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## Parent Training Complements Medication for Treating Behavioral Problems in Children with Pervasive Developmental Disorders

Treatment that includes medication plus a structured training program for parents reduces serious behavioral problems in children with [autism](#) and related conditions, according to a study funded by the National Institute of Mental Health (NIMH). The study, which was part of the NIMH Research Units on Pediatric



Psychopharmacology (RUPP) Autism Network, was published in the December 2009 issue of the *Journal of the American Academy of Child and Adolescent Psychiatry*.

Results from a [previous RUPP study](#) reported in 2002 showed that the antipsychotic medication risperidone (Risperdal) reduced such behavior problems as tantrums, aggression and self-injury in children with autism. However, most children's symptoms returned when the medication was discontinued. Although effective, risperidone is associated with adverse effects such as weight gain, which can lead to metabolic changes, obesity and related health problems.

"Medication alone has been shown to help with some symptoms of autism, but its potential is limited," said NIMH Director Thomas R. Insel. "This study shows promise of a more effective treatment protocol that could improve life for children with autism and their families."

In the study, the RUPP group tested the benefits of medication alone compared to medication plus a parent training program that actively involves parents in managing their children's severely disruptive and noncompliant behavior. Parents were taught to modify their children's behavior and learned to enhance their children's daily living skills.

The 24-week, three-site trial included 124 children ages 4 to 13 with pervasive developmental disorders (PDD) such as autism, Asperger's or related disorders accompanied by tantrums, aggression and self-injury. The children were randomized to a combination of risperidone and parent training, or to

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risperidone only. Parents in combination therapy received an average of 11 sessions of training over the course of the study.

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Although both groups improved over the six-month trial, the group receiving combination therapy showed greater reduction in behavioral problems like irritability, tantrums and impulsiveness compared to the group receiving medication only. The combination therapy group also ended the trial taking an average dose of 1.98 milligrams (mg) per day of risperidone, compared to 2.26 mg/day in the medication-only group—a 14-percent lower dose. However, children in both groups gained weight, indicating "a need to learn more about the metabolic consequences of medications like risperidone," said the authors.

"The combination group was able to achieve its gains with a lower dose of medication. Plus, it appeared that the benefits of added behavioral treatment increased over time, a strong signal that actively including parents in the treatment of children with PDD could only benefit families," said lead author Michael Aman, Ph.D., of the Ohio State University.

"Future studies will evaluate whether the benefits of parent training endure over a long period of time," concluded the authors. The investigators also plan to apply the parent training to younger children with PDD to prevent the evolution of serious behavioral problems. Future studies may also look for ways in which the parent training program can be used in schools and community clinics.

## Reference

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