Depression and health outcome in patients with severe physical illness: the case of coronary heart disease

Dr. Chris Dickens,
Senior Lecturer in Psychological Medicine
University of Manchester, UK
Outline

- What is meant by depression
- Why do people with coronary heart disease get depressed?
- What is the impact of depression on the natural history of CHD
  - Pre-MI depression
  - Post-MI depression
- What is it about depression that influences medical outcomes?
- How should we treat depression in people with CHD?
- Does treating depression improve their medical outcomes?
Depression as disorder (depressive disorder).

- More than just unhappiness
- Cluster of recognised symptoms associated with some degree of disability
- ICD-10 depression
  - low mood / lack of interest or enjoyment/ fatigue (2)
  - Associated with other symptoms including: (2-4)
    - Disturbed sleep, poor appetite, impaired concentration, poor motivation,
    - low self esteem, guilt, pessimism, hopelessness
    - Ideas of self-harm
  - Spectrum of severity
- Present on most days for most of the day for at least 2 weeks
- Depression affects about 5% of the general population
Depression and morbidity

- W.H.O.
  - Depression is the 4th most significant cause of disability Worldwide
  - Projected to be number 2 by 2020.
Distress

- Symptoms of depression and anxiety that do not meet criteria for depressive disorder
  - Fewer in number or
  - Shorter in duration

- Still associated with impaired health-related quality of life but to much lesser extent.

- Symptoms are usually more transient than those of full syndromal depression

- Usually not requiring of medical intervention resolve spontaneously when life circumstances shift

- Symptoms present in a continuum of severity from “normal” to depressed
Variation in symptoms of depression and anxiety

Variation in depression scores across population

Mean = 11.41
Std. Dev. = 7.88
N = 255
Depression and Chronic illness (Long Term Conditions - LTCs)

- 15.4 million people live with a LTC in England
  - About half such patients have multiple LTCs.
  - Prevalence of multi-morbidity rises steeply with age
  - LTCs account for 60-70% of all deaths and 70% of all healthcare expenditure

- Depression affects about 5% of the general population
  - Prevalence greatly increased in people with LTC
  - prevalence = 5-50%

- This association is important because depression not only adds to illness burden it interacts with the medical condition.
  - Depression is linked to adverse medical outcomes:
    - increased mortality, morbidity, healthcare utilisation, urgent healthcare use, healthcare costs
    - Reduced health-related quality of life
  - Shown in people with diabetes, stroke, COPD, Cancer and Coronary Heart Disease...
Coronary Heart Disease

- Disorder of heart muscle
  - due to build up of fatty atheroma in walls of blood vessels of the heart – so-called coronary arteries
  - Increases with age
    - Also determined by genetic and metabolic factors

- Arteries are narrowed and blood flow to the coronary muscle is restricted
  - Acute – unstable angina, myocardial infarction
  - Chronic - angina

- Commonest cause of death in World – most common in countries with long life expectancies – i.e. developed countries.
  - affects 2.6 million people in UK
  - Of whom approx 100,000 die each year
Atheromatous plaques
Depression and Coronary Heart Disease (CHD)

- Depression common in people with CHD
  - E.g. Among populations who have suffered Myocardial Infarction (MI) 20% have clinically significant depression – depressive disorder
  - Another 20% show signs / symptoms of emotional distress that don’t meet diagnostic criteria for depressive disorder / major depression
  - Both depression and sub-clinical symptoms have been linked to worse medical outcomes

- Prevalence increased in other groups with CHD
  - primary care patients with stable CHD -9.8%
    - predicts impaired health-related quality of life 6 months later
  - post Acute Coronary Syndrome -28.2%.
Why do people with CHD get depressed?

- Lloyd et al (1983)
  - 100 men interviewed 1 week after first MI
    - Demographic variables (age, sex, marital, employment)
    - Previous psychiatric history (self and family)
    - Separation from parents in childhood
    - Work, social, family, marital and sexual adjustment
    - Standardised Psychiatric Interview

  - 35 men had psychiatric illness
    - In 16 illness predated the MI
    - In 19 symptoms started after MI
Pre-existing depression was more likely to be associated with lack of employment, marital social and family problems and previous psychiatric problems.

