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Australian Institute of Health and Welfare

Rheumatoid arthritis

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Rheumatoid arthritis is an autoimmune disease where the body's immune system attacks its own tissues. Rheumatoid arthritis can affect anyone at any age, and may cause significant pain and disability.

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Findings from this report:

- Rheumatoid arthritis is most common in people aged 75 years or over
- Rates of rheumatoid arthritis are slightly higher for women (2.3%) than men (1.5%)
- About 458,000 Australians (1.9% of the total population) have rheumatoid arthritis
- In 2016–17, there were 13,213 hospitalisations for rheumatoid arthritis, a rate of 54 per 100,000 population

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Impact of rheumatoid arthritis

Rheumatoid arthritis can severely affect a person's quality of life and cause significant disability. Physical limitations, pain, fatigue and mental health issues are symptoms of rheumatoid arthritis that can impact a person's ability to engage in daily activities [1]. In Australia, rheumatoid arthritis accounted for 15% of the total burden of disease due to musculoskeletal conditions in 2015 [2]. Additionally, there is an economic impact of rheumatoid arthritis. In 2015–16, Rheumatoid arthritis cost the Australian health system an estimated $1.2 billion, representing 9.6% of disease expenditure on Musculoskeletal conditions and 1% of total disease expenditure [3].

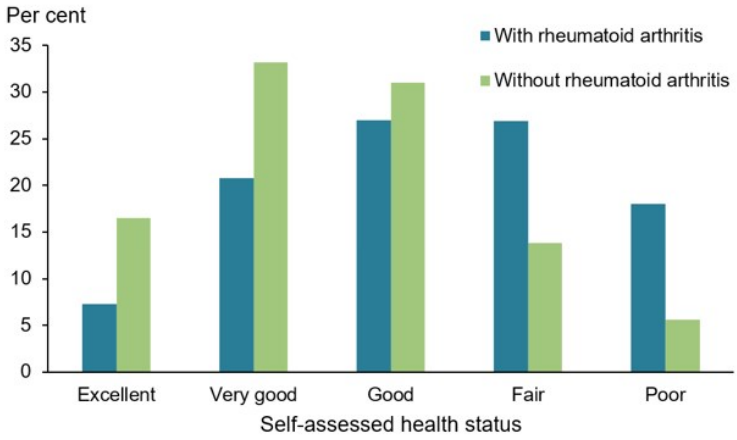
Perceived health status

3.2x

as likely to describe poor health among those with rheumatoid arthritis, compared with those without the condition

People aged 45 and over with rheumatoid arthritis had lower self-assessed health status compared with people without the condition -—based on self-reported data from the ABS 2017–18 National Health Survey. People with rheumatoid arthritis were 3.2 times as likely to describe their health as poor (18%) compared with those without the condition (5.6%) (Figure 1).

Figure 1: Self-assessed health of people aged 45 and over with and without rheumatoid arthritis, 2017–18



Note: Rates are age-standardised to the Australian population as at 30 June 2001.

Source: AIHW analysis of ABS 2019 [4] (Data table).

Pain

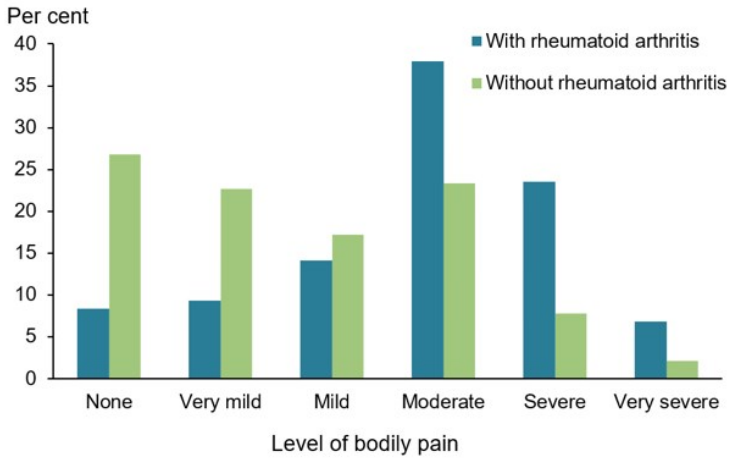
3.1x

as likely to have severe pain in those with rheumatoid arthritis, compared with those without the condition

Rheumatoid arthritis is a significant cause of physical disability. Functional limitations arrive soon after the onset of the disease and worsen with time. Joint damage in the wrist is reported as the cause of most severe limitation even in the early stages of rheumatoid arthritis [5].

