Overview of talk

› recent evidence that helps define chronic pain as both a condition in its own right, and as a significant public health problem

› a population-focussed approach to managing the burden of chronic pain

› barriers to progress
Chronic pain may change the structure of the brain

Aris May

Department of Anesthesiology, University of Hamburg-Eppendorf (UKE), Hamburg, Germany

Persisted Pain as a Disease Entity: Implications for Clinical Management

Helen J. Webb, MD, PhD, and Michelle J. Gordon, MD, FRANZCP
Department of Anesthesiology/Pain Management and Pain Management Research Institute, University of Sydney, Royal North Shore Hospital, Sydney, NSW, Australia

Chronicity is associated with structural and functional changes in the CNS

How can pain epidemiology help? - the Australian experience

Acute and chronic pain service funding

Economic impact of chronic pain

Australasian Faculty of Pain Medicine

Advocacy/support
Putting the population back into pain research

Had an episode of pain in the previous six months by Health Area and sex, persons aged 16 years and over, NSW 1997

<table>
<thead>
<tr>
<th>Males</th>
<th>Females</th>
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</thead>
<tbody>
<tr>
<td>Health Area:</td>
<td></td>
</tr>
<tr>
<td>Central Sydney</td>
<td></td>
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<tr>
<td>Northern Sydney</td>
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<tr>
<td>South East Sydney</td>
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<tr>
<td>North West Sydney</td>
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<tr>
<td>Western Sydney</td>
<td></td>
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<tr>
<td>Illawarra / Helensvale</td>
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<tr>
<td>Northern Rivers</td>
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<tr>
<td>Mid North Coast</td>
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<tr>
<td>New England</td>
<td></td>
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<tr>
<td>Maitland / Hunter</td>
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<tr>
<td>Far West</td>
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<td>Southern</td>
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<tr>
<td>All Urban</td>
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</tr>
<tr>
<td>All Rural</td>
<td></td>
</tr>
<tr>
<td>NSW</td>
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</tbody>
</table>

Per cent

0 10 20 30 40

NSW Health Survey - prevalence of chronic pain and pain-related disability, females (Blyth et al. Pain 2001)

Females

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Chronic Pain causing interference</th>
<th>Chronic Pain</th>
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<tbody>
<tr>
<td>15-19</td>
<td>10</td>
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<td>80-84</td>
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<td>70</td>
</tr>
<tr>
<td>All Ages</td>
<td>80</td>
<td>75</td>
</tr>
</tbody>
</table>
Malaysian National Health Survey 2006

The high price of pain: the economic impact of persistent pain in Australia

November 2007

Report by Access Economics Pty Limited for
MBF Foundation
in collaboration with
University of Sydney Pain Management Research Institute
Costs of pain in Australia

Based on a range of reports using the same methods of costing, chronic pain had the **third highest** level of health expenditure ($34 billion per year).

Chronic pain outranked cancer, depression, stroke, diabetes and asthma in costs.

Without this information

Pain has little or no visibility as a health care problem.

It is very difficult for chronic pain to compete with other more ‘established’ conditions for limited health resources.

Areas of unmet need go unnoticed.
Giving pain a voice and a shape

Putting it together…

- **PAIN-FOCUSSED STUDIES**
- **GENERAL HEALTH SURVEYS**
- **Shape**
- **Place**
- **Voice**
- **RISK FACTORS/ PAIN BURDEN WITHIN SPECIFIED POPULATIONS**
- **HOW COMMON/ SEVERE IS PAIN COMPARED WITH OTHER CONDITIONS?**
What is a public health problem?

› Lots of it

› Costly to individuals (health, quality of life)

› Expensive

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What is a public health problem?

- Lots of it
- Costly to individuals (health, quality of life)
- Expensive

- Population-level factors influence incidence and outcomes
- Strong ‘social patterning’
- Acting at the level of individuals alone will NOT address the problem of population burden

We need a multi-pronged approach…

“…societal, lifestyle, and molecular explanations of disease are interconnected and mutually reinforcing, not stark alternatives locked in mortal combat”

Poole and Rothman J Epidemiol Community Health 1998

In other words, the biopsychosocial model!
Why is the public health/population approach important?