Post MI depression did not differ from non-depressed in terms of general characteristics.

Pre-existing depression more persistent
- 75% of the pre-existing depression persisted at 12 months
- 25% of post MI depression persisted at 12 months
Manchester Cohort study

- **Subjects**
  - 1000 consecutive admission to 4 hospitals screened

- **Inclusion Criteria**
  - < 80 years, no other serious illnesses,
  - W.H.O. Criteria for MI
    - history of typical chest pain
    - characteristic ECG changes
    - serial rise in CPK levels

- Assessed depression pre-MI depression using research interview

- Repeated depression measure at 12 months
Natural history of depression following MI

Baseline assessment

344 not depressed
78.2%

96 depressed
21.8%

12 month assessment

440 of 589 subjects
## Risk factors for pre-MI depression

<table>
<thead>
<tr>
<th>Variable</th>
<th>Odds ratio</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past Psychiatric history</td>
<td>5.7</td>
<td>p&lt;0.0005</td>
</tr>
<tr>
<td>Social isolation</td>
<td>4.7</td>
<td>p&lt;0.0005</td>
</tr>
<tr>
<td>Age (years)</td>
<td>0.95</td>
<td>p=0.002</td>
</tr>
<tr>
<td>Having a marked social stresses</td>
<td>2.4</td>
<td>p=0.002</td>
</tr>
<tr>
<td>Female sex</td>
<td>2.3</td>
<td>p=0.018</td>
</tr>
<tr>
<td>Absence of a close confidant</td>
<td>9.2</td>
<td>p=0.02</td>
</tr>
</tbody>
</table>
Summary

- Depression is common in CHD populations
  - Affects about 20% with further 20% having increased symptoms of depression
  - Approx 3 to 4 times prevalence seen in the general population

- Depression frequently precedes onset of CHD
  - Predicted by usual risk factors for depression
Importance of pre-MI depression

Wulsin 2003
Importance of pre-MI depression

Risks for CHD associated with smoking

Passive smoking R.R. = 1.25
Smoking R.R. = 2.5
Manchester Cohort study

Baseline assessment

344 not depressed
78.2%

96 depressed
21.8%

12 month assessment

316 not depressed
71.8%

124 depressed
28.2%

440 of 589 subjects
Risk factors for post MI depression

- New onset depression associated with
  - On-going health difficulties (chest pain)  (OR=3.0,  p=0.02)
  - Negative perceptions about MI at baseline
    - Believing cardiac health problems would last a long time (OR=2.7, p=.013*)
    - Believing heart disease could not be cured (OR=2.2, p=.048*)

*Controlling for markers of severity of MI and depression at baseline
Summary

- Depression is common in CHD populations
  - Affects about 20% with further 20% having increased symptoms of depression
  - Approx 3 to 4 times prevalence seen in the general population

- Depression frequently precedes onset of CHD
  - Pre-MI depression associated with usual risk factor
  - Depression predicts increased risk of CHD

- Post MI depression common
  - Predicted by negative beliefs about health and ongoing health problems
Depression and cardiac outcomes: mortality
Depression and cardiac outcomes: mortality

