

Assessment of Self-Care Practices of Patients Suffering from Tuberculosis

Thesis

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List of Abbreviations

Abbr.	Full-term
AFB	Acid-fast-bacilli
AIDS	Acquired immune deficiency syndrome
BCG	Bacillus Calmette–Guérin
CDC	Centers for Disease Control and Prevention
CHN	Community Health Nurse
DH	Department of Health
DOTS	Directly Observed Treatment, Short Course
EMB	Ethambutol
FDA	Food and Drug Administration
GDF	Global TB Drug Facility
HIV	human immunodeficiency virus
ICN	International Council of Nurses
IGRAs	Interferon-Gamma Release Assays
INH	Isonicotinylhydrazine
LTBI	latent TB infection
MDR-TB	Multidrug-Resistant TB
TB	Tuberculosis
NHS	National Health Service
NPS	National Prescribing Services
PZA	Pyrazinamide
RIF	Rifampin
RR-TB	Rifampicin-resistant tuberculosis
TST	Tuberculosis Skin Test
U.S.	United States
WHO	<i>World Health Organization</i>
XDR TB	Extensively Drug-resistant TB

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Assessment of Self-Care Practices of Patients Suffering from Tuberculosis

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Abstract

Background: Tuberculosis is defined as a highly contagious infection caused by Mycobacterium tuberculosis that may affect almost any tissue of the body, especially the lungs. It is considered a medical and social problem that has been drawing the attention in many countries. **Aim:** to assess self-care practices of TB patients. **Research design:** A descriptive design was adopted in the study. **Setting:** The study was conducted in 10 chest dispensaries clinics affiliated to Menoufiya Governorate. **Sampling:** A purposive sample composed of one hundred and ten (110) of TB patients chosen randomly. **Tools:** Different tools were used for data collection of the study included, First tool: Interviewing questionnaire to assess sociodemographic characteristics, knowledge and the past and current history of respiratory system of study sample, Second tool: self-care checklist to assess the patients practices **Results:** The main results of study revealed that there were 78.2% of the patients their ages were between 26-65 years, 59.1% of patients were males. Results also showed that 80.9% of the patients had insufficient income. Regarding to total level of knowledge about TB disease 15% of patients had poor knowledge about TB disease while 45% of them had average and 31% had good knowledge. Results also showed that 80.9% of patients always committed to take the medicine on time. **Conclusions:** The current study findings illustrated that one of patients had bad health condition while less than half of them had good health condition and slightly less than two thirds had very good health condition. There were significant relations between total level of patient's practices and gender while there were no significant relation between (commitment to TB treatment, environmental practices) and gender. **Recommendation:** Further studies should be conducted to include large sample for generalization of results

Keywords: Tuberculosis, Self-Care Practices, patients

Introduction

Tuberculosis (TB) is an airborne bacterial infection caused by *Mycobacterium tuberculosis* organism that primarily affects the lungs, although other organs and tissues may be involved. It is not easy to become infected with tuberculosis. Most infected people have latent TB, meaning they have the tuberculosis germs in their bodies, but their immune system protects them from becoming sick and they are not contagious (**American lung association, 2018**).

DOTS is not just a treatment method. It ensures that a TB patient takes the right anti-tuberculosis drugs, in the right doses, at the right intervals. This is fulfilled through an observer watches the patient swallowing their tablets in a way that is sensitive and supportive to the patient's needs. WHO has initiated DOTS in an attempt to prove that simple supervision of anti-TB treatment will lead to a high cure rate. by applying DOTS strategy in Egypt, a successful treatment outcome was ensured (**Nduta, 2017**).

Self-care is any activity that people do deliberately in order to take care of mental, emotional, and physical health, Although it is a simple concept in theory, it is something people very often overlook. Good self-care is key to improved mood and reduced anxiety, it is also key to a good relationship with oneself and others, Knowing what self-care

is not might be even more important. It is not something that people force themselves to do, or something do not enjoy doing (**Raphailia Michael, 2019**).

There are different types of self-care, and it is important to have a balance in the life. These types which are for example physical self-care, emotional self-care, intellectual/mental self-care, spiritual self-care and social self-care. During the treatment period of 6 months, there are not only the physical problems suffered in patients with pulmonary tuberculosis but they also face psychosocial problems and emotional changes due to the illness (**Lunanimafox, 2017**).