In 2017–18, more than 2 in 3 people with rheumatoid arthritis aged 45 and over (68%) experienced 'moderate' to 'very severe' pain in the last 4 weeks. People with rheumatoid arthritis were 3.1 times as likely to have severe or very severe bodily pain in the last 4 weeks (30%) compared with those without the condition (10%) (Figure 2).

Figure 2: Pain[(a)] experienced by people aged 45 and over with and without rheumatoid arthritis, 2017–18



a. Bodily pain experienced in the 4 weeks prior to interview.

Note: Rates are age-standardised to the Australian population as at 30 June 2001.

Source: AIHW analysis of ABS 2019 [4] (Data table).

Psychological distress

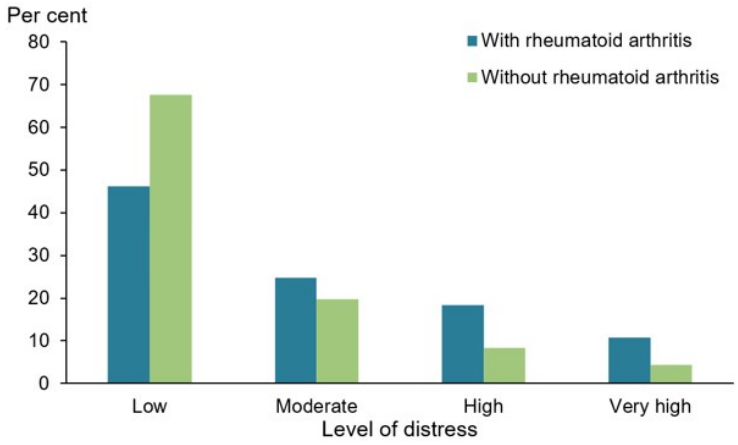
2.5x

as likely to describe very high psychological distress in those with rheumatoid arthritis compared with those without the condition

People with rheumatoid arthritis are more likely to suffer from anxiety, depression and low self-esteem [6]. Rheumatoid arthritis can affect a person's ability to participate in work, hobbies and social and daily activities. Combined with the chronic pain associated with rheumatoid arthritis, this can lead to mental health issues including depression, anxiety, feelings of helplessness and poor self-esteem [7].

People aged 45 and over with rheumatoid arthritis were 2.5 times as likely to describe very high levels of psychological distress (11%) compared with those without the condition (4.3%)—according to the 2017–18 NHS (Figure 3).

Figure 3: Psychological distress [(a)] experienced by people aged 45 and over with and without rheumatoid arthritis, 2017–18



a. Psychological distress is measured using the Kessler Psychological Distress Scale (K10), which involves 10 questions about negative emotional states experienced in the previous 4 weeks. The scores are grouped into Low: K10 score 10–15, Moderate: 16–21, High: 22–29, Very high: 30–50.

Note: Rates are age-standardised to the Australian population as at 30 June 2001.

Source: AIHW analysis of ABS 2019 [4] (Data table).

