

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

Christensen H, Griffiths KM, Jorm AF. Delivering interventions for depression by using the internet: randomised controlled trial. *BMJ* 2004;**328**:265–8.

**Q** In community dwelling patients with depression, do websites offering information about depression or cognitive behaviour therapy (CBT) 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) who had symptoms of depression but were not receiving clinical care and had access to the internet.

**Intervention:** a website offering information about depression (BluePages, <http://bluepages.anu.edu.au>) (n = 165) or CBT (MoodGYM, <http://moodgym.anu.edu.au>) (n = 182), or an “attention placebo” (control) (n = 178). Lay interviewers telephoned patients in the BluePages and MoodGYM groups every week to provide directions on how to use the websites. Detailed guides outlining website navigation and weekly assignments were sent by post at the commencement of the trial. Patients in the control group were telephoned once a week to discuss lifestyle and environmental factors that may have had an influence on depression.

**Outcomes:** measures of symptom change (20 item Centre for Epidemiologic Studies depression scale, with scores  $\geq 16$  out of 60 reflecting clinical depression).

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

\*Information provided by author.

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## MAIN RESULTS

At 6 weeks, reductions in symptoms of depression were 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 behaviour therapy reduced depressive symptoms.

A modified version of this abstract appears in *Evidence-Based Medicine*.

## Commentary

A paucity of research exists on the effect of internet based mental health clinical interventions, particularly those focusing on depression, one of the most common mental health diagnoses in primary care settings in both developed and developing countries.<sup>1</sup> The study by Christensen *et al* advances our knowledge about the effect of online clinical interventions, specifically CBT and psychoeducation for depression. Their promising results are supported by other studies.<sup>2,3</sup> However, 2 trials, 1 using psychoeducation<sup>4</sup> and one using stand-alone online CBT for depression<sup>5</sup> reported less successful outcomes. In the study by Christensen *et al*, the authors postulated that their minimal dropout rate was related to the interactive nature of the websites, as well as the weekly personal contacts made by lay interviewers. Other successful internet based interventions have also included personal contact by interviewers or clinicians through email or phone.

The sample was representative of people who had internet access, high levels of education, and had previously sought help from a clinician for depression. Although these results appear promising, it is premature to suggest that online CBT or psychoeducation should be widely adopted for use by the general population with internet access. The effect of personal contacts, programme content, degree of interactivity, and tailoring of responses requires more investigation before effective models of service delivery can be determined.

This study is relevant to nurses working in mental health and community health settings, as well as nurse practitioners in primary care settings.

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- 1 World Health Organization. *The world health report: mental health: new understanding - new hope*. Geneva: World Health Organization. 2001. [http://www.euro.who.int/mediacentre/PressBackgrounders/2001/20011128\\_1](http://www.euro.who.int/mediacentre/PressBackgrounders/2001/20011128_1)
- 2 Carlbring P, Ekselius L, Andersson G. *J Behav Ther Exp Psychiatry* 2003;**34**:129–40.
- 3 Andersson G, Strömberg T, Ström L, *et al*. *Psychosom Med* 2002;**64**:810–6.
- 4 Patten SB. *Psychiatr Serv* 2003;**54**:396–8.
- 5 Clarke G, Reid E, Eubanks D, *et al*. *J Med Internet Res* 2002;**4**:E14.

A website offering information about depression (BluePages) or a website offering cognitive behaviour therapy (MoodGYM) v “attention placebo” (control) for depression\*

Outcome at 6 weeks	Comparison	Mean	Difference (95% CI)‡
Change from baseline in CES-D† scores	BluePages v control	3.9 v 1.0	2.9 (0.6 to 5.2)
	MoodGYM v control	4.2 v 1.0	3.2 (0.9 to 5.4)

\*CI defined in glossary.

†CES-D = Centre for Epidemiologic Studies Depression scale; scores range from 0–60, with scores  $\geq 16$  reflecting clinical depression.

‡Both significant differences favour BluePages and MoodGYM over control.