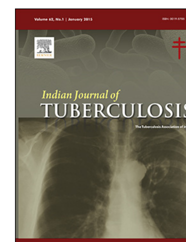
Available online at www.sciencedirect.com

ScienceDirect

journal homepage: http://www.journals.elsevier.com/indian-journal-of-tuberculosis/



Original Article

Health-related quality of life among tuberculosis patients under Revised National Tuberculosis Control Programme in rural and urban Puducherry

S. Ramkumar [a,*], S. Vijayalakshmi [a], N. Seetharaman [b], R. Pajanivel [c], A. Lokeshmaran [b]

[a] Department of Community Medicine, Vinayaka Mission Medical College & Hospital, Karaikal, Pondicherry, India
[b] Department of Community Medicine, Mahatma Gandhi Medical College and Research Institute, Pondicherry, India
[c] Department of Pulmonary Medicine, Mahatma Gandhi Medical College and Research Institute, Pondicherry, India

ARTICLE INFO

Article history:
Received 21 December 2015
Accepted 1 November 2016
Available online 16 December 2016

Keywords:
Tuberculosis
DOTS
SF-36
HR-QoL
Follow-up

ABSTRACT

Background: Globally, tuberculosis (TB) continues to be the major public health problem. Limited research is carried out on the impact of the disease on health-related quality of life (HR-QoL). The study aims to assess the HR-QoL among TB patients during and after Directly Observed Treatment Short-course (DOTS) therapy and to compare the HR-QoL of these patients with matched neighbourhood controls.

Methodology: A community-based longitudinal study was conducted in Ariyankuppam and Bahour communes of Puducherry from January 2014 to April 2015. 92 TB patients registered for DOTS therapy during January–June 2014 were interviewed in their DOTS centres during first visit using the SF-36 questionnaire to assess their HR-QoL. During the second visit, 9 TB patients were lost to follow-up; therefore, a total of 83 patients were interviewed in their houses and, simultaneously, 83 matched neighbourhood controls were interviewed. Non-parametric tests were used to compare the HR-QoL scores. p value <0.05 was considered as statistically significant.

Results: The mean HR-QoL scores had improved among TB patients upon completion of DOTS (80.8 ± 20.3), when compared to HR-QoL scores (48.3 ± 30) during treatment with significant difference. The HR-QoL scores of TB patients after DOTS completion (80.8 ± 20.3) had improved to levels comparable to that of non-TB controls (77.5 ± 29.1) without significant difference.

Conclusion: HR-QoL of patients suffering from TB was low. However, the study provides evidence that DOTS treatment offers a demonstrable improvement of HR-QoL among TB patients almost to the level of general population. The findings can be used in advocating the effectiveness of DOTS in TB control efforts.

© 2016 Tuberculosis Association of India. Published by Elsevier B.V. All rights reserved.

* *Corresponding author at*: Assistant Professor, Department of Community Medicine, Vinayaka Mission Medical College and Hospital, Karaikal, Pondicherry, India. Tel.: +91 9600442829.
E-mail address: drramkumar@gmail.com (S. Ramkumar).

http://dx.doi.org/10.1016/j.ijtb.2016.11.004

0019-5707/© 2016 Tuberculosis Association of India. Published by Elsevier B.V. All rights reserved.

1. Introduction

Tuberculosis (TB) is an infectious disease caused by *Mycobacterium tuberculosis*, predominantly transmitted by infectious droplet nuclei.[1] The causative organism of TB was discovered more than 100 years back, and highly effective drugs and vaccine are available making TB a preventable and curable disease. Despite these advancements in medical managements and techniques, TB continues to be a one of the major public health problems globally.[1]

Each year, there are around 9 million new cases of TB, and close to 2 million people die from the disease.[2] Directly Observed Treatment Short-course (DOTS) is one of the most cost-effective measures in controlling the TB. With the recent development of effective TB management strategies, the focus has shifted from the mortality prevention to morbidity reduction. This decline in disease rates has been attributed to changes in the non-specific determinants of the disease such as improvement of standard of living and quality of life of the people.[3]