Comorbidities of rheumatoid arthritis

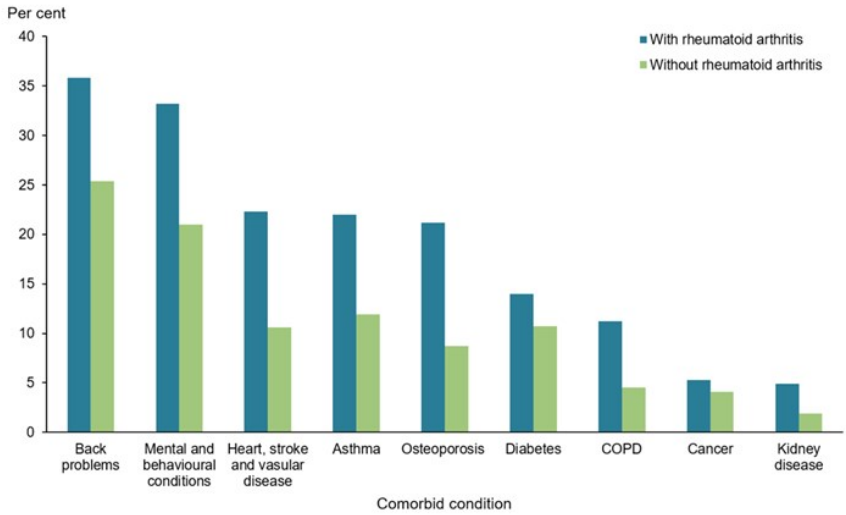
People with rheumatoid arthritis often have other chronic conditions, or 'comorbidities' (2 or more health conditions occurring at the same time). According to self-reported data from the ABS NHS 2017–18, among people aged 45 and over with rheumatoid arthritis:

- 36% also had back problems compared with 25% of people without rheumatoid arthritis
- 33% also had mental and behavioural conditions compared with 21% of people without rheumatoid arthritis
- 22% also had heart, stroke and vascular disease compared with 11% of people without rheumatoid arthritis (Figure 4).

For this analysis, the selected comorbidities are heart, stroke and vascular disease, back problems, mental and behavioural conditions, asthma, diabetes, chronic obstructive pulmonary disease (COPD), kidney disease, osteoporosis and cancer.

Most chronic diseases are more common in older age groups. The average age of people with rheumatoid arthritis is older than the average age of the general population, therefore people with rheumatoid arthritis are more likely to have age-related comorbidities. The rates of back problems, mental and behavioural conditions, heart, stroke, and vascular disease, asthma, osteoporosis, and COPD as comorbidities remained significantly higher for people with rheumatoid arthritis compared with those without after adjusting for age. There was no significant difference for diabetes, cancer or kidney disease. It is important to note that regardless of the differences in age structures, having multiple chronic health problems is often associated with worse health outcomes [8], in addition to a poorer quality of life [9] and more complex clinical management and increased health costs. Rheumatoid arthritis is also associated with increased mortality due to comorbidities and related complications [10].

Figure 4: Prevalence of other chronic conditions in people aged 45 and over with and without rheumatoid arthritis, 2017–18



Note: these components do not total 100% as one person may have more than one comorbidity.

Source: AIHW analysis of ABS 2019 [4] (Data table).

Data notes

The comorbidity data presented here are based on self-reported data from the Australian Bureau of Statistics National Health Survey (NHS). When interpreting self-reported data, it is important to recognise that because we rely on respondents providing accurate information, the outputs may not always be a true reflection of the situation.

In the 2017–18 NHS, the number and proportion of persons with long-term health conditions is presented as those who have "a current medical condition which has lasted, or is expected to last, for 6 months or more, unless otherwise stated" [11]. For the conditions rheumatoid arthritis, asthma, cancer, heart, stroke and vascular disease (HSVD), diabetes, kidney disease and mental and behavioural conditions, the estimates are based on: persons who reported having been told by a doctor or nurse that they had the condition/s and whether they reported that their condition was current and long-term; that is, their condition was current at the time of interview and had lasted, or was expected to last, 6 months or more.

For HSVD and diabetes, estimates also included persons who reported they had had the conditions, but that these conditions were not current and long-term at the time of interview.

The conditions data collected for back problems and COPD are 'as reported' by respondents and do not necessarily represent conditions as medically diagnosed. However, as the data relate to conditions which had lasted, or were expected to last, for six months or more, there is considered to be a reasonable likelihood that medical diagnoses would have been made in most cases. The degree to which conditions have been medically diagnosed is likely to differ across condition types. See the National Health Survey: Users' Guide, 2017—18 [12] for more information.

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Treatment and management of rheumatoid arthritis

At present there is no cure for rheumatoid arthritis. The Australian Models of Care for the management of the disease focus on early diagnosis, early management, and coordination of multidisciplinary care needs [1, 2]. The goal of rheumatoid arthritis treatment is to stop inflammation (put the disease in remission), relieve symptoms, prevent joint and organ damage, reduce complications and improve physical function. Early treatment for rheumatoid arthritis is aggressive in order to stop inflammation as soon as possible [2].

