

Frederick, Harford, and Prince George's
Counties join the CHADD Chapters of Greater
Baltimore, Anne Arundel, and Montgomery
Counties
in publishing this issue.

Thank you, Marilyn!

It is with mixed emotions that we on the Chapter board say farewell to Marilyn Halle-Webster. We love to see new folks come on board and fully realize how important this is to our Chapter's continuing growth and success. Consequently, it's very hard to say goodbye to a board member who has given as much to Greater Baltimore CHADD as Marilyn has over the years.

Marilyn might initially be seen as a quiet, reserved lady. However, when you get to know her, you'll find a true friend who is loads of fun and has always been there for us. Marilyn has tackled numerous jobs for CHADD over the years, including secretary, phone line coordinator, HyperTalk mailing coordinator, speaker meeting recorder, conference bookkeeper, meeting greeter, and bookstore/library aide, among many jobs big and small. Any time Marilyn agreed to take on a job, board members knew that we could count on her to do the job well and on a timely basis, no matter how boring, complex, or time consuming the task. Perhaps the quality we'll miss most is Marilyn's wonderful ability to listen with a truly caring ear and to restore peace when conflicts arise.

Thank you, Marilyn, for all the help you have so freely given over the years. We'll greatly miss your presence on our board but look forward to seeing you at future meetings.

Best Wishes Always!

—Tish Michel, CPA, MBA, and the CHADD of Greater Baltimore Board of Directors

CHADD Chapters in Maryland

Advocating statewide to improve the lives of people with AD/HD

This issue of Hyper-Talk contains news from • Anne Arundel County • Frederick County • Greater Baltimore • Howard County • Montgomery County • Harford County • Prince George's County

To obtain current information about chapter activities, meeting schedules, speakers, and support groups, visit our website: www.chadd-mc.org

Inclement Weather Meeting Cancellations

Monitor our website —www.chadd-mc.org—for news of meeting cancellations; we will do our best to post updates as they came in. Specific cancellation policies are as follows:

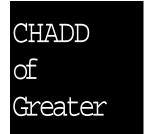
Meetings held at Loyola College are cancelled if Loyola cancels evening classes; monitor www.loyola.edu or call 410-617-2000 after 3 pm.Anne Arundel, Montgomery, Prince George's, and Frederick County meetings

are cancelled automatically if county schools close.



A Tribute to a Friend	Commentary on MTA Review20 Kenneth Tellemman, M.D.		
Table of Contents3	Worth a Look: Book Reviews21		
Greater Baltimore	Linda Spencer, Ph.D.		
Coordinator's letter4	-		
Meeting Schedule5	Professional Advisory Board Updates22		
Montgomery County	CHADD Golf Tournament23		
Coordinator's letter6			
Meeting Schedule7	Testing, Testing, Testing!		
Frederick County			
Support Group Schedule8	ADD Mom		
Howard County			
Support Group Schedule9	Grandparents and AD/HD		
Anne Arundel County			
Coordinator's letter	Internet Resources		
Meeting Schedule11	Linda Spencer, Ph.D. & Kerch McConologue, c.P.c.		
Linthicum	Fostering Social Skills30		
Support Group Schedule	Joyce Cooper-Kahn, Ph.D.		
Drings Coorder County, Information	Wiring in the AD/HD Brain32		
Prince Georges County Information	Jay N. Geidd, M.D., &		
Meeting Schedule3	Norman Rosenthal, M.D.		
Harford County Invitation	Brain Size and Medications		
Notes from Miami Conference14	National Institute of Mental Health33		
Notes from Main Contenence	national institute of ration training		
MTA Study Follow Up	Research Subjects Needed34		
David Rabilier, M.D.	Why Join CHADD35		

HyperTalk is a publication of Chadd of Greater Baltimore in conjunction with Chadd of Montgomery County and Chadd of Anne Arundel County. Chadd does not endorse products, services, publications, medications, or treatment, including those advertised in HyperTalk. Placement of an advertisement in HyperTalk does not represent an endorsement by Chadd, nor does it represent any testimony by Chadd as to the quality of the products advertised and the validity of claims made by the advertisement. Chadd programs are not intended as therapy nor are they intended to substitute for medical advice. HyperTalk is published bi-annually by Chadd of Greater Baltimore. For subscription information or advertising rates, please contact CHADD168@aol.com.