The Revised National Tuberculosis Control Programme (RNTCP) in India applies the DOTS strategy in the diagnosis and treatment of TB disease. The programme routinely focuses on bacteriological markers of response and on outcomes such as cure, mortality and treatment default/failure. However, there are various aspects that may lead to a poor health-related quality of life (HR-QoL). TB patients distinguish themselves to be at risk of stigma-related social and economic consequences, making the individual feel rejected and isolated from their families and friends.[4] Besides the sufferings from the disease, the treatment itself may have a role in affecting the HR-QoL, which includes prolonged TB treatment (at least 6 months) with multiple drugs that can lead to adverse reactions in TB patients though it is temporary, compared to the benefits.[5] Finally, there is a lack of knowledge regarding the disease process and its treatment among rural and urban slum populations affected with TB, which may contribute to feelings of powerlessness and anxiety.[6]

Societies have started to recognize health as a basic human right and are now demanding a better HR-QoL. Measuring a disease's impact on the HR-QoL of the patient is an important component in making policy decisions. Therefore, stakeholders all over the world are now increasingly concerned about improving the HR-QoL of their citizens by providing primary healthcare services to the people thereby enhancing the physical, mental and social well-being of the population to ensure good HR-QoL of their citizens.

With these vacuities in literature, we conducted a longitudinal study in the community to assess the HR-QoL during and after DOTS treatment among TB patients under RNTCP compared to a non-TB control group in Puducherry using the SF-36 tool.

2. Methodology

Ethical Committee approval from Institutional Human Ethical Committee and funding approval from state TB control society were taken before commencing the study. Permission was obtained from The Mission Director, Puducherry State Health Mission and from the Tuberculosis Programme Manager, Chest Clinic – Puducherry to access the details of the registered cases of TB from the TB register at Chest Clinic, CHCs and PHCs covered under our study area.

2.1. *Study setting*

The study was conducted in Ariyankuppam and Bahour Commune Panchayats of Puducherry, situated in southern part of India. The study area was covered by 4 DMCs cum DOTS centre (1 CHC/3 PHC) and 3 DOTS centres (3 PHCs).

2.2. *Study participants*

2.2.1. *Case*

The study included all willing pulmonary and extrapulmonary TB patients aged above 18 years registered for DOTS therapy in the study area during January 2014–June 2014.

2.2.2. *Controls*

Age, sex and co-morbidity matched non-tuberculous individuals from the patients' neighbourhoods were included as controls to document the HR-QoL among the general population in the study area. If the TB patient has more than one co-morbidity, any one co-morbidity was matched for the controls.

2.3. *Study tool*

The investigator interviewed the TB patients and non-TB controls in local language using a pre-designed proforma.

2.3.1. *Health-related quality of life assessment questionnaire and its scoring*

HR-QoL among TB patients and non-TB controls was assessed using SF-36 questionnaire.[7,8]

It contains 8 categories to assess the diverse concepts of health including physical functioning (PF, 10 items), energy/vitality (VT, four items), role physical (RP, four items), social functioning (SF, two items), bodily pain (BP, two items), role emotional (RE, three items), general health (GH, five items) and mental health (MH, five items).

Responses to each of the SF-36 items are scored and summed according to a standardized scoring protocol, and expressed as a score on a 0–100 scale for each of the eight health concepts.[7,8] Higher scores represent better self-perceived health.

The Tamil language translation of SF-36 questionnaire involves multiple independent forward translations by native speakers, reconciliation of the translation into one form and back translation of this Tamil SF-36 questionnaire into English to check the originality of the translation.

2.4. *Study design*

The present study was a prospective longitudinal study.

Download English Version:

https://daneshyari.com/en/article/5672375

Download Persian Version:

https://daneshyari.com/article/5672375

Daneshyari.com