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What are the consequences of early rheumatoid arthritis for the individual?

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Rheumatoid arthritis (RA) has important impacts on health that can be related to the World Health Organization's new International Classification of Functioning, Disability and Health (ICF framework). The physical consequences of RA for the individual relate to body functions and structures in the ICF framework. The functional consequences of RA are related to activity in the ICF framework, and the impact of RA on society relates to participation in the ICF framework. Despite conventional treatment, early RA continues to result in significant physical consequences for most patients. From the patients' perspective, this primarily results from persistent pain, although symptoms such as fatigue and depression are also relevant. This is confirmed from the clinician's perspective by the infrequency of remission, persistence of disease activity and unrelenting radiographic progression in early RA. Patients with early RA often progress, within only a few years, to significant disability. This has mainly been shown in studies using the Health Assessment Questionnaire as the disability measure, although a small number of studies using generic health measures such as Short Form-36 have reached similar conclusions.

RA patients and their friends and families incur the majority of costs associated with early RA. Many patients are not able to continue to work at the same level as they would have anticipated had they not developed RA. Later on, society bears an increased load, especially in patients with higher levels of disability; this results from major social care costs and interventions such as surgery. However, the evidence favouring expensive biological therapies, even in early RA, is likely to turn this analysis on its head in the near future.

Key words: rheumatoid arthritis; pain; remission; X-ray damage; disability; work disability.

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Classical population-based studies, reported in the 1950s and 1960s from the USA, UK and other Western countries, suggested that rheumatoid arthritis (RA) was largely a mild self-limiting disease with a limited impact on patients' lives.[1,2] In contrast, in the 1980s, long-term assessment of cohorts of RA patients attending hospitals in the UK[3,4], USA[5] and Sweden[6] demonstrated that RA was more serious and potentially disabling. This discovery emphasized the need for disability prevention by early diagnosis and treatment, and gave rise to a large number of early RA studies, recently summarized by Sokka and Pincus.[7]

RA has a major impact in many areas of individuals' lives, not just those traditionally considered to be the domain of medical intervention. The most important problems are persistent pain and loss of function[8] (attributable to the combined effect of continuing synovitis and progressive joint damage), that result in disability and impaired quality of life. However, patients may also suffer other symptoms, such as fatigue, and adverse effects from therapy. In addition, they incur high direct medical and social care costs for society and significant personal costs to themselves and their families and friends.

ASSESSING THE IMPACT OF CHRONIC DISEASE

As discussed by Carr[9], given our current inability to prevent or cure RA, the primary aim of care should be to reduce the impact of the disease on patients' lives. This major focus on improving quality of life and reducing or postponing disability necessitates the development of formal methods for measuring a patient's experience of disease. Such methods focus on the patient's ability to perform daily living tasks and on more global aspects of their quality of life. Various frameworks have been developed to describe these, and two systems, developed by the World Health Organization (WHO), are outlined below.

Impairment, disability and handicap

Historically, the WHO classified the impact of a disease at three different levels: impairment, disability and handicap.[9,10] Impairment was defined as 'any loss or abnormality of psychological or anatomical structure or function'. Disability was defined as 'any restriction or lack (resulting from impairment) of the ability to perform an activity in the manner or within the range considered normal for a human being'. Handicap was defined as 'a disadvantage for an individual resulting from an impairment or disability that limits or prevents the fulfilment of a role that is normal depending on age, sex and cultural factors for that individual'. This is being superseded by the International Classification of Functioning, Disability and Health (ICF framework).

ICF framework

The ICF[11] is WHO's new framework for assessing disability and health. It now used as the conceptual basis for the definition and measurement of health and disability, and to assist health and social care policy and planning.

The ICF belongs to the WHO family of international classifications, the best known of which is the ICD-10 (the International Statistical Classification of Diseases and Related Health Problems). The ICD-10 gives an 'aetiological framework for