latent TB infection and higher risk of death during TB treatment. Realising this joint burden, World Health Organisation (WHO) and the International Union Against Tuberculosis and Lung Disease (The Union) have developed a provisional collaborative framework to guide national programmes, researchers, and those directly involved in the care, prevention, and control of TB and DM in order to establish a coordinated response to both diseases. In order to improve the provision of pharmaceutical care that is suited to every TB-DM patient, a thorough understanding of obstacles and limitations in the existing healthcare system must be attained. This study aims to explore the current management of TB and DM amongst healthcare practitioners and patients and seeks to unravel new ideas of creating awareness and imparting knowledge about the link between TB and DM amongst healthcare practitioners and patients. Data were collected through face-to-face interviews with healthcare practitioners and patients at Institut Perubatan Respiratori which were audio-recorded before being transcribed verbatim and analysed thematically. The pre-determined and emerging themes included the TB-DM management, directly observed treatment short-course (DOTS), knowledge about TB-DM link and barriers in healthcare system. The study revealed that the integration of DM management into the care of TB patients with DM comorbidity was still found to be lacking especially concerning DM monitoring in TB patients. DOTS visits were not utilised for DM monitoring due to time constraint and patient reluctance. Educational tools are imperative to educate both healthcare practitioners and patients effectively.

CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Diabetes mellitus and tuberculosis epidemic convergence had been studied centuries ago and was documented in a book entitled *Phthisiologia: or a treatise on consumption* which was published in the year 1964 (Morton, 1720) suggesting that the link had been established since Roman times. Following numerous studies that have unravelled the causal relationship between tuberculosis and diabetes mellitus, the World Health Organisation (WHO) and the International Union Against Tuberculosis and Lung Disease (The Union) have developed a provisional collaborative framework whose primary purpose is to guide national programmes, researchers, and especially those directly involved in the care, prevention, and control of TB and DM in order to establish a coordinated response to both diseases (Harries et al., 2011). Another movement initiated with funding by the European Commission (EC) relative to the 7th Framework Programme of the European Union is called TANDEM which is a 4-year collaborative project coordinated by the London School of Hygiene & Tropical Medicine ("TANDEM," 2014). These are some global initiatives that share a common goal of primarily improving the efforts of prevention, disease management, and prognostic aspects of TB-DM comorbidity as well as making a revamp in the acquisition of basic knowledge among patients and healthcare providers on the relationship between TB and DM.

1.2 Problem Statement

The establishment of knowledge regarding the association of TB and DM is pervasive and is still ongoing. However, the circulation of this vital information seems to be confined to the groups of individuals involved in the research processes and not extensively disseminated to healthcare practitioners who are engaged directly in the care of patients, primarily the physicians, nurses, and pharmacists. Before developing a healthcare plan that is suited to every TB-DM patient, a thorough understanding of obstacles and limitations in the existing healthcare system must be attained. These