January, 2003

Dear Members:

This past Fall saw so many positive changes for CHADD of Greater Baltimore. Spring 2003 promises to be even more exciting. We are delighted to include the new branches in Frederick and Harford Counties and the new chapter in Prince George's County in this issue of Hypertalk Magazine.

In addition to meeting schedules that now include much of the State of Maryland, this issue features a review of the largest study of AD/HD ever conducted, with a follow-up commentary by Advisory Board member Kenneth Tellerman, M.D., outlining portions useful to parents. Articles on brain size and "wiring" differences in those with AD/HD contain important new information of interest to parents, adults, and professionals.

Be sure to check us out online at chadd-mc.org for a complete list of speaker and support meetings from the Washington area to north of Baltimore. Consider joining the email list offered at chadd-mc.org for help with AD/HD issues. Be assured that this is a private list serve generously operated by Michael Winick, Coordinator of CHADD of Montgomery County. As always, no information about our members is ever shared with any outside group or individual for any reason.

CHADD is entering an exciting era, so be sure to stay a member and get involved in your chapter. Without all of us (and you!), we wouldn't exist.

Sincerely,

Barbara Hawkins

Coordinator, CHADD of Greater Baltimore

CHADD of Greater Baltimore Board of Directors

Professional Advisors

Harold Cohen, Ph.D.
Baltimore County Fire Department

Bonnie Compton, R.N., M.S., C.P.N.P.

Pediatric Nurse-Practitioner

Karen A. Cruise, Ph.D. Clinical Psychologist

Debi Gartland, Ph.D. Faculty, Towson University

Claudette Brown, J.D.

Kenneth Tellerman, M.D.

Circuit Court for Baltimore CityBehavioral Pediatrician

Linda L. Jacobs, Ed.D. Director, Harbour School

Carol Watkins, M.D.
Psychiatrist

Leslie Seid Margolis, J.D.,

Hillary Wohl, Ph.D.

Board Members

Maryland Disability Law CenterSpeech-Language Pathologist

Tish Michel, M.B.A., C.P.A.

Immediate Past Coordinator

Sharyn S. Rhodes, Ph.D.

ege

Barbara Hawkins, Coordinator

Linda Spencer, Ph.D., Co-Coordinator

Faculty, Loyola College

Karen Sayler, Secretary

Michael Sherlock, M.D. Pediatrician

Diane Borenstein, Treasur

Kerch McConlogue, Adult Support Group

CHADD of Greater Baltimore

Meeting Schedule

Support group and speaker meetings are held the first Wednesday of every month at 7 PM at the Loyola College Graduate Center in Timonium, Maryland.

Meetings are open to members at no charge, and to non-members with the request of a \$5 donation per meeting.

Please call the Chapter phone line at 410-377-0249 for more information on meetings or with 6:30-7 Registration & Library 7-8 Guest Speaker 8-9 Small Group Support

Wednesday, January 8, 2003 Review of PBS Special Misunderstood Minds, followed by discussions and support group meetings

Wednesday, February 5
Behavior Management and
Educational Concerns
Sharyn Rhodes, Ph.D.

Professional Advisory Board Meeting

Wednesday, March 5 Social Skills: Guardian at the Gate to Success Linda L. Jacobs, Ed.D., Ph.D.

Wednesday, April 2
Rearing a Competent Child:
Enhancing Executive Functioning
Joyce Cooper-Kahn, Ph.D.

Wednesday, April 22
Professional Advisory Board Meeting

Directions The Loyola College Graduate Center in Timonium is one block west of the State fairgrounds. Take I-695 to I-83 North. Take the first exit, Exit 16, Timonium Road East; stay in the right hand lane and turn right at the light onto Greenspring Drive. The Graduate Center is directly behind the Red Roof Inn on the corner, with a large, well-light-

Abou t Our

Joyce Cooper-Kahn, Ph.D., a Clinical Psychologist, is Co-Director of Psychological Resource Associates in Severna Park, MD. Services that she provides to children and families include psychological assessment of cognitive, educational, emotional and behavioral problems. She consults with parents and schools on the topics of special education and attention deficit disorders. Dr. Cooper-Kahn serves on the board of the Anne

Arundel County Chapter of CHADD.

Diane Fadely, Ed.D., is Practicum Coordinator in the Education Department of Loyola College in Maryland. Dr. Fadely provides supervision, mentoring, and evaluation for graduate students as they develop and demonstrate essential skills teaching children with special needs and applying knowledge of special education processes and procedures. As a private educational consultant for children with special needs and their families, Dr. Fadely collaborates with other professionals and performs a range of services to help parents and children access appropriate special education services.

