Prevalence and correlates of foot pain: the North West Adelaide Health Study

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How many people suffer from foot pain?

Who cares?
Why is this important?

- Health service planning and delivery
  - Budgeting
  - Manpower / resourcing

- Research grant applications
  - Public health importance
  - Why should this research be funded?
Sources of prevalence data

- National Health Survey (ABS)
  - Nothing on foot problems

- West Moreton Rural Health Needs Survey\(^1\)
  - 26% of 600 people had foot problems

- Randwick study\(^3\)
  - 36% of 300 older people had disabling foot pain

1. AJPM 1999;33:45.
2. Rheumatology 2006;45:863.
Sources of prevalence data

- **Limitations**
  - Generally small, unrepresentative samples
  - Limited age range
  - Limited analysis of associated factors
    - Age, sex, body mass index, etc
The North West Adelaide Health Study

- General health survey
- Commenced in 2000
- NW region represents
  - half of the population of Adelaide
  - one quarter of the population of SA
- Range of socio-economic areas
The NWAHS - methods

- **Stage 1**
  - Recruited by electronic white pages
  - Independent living only
  - Within each household, the person who had the most recent birthday was invited
  - Interview and clinic assessment
  - n=4,060 (response rate 49%)
The NWAHS - methods

- **Stage 2**
  - 2\textsuperscript{nd} interview and clinic assessment
  - Focused on musculoskeletal disorders
  - n=3,206
  - **Foot question:**
    - On most days do you have pain, aching or stiffness in either of your feet?
# Results – sample (n=3,206)

<table>
<thead>
<tr>
<th>Variable</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1573</td>
</tr>
<tr>
<td>Female</td>
<td>1633</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>20 to 34 years</td>
<td>912</td>
</tr>
<tr>
<td>35 to 44 years</td>
<td>650</td>
</tr>
<tr>
<td>45 to 54 years</td>
<td>568</td>
</tr>
<tr>
<td>55 to 64 years</td>
<td>437</td>
</tr>
<tr>
<td>65 to 74 years</td>
<td>325</td>
</tr>
<tr>
<td>75 years and over</td>
<td>315</td>
</tr>
<tr>
<td><strong>Body mass index (kg/m²) – mean (SD)</strong></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>28.0</td>
</tr>
<tr>
<td>Females</td>
<td>27.7</td>
</tr>
</tbody>
</table>
Results – prevalence and associations

- Overall prevalence = 17.4 (16.2 – 18.8)%

- Associated with:
  - Increased age
  - Female sex (1.4 X)
  - Obesity (1.9 X)
  - High waist:hip ratio (1.7 X)
Results – pain at other sites

- Foot pain also associated with:
  - Knee pain (2.4 X)
  - Hip pain (2.4 X)
  - Back pain (2.4 X)
Results – health-related quality of life

- mental health
- role - emotional
- social function
- vitality
- general health
- bodily pain
- role - physical
- physical function

- foot pain
- no foot pain
How many of these people seek podiatry treatment?
Results – podiatry utilisation

- 9.5% had seen a podiatrist in the last year
  - Only 17.7% of those with foot pain
- Those who consulted a podiatrist were more likely to:
  - Be female
  - Be aged > 45 years
  - Earn less than $20,000 / yr
  - Be obese
  - Have chronic medical conditions
    - OA, o/porosis, diabetes, CVD
Results – podiatry utilisation

- Those with foot pain who had NOT seen a podiatrist in the last year were more likely to:
  - Be male
  - Be aged 20 to 34 years
  - Earn $40-60,000 / yr
  - Be smokers

- ...and were less likely to have chronic medical conditions
Key findings

- Nearly 1 in 5 people have foot pain, aching or stiffness
- Associated with age, female sex, obesity, pain in other regions
- Significant impact on health-related quality of life
Discussion

- Podiatry services do seem to be being accessed by those with the greatest need
- However, a large proportion of younger people with foot pain are not consulting podiatrists
  - Are they consulting other health professionals?
  - Low level of awareness?
  - Is the supply adequate enough to meet the demand?
Discussion

- **Limitations**
  - No clinical foot assessments performed
  - Foot pain based on single question

- **Future plans**
  - NHMRC project grant, 2009
  - “North West Adelaide Foot Health Study”
  - n=1,000
Conclusion

- NWAHS provides the best available epidemiological evidence of the prevalence of foot pain in Australia
- Very useful information in relation to policy and research
Acknowledgements

- University of Adelaide
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- Queen Elizabeth Hospital
- NHMRC
References


www.jfootankleres.com