

# 18 Musculoskeletal conditions and NSAID use

## 18.1 Background

Musculoskeletal disorders affect 5% (over 800,000 people) of all Australians (Australian Institute of Health and Welfare 1998a). The prevalence of these conditions increases with age with musculoskeletal disorders affecting more than 15% of people aged over 65 years. Musculoskeletal conditions are also one of the most common patient reasons for encounter (RFE) in general practice (11.5% of all RFEs) and such problems are managed at a rate of 16.9 per 100 encounters (Britt et al. 1999b).

Guidelines have been published on the management of osteoarthritis in general practice, including advice on the prescribing of non-steroid anti-inflammatory drugs (NSAIDs) (March 1997). It has been estimated that 10–20% of elderly people (65 years and over) currently use NSAIDs (Griffin 1998). Unfortunately, these medications can cause gastrointestinal problems such as peptic ulcers. A review of the evidence of the association between NSAID use and gastrointestinal injury reported a three-to-five fold increase in risk among NSAID users (Griffin 1998).

Recent studies in Australia have measured the prevalence of musculoskeletal conditions in the population (Australian Institute of Health and Welfare 1998a), and, separately, the use of NSAIDs (McManus et al. 1996). Although one study (March et al. 1998) has collected data on musculoskeletal conditions and NSAID use among people over 65 years, there has not been a national study that has described NSAID use among people with musculoskeletal conditions. The data collected as part of these SAND questions will fill this information gap and provide a better understanding of the extent of musculoskeletal conditions and NSAID use in general practice patients.

## 18.2 Research questions

1. What is the prevalence of chronic musculoskeletal conditions in general practice patients?
2. What medications are taken by patients for their chronic musculoskeletal conditions?
3. What proportion of general practice patients report using NSAIDs in the past 12 months?
4. What is the relationship between NSAID use (by those with a chronic musculoskeletal condition) and gastrointestinal injury?

## 18.3 SAND questions

### **Box 18.1: Musculoskeletal conditions and NSAID use**

*GPs asked the patients (or used their knowledge of the patient):*

- ◆ *Have you suffered from any chronic musculoskeletal conditions in the past 12 months?  
(chronic=lasting for 3 months or more)* Yes / No

*If 'yes':*

- ◆ *Name of the condition (if more than one such condition, specify the more serious)*
- ◆ *Drugs currently used (up to 3) for the chronic musculoskeletal condition,*
- ◆ *Their prescribed daily dose*
- ◆ *Approximate length of usage for these medications*

*If 'yes' to medications, GPs asked the patients:*

- ◆ *How effective do you feel this treatment has been?* Very good  
Good  
Fair  
Poor

*GPs were asked to ascertain whether the patient:*

- ◆ *had taken any NSAIDs in the past 12 months* Yes / No

*If 'yes':*

- ◆ *For approximately how long?* Short term (< 3 months)  
Long term (3+ months)

*GPs were asked whether, to their knowledge, the patient*

- ◆ *had suffered a gastrointestinal bleed in the past 12 months?* Yes / No

*If 'yes':*

- ◆ *Was the patient on NSAIDs at the time of the bleed?* Yes / No

*If 'yes':*

- ◆ *What drug was the patient taking?*
- ◆ *What was the daily dose and?*
- ◆ *Approximately how long had the patient been using the drug at the time of the bleed?*

