Arthritis in South Australia

FINDINGS IN BRIEF

- The self reported prevalence of arthritis in 2002 was 22.4%.
- Arthritis has a significant effect on quality of life.
- There are high rates of depression amongst people with arthritis particularly younger people.

INTRODUCTION

This report summarises the findings from surveys conducted by the Population Research and Outcome Studies Unit, DH.

METHODS

The majority of data in this report were obtained from the Health Omnibus Surveys conducted in South Australia between 1998 and 2001. Face to face interviews are conducted with people aged 15 years and over. Data was also used from SERCIS (Social and Environmental Risk Context Information System) surveys in 1997 and 1998.

Mental health was assessed using the SF-12, a shortened form of the SF-36 that creates the two summary scores, the PCS and MCS. The MCS has a cut-off score, which is likely to predict depression, and this was used as a proxy for the prevalence of depression. The General Health Questionnaire (GHQ), a questionnaire designed to identify people with specific mental health problems, was also asked.

Respondents were asked whether or not a doctor had told them that they have arthritis. Thus the data refers to self-reported, doctor-diagnosed arthritis.

RESULTS

Prevalence of arthritis in SA

- Between 21.5% and 24.9% of the population reported arthritis in 1998 to 1999 and 2001 and 2002 (Table 1).
- The overall prevalence of arthritis from 1998 to 2001 was 22.9%.

Table 1: Prevalence of arthritis (HOS)

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998 (Autumn)</td>
<td>21.5 (20.0-23.0)</td>
</tr>
<tr>
<td>1998 (Spring)</td>
<td>24.9 (23.3-26.4)</td>
</tr>
<tr>
<td>1999</td>
<td>24.3 (22.8-25.9)</td>
</tr>
<tr>
<td>2001</td>
<td>21.2 (19.8-22.7)</td>
</tr>
<tr>
<td>2002</td>
<td>22.4 (21.0-23.9)</td>
</tr>
<tr>
<td>Overall</td>
<td>22.9 (22.2-23.5)</td>
</tr>
</tbody>
</table>

- Women were more likely than men to have been diagnosed with arthritis.
- There was a clear relationship between age and prevalence of diagnosed arthritis, with older people experiencing a higher rate of arthritis.
- The prevalence of arthritis was not associated with area of residence in South Australia.
- In general, there was an inverse relationship between level of education and prevalence of arthritis, with lower levels of education associated with higher levels of arthritis.
- There was an association between arthritis and household income, with those with a lower income having a higher rate of arthritis.

Impact on mental health

- The impact of arthritis on mental health can be assessed using data from the 1997 SERCIS Mental Health Survey.
- The survey used the SF-12 and the GHQ to assess depression.
- Overall depression measured by the SF-12 was evident in 13.9% of people with arthritis and 11.3% of people without arthritis. There was no significant difference between the groups (p=0.1).
- Psychiatric problems measured by the GHQ were prevalent in 22.2% of people with arthritis and 18.8% of people without arthritis. There was no significant differences between groups (p=0.09).
- Respondents were also asked in the same survey if they had been diagnosed by a doctor with anxiety, depression or other mental health problems. People with arthritis had a statistically significantly higher prevalence of self-reported, medically confirmed mental health problems (14.3%) than people without arthritis (10.0%).
- Respondents were also asked if they had taken any medication for depression, anxiety or any other mental health problem in the two weeks preceding the survey. Those with arthritis were significantly more likely to have taken medication (4.5%) than those without arthritis (2.2%).
- In conclusion, arthritis had a significant impact on mental health.
Quality of life

In the 1998 HOS (autumn survey, all respondents answered the Short Form 36 (SF-36) which explores a range of mental and physical health dimensions. Eight dimensions of physical and mental health functioning are then calculated: physical functioning (PF), ability to perform physical role (RP), bodily pain (BP), general health (GH), vitality (VT), social functioning (SF), ability to perform emotional role (RE) and mental health (MH). Respondents with arthritis were compared to the general population norms.

Figure 1 shows the SF-36 standardised scores for people with and without arthritis, controlling for gender and age. It can be seen that arthritis has an impact on functioning across all eight dimensions.

**Figure 1: SF-36 scores for people with and without arthritis**

<table>
<thead>
<tr>
<th>SF-36 Dimension</th>
<th>General Population</th>
<th>Arthritis</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>RP</td>
<td>0.0</td>
<td>-0.1</td>
</tr>
<tr>
<td>BP</td>
<td>0.2</td>
<td>0.4</td>
</tr>
<tr>
<td>GH</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>VT</td>
<td>0.1</td>
<td>0.0</td>
</tr>
<tr>
<td>SF</td>
<td>0.3</td>
<td>0.4</td>
</tr>
<tr>
<td>RE</td>
<td>0.0</td>
<td>0.2</td>
</tr>
<tr>
<td>MH</td>
<td>0.2</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Impact on daily life

- Respondents to the Health Omnibus Survey in 1998 were asked if they had experienced days when they were unable to go to work.
- Overall 18.3% of people with arthritis were unable to work because of their health compared to 14.4% of people without arthritis, a statistically significant difference (p<0.05).
- In addition 29.7% people with arthritis had to cut back on their usual activity because of pain or illness compared to 18.1% people without arthritis, a statistically significant difference (p<0.05).

Participation in physical activity

Respondents were asked about their participation in physical activity as part of the 1998 SERCIS survey.
- There was a significant difference in the percentage of respondents who had arthritis and who had not walked for longer than 10 minutes in the past week (66.7%) than those who did not have arthritis (78.0%, p<0.05).
- There was a statistically significant difference (p<0.05) in the percentage of respondents who had arthritis and had done housework (36.5%) than those who did not have arthritis and had undertaken housework (41.7%).
- Respondents with arthritis were significantly less likely to have undertaken gardening in the last week (39.1%) compared to those without arthritis (45.0%, p<0.05).
- Those with arthritis were significantly less likely (17.8%) to have undertaken vigorous activity in the last week compared to those without arthritis (36.7%, p<0.05).
- There was no significant difference between the groups in terms of moderate physical activity.

Other physical capabilities

In the 1998 SERCIS survey respondents aged 50 and over were asked about their physical capabilities. Overall people with arthritis were significantly less likely to achieve the following tasks.
- Nearly 5% of people with arthritis were unable to rise unassisted after sitting on a chair (compared to 1.0% of those without arthritis).
- 24.4% of those with arthritis were unable to rise unassisted after sitting on the floor (compared with 7.8% of those without arthritis).
- 23.5% of people with arthritis were unable to rise unassisted after lying on the floor compared to those without arthritis (7.9%).

Need for medication

The SERCIS survey in 1997 asked all respondents if they had bought medication from the pharmacy, for pain relief, in the two weeks preceding the survey.
- 27.0% of people with arthritis and 11.1% of people without arthritis had purchased medication for pain relief. The difference was statistically significant (p<0.05).

Conclusions

- Arthritis is a highly prevalent disease with over a fifth of the South Australian population reporting doctor-diagnosed arthritis.
- Arthritis has a negative impact on health-related quality of life.
- There is an association between arthritis and mental health.
- Arthritis also results in people being more likely to have time off work or normal activities due to pain or illness and to cut down on the amount of work done.
- There is also an impact on ability to undertake physical activity and chores in the garden and around the home.

References


Acknowledgements

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