Physical health assessment and monitoring in long-term mental health care

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A brief questionnaire

Current thoughts, partnerships and resources

Handout 1
Things we know about people with mental illness

1. There is a high prevalence of physical health problems
2. Poor health has a major impact on mental stability and quality of life
3. There is reduced access to physical health care
Things we are starting to realise

1. The prevalence of physical health problems is rising faster than in the general population
2. People with physical health problems have higher mortality rates and those rates are increasing
3. Even when people access physical health care the quality is poorer
Increasing prevalence of physical health problems

- Difference from general population in prevalence of obesity in in-patients with schizophrenia
  1988 +4.7%
  2002 +14.7%
  Reist et al (2007)

- Prevalence of diabetes
  1979-1995 parallel trends
  1996-2001 0.7% increase per year in people with schizophrenia
  Basu & Meltzer 2006
Higher mortality rates

- People with psychosis age 25 to 44 have 6.6x higher cardiovascular mortality and die up to 25 years earlier. Highest in most developed countries. Saha et al (2007), Parks et al (2006)


- Increasing prevalence of IHD even in areas where it is declining in the general population. Lawrence (2003)
Five-year (non) survival rates

Fig. 1  Ischaemic heart disease mortality rates in Western Australia 1980–1998, total population rates (--- males; --- females) and rates in mental health service users (-----, males; -----, females).

Lawrence (2003)
Deficits in quality of medical care seem to explain a substantial portion of the excess mortality experienced by patients with mental disorders after myocardial infarction (Druss et al, 2001)

Medical and surgical hospitalizations for people with schizophrenia had at least two several types of adverse events and up to nine mortality rates (Daumit et al, 2006)
More people with mental illness die from cardiovascular disease than suicide.
Annual physical health checks
( NSF for mental health/NICE guidance)

- Blood pressure & weight/BMI
- Lifestyle advice (smoking/diet/exercise/alcohol/drugs)
- Urine/blood test to exclude diabetes
- Cholesterol check
- Medication side effect monitoring (Include thyroid function & creatinine if on lithium)
- Encourage screening in appropriate groups (cervical smears/mammography/hepatitis/HIV/high prolactin)
- Offer flu vaccination and contraceptive advice
### Screening for metabolic side effects in AO clients

- **Review of 1966 case records from 53 teams**

<table>
<thead>
<tr>
<th></th>
<th>% with recorded measurement over last 12 months</th>
<th>Documented diagnosis</th>
<th>Documented treatment</th>
<th>Estimated rates from Sz studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood pressure</td>
<td>26%</td>
<td>Hypertension 6%</td>
<td>48%</td>
<td>27-36% (X5)</td>
</tr>
<tr>
<td>Measure of obesity</td>
<td>17%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood glucose</td>
<td>28%</td>
<td>Diabetes 6%</td>
<td>62%</td>
<td>13% (X2)</td>
</tr>
<tr>
<td>Plasma lipids</td>
<td>22%</td>
<td>Dyslipidaemia 6%</td>
<td>37%</td>
<td>50% (X8)</td>
</tr>
<tr>
<td>All of the above</td>
<td>11%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Barnes et al (2007)
Review of prevalence/awareness of lifestyle & health problems in Worcestershire AO clients

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attended physical health screening assessment in the last 12 months</td>
<td>67 (60)</td>
<td>23</td>
<td>10</td>
</tr>
<tr>
<td>Do they take regular exercise?</td>
<td>59 (42)</td>
<td>41</td>
<td>0</td>
</tr>
<tr>
<td>Do they smoke?</td>
<td>74 (57)</td>
<td>26</td>
<td>0</td>
</tr>
<tr>
<td>Do they exceed recommended safe alcohol intake?</td>
<td>25 (17)</td>
<td>70</td>
<td>5</td>
</tr>
<tr>
<td>Any recreational drug use</td>
<td>23 (13)</td>
<td>70</td>
<td>7</td>
</tr>
<tr>
<td>Are they overweight?</td>
<td>33 (31)</td>
<td>62</td>
<td>5</td>
</tr>
<tr>
<td>Hypertension?</td>
<td>1</td>
<td>55</td>
<td>44 (30)</td>
</tr>
<tr>
<td>High cholesterol levels?</td>
<td>16</td>
<td>38</td>
<td>46 (50)</td>
</tr>
<tr>
<td>Diabetes</td>
<td>6</td>
<td>75</td>
<td>19 (15)</td>
</tr>
<tr>
<td>Do they have breathing problems?</td>
<td>14</td>
<td>81</td>
<td>5</td>
</tr>
<tr>
<td>Contraception?</td>
<td>1</td>
<td>52 (43)</td>
<td>47 (55)</td>
</tr>
<tr>
<td>Breast or testicular screening?</td>
<td>1</td>
<td>41 (32)</td>
<td>58 (63)</td>
</tr>
<tr>
<td>Up to date cervical screening? (f=40)</td>
<td>15</td>
<td>58 (21)</td>
<td>27 (70)</td>
</tr>
</tbody>
</table>
Implications for clinical practice

