An Epidemiological Analysis of Arthritis Prevalence Among South Australian Adults

Prepared for Arthritis Foundation of SA

Population Research and Outcome Studies Unit, SA Department of Health
Introduction

• Report prepared in response to previous brainstorming session.

• Data are collected by the Dept of Health.

• These data were analysed in terms of:
  – Demographics.
  – Chronic conditions.
  – Risk factors.
Surveys used

- The South Australian Monitoring and Surveillance System (SAMSS).
  - Telephone survey.
  - Telephone survey.
- SA Health Omnibus survey.
  - Face to face.
Prevalence of arthritis

- Survey participants asked:
  - “Have you ever been told by a doctor that you have arthritis? (If yes, what type?)”

- Some years, type of arthritis is also determined.
Trend over time

- Health Omnibus survey has collected data since 1993.

- Graph shows prevalence over time for respondents aged 18 years and over.
Trend over time

Data source: 1993 to 2005 HOS, age sex standardised to 2001 Census, age 18 years and over
Projections

Data source: 1993 to 2005 HOS, age 18 years and over
Demographic characteristics

- Health Monitor survey conducted in 2005.
- Sample size n=17140 respondents aged 18 years and over.
- Asked if “Ever been told by a doctor that they have arthritis?”
Characteristics examined

- Gender.
- Age groups.
- Country of birth.
- Language spoken at home.
- Marital status.
- Area of residence.
- Household size.

- Children under 16 years in the household.
- Work status.
- Highest educational attainment.
- Income.
- Socio-Economic Indexes for Areas (SEIFA) Index of Relative Socio-Economic Disadvantage (IRSD) quintiles.
Demographic profile those with arthritis

- Female.
- Aged 55 years and over.
- No children under 16 years in the household.
- One person over 16 years in the household.
- Live in country South Australia.
- Live in the lowest SEIFA IRSD quintile.
- Born in the UK/Ireland or a country other than Australia.

- Speak a language other than English at home.
- Separated/divorced or widowed.
- No schooling to secondary level education.
- Not employed.
- An annual household income of up to $40,000.
Country of birth comparisons

- Respondents with arthritis are significantly more likely to be from:
  - Other Southern Europe (Bosnia-Herzegovina, Spain, Slovenia, Former Yugoslav Republics of Serbia and Montenegro, Former Yugoslav Republic of Macedonia, Cyprus, Malta, Portugal, Croatia);
  - Eastern Europe (Bulgaria, Poland, Belarus, Czech Republic, Hungary, Romania, Slovakia);
  - UK/ Ireland;
  - Germany;
  - Italy; or
  - Greece.
Respondents with arthritis were significantly more likely to speak:

- Dutch
- Greek; or
- Italian.
Prevalence of arthritis

- Determined using SAMSS.
- Data collected between July 2003 and June 2006.
- Respondents aged 18 years and over.
## Prevalence of arthritis

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>%</th>
<th>(95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Osteoarthritis</td>
<td>1795/16218</td>
<td>11.1</td>
<td>(10.6-11.6)</td>
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<tr>
<td>Rheumatoid arthritis</td>
<td>513/16218</td>
<td>3.2</td>
<td>(2.9-3.4)</td>
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<tr>
<td>Other type</td>
<td>159/16218</td>
<td>1.0</td>
<td>(0.8-1.1)</td>
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<tr>
<td>Don’t know type</td>
<td>1132/16218</td>
<td>7.0</td>
<td>(6.6-7.4)</td>
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<tr>
<td>Arthritis</td>
<td>3546/16218</td>
<td>21.9</td>
<td>(21.2-22.5)</td>
</tr>
</tbody>
</table>

Data source: South Australian Monitoring and Surveillance System 2003-2006
Arthritis and chronic conditions

• Advantage of SAMSS also asks about other chronic conditions.
• These include:
  – Diabetes*;
  – Asthma;
  – Other respiratory problems such as emphysema, bronchitis, or chronic lung disease;
  – Cardiovascular conditions*;
  – Osteoporosis*; and
  – Disability*. 
Arthritis and diabetes

- Prevalence of diabetes among people aged 18 years and over in South Australia was 6.6% (95% CI 6.3 – 7.0; n=1078).
- Of those with arthritis, 12.5% (95% CI 11.4 – 13.6; n=442) also had diabetes.
- Statistically significantly higher proportion compared to respondents with diabetes and no arthritis.
Arthritis and diabetes

