Original Article

A cross-sectional study to assess the factors influencing adherence to directly observed treatment short course among tuberculosis patients in Udupi district

Badondor Shylla¹, Prakash Narayanan², P. Arathi Rao²

¹Department of Public Health, Indian Institute of Public Health Shillong, Meghalaya, India, ²Department of Public Health, Prasanna School of Public Health, Manipal Academy of Higher Education, Manipal, Karnataka, India

Abstract

Background: Tuberculosis (TB) is a major global health problem and continues to be endemic in certain parts of India. This study was conducted to find the sociodemographic factors and lifestyle-related factors influencing adherence to directly observed treatment short course (DOTS) and the side effects of antitubercular (ATT) drugs among TB patient on DOTS in Udupi district, Karnataka. **Materials and Methods:** A total of 158 TB-registered patients taking DOTS treatment in Udupi district were recruited using a convenience sampling technique. Morisky Medication Adherence Scale was adopted to assess the adherence level of treatment. **Results:** About 59.5% of the respondents were having adherence and 40.5% had no adherence to the treatment. Around 26% were alcoholic. Majority of them (86.7%) experienced at least one of the side effects of the ATT drugs. On multivariate analysis, primary education ($P = 0.047$), pre-university and above ($P = 0.025$), daily wage workers ($P = 0.013$), salaried persons ($P = 0.015$), and traveling cost ($P = 0.016$) were associated with DOTS adherence. However, predisposing factors such as addictions and the side effects of the ATT drugs did not show any significant association. **Conclusion:** The greater proportion of the TB patients was adhering to DOTS. Factors such as education, employment status, and traveling cost had a significant association with DOTS adherence. Factors such as discrimination and side effects of ATT were barriers to DOTS adherence.

Key words: Adherence, directly observed treatment short, tuberculosis patients

Address for correspondence: Badondor Shylla, Indian Institute of Public Health Shillong, Lawmali, Pasteur Hill, Shillong – 793 001, Meghalaya, India. Phone: +91-9774567798/0364 2592014. E-mail: badonshylla14@gmail.com

Introduction

Tuberculosis (TB) is an infectious disease and is considered to be as a major global health problem.^[1] The Southeast Asian region of the WHO contributes to 38% of the global incidence of TB. In 2013, there were around 3.4 million

new TB cases and 440,000 deaths due to TB.^[2] India accounts for nearly one-fourth of the global burden of TB every year. In 2013, the incidence of TB accounted to be around 2.2 million, with the prevalence of 2.8 million TB cases and 0.27 lakhs mortality due to TB.^[3] The WHO recommended directly observed treatment short course (DOTS) strategy, which is a part of the Revised National TB Control Program in India in 1997 to address the problem of TB. DOTS comprises of five components, namely political commitment, diagnosis by quality microscopy, adequate supply of right drugs, directly observed treatment, and accountability.^[3] The DOTS strategy includes treating TB patients with the standardized drugs, rifampicin, isoniazid, pyrazinamide, and ethambutol-based regimens of 6 months' duration for new TB cases and 8 months for retreatment cases with the addition of streptomycin.^[4] Patient compliance is monitored by DOTS providers by ensuring that every dose of the medicines is consumed by the patients under their direct supervision. DOTS provider may be a health worker,

Access this article online

Website: http://www.innovationalpublishers.com/Journal/ijns	e-ISSN: 2581-463X
DOI: https://doi.org/10.31690/ijns/31	

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution Noncommercial Share Alike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

How to cite this article: Shylla B, Narayanan P, Rao PA. A cross-sectional study to assess the factors influencing adherence to directly observed treatment short course among tuberculosis patients in Udupi district. Indian Journal of Nursing Sciences 2019;4(1):19-23.