Linda L. Jacobs, Ed.D., is the Founder and Executive Director of The Harbour Schools, with campuses in Annapolis and Owings Mills. Dr. Jacobs' Bachelors Masters and Doctoral degrees are in the field of Special Education. She is the creator of the Village Curriculum, and serves as a visiting faculty member at Johns Hopkins University, Towson University, and The College of Notre Dame. She has presented numerous papers at national and international conferences She is a member of the CHADD of Greater Baltimore Board of Directors.

Sharyn S. Rhodes, Ph.D., an Associate Professor in the Education Department at Loyola

CHADD of Montgomery County

Greetings!

Well folks, this coordinator is running out of juice! We recently had our second child, Stephanie, and now we have a 2 year old and a 2 month old. Though things are pretty busy in our household, we have accomplished several things on our CHADD To Do list. We found a great leader in Vanessa Lopez, who has taken the reins to start the Frederick County branch which now holds monthly meetings. Additionally, an e-mail discussion list was implemented on our web site. Currently, the list has over 100 subscribers. I encourage you to participate in the AD/HD discussions taking place there. Please go to http://www.chadd-mc.org/ to subscribe.For those of you who

do not know, The US Food and Drug Administration (FDA) recently approved a new nonstimulant drug for AD/HD. The FDA approved Eli Lilly and Company's Strattera (atomoxetine HCl). Strattera is now available. The drug is a selective norepinephrine reuptake inhibitor, not a stimulant. Strattera comes in a capsule and can be taken once or twice a day. More information from Eli Lilly can be found at http://www.strattera.com/. If folks start to try this new medication, please share your experience with us on the mailing list. Finally, (and most important!) I've started to look for a co-coordinator to help run CHADD of Montgomery County. If you are potentially interested, or have any other questions or concerns, please e-mail me at michael@chadd-mc.org or say hello to me at one of our meetings. Regards,

Michael Winick

Coordinator CHADD of Montgomery County Michael@chadd-mc.org

Meeting Location Change!

Speaker meetings in Montgomery County will move from St. Elizabeth School to

North Bethesda Middle School starting with the January 15 meeting. The address is

North Bethesda Middle School, 8935 Bradmoor Drive, Bethesda, MD 20817.

Parent and Adult Support Groups are held the first Monday of each month at 7:30 PM at The Silver Spring Center, 8818 Georgia Ave., Silver Spring, MD 20910. From I-495 take exit 31 to Georgia Avenue South. Turn right on Ballard Street; the entrance to the center is on the left.

Directions are on the web site.

CHADD of Montgomery County Board of Directors

Advisory Board Members

Sherry Askwith, L.C.S.W.-C., PAB Chair,

Maureen Donnelly, M.D.

Deborah Fisher, Ph.D.

Robert Hedaya, M.D.

Barbara Ingersoll, Ph.D

Peter Latham, J.D.

Patricia Latham, J.D.

Kathleen Nadeau, Ph.D.

Patricia Quinn, M.D.

Britt Rathbone, L.C.S.W.-C.

Ruth Spodak, Ph.D.

Judith Stern, M.A.

Susan Van Ost, M.D.

Executive Board Members

Michael Winick,

Chapter Coordinator

Sara Brown, Support Group Chair

Susan Cecil,

Parent Program Chair

Beverly Jones, Treasurer

Holiday Jones,

Membership Chair

David Lotts,

Database Administrator

The following board positions are available for volunteers:

Coordinator Elect

am Chair



Chadd of Montgomery County

Parent and adult support group meetings are held the first Monday of every month at 7:30 PM at the Silver Spring Center in Silver Spring.

Speaker Meetings are held the third Wednesday of every month at 7:30 PM at the North Bethesda Middle School.

For more information

Monday, January 6, SilverSpring Center.

Parent and Adult Support Group Sarah Brown

Wednesday, January 15 North Bethesda Middle School What can You Get Out of Testing?

Ruth B. Spodak, Ph.D.

Monday, February 3 Silver Spring Center Parent and Adult Support Group Sarah Brown

Wednesday, February 19 North Bethesda Middle School AD/HD and Juvenile Delinquency Gustavo A. Goldstein, M.D. How to Talk to Your Kids about AD/HD Judith Stern, M.A.

