Critically Appraised Topic
The use of behavioral modification therapy for the treatment of Attention Deficit Hyperactivity Disorder.

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Clinical Scenario: A.J. is a 11 year old female that presents with Attention Deficit Hyperactivity Disorder (ADHD), inattentive type. She has recently started stimulant medication for control of her symptoms but her and her parents feel there is more that can be done with her treatments and disease management. They are interested in treating her ADHD with a focus on behavioral modification therapy, in combination with pharmacologic methods.

Clinical Question: Would the use of behavioral modification therapy, such as independent therapy, and/or parent therapies be as effective as the use of stimulants in the treatment of ADHD in children and adolescents?

Articles:

Bjornstad, G. (2010). Family Therapy for Attention-Deficit Disorder or Attention-Deficit/Hyperactivity Disorder in Children and Adolescents. Cochrane Database of Systematic Reviews, (3), Retrieved from EBSCOhost.


Summary and Appraisal of Key Evidence:

Bjornstad (2010) studied the effects of Family Therapy for the treatment of ADHD-ADD, without medication, as compared to no treatment or the standard treatments. This study included randomized controlled trials that investigated the efficacy of behavioral therapy, cognitive behavioral family therapy, or functional family therapy for children with ADHD or ADD. The Studies were evaluated for methodological quality and to determine whether they met the inclusion criteria. This assessment yielded two studies. Data was taken from both studies. The finding from Jensen1999 (N=579) indicate that no difference can be detected between the efficacy of behavioral family therapy and treatment as usual in the community. The finding from the available data from Horn 1991 slightly favors treatment over medication placebo.

The level of evidence 4 B due to the fact that this study was a literature review of the research that was available at the time it was conducted. There for there was poor quality prognostic and cohort data and there was also not proper follow-up. Horn 1991, was a
randomized, researchers were blinded to participants medication condition and assessors were
blind to treatment status at all times. There were controls in place in this group, medication
placebo with no other treatment. Follow-up measures given nine months after termination of
treatment. Behavioral treatment, included parent training plus child self-control training
including at home practice and reinforcement of skills, other groups received high or low doses
of stimulant medication with or without family therapy, and controls received medication
placebo only. The Jensen 1999 was randomized, observational raters were blinded, and
treatment was usual in community. Behavioral treatment included parent training, child-focus
treatment, and school-based intervention. Controls: Community care group received various
treatments in their communities, often including medication.

Hoofdakker et. al (2007), the purpose was to further investigate the effectiveness of
behavioral parent training (BPT) as adjunct to routine clinical care (RCC). The method used for
this study was after the first phase of RCC, 94 children with ADHD ages 4-12, were all referred
to a outpatient mental health clinic, where they were randomly assigned to 5 months of BPT plus
concurrent RCC (n=47) or to 5 months of RCC (n=47) alone. BPT consisted of 12 weeks in
group format; RCC included family support and pharmacotherapy when appropriate.
Exclusionary criteria were minimized, and children with and without medication could
participate. Parent reported behavioral problems, ADHD symptoms, internalizing problems, and
parenting stress were assessed before and after treatment. Follow-up assessment of the
BPT+RCC group was completed 25 weeks post BPT intervention. Repeated-measures analyses
of variance were carried out an intention-to-treat basis. Results: Both groups showed
improvements over time on all measures. BPT + RCC was superior to RCC alone in reducing
behavioral problems and internalizing problems. No outcome differences were found in ADHD
symptoms and parenting stress. These results were equal for children with and without
medication. Children allocated to RCC alone received more polypharmaceutical treatment.

Level of evidence in this study 1B, this was highly valid study, with a few limitations
noted. But it was randomized, with a good cohort to study, test standards were in place, and one
clinical center was used, and good follow-up was used.

**Clinical Bottom Line:**

1. Adjunctive Behavior parent training enhances effectiveness of the routine treatment
   of children with ADHA, particularly in decreasing behavioral and internalizing
   problems, but not in reducing ADHD symptoms or parenting stress. Furthermore,
   adjunctive BPT may limit the prescription of polypharmaceutical treatment.
2. Providing treatments for the families of patients with ADHD who cannot or prefer not
to use medications and want to be more behaviorally oriented, a family therapy
program may be as effective as a normal treatment strategy for some children and
their families, and possibly more effective than placebo.
3. But when including behavioral therapies in addition or standing alone in the treatment
of ADHD it is important to know the differences in the structure function and types of
therapies available and also the different providers than can offer these types of
options for these families.

More and more parents are looking for alternatives to medication to treat their
children, due to many different reasons or beliefs. As practitioners we need to be aware
of possible therapies and their efficacy in the treatment of a particular disease process or problem. It is vital as providers to be able to determine quality studies from poorly preformed studies in order to find the best treatment for the patient. This understanding will help me use this information in my clinical practice when assisting parents and patients who wish to pursue complementary and alternative medications, such as behavioral modification therapy to help treat a disorder such as ADHD.
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