

Role of a counselor in the management of multidrug-resistant TB

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Abstract

The problem of tuberculosis has grown to become a major public health problem. The situation is really scary in the developing countries due to the ever-growing numbers of the drug resistant TB cases. The multidrug-resistant TB (MDR-TB) has become a big issue due to the longer treatment duration, high pill burden and relatively common adverse drug reactions due to comparatively toxic second line antitubercular drugs. The role of a counselor in the treatment adherence and success is very important. In this article the authors highlight the importance of a counselor in the management of MDR-TB.

Keywords: Counselor; Drug-resistance; Multidrug resistant tuberculosis; Tuberculosis.

Commentary

Tuberculosis is a public health problem and is a significant cause of death, due to airborne infection by the *Mycobacterium tuberculosis*^[1-4]. The problem of drug resistant TB came to limelight since the year 1990^[3]. The WHO has long accepted that Multidrug-resistant TB (MDR-TB) exists in the majority of countries. However, the impact of this type of TB is really grave on the patients, especially in the developing countries. As per the WHO Global TB report 2013, about 3.5% of new TB patients and about 20.5% of previously treated cases have MDR-TB^[3]. Of the total 480000 estimated cases of MDR-TB in the year 2014, only 123000 were detected and reported with MDR/Rif Resistant TB and out of these only 111000 MDR-TB patients were started on MDR-TB treatment with an estimated 190000 deaths^[5]. The majority of the cases occurred in three countries, i.e. India, China and the Russian Federation^[5]. The biggest challenge for the patients being prolonged treatment with multiple drugs and treatment adherence. Drugs used to treat MDR-TB are usually poorly tolerated and are linked with higher rates of unpropitious events resulting in an overall treatment success rate of about 50–80%^[6-9]. Thus the role of advocacy through local community leaders, awareness through face to face interaction regarding treatment adherence with patients and their attendants is very important and imperative in improving MDR-TB treatment outcomes. As the drugs prescribed for MDR-TB are quite toxic, the patients may leave the treatment in between,

leading to increased default rate and thus chances of development of extensively drug resistant TB are also high. Besides, the patients co-infected with HIV are prone to further complications.

Completing MDR-TB treatment is a great challenge for the patient and more so his family members. Thus the services of the MDR-TB counselor are really beneficial, as their presence imparts the necessary impetus in providing the Programmatic Management of Drug-resistant TB Services in the district. The provision of the MDR-TB counselor is through State Programme Officer via the Population Services International under the project Axshya at the district TB centers^[10]. These counselors work as a bridge between the patients and the treating physicians and are in constant touch with the MDR-TB patients through regular home visits and phone calls. During the regular visits to the patient's residence, the counselor meets with the family members apart from the patient and provides necessary psychological support. The impact, the disease has on the patient's lifestyle, on his mental framework and also the sufferings of the family members are analyzed and the counselor helps the patient and his family tide over this difficult and crucial phase. In depth interviews of patients and his family members by the counselor to find behavioral blocks and to prevent any drop-offs is gauged and remedial measures advocated. Sharing experiences of patients undergoing treatment and adopting innovative practices improve treatment outcomes.

The treatment of MDR-TB lasts for 24-27 months and has considerable social and economic burden on patient's life. Also, the disease entails a massive psychological impact. The services of an MDR-TB counselor are an adjunct to the efforts of the healthcare workers and also it serves as a useful tool in promoting awareness about the disease and ensures treatment adherence.

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References

1. Yadav S, Rawal G. Tubercular nodular episcleritis- A case report. *J Clin Diagn Res.* 2015;9(8):ND01-ND02.
2. CDC. Case definitions for infectious conditions under public health surveillance. *MMWR Recomm Rep.* 1997;46(RR-10):1-55.
3. Yadav S, Rawal G. Primary extrapulmonary multidrug-resistant tuberculosis of the sternum without HIV infection. *J Clin Diagn Res.* 2016;10(1):RD01-RD03.
4. Yadav S. A new concept in tuberculosis awareness in the low income countries. *Edorium J Tuberc.* 2015;5:1-4.
5. WHO. Global tuberculosis report 2015. Available from URL: http://apps.who.int/iris/bitstream/10665/191102/1/9789241565059_eng.pdf?ua=1. Last accessed 2016 on April 22.
6. Fox GJ, Menzies D. A review of the evidence for using Bedaquiline (TMC207) to treat multi-drug resistant tuberculosis. *Infect Dis Ther.* 2013;2(2):123-144.
7. Ahuja SD, Ashkin D, Avendano M, Banerjee R, Bauer M, JN Bayona, et al. Multidrug resistant pulmonary tuberculosis treatment regimens and patient outcomes: an individual patient data meta-analysis of 9,153 patients. *PLoS Med.* 2012;9:e1001300.
8. Orenstein EW, Basu S, Shah NS, Andrews JR, Friedland GH, Moll AP, et al. Treatment outcomes among patients with multidrug-resistant tuberculosis: systematic review and meta-analysis. *Lancet Infect Dis.* 2009;9:153-161.
9. Johnston JC, Shahidi NC, Sadatsafavi M, Fitzgerald JM. Treatment outcomes of multidrug-resistant tuberculosis: a systematic review and meta-analysis. *PLoS One.* 2009;4:e6914.
10. Project Axshya. Available from URL:- <http://www.axshya-theunion.org/>. Last accessed 2016 on April 22.