

Prevalence of multiple sclerosis in Buenos Aires, Argentina using the capture-recapture method

E. Cristiano^a, L. Patrucco^a, J. I. Rojas^a, F. Cáceres^b, A. Carrá^c, J. Correale^d, O. Garcea^e, L. Gold^f, J. Tessler^g and M. Kremenchutzky^h

^aMS Section, Hospital Italiano, Buenos Aires, Argentina; ^bMS Section, Institute of Neurosciences, Buenos Aires, Argentina; ^cMS Section, Hospital Británico, Buenos Aires, Argentina; ^dNeuroimmunology Section, FLENI, Institute of Neurological Investigations, Buenos Aires, Argentina; ^eClinical Neuroimmunology Section, Hospital Ramos Mejía, Buenos Aires, Argentina; ^fInstitute of Neurosciences, Buenos Aires, Argentina; ^gInternal Medicine Section, Hospital Italiano, Buenos Aires, Argentina; and ^hLondon Health Science Centre, University of Western Ontario, ON, Canada

Keywords:

Argentina, capture-recapture, multiple sclerosis, prevalence, South America

Received 30 June 2008
Accepted 17 October 2008

Background: Scarce data exist about multiple sclerosis (MS) prevalence in South America. The objective of the study is to determine the prevalence of MS in a high populated area from Argentina (Greater Buenos Aires Metropolitan area) using the capture-recapture methodology. **Methods:** Greater Buenos Aires is the generic denomination that refers to the megalopolis comprised by the autonomous city of Buenos Aires and the surrounding conurbation of the province of Buenos Aires. The study was carried out taking July 1996 as the prevalence month. We used capture-recapture method to estimate the prevalence of MS cross matching registries from four MS Centers. **Results:** A total of 803 registries were obtained from the four lists. Log-linear model for capture-recapture method was used to analyze the data. The population of the area based on the 1990 census was 12 594 974; the number of MS cases estimated amongst sources interactions were between 1833 and 2359; the prevalence estimated ranged from 14 to 19.8 cases per 100 000 inhabitants. **Conclusions:** This is the first study to provide epidemiological data on the prevalence of MS in a large population in Argentina (Greater Buenos Aires Metropolitan area). Further epidemiological studies will clarify the true prevalence of MS in South America.