Comparison: Depression versus no depression
Outcome: Cardiovascular mortality

<table>
<thead>
<tr>
<th>Study</th>
<th>Depression n/N</th>
<th>No depression n/N</th>
<th>OR (95%CI Fixed)</th>
<th>Weight %</th>
<th>OR (95%CI Fixed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frasure-Smith</td>
<td>22 / 290</td>
<td>15 / 606</td>
<td></td>
<td>28.5</td>
<td>3.23[1.65,6.33]</td>
</tr>
<tr>
<td>Irvine</td>
<td>12 / 188</td>
<td>12 / 203</td>
<td></td>
<td>21.8</td>
<td>2.22[0.96,5.14]</td>
</tr>
<tr>
<td>Ladwig</td>
<td>6 / 80</td>
<td>6 / 473</td>
<td></td>
<td>5.1</td>
<td>6.31[1.98,20.09]</td>
</tr>
<tr>
<td>Lane</td>
<td>9 / 87</td>
<td>18 / 197</td>
<td></td>
<td>31.4</td>
<td>1.15[0.49,2.67]</td>
</tr>
<tr>
<td>Shiotani</td>
<td>4 / 438</td>
<td>1 / 604</td>
<td></td>
<td>2.6</td>
<td>5.56[0.62,49.90]</td>
</tr>
<tr>
<td>Welin</td>
<td>9 / 98</td>
<td>5 / 169</td>
<td></td>
<td>10.6</td>
<td>3.32[1.08,10.20]</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>62 / 1091</strong></td>
<td><strong>57 / 2252</strong></td>
<td></td>
<td><strong>100.0</strong></td>
<td><strong>2.59[1.77,3.77]</strong></td>
</tr>
</tbody>
</table>

Test for heterogeneity chi-square=7.06 df=5 p=0.22
Test for overall effect z=4.95 p=0.00001
Depressive symptoms and cardiac mortality

Barth 2004

<table>
<thead>
<tr>
<th>Study or sub-category</th>
<th>log[adj HR] (SE)</th>
<th>adj HR (random) 95% CI</th>
<th>Weight %</th>
<th>adj HR (random) 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>03 effects (&gt; 3 months)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barefoot 1996</td>
<td>0.3506 (0.1100)</td>
<td>-</td>
<td>24.62</td>
<td>1.42 [1.14, 1.76]</td>
</tr>
<tr>
<td>Frasure-Smith 1999</td>
<td>1.1500 (0.2915)</td>
<td>-</td>
<td>14.83</td>
<td>3.16 [1.78, 5.59]</td>
</tr>
<tr>
<td>Hermann 2000</td>
<td>0.1906 (0.0816)</td>
<td>-</td>
<td>25.90</td>
<td>1.21 [1.03, 1.42]</td>
</tr>
<tr>
<td>Irvine 1999</td>
<td>0.8960 (0.3903)</td>
<td>-</td>
<td>10.84</td>
<td>2.45 [1.14, 5.26]</td>
</tr>
<tr>
<td>Ladwig 1991</td>
<td>1.5890 (0.7568)</td>
<td>-</td>
<td>4.05</td>
<td>4.90 [1.11, 21.59]</td>
</tr>
<tr>
<td>Lane 2001</td>
<td>-0.1743 (0.4183)</td>
<td>-</td>
<td>9.95</td>
<td>0.84 [0.37, 1.91]</td>
</tr>
<tr>
<td>Welin 2000</td>
<td>1.1506 (0.4226)</td>
<td>-</td>
<td>9.82</td>
<td>3.16 [1.38, 7.23]</td>
</tr>
<tr>
<td>Subtotal (95% CI)</td>
<td></td>
<td></td>
<td>100.00</td>
<td>1.76 [1.27, 2.43]</td>
</tr>
</tbody>
</table>

Test for heterogeneity: Chi² = 20.95, df = 6 (P = 0.002), I² = 71.4%
Test for overall effect: Z = 3.42 (P = 0.0006)
Depression and cardiac outcomes: cardiac events

