Background

Chronic fatigue syndrome (CFS) is characterised by more than 6 months of sustained debilitating fatigue which has no apparent medical cause. Cognitive Behavioural Therapy (CBT) has been shown to be useful for reducing fatigue symptoms in CFS (Price et al, 2008). Previous studies have identified an association between CFS and other psychiatric disorders (Fischler et al 1997, Skapinak et al 2003) although such studies tended to use small sample sizes or lacked controls. This study sought to improve upon previous studies, by using recent data and by including a control group.

Study Aims

1. To investigate the frequency of mental disorders in a group of patients suffering from CFS compared to a control group of individuals without CFS.
2. To investigate whether there was a statistically significant difference in the frequency of mental disorders in CFS patients compared to controls.

METHODOLOGY

Participants

Cases: 286 patients from Greater London with CFS all of whom were diagnosed by psychiatrists at The Maudsley Hospital, between 2012 and 2013, and have been referred for CBT.

Controls: 1693 individuals drawn from the South East London Community Health Study (‘The SECoH Study’), a household survey covering boroughs in South East London, which was conducted from 2008 to 2010.

Measures

Common Mental Disorders: The Structured clinical interview schedule (CIS-R) was used to assign ICD-10 diagnoses to cases and controls who fulfilled the criteria.

Socio-demographic Variables: Information on age, gender, ethnicity, employment status and marital status was obtained from pre-treatment questionnaires for cases and data from the SECoH study for controls.

Analysis

• SPSS version 21 was used to perform univariate and bivariate analyses on the sociodemographic and CIS-R data.
• Pearson’s χ2 test and Fisher’s Exact Test were used to compare the proportions of cases and controls with individual common mental disorders. Unadjusted odds ratios with 95% confidence intervals were calculated as well.

RESULTS

<table>
<thead>
<tr>
<th>Common Mental Disorders (Primary Diagnoses)</th>
<th>Frequency in CFS (% within cases)</th>
<th>Frequency in Controls (% within controls)</th>
<th>P-value of difference</th>
<th>Unadjusted Odds ratios Cases/Controls (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-specific neurotic disorder</td>
<td>40 (14.1)</td>
<td>112 (6.6)</td>
<td>&lt;0.001</td>
<td>2.32 (1.58 - 3.42)</td>
</tr>
<tr>
<td>Mixed Anxiety &amp; Depressive Disorder</td>
<td>12 (4.2)</td>
<td>17 (1.0)</td>
<td>&lt;0.001</td>
<td>4.37 (2.06 - 9.24)</td>
</tr>
<tr>
<td>Generalised Anxiety Disorder</td>
<td>16 (5.7)</td>
<td>14 (0.8)</td>
<td>&lt;0.001</td>
<td>7.19 (3.47 - 14.9)</td>
</tr>
<tr>
<td>Mild Depressive Disorder</td>
<td>33 (11.7)</td>
<td>73 (4.3)</td>
<td>&lt;0.001</td>
<td>2.93 (1.90 - 4.51)</td>
</tr>
<tr>
<td>Moderate Depressive Disorder</td>
<td>61 (21.6)</td>
<td>100 (5.9)</td>
<td>&lt;0.001</td>
<td>4.38 (3.09 - 6.20)</td>
</tr>
<tr>
<td>Severe Depressive Disorder</td>
<td>14 (4.9)</td>
<td>18 (1.1)</td>
<td>&lt;0.001</td>
<td>4.84 (2.38 - 9.85)</td>
</tr>
</tbody>
</table>

Only statistically significant associations have been presented in the table above. The overall frequency of CMDs was 205 in cases and 330 in controls (P<0.001)

Differences in gender between cases and controls were statistically significant (p<0.01). A higher percentage of CFS cases were White or White British compared to controls (p<0.001); but a lower proportion of such cases were Black or Black British (p=0.001). A higher proportion of CFS cases worked part time or were permanently sick or disabled (p<0.001 for both).

DISCUSSION

Differences in the distribution of gender in the cases and controls, may be problematic, as gender can act as a confounding variable. This is the case since women are more likely to suffer from CFS and depressive disorders (Ranith 2005, Taylor 2003).

The differences in employment status in cases and controls, are expected, since CFS is associated with moderate to severe functional impairment (Lavergne et al 2010).

CONCLUSIONS

This study reinforces existing evidence that suggests CFS is associated with other mental disorders – particularly anxiety and depressive disorders.

The morbidity arising from co-morbid psychiatric disorders needs to be addressed, as well as the effects of fatigue symptoms arising from CFS.