The Costs of Eating Disorders

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Early words …

- Early in the day… not too many tech details!
  - Healthy respect – and healthy scepticism

- Unusually for me....
  - Costs = money, not ‘human costs’ such as well-being, quality of life, social factors, etc …

- ... and I’m no clinician

- Generally studies only cover AN and BN.
  - Low evidence base, but even smaller for BED, EDNOS or ED Unspecified, other.
What you already know...

- 1.5m EU citizens suffer from AN or BN, 75-90% female
- High psychiatric/psychological & physical co-morbidity
- Long, multi-component treatment episodes: c12 months
- ‘Long & hard’ recovery; relapse is common. Often modest incremental improvements, and a small % don’t improve.
- Chronic and long-term condition: c20-25% remain chronically ill, but raised mortality levels (esp. AN)

Some current issues:

- Identification & help-seeking behaviour but earlier intervention better; appears age 16-19 years then crosses cyp/adult boundary; geog variation in specialist provision; carer ‘burden’
Today we’ll progress gently through...

A. Population-level costs
B. System level costs
C. Service & intervention costs
D. Individual level costs
E. Conclusion and key points
The costs of eating disorders

Population level costs
OHE (1994)

- AN-1870s; BN-1970s: binge-eating disorder 1990s
- "AN and BN have received considerable publicity in recent years..."
- "... a long hard process ...
- Treatment ... but limited evidence"

NHS costs for AN in the UK= £4m p.a.; excl. psychological therapies

NHS costs for AN: GP, outpatient referrals, inpatient (n=1000 admissions, avg 21.5 days), and medications. 1990 prices.

Many not receiving treatment.
2004 ?

NCC-MH – on the new NICE Guidelines for eating disorders

...insufficient information on health service use of patients with ED to calculate the NHS costs of implementing this guideline...

So... how are we doing by 2014?
Population-level costs, per annum

Europe (+14yrs)
AN+BN €\textsubscript{PPP} 827m
(Gustavsson et al, 2009 prices)

England (<35 yrs)
AN+BN = £50.6m
(Kings Fund, 2007 prices)

Australia (all ages)
All ED Au$17,108bn
(Butterfly, 2012 prices)

UK (all ages)
AN, BN, BED £15.5bn
(beat, 2014 prices)
COI: uses and challenges

**Uses**
- Advocacy & policy development
- Analysis of cost savings
- Expenditure decisions

**Challenges**
- Year base (inflation)
- Currencies – and cost estimation
- Estimates: prevalence and population(s)
- Data sources, methods
- Items included (scope)

And how costly is the ‘hidden’ population
Cost ~ perspective matters

- Wider societal perspective
- Family (OoP, inf care, lost productivity)
- Public sector (Educ, SS etc)
- Health Services
- Intervention

Where do costs fall, and what to include?
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System level costs
Health care system costs: pp pa

**Europe (+14yrs)**
AN €1,608, BN €70
(Gustavsson et al, 2009 prices)

**England (<35 yrs)**
AN+BN = £134
(King’s Fund, 2007 prices)

**UK (all ages)**
AN, BN, BED £8,850
(beat, 2014 prices)

**Australia (all ages)**
All ED Au$93
(Butterfly, 2012 prices)

**Review (15-65 yrs)**
AN US$\textsubscript{PPP} 8042-1288
BN US$\textsubscript{PPP} 127-5016
(Stuhldreher et al, 2008 prices, n=5)
Cost of health care data: uses & challenges

Challenges

- Year base (inflation)
- Currencies & cost estimation
- Estimates: prevalence and population/sample(s)
- Data sources, methods
- Items included (scope of systems/funding)

And how costly is the ‘hidden’ population?
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Treatment options: AN

- Psychological treatments are the mainstay of adult treatment; lack of c&yp studies

- Family therapy considered central for c&yp, and for the UK its recommended by NICE

- Individual therapy good outcomes for adults but family therapy now considered better for c&yp

- Little effect for anti-depressants, some effect for new anti-psychotics but major side-effects

