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Multi-Drug-Resistant Tuberculosis

Editorial

Mirhashemi S[1*], Mirhashemi AH[2], Kalantar Motamedi MH[1], Danial Z[1], Khoshmohabat H[1]

[1] Trauma Research Center, Baqiyatallah University of Medical Sciences, Tehran, Iran.
[2] Assistant professor, Tehran University of Medical Sciences, Tehran, Iran.

*Corresponding Author:
Sedigheh Mirhashemi,
Trauma Research Center, Baqiyatallah University of Medical Sciences,
Tehran, Iran.
E-mail: motamedical@yahoo.com

Tuberculosis (TB) is one of the most important health issues in developing countries. Understanding the epidemiology of TB is essential for effective control of the disease [1]. Drug-resistant TB is a danger that threatens the world and should be taken seriously; the highest incidence of TB in Iran is in the provinces of Sistan, Baluchestan and Golestan because of Afghan refugees. The incidence of TB in the country is 13.5 per thousand. This figure is 7 to 9 per thousand in developed countries; and in Africa it is 150 per thousand. The cost of treatment and hospitalization of patients with TB approximates 60 USD. In patients with resistant TB (MDR) admission is about 4333 USD. Ultra-resistant tuberculosis or XDR TB treatment is several times that. Although the prevalence of TB in our country has decreased due to free medical care for these patients, rapid two-hour TB diagnosis centers, vaccination, chemoprophylaxis, education, system of recording and reporting patients etc., multidrug resistant TB however, has increased. Drug resistance is one of the main causes of death in TB patients and recent reports indicate that the incidence of TB resistant to all drugs is on the rise [2] 30 to 35 percent of TB patients in major cities, especially addicts, mentally ill and HIV positive cases do not complete treatment. MDRTB is increasing because lack of detection in rural areas, inadequate health coverage due to population growth, failure to follow the treatment protocol, inappropriate therapeutic dose and failure to complete the full course of treatment (in imprisoned addicts and AIDS patients and household) lack of proper planning and disregard to operational programs, and lack of financial resources are major cause in the drug resistance [2]. Due to the high level of non-TB mycobacteria, it is recommended that all patients at the time of diagnosis of TB, undergo culture and antibiogram to prevent improper treatment of ectopic TB that will increase drug resistance and jeopardize patients from receiving the proper treatment [3]. Actions taken towards TB is dependent on effective screening; the success of national TB control depends on the participation and cooperation of patients and physicians. Knowledge of factors affecting the detection and successful treatment, is the first step in reforming the program and prevention of MDR TB [4].

References

[1]. Alikhani A, Yazdani Charati J, Ghovvati A, Ahangarkani F, Delavarian L, et al. (2015) Clinical epidemiology and paraclinical findings in tuberculosis patients in north of iran. BioMed Research International 26(5): 339-342.
[2]. Velayati AA, Farnia P, Masjedi M, Ibrahim TA, Tabarsi P, et al. (2009) Totally drug-resistant tuberculosis strain: evidence of adaptation at the cellular level. Eur Respir J 34(5): 1202-1203.
[3]. Tavanaee Sani A, Ghazvini K, Salehi M, Shakiba A (2015) Determination of Mycobacterium tuberculosis resistance to anti tuberculous drugs and influencing factors on samples referred to Shariati hospital in Mashhad in 2012-2013.
[4]. http://www.sbmu.ac.ir/?siteid=107&pageid=6012

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