Medications are primarily used to treat rheumatoid arthritis, however physical therapy and surgery can also be used.

Medications

Treatment for rheumatoid arthritis has improved dramatically over the past 20 years, with new medicines now very helpful for people, particularly in the early stages of the disease.

Medications for symptoms

Paracetamol, codeine, and nonsteroidal anti-inflammatory drugs (NSAIDs) are sometimes called the 'first-line' medicines in management of rheumatoid arthritis, as these are the initial medicines provided for symptom relief [3].

Medications for slowing disease

Stronger medications such as corticosteroids, disease-modifying anti-rheumatic drugs (DMARDs) and biologic disease-modifying anti-rheumatic drugs (bDMARDs) may be prescribed when insufficient symptom control is obtained from first-line medicines. Corticosteroids and DMARDs are typically prescribed and monitored by specialist rheumatologists and require close medical monitoring to ensure effectiveness and to minimise side effects. Evidence suggests initiation of aggressive treatment with DMARDs within 12 weeks of symptom onset is associated with less joint destruction and a higher chance of achieving DMARD-free remission as compared with a longer delay in assessment [4].

bDMARDs are specialised immunosuppressant medications that have been shown to halt or slow the disease process sufficiently to reduce the joint destruction and disability associated with early rheumatoid arthritis [5]. bDMARDs are also used for other autoimmune conditions such as juvenile arthritis, psoriatic arthritis and Crohn's disease.

Treatment options for rheumatoid arthritis, including bDMARDs are available through the Pharmaceutical Benefits Scheme (PBS) and Repatriation Pharmaceutical Benefits Scheme (RPBS) codes [6].

Physical therapy

Maintaining a healthy and active lifestyle is an important management strategy in rheumatoid arthritis. Low-impact physical activity can assist in reducing inflammation, increasing and maintaining mobility and strengthening muscles around affected joints (7). A physiotherapist can prescribe an exercise program to assist in the management of rheumatoid arthritis.

Joint replacement surgery

Joint replacement surgery can relieve pain and restore function to joints severely damaged due to rheumatoid arthritis.

General practitioners and rheumatoid arthritis treatment

Treatment of rheumatoid arthritis often begins with the patient visiting a general practitioner (GPs). This is an important step in the treatment of rheumatoid arthritis because it is optimal for inflammation to be managed early on to reduce the chances of joint damage occurring [1] and improve long-term outcomes [8]. GPs often conduct initial assessment and diagnosis of rheumatoid arthritis. The time from onset of rheumatoid arthritis symptoms and referral to a specialised rheumatologist for treatment needs to be as efficient as possible to improve long-term treatment outcomes [5]. The RACGP recommends GPs complete diagnosis of rheumatoid arthritis as soon as possible and refer patients to a rheumatologist if joint swelling persists beyond 6 weeks [9].

Hospitalisation and the treatment of rheumatoid arthritis

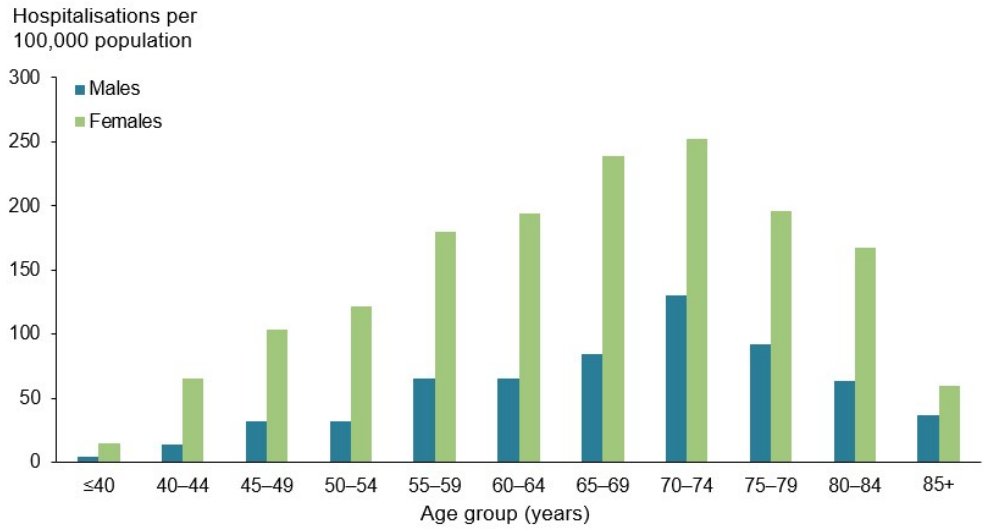
Treatment of rheumatoid arthritis is usually managed by general practitioners in partnership with rheumatologists and allied health professionals (such as physiotherapists) and centres on managing pain, reducing inflammation and joint damage, and preventing loss of function.

