Rheumatology and work

A call for submissions

As rheumatologists, we believe we are all well aware of the associations between work and rheumatic disease, but that awareness perhaps does not always fully appreciate the enormity of the interactions for society, the individual and the causation of rheumatic complaints. In a time of economic uncertainty, its importance needs to be understood, quantified and the impact ameliorated not only for our patients’ best interests but also from an element of self-interest as a tax payer. To this end, research is vital to prevent misinformation, prejudice, bias and to maximize the economic well-being not only of the sufferer but also the wider community. In principle, the impact can be examined in three ways:

- the impact of rheumatic disease on the world of work and economic production;
- the impact of rheumatic disease on the individual’s ability to work;
- the impact of occupation on causing or affecting the outcome, both positively and negatively, of rheumatic disease; and
- the impact of rheumatic disease on productivity within the home environment and the individual’s ability to function therein.

There is no doubt that rheumatic diseases are a major factor in both loss of productivity in the workplace and national economic resources, be that taxation, expenditure on benefits, inefficient productivity or health-care costs. For example, data from the UK estimate that musculoskeletal disease is a major cause of work disability, with at least 10 million days lost per annum, almost half of that due to arthritis [1]. The direct impact of this on employers is hard to estimate since it varies between professional groups and occupation. For society the cost may also be huge—for example, in the UK, disability living allowance (DLA) is one benefit to help patients and carers cope with ill health. Musculoskeletal disorders make up 37% of all claims for DLA, with arthritis alone making up 20% as the biggest single reason for claiming DLA [2]. It is not just diagnosed disease that is an issue. A recent study has demonstrated that for inflammatory arthritis work loss also occurs in the pre-diagnosed phase of the illness [3]. Similar data for work loss in other nations have been produced. The US estimates suggest a direct cost of arthritis of almost $81 billion and an indirect (lost earnings) cost of $47 billion in 2003 [4] and, of the huge cost attributed to RA, almost 75% is secondary to work disability [5]. It is also increasingly recognized that absenteeism from work is not the sole issue. Presenteeism (being at work when not fully fit) has an important economic impact both for the employer and also the individual who may experience work dissatisfaction, stigmatization by colleagues or suffer impaired career progression as a result.

Finally, the effect of a patient with arthritis on their wider family and carers may be overlooked or hidden. Lost home productivity creates additional stress for the patient, dependants and carers. This can be measured not only economically (carers/children may need to attend hospital and clinic visits with additional lost work days, annual leave utilized for health-care-associated reasons rather than the needs of the employee or loss of education by children, time lost at work/education by carers due to disease flares) but also in less tangible ways in terms of additional family stress, impact on relationships and home life and the loss or impairment of role for the patient.

When considering the impact on the individual, it is important to examine how the macro-economic results in real issues for the individual patients themselves. The data for work disability for an individual diagnosed with an inflammatory condition still make depressing reading. With regard to an individual with RA there is a likelihood of days lost from work in the pre-diagnosed phase of the illness, and a significant likelihood of unemployment after 5 years of diagnosed disease [6]. Importantly, within an economy, this impact is likely to be more severe in those with manual jobs than professional jobs [6]. In contrast, between economies loss of employment is more likely in more-affluent states; workers in less-affluent economies appear to have to continue working regardless of health needs and current symptoms, possibly because of the impact of a reduced safety net. The impact of this on the individual and their families in terms of symptoms, disease progression and ill health is hard to quantify and indeed may be under-appreciated.

For individual patients and indeed their carers, the decision to stay at work or not is, therefore, complex and depends on a careful balancing of lots of competing interests, some of which may be outside their control. This includes perceived benefits and harms of the occupation on the disease itself; the ability to find alternative employment [and both personal (e.g. educational attainment) and societal factors may be important here]; the availability of benefits including health-care costs from being in or out of work; the extended economic support from other family members; and ability to defer a decision until
maximal response to treatment can be obtained will all play a role.

Finally, the role of occupation in causation of rheumatic disease is not always clear, which can lead to tension between employees, employers and health benefits systems. In 2008–09, in the UK, an estimated 1.2 million people reported suffering from ill health that they thought was work related, and almost half of this was due to musculoskeletal disease [1]. However, the strength of this attribution can be hard to gauge. It is well recognized that OA of the hip is associated with farming and OA of the knee with mining and indeed both are prescribed industrial diseases in the UK [7]. However, it is not always clear what the components of the industry are that result in this association and why it is not apparent in other comparable occupations for which no compensation is currently available. It seems unlikely that similar associations do not exist in other industries. Establishing these links, however, is often a matter of court judgments and medical opinion rather than systematic occupational research. The difficulties of such research cannot be underestimated: good occupational records may be lacking; exposures to putative disease-causing mechanisms may be hard to determine; employees may now be unlikely to remain in stereotypical jobs for extended periods of time in sufficient numbers to establish causality; employee and employer recall may be influenced by participation in medicolegal proceedings or media interest; and the motivation for establishing causation or lack thereof may be motivated by other factors such as compensation and litigation.

These three aspects can produce tensions between themselves (Table 1).

The challenge for those researching these issues is to provide good quality data on which to draw conclusions and enable informed debate and decision making. To that end, *Rheumatology* is proposing a themed issue on the links between work and rheumatic disease, particularly with regard to inflammatory arthritis and OA. We would therefore, like to invite submission on any aspect of this theme. The submission deadline is 1 April 2011.

**Disclosure statement:** The authors have declared no conflicts of interest.

**Adrian C. Jones**, **Arthur F. Kavanaugh** and **David J. Walker**

1Department of Rheumatology, Nottingham University Hospitals NHS Trust, Nottingham, UK, 2Rheumatology Division, Department of Medicine, The University of California, San Diego, CA, USA and 3Musculoskeletal directorate, Freeman Hospital, Newcastle, UK

Accepted 27 August 2010

Correspondence to: Adrian Jones, Department of Rheumatology, Nottingham University Hospitals NHS Trust, Derby Road, Nottingham NG7 2UH, UK. E-mail: adrian.jones@nuh.nhs.uk

**References**