Keel & Haedt, 2009
Treatment options: BN

- Adaptations of family therapy having some impact
- Good outcomes for adults with CBT (rec. by NICE); better than psychotherapy or interpersonal therapy
- Other talking treatments not systematically evaluated
- CBT for c&yp good findings; manualised GS-C good promising for older adolescents
- Pharmacology? Some effect for anti-depressants, and some evidence of additional impact of anti-depressants on psychological therapy

Keel & Haedt, 2009
Service level costs (UK prices)

Locations (black boxes? multi-component?)
- Inpatient treatment
- Day patient treatment
- Out patient treatment

Specific interventions (Various approaches)
- Individual / family therapy
- Guided self-care
- Cognitive behaviour or interpersonal therapies
- (Internet-delivered, tele-medicine/psychiatry)
We’ve arrived at a central tenet in economics....

There’s always more MONTH than MONEY.

SCARCITY

There are not enough resources to meet all needs and wants.
There’s always more than money. There are not enough resources to meet all needs and wants.

You need to make choices: your budgets are not getting any larger.
Think *opportunity costs* when implementing more/new services

Reallocate resources within your budget?
- Stop providing one of your services?
- Staff re-trained to work in new ways?
- Collaborate with a ‘free’ resource? (But free to who?)

Get ‘new’ money from another budget
- This means there is less money in that ‘other’ budget

Perhaps leading to poorer outcomes for people with dementia or first-episode psychosis? Poorer recovery from heart or eye conditions? Less cleaning in the hospital? Fewer nurses?

How to choose?
The costs of eating disorders

Individual level costs.
(It’s not just health care)
Study 1: Young people with Bulimia Nervosa, age 13-20 years

- N=102 recruited from specialist ED services: % total cost

- Extra education support: 11%
- Medication: 5%
- Social care: 1%
- Primary care: 17%
- Hospital services: 17%
- Mental health services: 49%

Schmidt et al, 2007
### Study 2: Young people with BN, age 13-20 years

<table>
<thead>
<tr>
<th>Service group</th>
<th>Clinic sample n=40</th>
<th>Vol org website (n=61)</th>
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</thead>
<tbody>
<tr>
<td>Additional school services</td>
<td>1.4 (0-24)</td>
<td>1.1 (0-8)</td>
</tr>
<tr>
<td>Hospital A&amp;E and outpatient</td>
<td>1.2 (0-12)</td>
<td>0.5 (0-4)</td>
</tr>
<tr>
<td>Primary care</td>
<td>3.5 (0-16)</td>
<td>2.6 (0-13)</td>
</tr>
<tr>
<td>Specialist care</td>
<td>3.9 (0-26)</td>
<td>2.1 (0-13)</td>
</tr>
<tr>
<td>Social care services</td>
<td>0.7 (0-24)</td>
<td>0.0 (0-1)</td>
</tr>
<tr>
<td><strong>All service contacts</strong></td>
<td><strong>10.6 (1-49)</strong></td>
<td><strong>6.4 (0-34)</strong></td>
</tr>
<tr>
<td>Help from semi-formal supports</td>
<td>18.0 (0-290)</td>
<td>26.4 (2-176)</td>
</tr>
<tr>
<td>Help from friends and family</td>
<td>8.6 (0-60)</td>
<td>27.8 (0-100)</td>
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Pretorius et al, 2009
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Conclusion and key messages
Conclusion and key messages

- Accuracy of any of the estimates shown?
- Read and use cost evidence - but with as much respect and scepticism as you do outcomes evidence!
- Cost evidence: how money has been spent, not whether it SHOULD be spent that way.
- Little enough cost evidence – very few CEA studies to inform commissioning
Only looked at costs today, but economic analysis is...

- about developing an evidence base to allow informed choices about how best to spend ED resources to achieve improved outcomes
- technical, with a different language and view of the world – and it requires plenty of data

And my very last point?

- If you don’t start thinking about economic analysis, someone else will make those choices for you ~ probably based on the cheapest option.