

INTRODUCTION

Rheumatism is derived from the Greek word rheumatismos, which designated mucus (catarrh) as an evil humor which was thought to flow from the brain to the points and other portions of the body, producing pain (*Mc Carty, 1985*).

Rheumatism is a word often used by patients and doctors, but with many different meanings to the layman it implies pain that is associated with the moving parts of the body, appearing for so clear reason. To some physicians it includes every disorder of the moving parts. Whatever the cause, arthritis, tendonitis, tenosynovitis, ligamentous and muscle strain, post-traumatic adhesions and internal derangement, especially at the spinal joints. Others confine the term to collagen diseases, yet others to chorea and rheumatic fever and its cardiac sequel (*Convery et al., 1977*).

As a group, arthritis and disorders of the musculoskeletal system are a leading cause of work-related disability among men and women 16-72 years old. Together these conditions also are the leading cause of disability among Americans over 65 years old (*Lawrence et al., 1998*), and back pain is the most common cause of disability in Americans younger than 45 years old. At any time, approximately one-third of all US adults are affected by objective joint pain, swelling, or limitation of motion (*Kelsey, 1982*), and about two-thirds of adults experience back pain at some time in their lives (*Deyo and Tsui, 1987*). The prevalence of arthritis and back pain increased with age, but these conditions also affect the health of a significant number of children and young adults

(Lawrence *et al.*, 1998). In addition, major changes in the health care system have created concerns regarding the quality of life among older Americans living with chronic diseases Arthritis is ranked among the most prevalent chronic conditions in persons ages 65 years and older (Manton *et al.*, 1994).

Baillou (1538-1616) was the first to use the term rheumatism to designate a form of acute arthritis (as distinguished from gout); he also was the first to regard rheumatism as a clinical entity (Hollander, 1985).

Today rheumatology is one of the most important cross-roads to be found in medicine. It is the meeting place of a bewildering number of specialities both clinical and laboratory.

Rheumatology is the study of the rheumatic diseases, including arthritis, rheumatic fever, fibrositis, neurologia, myositis, bursitis, gout and other conditions producing somatic pain, stiffness and soreness.

Rheumatology is characterized by a large variety of diseases, not only inflammatory rheumatic and systemic diseases but also degenerative and spine diseases soft tissue rheumatism and metabolic bone disease (Vanhoof *et al.*, 2002).

The rheumatic diseases are those conditions in which pain and stiffness of some portion of the musculoskeletal system are prominent (Hollander, 1985).

Epidemiology is the study of the frequency and distribution of disease in populations and of those factors associated with disease occurrence. The study has made significant contributions to the understanding and control of many conditions, both infectious and non communicable (*Masi, 1967 and Masi and Medsger, 1985*).

Epidemiology has a broad mission, and its methodology interfaces with other major disciplines, including clinical studies, public health, and laboratory science. Depending upon the level of disease understanding, epidemiologic investigations may be designed as descriptive, experimental, or disease control studies (*Hochberg and Lawrence, 1980*).

Most Rheumatic diseases epidemiology has focused on the more elementary description of disease occurrence (*Masi and Medsger, 1979*).

Basic epidemiologic concepts :

Classification of disease :

Since case frequencies reported in population surveys depend directly upon disease definition, emphasis has been given to developing accurate, or at least, reliable, criteria for the classification or diagnosis of rheumatic diseases (*Masi and Medsger, 1985*).

1-Incidence and prevalence :

Incidence :

Is the rate of occurrence of new cases of disease (or its manifestations) during a given period in a defined population (*Mikkelsen 1972*).

Specificity :

Is the probability that those who have a negative test or finding, or who are diagnosed as not having the disease, actually do not have it (*Masi, 1967*).

III- Multifactorial contributions to etiology :

Most chronic acquired diseases are now believed to result from the interaction of multiple factors related to the host, environment and, it's time, infecting agents (*Medsker and Masi, 1985*).