- We need a thorough understanding of physical health risks. Psychiatrists function as front line physicians for in-patients and many out patients.

- We must all prevent or reduce physical health risks in all our patients and promote screening, monitoring and health education in primary or secondary care.

- We must all advocate for patients already experiencing physical health problems, making sure they are appropriately managed and followed-up.
NICE guidelines

“The higher physical morbidity and mortality of service users with schizophrenia should be considered in all assessments.

“Whilst this would normally be expected to be the role of primary care services, secondary care services should nevertheless monitor these matters where they believe a service user may have little regular contact with primary care.”

NICE 2002
Meeting the challenge

Practical considerations

Handout 2
Understanding cardiovascular risk factors

**Non-modifiable risk factors**
- Gender
- Family history
- Personal history
- Age
- Ethnicity

**Modifiable risk factors**
- Obesity
- Smoking
- Glycaemic control
- Hypertension
- Dyslipidaemia
The Framingham Study

Wilson et al. (1998)
The Metabolic Syndrome

Constellation of risk factors for cardiovascular disease
Associated with increased insulin resistance

- **Abdominal obesity**: Waist circumference
  - Men > 94 cm (> 37 in)
  - Women > 80 cm (> 31 in)

  Plus 2 or more of the following factors

- **Raised Triglyceride** ≥ 1.7 mmol/l (or specific treatment for this lipid abnormality)
- **Reduced HDL cholesterol**
  - Men < 1.03mmol/L
  - Women < 1.29mmol/L
- **Raised Blood pressure** ≥ 130/85 mm Hg (or previously diagnosed hypertension)
- **Fasting blood glucose** ≥ 5.6mmol/L (or previously diagnosed Type II Diabetes)
## Physical health monitoring (atypical antipsychotics)

<table>
<thead>
<tr>
<th></th>
<th>Initial visit</th>
<th>4 weeks</th>
<th>8 weeks</th>
<th>12 weeks</th>
<th>6-monthly</th>
<th>Annually</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal/family history</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Height/weight (BMI)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Blood pressure/pulse</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Fasting plasma glucose**</td>
<td>X</td>
<td>(x)</td>
<td>(x)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Fasting lipid profile</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Barnett et al. (2007)
Challenges and opportunities

- Awareness raising, training, resources and multidisciplinary working to meet physical health needs
- Medication management involving patient education and choice
- Secondary care lifestyle interventions on in-patient units and hard to reach groups
- Liaison, communication and integration with physical health providers (primary and secondary health care)
- Increasing profile of physical health in CPA
Developing action plans
Physical health monitoring references


- **Department of Health (2006)** Choosing Health: supporting the physical health needs of people with severe mental illness. DH, August 2006 [www.dh.gov.uk/assetRoot/04/13/82/90/04138290.pdf](http://www.dh.gov.uk/assetRoot/04/13/82/90/04138290.pdf)

- **NHS Clinical Knowledge Summaries**: [www.cks.library.nhs.uk/schizophrenia](http://www.cks.library.nhs.uk/schizophrenia)

- **NICE public health guidance**: Reducing the rate of premature deaths from cardiovascular disease and other smoking related diseases: finding and supporting those most at risk and improving access to services (September 2008) [http://guidance.nice.org.uk/PH15](http://guidance.nice.org.uk/PH15)

- **Rethink PHC**: [www.rethink.org/physicalhealthcheck](http://www.rethink.org/physicalhealthcheck)