Comparison: 01 Depression versus no depression
Outcome: 03 Cardiovascular events

<table>
<thead>
<tr>
<th>Study</th>
<th>Depression</th>
<th>No depression</th>
<th>OR (95%CI Random)</th>
<th>Weight %</th>
<th>OR (95%CI Random)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahern (23)</td>
<td>16 / 139</td>
<td>11 / 212</td>
<td></td>
<td>11.4</td>
<td>2.38 [1.07, 5.29]</td>
</tr>
<tr>
<td>Frasure-Smith (41)</td>
<td>13 / 34</td>
<td>35 / 184</td>
<td></td>
<td>11.6</td>
<td>2.64 [1.20, 5.77]</td>
</tr>
<tr>
<td>Ladwig (37)</td>
<td>11 / 80</td>
<td>18 / 473</td>
<td></td>
<td>11.5</td>
<td>4.03 [1.83, 8.89]</td>
</tr>
<tr>
<td>Lane (42)</td>
<td>24 / 81</td>
<td>58 / 191</td>
<td></td>
<td>15.2</td>
<td>0.97 [0.55, 1.70]</td>
</tr>
<tr>
<td>Lauzon (35)</td>
<td>105 / 191</td>
<td>153 / 359</td>
<td></td>
<td>19.0</td>
<td>1.68 [1.18, 2.39]</td>
</tr>
<tr>
<td>Shiotani (40)</td>
<td>138 / 438</td>
<td>145 / 604</td>
<td></td>
<td>20.4</td>
<td>1.46 [1.11, 1.92]</td>
</tr>
<tr>
<td>Silverstone (29)</td>
<td>14 / 48</td>
<td>2 / 60</td>
<td></td>
<td>4.8</td>
<td>11.94 [2.56, 55.75]</td>
</tr>
<tr>
<td>Strik (36)</td>
<td>1 / 63</td>
<td>9 / 143</td>
<td></td>
<td>2.9</td>
<td>0.24 [0.03, 1.94]</td>
</tr>
<tr>
<td>Sydenham (22)</td>
<td>2 / 4</td>
<td>18 / 97</td>
<td></td>
<td>3.1</td>
<td>4.39 [0.58, 33.28]</td>
</tr>
</tbody>
</table>

Total (95% CI): 325 / 1078 | 449 / 2323

Test for heterogeneity chi-square = 21.80 df=8 p=0.0053
Test for overall effect z=3.41 p=0.0006

Van Melle 2004
4 studies have homogeneous results
Random effects combined odds ratio = 1.6 (95% CI 1.3 to 1.8) p<0.001
Higher depression scores are associated with more urgent healthcare visits

Effect of depression on urgent healthcare in people with CHD

Odds ratios and 95% Confidence intervals

Lauzon 2003
Frasure Smith 2000
Kurdyak 2008
Shiotani 2002

Combined OR = 1.6 (1.3 to 1.8)
Depression predicts adverse medical outcomes, but

- Not clear
  - What it is about depression that predicts adverse medical outcomes
  - How best to treat depression
  - Whether treating depression improves medical outcomes
Manchester Cohort study

- Aims was to investigate
  - Effects of timing of onset of depression on mortality

- 1000 MI patients screened from hospitals in Manchester

- 589 patients assessed 3 days following MI
  - 23.7% depressed in week preceding MI (n=140)

- Depressed reassessed in 440 patients at 12 months
  - 28.2% depressed at 12 months
  - Of whom just over half had “new depression” (n=71).
  - Just under half had depression that predated the MI (n=53).

- Survival established in 588 at 7 years
Depression and 7 year survival after MI

Survival Functions

Cum Survival

hads total >=17-
censored
hads total <17-
censored
hads total >=17
hads total <17
hads total 17 or
more

Survival Functions

hads total <17
hads total >=17
hads total <17-
censored
hads total >=17-
censored

p=0.75
## Predictors of post MI mortality

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Regression coefficient</th>
<th>p-value</th>
<th>Hazards ratio</th>
<th>95% CI for (HR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>age</td>
<td>0.04</td>
<td>0.007</td>
<td>1.04</td>
<td>1.01-1.07</td>
</tr>
<tr>
<td>pre-MI angina</td>
<td>0.59</td>
<td>0.033</td>
<td>1.81</td>
<td>1.05-3.13</td>
</tr>
<tr>
<td>No. previous MIs</td>
<td>0.48</td>
<td>0.004</td>
<td>1.61</td>
<td>1.17-2.23</td>
</tr>
<tr>
<td>Killip Class</td>
<td>0.57</td>
<td>0.005</td>
<td>1.76</td>
<td>1.18-2.62</td>
</tr>
<tr>
<td>beta blockers</td>
<td>-0.66</td>
<td>0.023</td>
<td>0.52</td>
<td>0.29-0.91</td>
</tr>
<tr>
<td>ACE inhibitors</td>
<td>-0.55</td>
<td>0.047</td>
<td>0.58</td>
<td>0.34-0.99</td>
</tr>
<tr>
<td>Pre-MI depression</td>
<td>-0.22</td>
<td>0.48</td>
<td>0.81</td>
<td>0.44-1.47</td>
</tr>
</tbody>
</table>
New onset depression depression and survival

