A population-based approach to optimising the use of anti-hypertensives
Outcomes from the Greater Green Triangle Chronic Disease Risk Factor Surveys

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www.greaterhealth.org

Background

• Suboptimal blood pressure is number one attributable risk for death globally¹
• 31% of Australian adults have blood pressure >=140/90mmHg²
• Latest international evidence suggests a continued evidence-treatment gap³


Objectives

• To examine the evidence-treatment gap for hypertension at a population level
• To discuss implications for future direction of Quality Use of Medicines (QUM) strategies

Methodology

• Electoral roll random sample from Limestone Coast (LC, 2004) and Corangamite Shire (CO, 2005), aged 25-74 years
• WHO MONICA Protocol – www.ktl.fi/monica
• Recommendations of the European Health Risk Monitoring (EHRM) Project – www.ktl.fi/ehrm

Greater Green Triangle Region

www.greaterhealth.org
Survey Sites (CO)
Camperdown
Cobden
Lismore
Terang
Timboon

Survey Sites (LC)
Mount Gambier
Naracoorte
Millicent
Keith
Bordertown
Penola
Lucindale
Robe
Kingston

Analysis
• Data from 891/967 (92%) participants
  – BP measurement and medication information required for inclusion
• Identifying hypertensive participants
  – BP readings, includes normotensive participants taking BP medications

Categorisation of Hypertension
– Heart Foundation Guidelines (140/90mmHg)
– Participant categories examined
  – Aware (controlled/uncontrolled)
  – Unaware
  – Normotensive

Overall Age-Adjusted Results
• 35.1% hypertensive
• 51.9% of hypertensives used medication
• 58.4% of medication-users lacked BP control

Blood pressure categories
- Normal ≤ 140 / 90 mmHg
- Mild systolic BP > 160 mmHg OR diastolic BP > 100 mmHg
- Moderate or severe systolic BP > 160 mmHg OR diastolic BP > 100 mmHg

* P for difference <0.05
Prevalence of Hypertension

<table>
<thead>
<tr>
<th>Age group</th>
<th>% of population</th>
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<tbody>
<tr>
<td>25-34</td>
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<td>35-44</td>
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<td>55-64</td>
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<td>65-74</td>
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Awareness and Control of Hypertension

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<th>Age group</th>
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Use of Medications among those aware of hypertension

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<thead>
<tr>
<th>Medication</th>
<th>LC Males</th>
<th>CO Males</th>
<th>LC Females</th>
<th>CO Females</th>
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<tbody>
<tr>
<td>Diuretics</td>
<td>%</td>
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<td>Beta-blockers</td>
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Discussion

- Physical measurements, not self-reported
- More powerful sub-analyses desirable
- Distinct detection and treatment issues

Conclusions

- Guidelines not sufficiently effective at a population level
- QUM strategies require surveillance
- Targeted campaigns should be considered

Acknowledgements

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