Cognitive therapy prevented onset of chronic post-traumatic stress disorder after a motor vehicle accident


Clinical impact ratings Mental health ★★★★★★★ Psychiatry (specialist) ★★★★★★★

Q In patients who developed post-traumatic stress disorder (PTSD) < 3 months after a motor vehicle accident, is cognitive therapy (CT) or a self help booklet (SHB) more effective than repeated assessments (RA) for preventing chronic PTSD?

CONCLUSION

In patients who developed post-traumatic stress disorder (PTSD) < 3 months after a motor vehicle accident, cognitive therapy was more effective than a self help booklet or repeated assessments for preventing chronic PTSD.

METHODS

Design: randomised controlled trial.
Allocation: concealed.*
Blinding: blinded (outcome assessors).*
Follow up period: 9 months.
Setting: local accident and emergency departments of 2 hospitals in the UK.
Patients: 85 survivors of motor vehicle accidents who were 18–65 years of age, met DSM-IV criteria for PTSD in the initial months after the accident, had Posttraumatic Diagnostic Scale (PDS) scores ≥20, and were to receive treatment <6 months after the accident. Exclusion criteria included having no memory of the accident, history of psychosis, and need for an interpreter.
Intervention: after a 3 week self monitoring phase, patients who did not recover were stratified by sex and severity of PTSD symptoms and allocated to CT (n = 28), SHB based on cognitive behavioural therapy (n = 28), or RA (n = 29). CT comprised 12 weekly sessions during 3 months and <3 monthly booster sessions. The treatment goals were to modify excessively negative appraisals of the trauma, correct the autobiographical memory disturbance, and remove the problematic behaviour and cognitive responses.
Outcomes: change in severity of self reported (patients completed the PDS indicating the frequency of bothersomeness of each symptom) and clinician rated PTSD symptoms (Clinician Administered PTSD Scale [CAPS] interview) at 3 and 9 months of follow up.
Patient follow up: 93%.

*See glossary.

MAIN RESULTS

Analysis was by intention to treat. Reduction in PTSD symptoms was greater in the CT group than in the SH or RA groups at 3 and 9 months (p values <0.001). Fewer patients in the CT group than in the RA group had PTSD at 3 months (table) and 9 months (p values <0.001).

For correspondence: Dr A Ehlers, Institute of Psychiatry, London, UK. a.ehlers@iop.kcl.ac.uk
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Cognitive therapy (CT) v a self help booklet (SHB) or repeated assessments (RA) for preventing chronic post-traumatic stress disorder (PTSD)*

<table>
<thead>
<tr>
<th>Outcome at 3 months</th>
<th>Comparison</th>
<th>Event rates</th>
<th>RRR (95% CI)</th>
<th>NNT (CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients with PTSD</td>
<td>CT v RA</td>
<td>21% v 72%</td>
<td>70% (42 to 86)</td>
<td>2 (2 to 4)</td>
</tr>
<tr>
<td></td>
<td>CT v SHB</td>
<td>21% v 79%</td>
<td>73% (47 to 87)</td>
<td>2 (2 to 4)</td>
</tr>
</tbody>
</table>

*Abbreviations defined in glossary; RRR, NNT, and CI calculated from data in article.

Commentary

Early single session interventions for all patients exposed to a traumatic event do not seem to reduce symptoms of traumatic stress; however, brief cognitive behavioural interventions (4 or 5 sessions) for patients with symptoms started within 6 weeks of the trauma do. Some debate exists as to when is the most appropriate time to intervene because many patients’ traumatic stress symptoms will resolve without intervention. The study by Ehlers et al evaluated a longer CT intervention (mean 11 sessions) for patients with PTSD starting on average 2 months after the traumatic event.

The CT technique focused on trauma but placed a greater emphasis on cognitive techniques than many of the earlier, more exposure based interventions. The improvement in the CT group was impressive and, especially given the robust methodology used, strongly suggests that the intervention is effective.

The failure of the SHB group to improve when compared with the RA group is important and, like other studies, suggests that very limited input is no more helpful than no specific input at all. On the surface, this seems to challenge the notion that to give educational information is always beneficial. It may be that the nature of the educational material used in this study was unhelpful, or that educational material is more likely to be beneficial if “sold” in a particular way. Given the widespread use of educational material after traumatic events, it seems important that this issue should be researched more thoroughly.

This study adds to the existing evidence base that suggests the best way to prevent chronic PTSD is to identify individuals with traumatic stress symptoms within a few months of a traumatic event and to offer them a brief cognitive behavioural intervention.

Jonathan I Bisson, BM, MRCPsych
Cardiff and Vale NHS Trust
Cardiff, UK