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Effect of an Intensive Multi-Modal Intervention for Attention-Deficit Hyperactivity Disorder (ADHD) on Equity in Children's Health and Educational Outcomes

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Objectives

To determine whether an intensive multi-modal ADHD intervention for children and teens resulted in improved long-term health and educational outcomes and in reduced inequity in these outcomes across the socioeconomic gradient.

Approach

There were 485 children in the ADHD intervention group and 1,884 controls. Children who received the intervention were more likely to be prescribed medication (patients with 1+ prescription(s), rate ratio [RR] 1.21, 95% CI 1.08-1.36) and be adherent to their medication (RR 1.42, 95% CI 1.03-1.96). They were also more likely to be in their age-appropriate grade (RR 1.33, 95% CI 1.09-1.63) compared to controls. Moreover, the intervention was associated with reduced inequity in these outcomes across income deciles. No difference in the rates of hospital episodes or emergency department visits was found, nor in rates of contact with child and family services.

Result

There were 485 children in the ADHD intervention group and 1,884 controls. Children who received the intervention were more likely to be prescribed medication (patients with 1+ prescription(s), rate ratio [RR] 1.21, 95% CI 1.08-1.36) and be adherent to their medication (RR 1.42, 95% CI 1.03-1.96). They were also more likely to be in their age-appropriate grade (RR 1.33, 95% CI 1.09-1.63) compared to controls. Moreover, the intervention was associated with reduced inequity in these outcomes across income deciles. No difference in the rates of hospital episodes or emergency department visits was found, nor in rates of contact with child and family services.

Conclusions

A multi-modal ADHD intervention program was associated with increased use and adherence to medication, and may boost academic achievement for vulnerable children and teens. It contributed to closing the equity gap between children from low- and high-income families. ADHD interventions that combine approaches may be more effective than medication alone.

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