Severe disease however may require hospitalisation to relieve pain and restore function to damaged joints.

Data from the AIHW National Hospital Morbidity Database (NHMD) show that, in 2016–17:

- there were 13,213 hospitalisations with the principal diagnosis of rheumatoid arthritis, a rate of 54 hospitalisations per 100,000 population
- nearly three-quarters (75%) of rheumatoid arthritis hospitalisations were for females
- the hospitalisation rate was lowest among those aged 40 and under, increased until the age of 70–74, and then decreased again among people aged 75 and over (Figure 1).

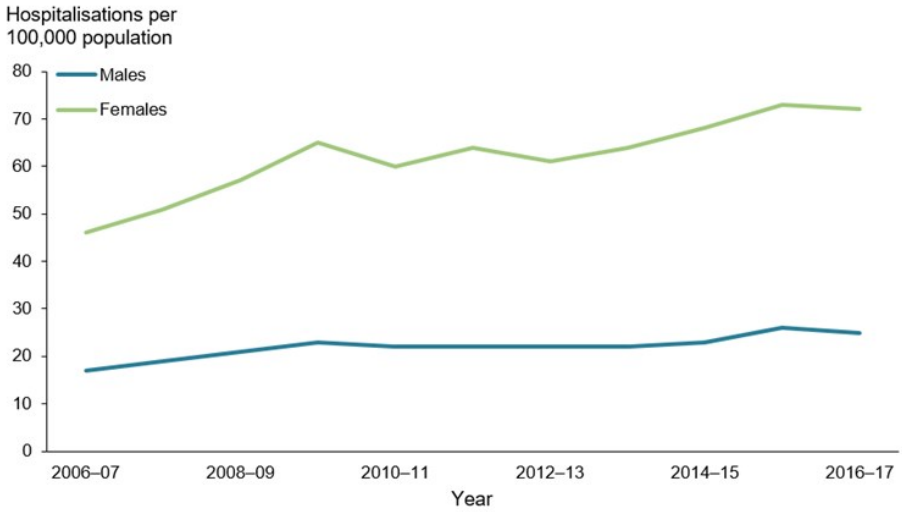
Figure 1: Rate of hospitalisation for rheumatoid arthritis, by sex and age, 2016–17



Source: AIHW National Hospital Morbidity Database (Data table).

From 2006–07 to 2016–17, the age-standardised hospitalisation rate for rheumatoid arthritis increased by 53%: from 32 per 100,000 to 49 per 100,000 population. This increase was driven by a 57% increase in hospitalisations for females (from 46 to 72 per 100,000 females), compared with a 47% increase for males (from 17 to 25 per 100,000 males) (Figure 2).

Figure 2: Rate of hospitalisation for rheumatoid arthritis, by sex, 2006–07 to 2016–17



Note: Rates are age-standardised to the Australian population as at 30 June 2001.

Source: AIHW National Hospital Morbidity Database (Data table).

Common hospital procedures for rheumatoid arthritis

In 2016–17, a total of 21,766 procedures were performed in rheumatoid arthritis hospitalisations. Administration of pharmacotherapy (44%), generalised allied health interventions (including physiotherapy, occupational therapy and dietetics) (23%) and cerebral anaesthesia (5.7%) were the most common groups (blocks) of procedures for rheumatoid arthritis hospitalisations.

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Data

Data tables: Rheumatoid arthritis 2019
Download Data tables: Rheumatoid arthritis 2019. Format: XLS 202Kb XLS 202Kb

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