## 18.4 Results

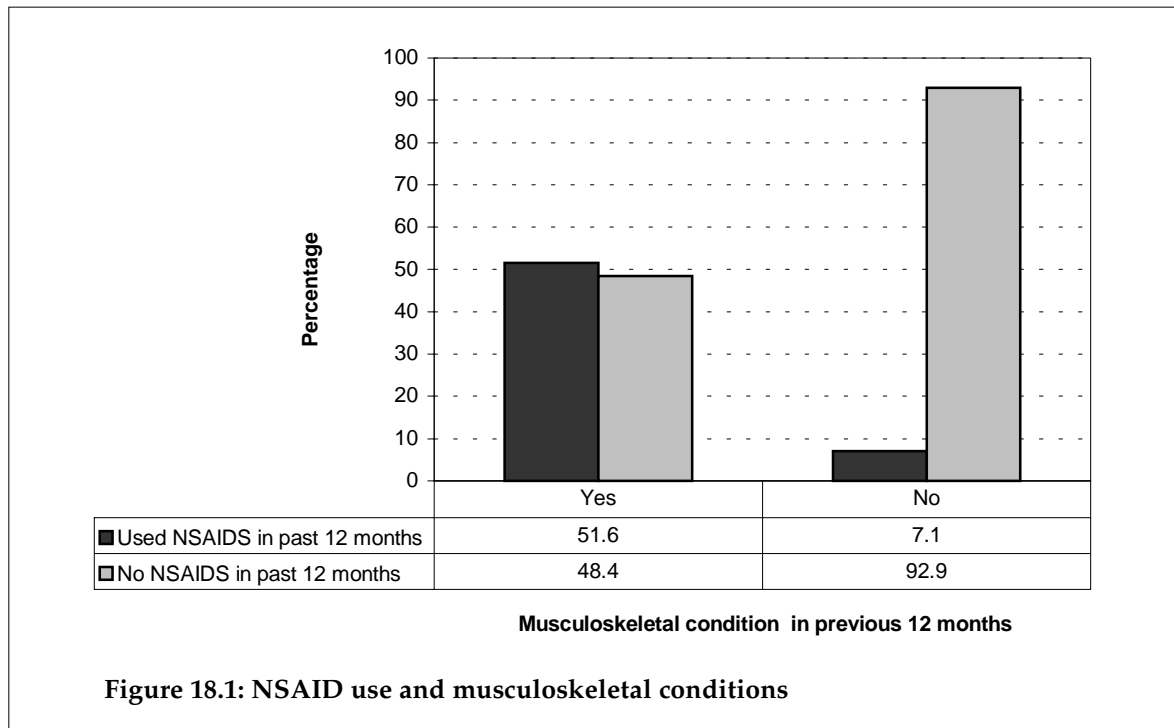
Sample size was 4,443 patient encounters from 111 GPs.

At almost one in three (31.9%, 95% CI: 29.0–34.8) encounters the patient had suffered a chronic musculoskeletal condition in the previous 12 months. The sex specific rate was not significantly different for males and females (30.4%, 95% CI: 26.0–34.9 and 33.0%, 95% CI: 29.7–36.2, respectively). Significantly, more patients in the older age groups reported having had a musculoskeletal condition, particularly for women aged 85 years or more. For age groups 65–74, 75–84 and 85 years +, prevalence of chronic musculoskeletal conditions ranged between 40–47% in males and 48–53% in females.

The most common chronic musculoskeletal conditions reported were osteoarthritis (30.4 per 100 encounters, 95% CI: 24.8–36.0) and back complaints (22.2 per 100 encounters, 95% CI: 19.1–25.2). Males and females reported a similar range of conditions. For those aged less than 65 years, back complaints was the most common, while osteoarthritis was the most common among those aged 65 years and over.

Of patients with a chronic musculoskeletal condition, 70.8% (95% CI: 66.8–74.9) reported current use of medication to treat the condition. The most common drug used to treat the condition was Paracetamol. Eighty-seven medications were prescribed for every 100 musculoskeletal conditions. The majority (60%) of patients using medication reported that the current treatment was either 'Good' or 'Very good'. This proportion was not significantly related to sex, age or condition treated.

Fourteen per cent (95% CI: 12.4–16.2) of all respondents had been taking NSAIDs for less than three months in the previous 12 months and 6.3% (95% CI: 5.3–7.2) had been taking NSAIDs for more than three months. There was a higher rate of NSAID use among people who had a chronic musculoskeletal condition than among people who had not (Figure 18.1). Only 67 people (1.5%) reported having had a gastrointestinal bleed in the previous 12 months.



## 18.5 Discussion

The prevalence of musculoskeletal conditions among people aged 65 years or more was lower in the current survey than in that reported by March et al. From a survey conducted in 1991 among people living in Northern Sydney (1998). The current survey found a range of prevalence of 40–53% in patients aged 65 years and over, compared with a prevalence of 60–70% in the survey by March et al. (1998). The difference in the prevalence of musculoskeletal conditions may be due to differences in definitions used in the two studies. While March et al. suggest that one of the main outcome measures of the study was ‘self-reported chronic illnesses’, the results are described in terms of ‘musculoskeletal symptoms’. In contrast, in the current study only chronic conditions were included and ‘chronic’ was defined as lasting three months or more.

The prevalence of NSAID use, 25%, was similar in the two studies. However, the prevalence of NSAID use was expected to be less because McManus et al. (1996) described a fall in NSAID use in the Australian community between 1990 and 1994. The similarity in results may be because the survey of March et al. (1998) recorded only medications that were taken regularly and did not include medications that had been discontinued. In contrast, the current study asked about any NSAID use in the previous 12 months.

The number of people who reported a gastrointestinal bleed was insufficient to examine its relationship with NSAID use.

The SAND data provide up-to-date information on chronic musculoskeletal conditions and NSAID use in Australia and will act as a baseline against which future changes in prevalence and related NSAID use can be measured.