The vital role played by community health nurses in the care and treatment of tuberculosis patients around the world. Scientists and researchers are critical to ending TB, but nurses, working on the front line of TB care and treatment, are equally so a registered nurse turned TB educator, has been involved in TB prevention, care and control for more than 20 years emphasizing the central role of nurses in the treatment of TB (**Linette, 2018**).

Community health nurses spend the most of time with patients, so when empowered with knowledge on treating TB it is a benefit to all because this leads to good adherence, good outcomes, a healthy community for all, and through this, they will reach the goal strategy – a TB-free world in 2030 (**Union Scientific, 2017**).

Significance of the study:

TB is preventable disease through health awareness of people about preventive measure and immunization. This will contribute in decreasing high cost of treatment. The importance of this study is to assess the knowledge, and self-care practices of patients toward TB

In EYGPT according to WHO statistics; the prevalence rate of TB in Egypt was 23 per 100, 000 people according to the World Health Organization estimate in 2017, while the incidence rate was 13 per 100, 000 people. Screening, diagnosis, notification, and registration of TB cases were implemented all over Egypt according to the National TB Strategy of the National Tuberculosis Control Program (**WHO, 2018**).

Aim of the study

The aim of this study is to assess self-care practices of TB patients through:

1. Assessing patient's health condition.
2. Assessing patient's knowledge about TB disease.
3. Assessing self-care practices toward TB disease.

Research Question:

1. What is the patients' knowledge about disease?
2. What are self-care practices of patient toward TB disease?
3. Is there a relation between patients' self-care practices and their health condition?
4. Is there a relation between patient's knowledge about TB disease and their demographic data?
5. Is there a relation between patients' self-care practices toward TB disease and their demographic data?
6. Is there relation between patients' self-care practices and patient's knowledge toward TB disease?

Part 1: Tuberculosis Disease

Definition:

Tuberculosis is defined as a dangerous disease caused by bacteria (*Mycobacterium tuberculosis*) that most often affect the lungs. Tuberculosis is curable and preventable. TB spreads from person to person through the air. When people with lung TB cough, sneeze or spit, they propel the TB germs into the air. A person needs to inhale only a few of these germs to become infected (**WHO, 2017**).

About one-third of the world's population has latent TB, which means TB bacteria have infected people but are not (yet) ill with disease and cannot transmit the disease. People infected with TB bacteria have a lifetime risk of falling ill with TB of 10%. However persons with compromised immune systems, such as people living with HIV/AIDS, malnutrition or diabetes, or people who use tobacco, have a much higher risk of falling ill (**WHO, 2017**).

When a person develops active TB disease, the symptoms are (cough, fever, night sweats, weight loss etc.) may be mild for many months. This can lead to delays in seeking care, and results in transmission of the bacteria to others. People ill with TB can infect up to 10-15 other people through close contact over the course of a year. Without proper treatment up to two thirds of people ill with TB will die (**Mayo Clinic, 2017**).

Since 2000 more than 49 million lives have been saved through effective diagnosis and treatment. Active, drug-sensitive TB disease is treated with a standard 6month by course of 4 antimicrobial drugs that are provided with information, supervision and support to the patient by a health worker or trained volunteer. The vast majority of TB cases can be cured when medicines are provided and taken properly (**Chronic disease center, 2016**).

Causes of tuberculosis:

Tuberculosis is caused by bacteria that spread from person to person through microscopic droplets released into the air. This can happen when someone with the untreated, active form of tuberculosis coughs, speaks, sneezes, spits, laughs or sings, although tuberculosis is contagious, it's not easy to catch. Person are much more likely to get tuberculosis from someone who live with or work with him than from a stranger. Most people with active TB who have had appropriate drug treatment for at least two weeks are no longer contagious (**Schiffman, 2019**).

Types of tuberculosis:

There are many types of tuberculosis, but the main two types are termed either active or latent TB. Active TB is when the disease is actively producing symptoms and can be transmitted to other people; latent disease is when the person is infected with *Mycobacterium tuberculosis* bacteria, but the