How to Talk to your Spouse About ${\tt AD/HD}$

Sherry Askwith, LCSW-C

Monday, April 7, Silver Spring Center.

Parent and Adult Support Group

Sarah Brown

April 9, North Bethesda Middle School Anxiety and AD/HD Deborah M. Fisher, Psy.D.

May 21, North Bethesda Middle School Speaker will be announced on the CHADD-MC website.

Monday, June 2, Silver Spring Center. Parent and Adult Support Group Sarah Brown

Wednesday, June 18

Abou t Our

Sherry Askwith, L.C.S.W.-C., of Gaithersburg, is known for her work with AD/HD-diagnosed children and adults in Montgomery County as well as her on-site teacher training, school-based workshops, and

articles on AD/HD, parenting, and mental health issues, including a quarterly class for parents of AD/HD children and ongoing therapy groups for children, adolescents, and adults. This year, she will also be conducting a workshop for spouses of individuals with AD/HD, and offering lunchtime interactional workshops on parenting issues at local corporations. Coordinator of Montgomery County CHADD, Sherry is particularly interested in the impact of differing perceptual abilities and communication styles on relationships.

Deborah M. Fisher, Ph.D. received her doctorate in clinical psychology from Rutgers University. Since 1980, she has been working in the Washington, DC, metropolitan area with children, adolescents, and adults specializing in the diagnosis, treatment, and remediation of learning disabilities, AD/HD, and school and workplace problems. In addition, Dr. Fisher works with a variety of concerns including depression and anxiety disorders, relationship difficulties, and behavior management and parenting skills, and provides a full range of psychological and neuropsychological assessments. A professional advisor in

the Montgomery County CHADD Adult Support Group, she has a private practice in Bethesda, MD.

Gustavo A. Goldstein, M.D., obtained his medical diploma at the University of Buenos Aires, Argentina, and a bachelors degree in Elementary School Education. He worked as an emergency room surgeon in Argentina for several years. After immigrating to the United States, Dr. Goldstein completed residencies in adult, and child and adolescent psychiatry in Washington DC. On the staffs of Montgomery County Mental Health and the Children's National Medical Center, Dr. Goldstein has specialized in the legal aspects of psychiatry, and is board certified in Forensic Psychiatry. He has served as speaker in several National Mental Health Association training programs, Congressional briefings, and media programs. Currently the psychiatric consultant for the Child and Adolescent Forensic Evaluation Services of Montgomery County, he also has a private practice in Rockville, MD.

Kathleen Nadeau, Ph.D., a recognized authority on AD/HD, is Director of Chesapeake Psychological Services in Silver Spring, MD, and offers psychological services to adults and teens with AD/HD. A member of the Professional Advisory Board of CHADD National and CHADD of Montgomery County. She is the author of Adventures in Fast Forward and The Comprehensive Guide to Attention Deficit Disorders, as well as numerous other publications dealing with AD/HD.

CHADD in Frederick County

The second largest city in Maryland, Frederick is getting its own CHADD branch. Frederick CHADD will be a branch of the Montgomery County CHADD chapter, serving the growing Frederick community. Meetings will be held the

second Wednesday of the each month at West Frederick Middle School, 515 West Patrick Street, both for parents of children with AD/HD and for adults with AD/ HD. The meetings will begin at 6:30 PM and end at 8 PM.

- From Route 15 take the East Patrick Street/Route 40 exit. The school is approximately 3/4 of a mile on the left side.
- From points east of Frederick, take Route 70 West to Route 15 North. Take take the East Patrick Street/Route 40 exit. The school is about 3/4 of a mile on the left side.

Vanessa Rini-Lopez, moderator of the group, has been a resident of Frederick County for over thirty years.

She and her husband have two children. Vanessa has AD/HD as do her father and daughter. Her family has been very fortunate in having received treatment for their AD/HD from knowledgeable practitioners, and strong support from their family. Additionally, her daughter attends Sylvan Learning Center, which has been instrumental in enabling her to keep up in school.

A graduate of the University of Maryland, Vanessa works full time as an Executive Assistant.

Vanessa's personal vision for the group is to

- Serve as a resource to Frederick County educators
 on the subject of AD/HD.
- Stay current on the latest information on AD/HD to deal with her own AD/HD and that of her daughter.
- Reach out to Frederick County's Latino and deaf communities, so that people with AD/HD in these communities can benefit from CHADD's efforts.
- 4. Help other families deal with AD/HD and share what the Lopez family has learned.

