

## Incidence of Tuberculosis in Parsabad-e-Moghan during 2005-2011

Abdollah Dargahi,\*<sup>1</sup> Razieh Khamutian,<sup>1</sup> Ali Shokri,<sup>2</sup> Shahriar Dargahi,<sup>3</sup> Mehdi Elmi<sup>4</sup>

Received: 22 Feb 2013  
Accepted: 1 May 2013  
Available online: 15 May 2013

1. Department of Environmental Health Engineering, Faculty of Public Health, Kermanshah University of Medical Sciences, Kermanshah, Iran
2. Sama Technical and Vocational Training College, Islamic Azad University, Parsabad Moghan Branch, Parsabad, Iran
3. Bs of Guidance and Counseling, Faculty of Education, University of Mohaghegh Ardabil, Ardebil, Iran
4. Department of Toxicology, Ahar Branch, Islamic Azad University, Ahar, Iran

**T**uberculosis is an important infectious disease in Iran and the word so that the World Health Organization has declared it as a public health emergency disease. Each year approximately 3 to 4 million TB positive sputum smear occurs and the same number for negative and extra-pulmonary tuberculosis has been occurring and approximately 2 to 3 million people disease due to tuberculosis [1]. Knowing the number, age distribution and the incidence of new case sineachregion will show the real image of the disease. According to the statistics on the high incidence and prevalence rate of tuberculosis in the region, it would be needed careful and thorough review of the actual incidence of the disease in order to be used by researchers and authorities.

The aim of this study is to investigate the incidence of pulmonary and extra pulmonary tuberculosis in Parsabad city during 7 years from 2005 to 2011. This is a cross-sectional study in which all monthly reported cases of pulmonary and extra pulmonary TB from Urban and rural health and treatment centers and laboratories institutes of governmental and social security hospitals were recorded during 2005-2011.

Finally, the data were analyzed using SPSS-16 software. Based on the results of this study, the total number of patients with smear positive pulmonary tuberculosis was obtained 122 persons in Parsabad during 2005-2011 and of which 39.34% and 60.65% was urban and rural, respectively. In addition 63 person (51.63%) and 59 person (48.36%) were males and females, respectively. The number of total TB patients were 232 person (44.83% urban and 55.17% rural), of which 117 person were male (50.43%) and 115 person were females (49.56%). Generally, the highest rate of TB incidence (3.44 per hundred thousand person) were in the year 2007 and the lowest rate of that (2.89% per hundred thousand person) were in 2011. The mean age of patients with smear positive

pulmonary tuberculosis, new smear negative pulmonary tuberculosis, new unspecified TB and Extra pulmonary TB were 31,40, 37 and 32 years old, respectively. Considering that these age groups including working- age, TB disease can stop working for some people, and ultimately cause loss to the economy of the community. Extra pulmonary tuberculosis may coincide with pulmonary tuberculosis or can develop several years after primary infection of TB.

The incidence of extra pulmonary tuberculosis less than pulmonary tuberculosis and it is one third of tuberculosis cases. TB might effect on different organs and tissues, such as lymph node, pleura, pericardium, kidneys, bones, joints, throat, ear, skin, intestine, peritoneum lining and the eyes. In this study, the most common form of pulmonary tuberculosis was pleural effusion (40%) and lymphadenitis tuberculosis (31.2%). A number of studies have examined the most common area of lymph node involvement [2]. In the study of Dr. Khodabakhshi, the most commonly involved site is the pleura [3], which is in accordance with the present study.

\*Corresponding author at: [a.dargahi29@yahoo.com](mailto:a.dargahi29@yahoo.com)

© 2013 Zahedan University of Medical Sciences. All rights reserved.

### References

1. Aviglione MC, O'Brein RJ. Tuberculosis. In: Kasper DL, Fauci AS, Longo DL, Editors. Harrison's principles of internal medicine. 16<sup>th</sup> ed. New York: McGraw-Hill; 2005: 953-66.
2. Bonnet M, Ramsay A, Gagnidze L, et al. Reducing the number of sputum samples examined and thresholds for positivity: An opportunity to optimise smear microscopy. *Int J Tuberc Lung Dis* 2007; 11(9): 953- 58.
3. Mase SR, Ramsay A, Ng V, et al. Yield of serial sputum specimen examinations in the diagnosis of pulmonary tuberculosis: a systematic review. *Int J Tuberc Lung Dis* 2007; 11(5): 485-95.

Please cite this article as: Dargahi A, Khamutian R, Shokri A, Dargahi S, Elmi M. Incidence of tuberculosis in Parsabad-e-Moghan during 2005-2011. *Zahedan J Res Med Sci (ZJRMS)* 2014; 16(4): 49.