Log rank, p=0.01
Incident v non-depressed, p=0.057
Hazard ratio = 2.3
after controlling for medical risk factors
## Predictors of post MI mortality

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Regression coefficient</th>
<th>p-value</th>
<th>Hazards ratio</th>
<th>95% CI for (HR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>age</td>
<td>0.06</td>
<td>0.007</td>
<td>1.06</td>
<td>1.02-1.11</td>
</tr>
<tr>
<td>pre-MI angina</td>
<td>1.42</td>
<td>&lt;0.0005</td>
<td>4.15</td>
<td>1.96-8.80</td>
</tr>
<tr>
<td>Killip Class 2 or 3</td>
<td>0.79</td>
<td>0.013</td>
<td>2.21</td>
<td>1.18-4.13</td>
</tr>
<tr>
<td>beta blockers</td>
<td>-0.99</td>
<td>0.02</td>
<td>0.37</td>
<td>0.16-0.85</td>
</tr>
<tr>
<td>New onset post MI depression</td>
<td>0.84</td>
<td>0.038</td>
<td>2.33</td>
<td>1.05-5.16</td>
</tr>
</tbody>
</table>
Summary

- Depression is common in CHD populations
  - Affects about 20% with further 20% having increased symptoms of depression
  - Approx 3 to 4 times prevalence seen in the general population

- Depression frequently precedes onset of CHD
  - Predicted by usual risk factors for depression
  - Pre-MI depression associated with usual risk factor
  - Depression predicts increased risk of CHD

- Post MI depression common
  - Predicted by negative beliefs about health and ongoing health problems

- Predictors of adverse medical outcomes
  - Pre-MI depression not predictive of increased mortality
  - Post MI depression associated with doubling of risk of subsequent mortality

- What it is about post MI depression is unclear
  - Is this a specific cardiotoxic subtype of depression
  - Is the association confounded
Mechanisms of effect of depression on cardiac outcomes

- **Physiological**
  - Increased sympathetic autonomic tone and reduced heart rate variability
  - Altered platelet function
  - Inflammation

- **Behavioural**
  - Increased smoking /drinking
  - Reduced adherence to medical /lifestyle advice
  - Disengagement from medical services
    - ?due to reduced motivation or negative cognitions in depression

None of these proposed mechanisms explain why post MI depression specifically is linked to adverse medical outcomes

Is the association between depression and adverse outcome confounded?
Treatment

- Quality and Outcomes Framework (QOF)
  - Since 2006 general practitioners have been incentivised to screen for depression among people with diabetes and heart disease every 12 to 15 months

- NICE guidance
  - 2004 – management of depression in primary and secondary care
  - 2009 - The treatment and management of depression in adults with chronic physical health problems
Management of depression in adults with chronic physical health problems

<table>
<thead>
<tr>
<th>Step</th>
<th>What is the focus</th>
<th>Nature of the intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 5</td>
<td>Severe and complex depression, risk to life, severe self neglect</td>
<td>Medication, high intensity psychological interventions, ECT, crisis service, combined treatment, multi-professional input and inpatient care</td>
</tr>
<tr>
<td>Step 4</td>
<td>Moderate depression with limited response to initial interventions, and severe depression</td>
<td>Collaborative care</td>
</tr>
<tr>
<td>Step 3</td>
<td>Mild to moderate depression with limited response to initial interventions, and moderate depression</td>
<td>Medication high intensity psychological interventions, combined treatments, referral</td>
</tr>
<tr>
<td>Step 2</td>
<td>Mild to moderate depression</td>
<td>Low intensity psychological and psychosocial interventions, medication, referral</td>
</tr>
<tr>
<td>Step 1</td>
<td>Recognition of depression</td>
<td>Assessment, referral, psych-education, active monitoring and support</td>
</tr>
</tbody>
</table>
Evidence that antidepressants reduce depression in CHD

None of the studies showed that medical outcomes improved following improvement in depression.

