Original investigation

Rheumatoid arthritis prevalence in Colombia: An approach based on burden of disease study during 2005☆

Jorge Augusto Díaz-Rojas[a,*], *Fabián Antonio Dávila-Ramírez*[b], *Gerardo Quintana-López*[c,d], *Fabio Aristizábal-Gutiérrez*[a], *Paul Brown*[e]

[a] *Departamento de Farmacia, Facultad de Ciencias, Universidad Nacional de Colombia, Bogotá, Colombia*
[b] *Departamento de Bioestadística, Fundación Clínica Shaio, Bogotá, Colombia*
[c] *Departamento de Medicina Interna, Facultad de Medicina, Universidad Nacional de Colombia, Bogotá, Colombia*
[d] *Departamento de Medicina Interna, Facultad de Medicina, Universidad de los Andes, Bogotá, Colombia*
[e] *Instituto de Investigación en Ciencias de la Salud, Universidad de California, Merced, CA, USA*

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ABSTRACT

Introduction: The prevalence of rheumatoid arthritis (RA) in Colombia is currently unknown. The purpose of this study was to estimate the prevalence of rheumatoid arthritis in Colombia using document bases.

Material and methods: A search was made of administrative sources for prevalent cases of RA reported by the Colombia 2005 Disease Burden study and the Servicing Individual Health Records, and corresponding to the International Classification of Diseases, tenth edition codes M05 and M06. The specific prevalences by sex and age were estimated by dividing the prevalent cases identified by the population bases reported by the National Bureau of Statistics in Colombia for the same year.

Results: A total of 267,628 prevalent cases were found in Colombia in 2005. The overall prevalence of rheumatoid arthritis was 0.9/100 inhabitants, with a rheumatoid arthritis female/male ratio of 4:1. A progressive increase with age was observed (peaking in the group older than 80 years).

Conclusion: This is the first study of the prevalence of rheumatoid arthritis in Colombia based on administrative records. The prevalence for this methodology was similar to that found by other studies in populations of Europe and South America.

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Prevalencia de artritis reumatoide en Colombia: una aproximación basada en la carga de la enfermedad durante el año 2005

R E S U M E N

Palabras clave:
Prevalencia
Registros administrativos
Carga de enfermedad
Artritis reumatoide

Introducción: En Colombia, a la fecha, se desconoce la prevalencia de artritis reumatoide (AR). El propósito de este estudio fue hacer una aproximación a la prevalencia de la AR en Colombia con respecto a bases documentales.

Materiales y métodos: Mediante una revisión de bases administrativas, se identificaron los casos prevalentes de AR, notificados por el estudio Carga de Enfermedad Colombia 2005, de los Registros Individuales de Prestación de Servicios de Salud, correspondientes a la clasificación internacional de enfermedades, décima revisión, M05 y M06; dividiendo los casos prevalentes por las bases de población reportadas por el Departamento Nacional de Estadística en Colombia para el mismo año, se estimaron las prevalencias específicas por edad y sexo.

Resultados: Se encontraron 267.628 casos prevalentes en el año 2005 en Colombia, la prevalencia global de AR correspondió a 0,9/100 habitantes, la razón mujer/hombre de AR fue 4:1, se apreció un incremento progresivo con la edad (pico en el grupo de mayores de 80 años).

Conclusión: Este es el primer estudio de prevalencia de AR en Colombia con base en registros administrativos, la prevalencia por esta metodología fue similar a la encontrada por otros estudios en poblaciones de Europa y Sudamérica.

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Introduction

The estimation of the burden of this disease is of great importance to understand its impact on the health care services.[1] Incidence and prevalence studies allow to assess the impact of the pathologies in the burden of disease and their resource consumption. The prevalence is the proportion that defines us the status of a disease in a specific point in time; it is usually used to measure the occurrence of degenerative diseases with unclear onset times.[1,2] Knowledge of the prevalence is fundamental for the design of fair and equitable health policies that allow prioritization of technologies, optimal allocation of resources, and a greater coverage, which in the long term can reduce the burden of disease.[3]

Rheumatoid arthritis (RA) is a progressive and destructive polyarticular inflammatory disease, associated with pain and disability, with a highly significant impact on quality of life, job losses and poor social function, as well as high costs in community health care.[4] It is the inflammatory disease mostly studied in the world, its prevalence in the Western Hemisphere ranges between 1% and 5%, and its clinical manifestations occur mainly between the third and the fifth decades of life, being, preferentially, of 3 women per each man.[5]

Several countries have identified the prevalence of arthritis in their population.[5–13] However, applying surveys in large regions in order to identify patients (count), it has been considered that the measurements obtained by this methodology do not fully reflect reality; a very common option at this time is to use administrative databases.[14] Currently, Colombia has a system of compulsory filling out by the healthcare providers for the regulation and control of the demand for health care services, the Registry of Provision of Healthcare Services (in Spanish: *Registro de Información de Prestación de Servicios de Salud* [RIPS]), the designation, structure and characteristics have been unified and standardized for all entities providers of healthcare services. The data of this record contain the identification of the provider of the healthcare service, of the user who receives it and the reason that originated its provision: diagnosis and external cause.[15] The document Colombia 2005 Disease Burden compiled, from the RIPS, the incident and prevalent cases of a group of specific causes, which included the diagnosis of RA.[16]

The objective of this study is to estimate the point prevalence of RA in Colombia based on the burden of disease for the year 2005.

Methods

It was calculated the point prevalence[2] considered as the probability that an individual has to be a case at a given time or age; it is a proportion and it does not have dimension; its values range between 0 and 1. The point prevalence can refer to a population at a given time, to a population of a given age, or to a combination of both. It is calculated by dividing the number of existing cases in a given point of time (numerator) by the total population at that time (denominator). The point prevalence is the probability that an individual has to be a case at a given time or age.

Point prevalence : $Pt = \dfrac{Ct}{Nt}$

Pt is the prevalence for the year 2005, *Ct* is the total number of cases of RA and by age groups for the year 2005 and *Nt* is the total population, population older than 16 years and by age groups for Colombia in the year 2005.