

Original Paper

Epidemiological pattern of extra-pulmonary tuberculosis in Mazandaran Province, Iran (2001-11)

Moosazadeh M (M.Sc)¹, Ashrafian Amiri H (M.D)², Vaseghi Amiri R (M.D)³
Dehghan A (M.Sc)¹, Nezammahalleh A (B.Sc)⁴, Khanjani N (Ph.D)^{*5}

¹Ph.D Candidate in Epidemiology, Faculty of Health, Kerman University of Medical Sciences, Kerman, Iran. ²Internal Medicine, Researcher, Health Deputy, Babol University of Medical Sciences, Babol, Iran. ³General Physician, Researcher, Health Deputy, Babol University of Medical Sciences, Babol, Iran. ⁴B.Sc in Public Health, Health Deputy, Mazandaran University of Medical Sciences, Sari, Iran. ⁵Assistant Professor, Department of Biostatistics and Epidemiology, Faculty of Health, Kerman University of Medical Sciences, Kerman, Iran.

Abstract

Background and Objective: Due to the increase of incidence of extrapulmonary tuberculosis in Iran, This study was conducted to determine the epidemiological pattern of extrapulmonary tuberculosis in the Mazandaran province, northern Iran.

Methods: This descriptive-analytic study was carried out on medical record of 3313 tuberculosis patients in Mazandaran province, northern Iran during 2001-11. Age, gender, affected year, area and affected organ were gathered for each patient.

Results: 843 (25.4%) of subjects were diagnosed with extrapulmonary tuberculosis. The incidence of extrapulmonary tuberculosis increased by 4% for every unit increase in incidence year ($P<0.05$). The mean age of patients with extrapulmonary tuberculosis was significantly less than patients with pulmonary tuberculosis (42.8 ± 20.6 years vs. 48.7 ± 21.2 , $P<0.05$). Extrapulmonary tuberculosis was significantly higher in women ($P<0.05$). The chance of extrapulmonary tuberculosis in women was 1.7 times of men. Lymph node (33%) was the most common affected organ followed by pleura (18.9%) and bone (17.7%).

Conclusion: The trend of incidence of extrapulmonary tuberculosis was ascending during 2001 to 2011. The most affected organ in extra pulmonary tuberculosis was lymph nodes.

Keywords: Extrapulmonary Tuberculosis, Incidence, Lymph node, Gender, Age

* Corresponding Author: Khanjani N (Ph.D), E-mail: n_khanjani@kmu.ac.ir

Received 19 Jun 2013

Revised 1 Dec 2013

Accepted 18 Jan 2014