



The Egyptian Society of Chest Diseases and Tuberculosis  
Egyptian Journal of Chest Diseases and Tuberculosis

[www.elsevier.com/locate/ejcdt](http://www.elsevier.com/locate/ejcdt)  
[www.sciencedirect.com](http://www.sciencedirect.com)



ORIGINAL ARTICLE

# Evaluation of primary health care service participation in the National Tuberculosis Control Program in Menofya Governorate



Mahmoud M. Al Salahy<sup>a</sup>, Tarek S. Essawy<sup>a</sup>, Osama I. Mohammad<sup>a</sup>,  
Rasha M. Hendy<sup>a,\*</sup>, Asmaa O. Abas<sup>b</sup>

<sup>a</sup> Department of Chest Diseases, Benha University, Egypt

<sup>b</sup> Quesina General Hospital, Egypt

Received 15 March 2016; accepted 20 March 2016

Available online 24 May 2016

## KEYWORDS

Primary health care service;  
Menofya Governorate;  
Tuberculosis

**Abstract** To evaluate the primary health care (PHC) services performance in National Tuberculosis Control Program (NTP) in Menofya Governorate this study was created.

**Methods:** A questionnaire based on 6 parameters was used to evaluate the PHC system performance: I – Physicians basic knowledge about TB (causative agent, methods of spread, clinical picture, essential steps in investigations: X-ray and sputum smear). II – Facilities for primary investigation (sputum examination and chest X-ray). III – Communication with the central health authorities or a TB specialist. IV – Proper recording systems needed for proper patient management and follow up. V – Follow up schedules available for the detected/recorded patients. VI – Role in community education about the disease.

**Results:** The studied area included 10 health territories and 46 primary health care units (34.8% were urban and 65.2% were rural) with one physician in each unit. The mean percent of the correct answers of the basic knowledge score was 54.5% and was higher in rural units physicians than urban units physicians. There were lack of proper facilities (laboratory for sputum analysis and X-ray apparatus), and availability of DOTS in 32 units (69.6%). Communication with central health authorities in urban areas and rural areas was nearly equal (87.5–86.7%). Case recording was lower in urban than rural areas (6.25% vs. 43.3%). Patient follow up after referral to central health units was higher in rural than urban areas (23.3% vs. 6.25%). Participation in community education was higher in rural than urban areas (80% vs. 20%).

**Conclusion:** In the Menofya Governorate, PHC physicians lack proper knowledge about TB and their units lack proper equipment. The PHC system needs to be empowered by the health care authorities through training and equipment for better performance in NTP.

© 2016 The Egyptian Society of Chest Diseases and Tuberculosis. Production and hosting by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

\* Corresponding author.

Peer review under responsibility of The Egyptian Society of Chest Diseases and Tuberculosis.

<http://dx.doi.org/10.1016/j.ejcdt.2016.03.010>

0422-7638 © 2016 The Egyptian Society of Chest Diseases and Tuberculosis. Production and hosting by Elsevier B.V.

This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## Introduction

World Health Organization (WHO) Stop TB Strategy explicitly acknowledges that effective and sustainable TB control relies on the general health care system, especially on well-functioning primary health care (PHC) as weak health systems pose many barriers to effective TB control [1]. PHC providers should follow the regulations within their country. Since PHC providers are the first contact with persons seeking medical help, good communication with PHC services can be very useful in detecting and treating patients with tuberculosis (TB). Initial suspicion of TB most frequently occurs at the PHC level and when a PHC provider encounters a patient with symptoms indicating TB, he or she should examine the patient, take a medical history, and order sputum smear examination and chest X-ray or refer to a provider who can carry out these steps [2].

This study was done aiming at evaluation of the participation of primary health care service in National Tuberculosis Control Program in Menofya Governorate.

## Methods

The studied area (Menofya Governorate) includes 10 health territories.

