**SUPPLEMENTARY MATERIAL:**

**Table A1 Complete and missing data for all stages of the study**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **Time point (number of cases)** | | |
| **Measure** |  | **Baseline** | **Pre-CBT** | **Post-CBT** |
| **Physical functioning** |  |  |  |  |
|  | Complete data | 189 | 192 | 138 |
| ≤20% of scale missing (data pro-rated) | 34 | 24 | 8 |
| Number of cases with complete data after pro-rating | 223 | 216 | 146 |
| Number of cases imputed using NOCB | - | - | 22 |
| Complete data after imputation and pro-rating | 223 | 216 | 168 |
|  |  |  |  |
| **Social adjustment** |  |  |  |  |
|  | Complete data | 224 | 204 | 133 |
| ≤20% missing (data pro-rated) | 4 | 13 | 8 |
| Number of cases with complete data after pro-rating | 228 | 217 | 141 |
| Number of cases imputed using NOCB | - | - | 27 |
| Complete data after imputation and pro-rating | 228 | 217 | 168 |
|  |  |  |  |
| **Fatigue** | Complete data | 209 | 205 | 140 |
| ≤20% of scale missing (data pro-rated) | 19 | 16 | 6 |
| Number of cases with complete data after pro-rating | 228 | 221 | 146 |
| Number of cases imputed using NOCB | - | - | 24 |
| Complete data after imputation and pro-rating | 228 | 221 | 170 |
|  |  |  |  |

**Table A2**

|  |  |  |
| --- | --- | --- |
|  | Responders (171) | Non-responders(123) |
| Female gender (N) | 127 | 92 |
| Mean Age | 38.02(11.50) | 38.89(12.02) |
| Mean baseline Fatigue | 25.07(5.20) | 26.54(4.71)\* |
| Mean baseline Physical functioning | 50.97(24.79) | 44.08(26.22) |
| Mean baseline Social adjustment | 25.76 (8.16) | 26.43 (10.02) |

\**p*<.05

Note: Differences between responders and non-responders were compared using independent (two-tailed) t-tests, apart from gender, which was analysed using a Chi-square test.

**Supplement A3**

Sensitivity analysis: mixed model analyses using prorated data only (no imputation)

Primary outcome:

Physical functioning scores showed a statistically significant improvement at pre- CBT compared to baseline, with an increase of 2.7 points (95% CI 0.1 to 5.2, *p*=.039). Also, compared to pre-CBT, post-CBT physical functioning scores were 10.0 points higher: (95% CI 7.2 to 12.8, *p*<.001). These comparisons were both adjusted for gender and age and both covariates were found to significantly influence the outcome (both *p*<.001).

Secondary outcomes:

Results for social adjustment showed that the change between baseline and pre- CBT scores on the Work and social adjustment scale was not statistically significant, (decrease of 0.9 points, 95% CI -2.0 to 0.2; *p*=.093). However, post-CBT scores were 7.4 points lower than pre-CBT (95% CI-6.2 to -8.6, *p*<.001), indicating that patients were less impaired after CBT treatment. These comparisons were both adjusted for gender and age and both covariates were found to significantly influence the outcome (*p*=.007 and *p*<.001).

The model examining change in fatigue over time, adjusted for gender and age, showed no statistically significant difference in fatigue between baseline and pre-CBT(decrease of 0.7 points, 95% CI -1.6 to 0.3, *p*=.189). However, fatigue showed an improvement (decrease) of 8.4 points at post-CBT as compared to pre-CBT (95% CI -7.3 to -9.6, *p*<.001). Results showed that neither gender (*p*=.084) nor age (*p*=.152) had any statistically significant influence on the outcome.

**Table A4 Comparison between baseline and pre-CBT for physical functioning, social adjustment and fatigue**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **N** | **Mean at initial assessment (SD)** | **Mean at pre-CBT(SD)** | **T test** | **95% confidence interval for mean difference** | |
| Physical functioning | 171 | 48.00 (24.24) | 51.18 (25.92) | *t*(170)=-2.91, *p*=.004 | -5.33 | -1.02 |
| Social adjustment | 174 | 26.42 (8.37) | 25.35 (8.67) | *t*(173)=2.44, *p*=.016 | .20 | 1.92 |
| Fatigue | 180 | 25.61 (5.16) | 24.74 (6.42) | *t*(179)=2.19, *p*=.030 | .09 | 1.64 |

**Table A5 Comparison between pre-CBT and post- CBT scores for physical functioning, social adjustment and fatigue**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **N** | **Mean at pre- CBT (SD)** | **Mean at post- CBT (SD)** | **T test** | **95% confidence interval for mean difference** | |
| Physical functioning | 156 | 52.99 (26.02) | 62.14(27.64) | *t*(155)=-6.42, *p*=.000 | -11.97 | -6.33 |
| Social adjustment | 160 | 24.61(9.33) | 17.90(11.08) | *t*(159)=10.57, *p*=.000 | 5.46 | 7.97 |
| Fatigue | 162 | 24.39(6.25) | 16.73(8.57) | *t*(161)=11.19, *p*=.000 | 6.31 | 9.01 |