Only one study was sufficiently large to look at medical outcomes.
Evidence that psychological treatments reduce depression in CHD

### Effect of psychological treatments on depression in people with CHD

<table>
<thead>
<tr>
<th>Study name</th>
<th>Subgroups</th>
<th>Comparison</th>
<th>Outcome</th>
<th>Std diff in means and 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>701 Schrader 2005</td>
<td>Depressed</td>
<td>intervention for GPs, (depressed patients)</td>
<td>Depression (CES-D)</td>
<td>-1.00 -0.50 0.00 0.50 1.00</td>
</tr>
<tr>
<td>2492 Lewis 1992</td>
<td>All</td>
<td>rehabilitation vs control group</td>
<td>Depression (HADS)</td>
<td></td>
</tr>
<tr>
<td>1301 Lin 2007</td>
<td>All</td>
<td>home-based intervention vs control group</td>
<td>depression (HADS)</td>
<td></td>
</tr>
<tr>
<td>1257 / 509 / 1972 / 1053 ENRICHD writing committee</td>
<td>All</td>
<td>CBT +/- antidepressants vs usual medical care</td>
<td>Combined</td>
<td></td>
</tr>
<tr>
<td>759 McLachlan 2003</td>
<td>Depression</td>
<td>telephone based intervention for distress</td>
<td>Depression (HADS)</td>
<td></td>
</tr>
<tr>
<td>160 Lesprieune 2007 (CREATE)</td>
<td>Depressed</td>
<td>vs usual clinical management</td>
<td>Combined</td>
<td></td>
</tr>
<tr>
<td>3011 Stodridge 1981</td>
<td>Depression</td>
<td>telephone vs conventional treatment</td>
<td>Depression (HADS)</td>
<td></td>
</tr>
<tr>
<td>2617 Kuen 1983</td>
<td>Depression</td>
<td>telephone vs behaviour therapy techniques</td>
<td>depression (HADS)</td>
<td></td>
</tr>
<tr>
<td>4002 Soreland 2004</td>
<td>Depression</td>
<td>vs usual care</td>
<td>Combined</td>
<td></td>
</tr>
<tr>
<td>4002 Soreland 2005</td>
<td>Without intervention</td>
<td>vs usual care</td>
<td>Combined</td>
<td></td>
</tr>
</tbody>
</table>

10 studies, combined effect (SMD) = 0.19 (95% CI = 0.04 to 0.34)
## Effects* of psychological treatment types on depression

<table>
<thead>
<tr>
<th>Treatment</th>
<th>No. studies</th>
<th>Effect size</th>
<th>(95% Confidence intervals)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>General education</td>
<td>1</td>
<td>0.23</td>
<td>(-0.62 to 1.08)</td>
<td>0.60</td>
</tr>
<tr>
<td>Skills training</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Exercise</td>
<td>2</td>
<td>-0.04</td>
<td>(-1.09 to 1.05)</td>
<td>0.95</td>
</tr>
<tr>
<td>Behaviour therapy</td>
<td>1</td>
<td>0.37</td>
<td>(-0.61 to 1.33)</td>
<td>0.46</td>
</tr>
<tr>
<td>Problem solving</td>
<td>1</td>
<td>-0.38</td>
<td>(-1.46 to 0.70)</td>
<td>0.48</td>
</tr>
<tr>
<td>CBT</td>
<td>4</td>
<td>0.40</td>
<td>(-0.24 to 1.05)</td>
<td>0.22</td>
</tr>
<tr>
<td>Relaxation</td>
<td>4</td>
<td>-0.01</td>
<td>(-0.65 to 0.63)</td>
<td>0.98</td>
</tr>
</tbody>
</table>

*effects after controlling for %male, duration follow-up, No. treatments sessions and study quality
Treatment

- In post-MI cohort of 589 recruited following MI only 14% of depressed were receiving antidepressants

- In primary care cohort 31% of depressed were receiving antidepressants – none were receiving psychological therapies

- Unclear what are the barriers to the treatment of depression in people with LTCs
What are the barriers to treating depression in people with LTCs

In-depth interviews
- 19 healthcare professionals, 7 patients and 3 carers

Focus group with key stake-holders
- 6 healthcare professionals, 7 patients and 1 carer
Results

1. Barriers exist where there is a mismatch between patient and professional understanding about vulnerability to depression in the presence of LTCs.

