Websites offering information about depression or cognitive behaviour therapy reduced depressive symptoms


Clinical impact ratings GP/FP/Primary care ★★★★★☆ Mental health ★★★★★★★ Psychiatry ★★★★★★★

In community dwelling patients with depression, do websites offering information about depression or cognitive therapy reduce depressive symptoms?

**METHODS**

**Design:** randomised controlled trial.

**Allocation:** (concealed*)

**Blinding:** unblinded *

**Follow up period:** 6 weeks of intervention.

**Setting:** Canberra, Australian Capital Territory, Australia.

**Patients:** 525 patients 18–52 years of age (mean age 36 y, 71% women) with access to the internet who had symptoms of depression (Kessler Psychological Distress Scale score ≥22) but were not receiving clinical care from either a psychologist or psychiatrist.

**Interventions:** (1) a website offering information about depression (BluePages, http://bluepages.anu.edu.au) (n = 165) or (2) cognitive behaviour therapy (MoodGYM, http://moodgym.anu.edu.au) (n = 182), or (3) an "attention placebo" (control) (n = 178). Patients in the BluePages and MoodGYM groups received directions on how to use the websites (by phone every week) and detailed guides outlining navigation and weekly assignments. Patients in the control group were called once a week to discuss lifestyle and environmental factors that may have had an influence on depression.

**Outcomes:** measures of symptom change (0–60 Center for Epidemiologic Studies depression scale with scores ≥16 reflecting clinical depression).

**Patient follow up:** 83% (intention to treat analysis).

*See glossary.

†Information provided by author.

**MAIN RESULTS**

At 6 weeks, reduction in symptoms of depression was small but statistically significantly greater in both the BluePages and MoodGYM groups than in the control group (table).

**CONCLUSION**

In community dwelling patients with depression, websites offering information about depression or cognitive therapy reduced depressive symptoms.

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**Commentary**

Structured psychotherapies are clearly effective treatments for depression, but high cost and limited availability of trained clinicians are major barriers to dissemination. Psychotherapy for depression delivered by the internet is a promising strategy that may overcome these barriers. Christensen et al provide convincing evidence for the effectiveness of a web-based psychoeducational programme. Participation rates were high, and benefits, although modest, were clinically important.

Three questions remain regarding the significance of these findings and the generalisability of the programme. Firstly, the sample was self selected for motivation to participate. We can expect that uptake of the web-based program would be considerably lower in a broader community or primary care sample. Secondly, the internet programmes were supported by weekly telephone contact with a trained lay person. Telephone outreach and support can have important clinical effects but requires a substantial amount of additional resources. A recent study by Clarke et al suggests that uptake of web-based depression interventions alone is disappointing. A reasonable next step would be to compare this web-based intervention with and without telephone prompting. Finally, the finding that the web-based depression education programme and the more specific cognitive therapy programme had similar clinical effects raises questions about the specificity of the intervention. We cannot determine whether improvements in depression are specifically attributable to cognitive and behavioural content or more generally attributable to increased attention and support.

Despite any questions, these findings have important implications for the dissemination of effective behavioural treatments. Internet-based interventions offer the promise of a true public health approach toward psychotherapy.

Gregory E Simon, MD, MPH
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A website offering information about depression (BluePages) or one offering cognitive therapy (MoodGYM) v "attention placebo" (control) in depression at 6 weeks

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Comparison</th>
<th>Means</th>
<th>Difference (95% CI)†</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change from baseline in CES depression scale (scores range 0–60)</td>
<td>BluePages v control</td>
<td>3.9 ± 1.0</td>
<td>2.9 (0.6 to 5.2)</td>
</tr>
<tr>
<td></td>
<td>MoodGYM v control</td>
<td>4.2 ± 1.0</td>
<td>3.2 (0.9 to 5.4)</td>
</tr>
</tbody>
</table>

*CES = Center for Epidemiologic Studies. CI defined in glossary. †All significant differences favour BluePages and MoodGYM.