› A high-risk individual approach to chronic pain will NOT succeed in reducing the problem at population level

› Important intervention targets will be overlooked if uniquely population-level risk factors are not identified

› We are not optimising our intervention strategies

The high risk approach
The population approach

Population A
More pain/disability

Population B
Less pain/disability

Thinking about risk factors
Unanswered questions about chronic pain

› Is there a threshold effect?
› What is the contribution of current vs. former pain?
› What is the contribution of childhood vs. adult-onset pain?
› What is the contribution of maximum pain versus duration of pain?
› At what level of pain does increased susceptibility to chronic pain begin?

These questions are not new...

› There are other examples of recently-emerging public health problems, for example overweight/obesity…
Is there a threshold effect?
- What is the contribution of current vs. former obesity?
- What is the contribution of childhood vs. adult-onset weight?
- What is the contribution of maximum overweight versus duration of overweight?
- At what level of overweight does increased susceptibility to diabetes begin?

These questions were being asked about overweight/obesity in 1989.

Barrett-Connor et al. 1989

Risk factors for chronic pain are not necessarily also risk factors for staying in chronic pain.

Risk exposures and pain experience are dynamic across the lifespan.

Pain is dynamic…

Longitudinal studies show that chronic pain is dynamic over time.

Risk factors for getting chronic pain are not necessarily also risk factors for staying in chronic pain.

These questions were being asked about overweight/obesity in 1989.
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What we are up against

Problems of competition:

- My disease is bigger than yours
- My disease is better-funded than yours

Problems of recognition:

- How do we give pain a ‘shape’ like cancer?
- Symptom vs. condition debate
- Case definitions
- Unambiguous coding within the health system (e.g. ICD codes)
- Disease registries
How does pain relate to other health priority areas?

- Injury, musculoskeletal conditions, cancer, healthy ageing
- Pain as a long-term outcome of injury is rarely recorded

Models of care – the ideal world

- Abundantly well-funded
- Targeted at well-defined groups with clear potential to benefit from interventions
- Have a ‘whole of population focus’
- Underpinned by effective, evidence-based interventions
Types of care used in the community

- Self-care
- Complementary/Alternative care
- Informal health care
- Formal health care

www.painsummit.org.au
Why was it the right time in Australia?

- **Disease burden** now known: 1 in 5 people
- Associated **disability** known
- **Financial costs** of $34 bn per year
- Chronic Pain increasingly seen as a **disease entity**
- **BUT** pain **NOT** on national radar
- Major changes to national health care system on the way

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**NATIONAL PAIN SUMMIT – AUSTRALIA** who was involved

- **Led by** ANZCA / AFPM, APS and Consumer groups (Chronic Pain Australia & Consumer Health Forum)
- Inaugural supporters: PMRI and MBFF
- Grants from pharmaceutical, biotechnology and insurance companies
- More than 130 health & Consumer organisations
- Over 200 stakeholder participants
- Multidisciplinary input AND interdisciplinary input
NATIONAL PAIN SUMMIT – AUSTRALIA processes

› Steering Committee Meetings: Nov 08, Feb, Apr, June, Oct 09
› Working Groups: Models of Care, Primary Care, Evidence
› Leaders Meeting: ANZCA Sept 09
› Draft National Pain Management Strategy: launched Oct 09
› Summit: 11 March 2010

NATIONAL PAIN SUMMIT – AUSTRALIA activities

› Reference Groups – Acute, Cancer, Paediatrics, Geriatrics
› Consultation – Industry
› Visits – Canada, USA, UK – Oct – Nov 09
› Political advocacy – Oct 09 – March 10 & beyond
› Media program – Oct 2009 – March 10
› Pain Summit March, 2010 – Parliament House
› Next steps underway
› Montreal
People in pain as a National Health Priority
Knowledgeable, empowered and supported consumers
Access to skilled professionals and evidence-based care
Access to interdisciplinary care at all levels
Quality improvement and evaluation
Research agenda, adequate resources & translation to care
“If the world should blow itself up, the last audible voice would be that of an expert saying it can't be done”

Peter Ustinov