Editorial

Physician... Attorney of the Poor[1]

It was first suggested in the editorial pages of this journal that the pyramidal approach to managing rheumatoid arthritis (RA) should be deconstructed[2]. This shift in paradigm prompted studies suggesting a window of opportunity in early RA and greater benefit from use of disease modifying antirheumatic drugs. Received wisdom, reinforced by an increasing evidence base, now supports the view that RA should be treated early with disease modifying antirheumatic drugs (DMARD). Further, better outcomes can be achieved by disease-activity-targeted treatment strategies as shown in the TICORA study (Tight Control for RA)[3]. This concept, borrowed from diabetes but first championed in RA in Glasgow, confirmed that achieving and maintaining low disease activity as defined by Disease Activity Score (DAS) reduces radiological progression and improves function as measured by the Health Assessment Questionnaire (HAQ)[3]. These findings were endorsed by the more recent BeSt study[4]. In parallel, a better understanding of the biology of the inflamed synovium has resulted in targeted approaches to treatment. The availability of these drugs has, for the first time, allowed us to achieve better control of synovitis and also raised the tantalizing opportunity of achieving disease remission. Patients with newly diagnosed RA should thus be seen early at a specialist clinic to initiate early and sustained use of DMARD. Delays in initiating DMARD therapy may add not only to the morbidity but also to the premature mortality of RA.

In this issue of *The Journal* Suarez-Alamazor and colleagues report on the time to initiation of first DMARD in a cohort of RA patients seen by the same physicians, but at 2 different sites, one serving the disadvantaged in a public hospital and the second for those with health insurance[5]. Based in an academic center, these investigators provided a clinical service to 285 RA patients first seen by them between 1994 and 2000 in Houston, Texas, USA. The uninsured group were predominantly non–White (99 of 118 patients) whereas only 30 of those attending the private institution were non–White. In a retrospective analysis of these patients the time to initiation of a DMARD was examined, and significant delays were found in the disadvantaged. The authors, presumably due to resource limitations, did not explore the reasons behind the delays.

There are many limitations to this study, some of which are acknowledged by the authors. However the study highlights an important issue for all professionals working in any healthcare system.

Health inequalities have previously been highlighted in RA. As the authors point out in their discussion, others have recognized that the socially disadvantaged and less well educated patient with RA is not only more likely to have a poorer disease outcome or to die, but is also less likely to access the resources offered by the professions allied to medicine. It would be disappointing to discover but it is probable that the disadvantaged are also less likely to receive biologic therapies.

It is well established that rather than race, socioeconomic standing is contributory to developing RA[6]. The scourge of smoking, more common in the deprived, is an important contributor to socioeconomic differences in health[7]. We have known for some time that smoking is associated with rheumatoid factor positivity[8]; colleagues show that smoking is an independent variable in the risk of developing RA, after female sex and advancing age[9].

Reducing the risk of developing RA may be within the realms of policymakers and public health initiatives rather than scientists, but it is within the province of rheumatologists to improve prognosis and outcome once RA is diagnosed.

Our work in the MASCOT study (Glasgow) and that of ERAS (early RA study in 9 centers in England) in relation to RA has shown that patients from deprived communities present with more severe disease and comorbidity[10,11]. In the MASCOT study, individuals in the most deprived groups took longer to improve, and a statistically higher proportion required combination therapy in order to achieve desired improvement in disease activity. After 5 years of specialist rheumatological care the deprived achieved disease outcomes equivalent to the more affluent. This sup-

See Initiation of DMARD treatment in minority and disadvantaged patients with RA, *page 2400*

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ports the concept that initial sustained management of RA in a specialist center can have a positive influence on prognosis.

The West of Scotland has long been known to have high mortality and morbidity rates, particularly in terms of ischemic heart disease, and higher rates of deprivation compared to the rest of Europe. On examining the all-cause mortality in deprived rheumatoid patients in Glasgow at 12 years of followup, significantly higher percentages of deaths were seen in the most deprived[12]. Both Pincus and Wolfe reported that HAQ in early RA is an important predictor of subsequent functional disability and mortality[13,14]. Both ERAS and MASCOT show that deprivation correlates with a higher HAQ at presentation. We have also seen that affluent groups sustain a more rapid improvement in HAQ compared to deprived cohorts.

Social inequalities affect health in many ways, but trying to disentangle the many linked factors of poor income, failed educational attainment, inadequate housing, smoking, and psychosocial deprivation to determine which is most important is probably not helpful, as the solution to most would be by increasing access to tangible resources. The "causes of these causes" have been the source of intense discussion and scrutiny, and 10 main messages have been identified (Table 1)[15].

In those countries where the basic material determinants of health have been met, the income gradient and hence relative deprivation becomes more important. Several mechanisms to explain the income gradients related to health have been investigated; these include psychosocial harm (the loss of respect resulting from comparisons), social investment (inequalities in social spending on education and welfare), and erosion of social cohesion and the resources available through social relations (social capital)[16]. Many of these culminate in an inability to rise to many of life's challenges or exert control on the shape of life[17].

The observations of longer time to initial DMARD, increased disease severity, and comorbidity associated with lower socioeconomic status may explain some of the findings of increased time to improvement and need for more complex drug regimens. The impact of socioeconomic status on health in RA therefore raises important issues not only for policymakers but also for rheumatologists as advocates of our patients, and more importantly, for our Colleges who champion our cause. It has been well established that standard-setting and the audit of these outcomes results in overall improvement[18,19]. We thus need to establish evidence-based standards of care, and encourage physicians to adopt these[20]. In Scotland the Scottish Intercollegiate Guideline Network (SIGN) guideline was our first attempt to define minimum standards of care. Although these guidelines need to be updated, adopting them, or a version of them, could help champion the cause for reducing the effects of health inequalities. It is time for rheumatologists to adopt the approach taken by diabetologists in the USA to eliminate ethnic and financial disparities in diabetes and its complications by 2010[21].

Table 1. Causes of ill health as summarized by WHO investigative group.

Factor
The social gradient
Stress
Early life
Social exclusion
Work
Unemployment
Social support
Addiction
Food
Transport

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