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Ageing, musculoskeletal health and work

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A B S T R A C T

Changing demographics mean that many patients with soft tissue rheumatism, osteoarthritis, inflammatory arthritis, large joint prostheses and age-related co-morbidities are seeking to work beyond the traditional retirement age. In this chapter, we review the evidence on musculoskeletal health and work at older ages. We conclude that musculoskeletal problems are common in older workers and have a substantial impact on their work capacity. Factors that influence their job retention are described, together with approaches that may extend working life. Many gaps in evidence were found, notably on the health risks and benefits of continued work in affected patients and on which interventions work best. The roles of physicians and managers are also considered.

Introduction

In Europe, the proportion of people aged >65 years is expected by 2050 to represent 30% of the population; worldwide, the support ratio (of adults of working age to those aged >65 and <15 years) is projected to be only one-third of that in 1950 [1]. Therefore, in most countries, an economic imperative exists to encourage people to remain in productive work to older ages. Governments have responded

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by developing policies to encourage labour force participation in later life by, for example, delaying the age at which people can draw state pension benefits, abolishing the 'default' retirement age, and legislating against workplace age and disability discrimination.

The delayed availability of pension benefits as well as improved population health has led to many older individuals recognising the financial need and opportunity to remain in the workforce longer. A steady rise in those working beyond traditional retirement age has been observed [2,3].

This changing age profile in employment brings with it potential pros and cons. It is feasible that work at older ages can benefit health [4]; on the other hand, it may be challenging for those with serious health limitations. In this chapter, we consider the relation between work and health at older ages, focussing particularly on musculoskeletal health, and a number of associated questions:

- How feasible is work, for those with chronic musculoskeletal disorders (MSDs)?
- Is work beneficial for people with chronic MSDs?
- How limited in employment are affected patients? How often does poor musculoskeletal health prevent their working?
- What interventions can increase work productivity in people with chronic MSDs?
- What are the predictors of work disability due to MSDs?
- Where affected individuals wish to work for longer, or feel they need to, what can be done to support them?
- What role can health-care professionals and managers play in extending gainful employment?

We first review the pattern of musculoskeletal complaints in later middle age; then consider what is known about their impact on employment; finally, we review potential interventions, including what clinicians can do to support older workers with MSDs. Gaps in research are highlighted.

To inform the review, searches were performed in Medline and Google Scholar, as well as a hand search of recent volumes of two journals of occupational medicine and three journals of rheumatology (details available on request).

The relation of musculoskeletal symptoms and pathology to age

Regional pain

Musculoskeletal symptoms are common in older middle life. In a survey of adults aged ≥50 years from North Staffordshire [5], back pain in the previous 4 weeks affected about one in three people aged 50–59 years. Similar proportions reported knee or shoulder pain, while a fifth to a quarter reported pains in the hip, neck, distal upper limbs or feet. Almost two-thirds of those affected experienced moderate to extreme interference with their work and household duties.

Age is a major risk factor for prevalent regional pain. Thus, in a random sample of the Dutch population [6], pain affecting the elbow, hip or foot was about 1.5 times more common in people aged 45–64 years than in those aged 25–44; in the Quebec Health Survey [7], odds of upper extremity pain causing frequent disturbance in work activity were raised by 1.7–3.4-fold in those aged ≥50 versus 18–24 years; in a survey of over 4000 adults from 16 British general practices [8], pain lasting for ≥3 months and 'highly disabling or severely limiting' affected 10% of 55–64-year-olds but was rare in young adults; and in a sample drawn from 40 British general practices, sciatica was five to eight times more common in people aged 55–65 than in those aged 16–24 years [9].

For uncomplicated low back pain (LBP), the trend with age is somewhat flatter and less consistent. Many studies have found a moderate age-related rise, peaking and flattening off in the second half of working life; but some have found little relation. In a review of 22 such investigations [10], <50% had reported a positive association. However, even in LBP, there is a general, if moderate, tendency for disabling effects to become commoner at older ages. In the Cultural and Psychosocial Influences on Disability (CUPID) study [11], comprising >12,000 workers across 47 occupational groups from 18 countries, disabling LBP was 55% more prevalent at 50–59 than at 20–29 years; and in a British population survey [12], the 12-month prevalence of troublesome LBP was roughly doubled in a similar age comparison.