- Not clear among patients or professionals what factors contribute to depression
  - LTC related / LTC independent

- Difficulty recognising depression in context of LTC (patients and professional)

- Depression often seen as understandable reaction to LTC therefore not justifying additional treatment

- Patients and professionals insensitive to the possibility that depression may be present in association with LTCs
Results

2. Barriers exist where there is uncertainty among professionals about moving from awareness to formal identification and assessment of depression

- As the result of QOF routine standardised screening tests for depression have been introduced for people with CHD and Diabetes

- Professional are sometimes uncomfortable about introducing these questions and lack confidence in them

- Patient attitude to screening varied – some don’t like the questions, other think it shows staff are taking an interest in their well-being

- Formal diagnosis of depression still relies on subjectivity of GP
3. Barriers exist where there is uncertainty about how professionals and patients negotiate labels for depression.

- Reluctance among patients and professionals to use mental health/psychological labels

- Feeling among patients that depression means they have failed to cope
  - Therefore a reluctance to acknowledge and engage in treatments for depression

In addition

- Logistical and systemic reasons for failure to detect and treat (10 mins too short)

- Problems exacerbated in people who do not speak English
  - Translators not available
  - No training in use of interpreters
Conclusions: What we know

- Depression is common in LTCs / CHD
  - Linked to adverse medical outcomes: mortality / morbidity / QoL / healthcare utilisation
  - Effects unlikely to be homogeneous: new onset, post MI depression predicts increased mortality
  - Mechanisms unclear – is it depression or is it something related to depression that causes this effect

- Treatments that improve depression have potential to improve medical outcomes and reduce treatment costs
  - Not clear which what constitutes most effective treatments
  - Antidepressant probably work but effects are small to moderate
  - Overall effects of psychological treatments is small
    - There is most evidence for use of CBT
Conclusions: What we know

- GPs screen CHD patients for depression, effective treatments exist and National guidance directs the treatment of depression,
  - yet depression is often under-treated among people with LTCs in
  - Barriers exist at level of patients, practitioners and services
  - Barriers more problematic for people of South Asian origin
Conclusions: What do we need to know?

- Nature of depression in LTCs poorly understood
  - What are the risks
  - What are the impacts / is it depression or is it something else
  - How are impacts mediated / what are the mechanisms
  - Does treating depression improve medical outcomes
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- Available treatments are not adequate
  - Achieve 70% response and 40% remission at best
  - Need to understand what are the predictors of response to conventional depression treatments
    - Help us design novel interventions
    - Help us target existing interventions
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- How do we best address the needs of LTC sufferers who are depressed
  - Need interventions that work
  - Need training to overcome barriers and enable delivery of intervention
  - Normalise intervention and training within primary care
The End
Meta-synthesis of qualitative literature

Question:
- “What are the barriers to treatment of Long Term Conditions among people of South Asian origin

Method
- Systematic identification of qualitative studies that investigate barriers to treatment
- Extraction and analyses of themes arising from papers identified
- Attempt to develop over-arching model that unites emerging themes into a single model.
5 second order themes emerge from papers

- Migration and exposure to SA culture
  - Exposure to different healthcare systems
  - Experience of social exclusion following migration

- Explanatory models of illness
  - Culturally different understanding of why illness arises, what effects it has, and how it affects individual life

- Reflect exposure to social and cultural practices and beliefs – determines how patient understand illness and therefore how they respond to it
Themes

- Help seeking and helper models
  - Stigma
  - Problems with discussing emotional issues outside the family
  - Fear of being blamed for illness
  - Fear of bringing shame on family

- Interactions at the healthcare interface
  - Language barriers
  - Excessive deference
  - Difficulty understanding key concepts e.g self-management / preventative medicine

- Adherence to treatment
  - Role of food in cultural events
  - Exercise as an alien concept