Group cognitive-behavioural therapy may reduce symptoms and impairment in adolescents with attention-deficit/hyperactivity disorder

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WHAT IS ALREADY KNOWN ON THIS TOPIC

Persistence of attention-deficit hyperactivity disorder (ADHD) into adolescence is associated with a broad range of negative outcomes[1] and high rates of treatment discontinuation.[2] While clinical guidelines recommend non-pharmacological therapies as the first-line treatment for adolescents with ADHD[3] the evidence to support this recommendation is sparse and generally not convincing. More specifically there is inadequate evidence to properly support the efficacy of either group or individual cognitive-behavioural therapy (CBT) for this patient group.[4]

METHODS OF THE STUDY

In this randomised controlled trial, participants were 119 adolescents aged between 15 and 21 years old who met DSM-IV criteria for ADHD, recruited from two specialist ADHD services in Spain. All participants were on stabilised doses for ADHD medication but were judged as having residual impairments (CGI-S score ≥3). In the CBT group (n=59), 54 were taking methylphenidate (mean dose 46.06 mg/day) and 5 atomoxetine (51.31 mg/day). In the control group (n=60), 47 were taking methylphenidate (47.07 mg/day) and 13 atomoxetine (53.45 mg/day). Exclusion criteria were: IQ <85 or presence of another major psychiatric disorder or substance use disorder in previous 6 months. The active intervention was a manualised 12-session CBT programme designed specifically to address ADHD symptoms and associated impairments. The control intervention was a waiting list group whereby participants were only seen to monitor adherence to medication. Treatment fidelity was monitored adequately. Outcomes were measured at the beginning of the study and after session 12. There was no longer term follow-up. Primary outcomes were: ADHD symptoms measured by the ADHD Rating Scale; Global Impressions-Severity or -Improvement (CGI-S/I); Weiss Functional Impairment Rating Scale (WFIRS); Global Assessment of Functioning (GAF). Randomisation was conducted by the data manager. It was not possible for participants to be blind to treatment allocation. Raters were blinded to treatment allocation and not involved in other aspects of the study; however, there was no indication as to how blinding was checked.

WHAT DOES THIS PAPER ADD

- This is the first randomised controlled trial to assess the efficacy of group-based CBT in adolescents with ADHD and an incomplete response to medication. This is an important study that, notwithstanding its limitations, provides some initial evidence to support recommendations made within clinical guidelines.
- Group CBT demonstrated superior efficacy compared to waiting list with regards parent and adolescent-reported ADHD symptoms. For parent-rated symptoms, the standardised mean difference (SMD) was 8.38 for total ADHD symptoms, 9.62 for inattention and 4.95 for hyperactivity/impulsivity. For adolescent-rated symptoms, SMDs were 7.50, 8.57 and 4.90, respectively. Several measures of functional impairment (CGI-S, CGI-I, GAF and WFIRS) were also reported to show large effects, with SMD ranging between 2.29 and 7.51.
- There were no effects found for anxiety, depression or anger management.

LIMITATIONS

- The use of a waiting list control as the comparison condition is likely to result in exaggerated effects compared to a placebo psychological therapy such as sham therapy or attention control).[5]
- Despite the raters being blind to treatment allocation their ratings were based on information from adolescents and their parents who were not blinded. This is also likely to have exaggerated the effect of active treatment over waiting list.
- The findings are limited to adolescents who are on stable ADHD medication but have continuing functional impairments.

WHAT NEXT IN RESEARCH

- Replication of the study with a more active comparison group and consideration of better blinded ratings (eg, direct observation or teacher/tutor ratings).
- Longer follow-up to assess whether effects are maintained over time.

DO THESE RESULTS CHANGE YOUR PRACTICES AND WHY?

Many adolescents with ADHD continue to have functional impairments despite being treated with medication—at present there are few available evidence-based options for such cases. Despite the various limitations associated with this study, these findings provide initial support for the use of group based cognitive behavioural strategies to help these young people. However, while the current programme could be implemented locally (it is not clear whether the manual is in Catalan or Spanish) it would need to be translated and evaluated in different languages before it could be used in other countries and settings.

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REFERENCES

1. **Barkley RA**, Fischer M, Smallish L, *et al*. Young adult outcome of hyperactive children: adaptive functioning in major life activities. *J Am Acad Child Adolesc Psychiatry* 2006;**45**:192–202.
2. **McCarthy S**, Asherson P, Coghill D, *et al*. Attention-deficit hyperactivity disorder: treatment discontinuation in adolescents and young adults. *Br J Psychiatry* 2009;**194**:273–7.
3. **NICE.** *Attention deficit hyperactivity disorder: diagnosis and management of ADHD in children, young people and adults*. London: National Institute for Health and Clinical Excellence, 2008; Report No: National Clinical Practice Guideline Number 72.
4. **Young S**, Amarasinghe JM. Practitioner review: non-pharmacological treatments for ADHD: a lifespan approach. *J Child Psychol Psychiatry* 2010;**51**:116–33.
5. **Furukawa TA**, Noma H, Caldwell DM, *et al*. Waiting list may be a nocebo condition in psychotherapy trials: a contribution from network meta-analysis. *Acta Psychiatr Scand* 2014;**130**:181–92.