Data source: South Australian Monitoring and Surveillance System 2003-2006
Arthritis and cardiovascular disease

- Prevalence of CVD was 8.1% (95% CI 7.7 – 8.5; n=1316) among respondents aged 18 years and over.
- Of the respondents with arthritis, 18.1% (95% CI 16.8 – 19.4; n=641) also had cardiovascular disease.
- Statistically significantly higher proportion compared to respondents with cardiovascular disease and no arthritis.
Arthritis and cardiovascular disease

Data source: South Australian Monitoring and Surveillance System 2003-2006
Arthritis and osteoporosis

- Prevalence of osteoporosis among people aged 18 years and over in South Australia was 4.5% (95% CI 4.2 – 4.9; n=735).
- Of the respondents with arthritis, 11.9% (95% CI 10.9 – 13.0; n=422) also had osteoporosis.
- This is a statistically significantly higher proportion compared to respondents with osteoporosis and no arthritis.
Arthritis and osteoporosis

Data source: South Australian Monitoring and Surveillance System 2003-2006
Arthritis and disability

- The prevalence of disability was 21.9% (95% 21.2 – 22.5; n=3548) in the South Australian population aged 18 years and over.
- Of the respondents with arthritis, 46.9% (95% CI 45.2 – 48.5; n=1662) also reported having a disability.
- This is a statistically significantly higher proportion compared to respondents with a disability and no arthritis.
Arthritis and disability

Data source: South Australian Monitoring and Surveillance System 2003-2006
Arthritis and risk factors

Another advantage of SAMSS also asks about risk factors.

These include:
- High blood pressure;
- High cholesterol;
- Overweight and obesity (which is determined from self-reported height and weight);*
- Current smoking;
- Insufficient physical activity;*
- Poor diet and nutrition, including eating less than five serves of vegetables per day and less than two serves of fruit per day; and
- Alcohol consumption leading to harm in the long term.
Arthritis and overweight

- Prevalence of overweight, 36.4% (95% CI 35.7-37.2).
- Prevalence of obesity, 18.7% (95% CI 18.1-19.3)
- Respondents with arthritis were statistically significantly more likely to be overweight or obese than respondents without arthritis.
Arthritis and overweight

Data source: South Australian Monitoring and Surveillance System 2003-2006
Arthritis and physical activity

- Prevalence of no activity 19.4% (95% CI 18.8-20.1).
- Of the respondents with arthritis, 28.2% (95% CI 26.8 – 29.8; n=991) were not physically active.
- Respondents with arthritis were statistically significantly more likely to be undertaking no physical activity.
Arthritis and physical activity

Data source: South Australian Monitoring and Surveillance System 2003-2006
Arthritis and current mental health condition

- Prevalence of self-reported current diagnosed mental health conditions was 14.5% (95% CI 13.9 – 15.0; n=2345).
- Of the respondents with arthritis, 21.1% (95% CI 19.8 – 22.5; n=749) reported having a current diagnosed mental health condition.
- Respondents with arthritis were statistically significantly more likely to have a current diagnosed mental health condition than respondents without arthritis.
Arthritis and current mental health condition

Data source: South Australian Monitoring and Surveillance System 2003-2006
Arthritis and mental health

• Similar patterns for arthritis and psychological distress.

• And for arthritis and suicide ideation.
Recommendations

- The prevalence of arthritis (approximately one quarter of the South Australian population aged 18 years and over) requires a significant investment in program development and targeting in order to provide information to those with arthritis regarding treatment and self management.

- The highest prevalence of arthritis is among females, those in the older age groups, those with lower levels of education, income and socioeconomic status. Programs need to targeted specifically at these populations in order to achieve benefits.
Recommendations

• The prevalence of arthritis is high among people from non-English speaking background and born in countries other than Australia. Consideration needs to be given to provide programs and information in specific languages addressing these populations.

• Trends and projections of arthritis prevalence indicate that the prevalence will at least be maintained in females over the next 15 years to 2020. Trends and projections also indicate that prevalence will rise in the younger age groups, among males which will have an ongoing impact as ageing occurs. These trends demand that a focus in placed on these age groups in order to prevent and manage arthritis into the future.