Treatment Receipt and Outcomes from a Clinic Employing the Attention-Deficit/Hyperactivity Disorder Treatment Guideline of the Children's Medication Algorithm Project


Objective: Little is known about the pattern of service receipt and outcomes from clinics implementing best practice guidelines in child mental health. This study aimed to determine these variables for a clinic that implemented an attention-deficit/hyperactivity disorder (ADHD) treatment guideline proposed by the Children's Medication Algorithm Project (CMAP).

Methods: Secondary analyses of medical record extracts were conducted for children who received treatment from 2007 to 2012 in a specialty clinic linked to a public children's hospital in Canada. Patterns of medication selection and dosing were compared with CMAP guidelines. Outcomes were based on parent and teacher ratings on the ADHD portion of the Multimodal Treatment Study for ADHD (MTA)- Swanson, Nolan, and Pelham, Version IV (SNAP-IV).

Results: Data were available for 132 children (ages 5–14), 81.8% of whom had no previous ADHD medication exposure, and 97.0% of whom had started at least one medication. Methylphenidate was used first for 59.8% of children, whereas 33.3% started with an amphetamine product. Of the 47.0% of children who progressed to a second medication trial, 88.7% tried a stimulant from a second class. In total, 19.7% tried atomoxetine, which was typically used as a third stage choice (i.e., after two different stimulant exposures). Stage four to six medications were rarely used, rather stimulants were retried after atomoxetine and/or medication combinations were tried. Symptomatic remission at the end of treatment was achieved by 70.4% and 82.4%, according to parents and teachers respectively, for those with outcome data and who completed treatment. Outcomes for those further along the treatment algorithm were similar to discharges at the beginning of the algorithm.

Conclusions: The high rates of symptomatic remission observed within this clinical service may be a function of adherence to CMAP recommendations. However, the lack of a comparison group or experimental design prevents determination of causality. Additional investigations of the impacts of implementing evidence-based guidelines are critically needed, with proposed benchmarks to inform outcome evaluations.