According to the Egyptian NTP [3] and WHO European region guidelines [4], the PHC system should have: I – Physicians with basic knowledge about TB (causative agent, methods of spread, clinical picture, essential steps in investigations: X-ray and sputum smear). II – Facilities for primary investigation (sputum examination and chest X-ray) III – Communication with the central health authorities or a TB specialist. IV – Proper recording systems needed for proper patient management and follow up. V – Follow up schedules for the detected patients. VI – Role in community education about the disease.

In the light of the above guidelines, this study evaluated these 6-parameters to check if PHC units have met the required criteria using the following questionnaire system:

*A – The basic knowledge is assessed through 11 questions, giving 1 for a positive answer and 0 for a negative or inconclusive one. These questions and positive answers were*

1. What is tuberculosis? (Infectious disease of the lung caused by tubercle bacilli characterized by lung destruction and fibrosis).
2. What is the causative agent? (*Mycobacterium tubercle* bacilli).
3. What are the types of TB? (Pulmonary and extra-pulmonary).
4. What are the methods of spread? (Droplet, cough and sneezing).
5. What are the main symptoms? (Cough expectoration, hemoptysis, fever and sweating especially at night).
6. What are the main signs? (General: weight loss and fever and local: consolidation or fibrosis in upper lobes with or without cavitation).
7. How to suspect extra-pulmonary TB? (Enlarged cervical lymph nodes, chronic skin ulcers, spine deformity or cold abscesses).
8. What will you do if you suspect a pulmonary TB case? (Sputum analysis for acid fast bacilli, chest X-ray and referral to specialist or central hospital).

9. What are the main signs in X-ray? (Upper lobe infiltration, fibrosis with or without cavitation).
10. If sputum smear is negative and X-ray suggestive of TB, what will you do? (Refer to a central chest hospital or a specialist).
11. What

are the main drugs used in treatment? (INH, Rifampicin, Pyrazinamide, Ethambutol and Streptomycin).

*B – Facilities for case detection and treatment*

Does a working lab for sputum smear exist? (Yes; 1 – No; 0). Does a working X-ray apparatus exist? (Yes; 1 – No; 0). DOTS application exists? (Yes; 1 – No; 0).

*C – Have a communication with central health authorities or a TB specialist? (Yes; 1 – No; 0)*

What are the methods of communication? (Phone, net or send patients with reports). What are the types of health authorities? (Ministry of health related hospitals such as Central Teaching, chest, fever hospitals or University hospitals).

*D – Have proper recording systems for proper patient management and follow up? (Yes; 1 – No; 0)*

The minimum recorded items required: Name – Age – Sex – Address – Registration Number – Referral site – How suspected (signs and symptoms) – Sputum and CXR results – Diagnosis – treatment given – Follow up and outcome.

*E – Do you follow up patients after referral to central health units? (Yes; 1 – No; 0)*

How do you make follow up? – By phone, by visits to the patient or by patient visit to the primary care units.

*D – Role in community education*

- Are there any ways to communicate with and educate the public about TB? (Yes; 1 – No; 0).
- Where do you make these communications? (At the primary care units, Youth clubs and collections or during infectious disease prevention campaigns).

*Statistical analysis*

Collected data were analyzed using SPSS software, version 16 (Spss Inc, Chicago, IL). Categorical data were presented as numbers and percentages while quantitative data were expressed as mean and standard deviation. Chi square test, or Fisher's exact test, Spearman's correlation coefficient (rho) and Mann-Whitney *U* test were used as tests of significance. The accepted level of significance in this work was stated at 0.05 ( $P < 0.05$  was considered significant).  $P$  value  $> 0.05$  insignificant,  $P < 0.05$  significant and  $P < 0.001$  highly significant.

## Results

The studied area included 10 health territories and 46 primary care units (centers) with one physician in each unit. Urban territories comprised 16 units (34.8%) while rural territories comprised 30 units (65.2%). Only 40 patients were recorded in all units (Table 1). The % of the correct answers of the basic knowledge score ranged from 18% to 81%, with a mean of

Download English Version:

<https://daneshyari.com/en/article/3399826>

Download Persian Version:

<https://daneshyari.com/article/3399826>

[Daneshyari.com](https://daneshyari.com)