Adult AD/HD Advocacy

Harold C. Cohen,

Ph.D., Che, EMT-P

35 Anderson Ridge Road Catonsville, MD 21228

Phone 410-747-8637 Cell Phone 443-829-8113 Fax 410-747-7643 E-mail EMSHC@aol.com





Got a coach?

Kerch McConlogue

kerch@mapthefuture.com 410 233 3274

Child Development Resources

Specialists in AD/HD, learning disorders, emotional problems, and the variety of developmental challenges facing children and their families

- Psychological Evaluation
- Educational Consultation
 - · Parent Counseling
- Individual Therapy

for children and adolescents

Joyce Cooper-Kahn, Ph.D., Director Therese Shank, Ph.D. Kathleen Gallagher, L.C.S.W. Karin Anetendig Mosk, Psy. D.

Psychological Resources Associates

CHADD in Howard County

Howard County Parent Support Group

Parenting can be a daunting task, but parenting a child with AD/HD has added challenges. Often parents muddle through as best they can but become frustrated when their efforts fail. As they watch their friends' or neighbors' children behave in appropriate manners, parents of children with AD/HD often wonder, Where have I gone wrong? Why can't my child follow my instructions? Why does my child become frustrated easily and have little patience? Often parents describe their AD/HD child as a time bomb waiting to go off, and nothing they do seems to help. Children with AD/HD often experience difficulty with self-control and may exhibit defiant behaviors. They may require more attention and supervision, which may leave the parent frus-

trated and exhausted. Parents of children with AD/HD often feel isolated from friends and family, who may be well-meaning with their advice to just give them more discipline. The parent support group provides a place where parents can come together to discuss issues that they encounter in their day-to-day experiences with their ADHD child. Parents are able to share their successes and frustrations with others and know that they are not alone. Reading books and attending lectures about ADHD is important, but parents need a venue where they can learn from each other.

The Howard County Parent Support Group was formed in cooperation with the Greater Baltimore and Anne Arundel County CHADD Chapters. The group includes parents of children with AD/HD and rotating group facilitators, including: Bonnie Compton, M.S., C.S., C.P.N.P.; Karen Cruise, Ph.D.; and Carol Robbins, Ph.D. In addition to being a parent of AD/HD children, Bonnie Compton has a private AD/HD practice in Howard County and works as a child and adolescent therapist at The Family Center. Dr. Cruise is a psychologist practicing in Howard County and specializes in the evaluation, therapy and school consultations with an emphasis on learning disabilities and AD/HD. Dr. Robbins is a psychologist with a private practice in Annapolis who specializes in the treatment of AD/HD in all age groups.

The group meets the second Wednesday of each month at the Loyola College Graduate Center, 7135 Minstrel Way, Columbia, MD 21045, from 7 to 8:30 PM, through until May 2003. CHADD membership is not required, but is encouraged. Membership information will be available at the meeting.

Bonnie Compton, M.S., C.S., C.P.N.P

Howard County Meetings

Support group and speaker meetings are held the second Wednesday of every month at 7 pm at the Loyola College Graduate Center in Columbia.

Meetings are open to members at no charge, and to nonmembers with the request of a \$5 donation per meeting.

For more information on meetings or with

Wednesday, January 15 Facilitator:

Carol Robbins, Ph.D.

Wednesday, February 12 Facilitator:

Bonnie Compton, R.N.

Wednesday, March 12

. . . .

Karen Cruise, Ph.D.

Wednesday, April 9

Facilitator:

Facilitator:

Carol Robbins, Ph.D.

Wednesday, May 14

Facilitator:

CHADD of Howard County Steering

Bonnie Compton, R.N., M.S.N., C.P.N.P.

Board of Directors, CHADD of Greater Baltimore

Barbara Hawkins,

Coordinator, CHADD of Greater Baltimore

Linda Spencer, Ph.D.

Co-Coordinator CHADD of Greater Baltimore

Joyce Cooper-Kahn, Ph.D.

Board of Directors, CHADD of Anne Arundel

County

Carol Robbins, Ph.D.

Coordinator, CHADD of Anne Arundel County

Mick Terrone,

Director of Membership and Chapter Services,

CHADD National

Directions Loyola College Graduate Center in Columbia: From Rte. 29, take the exit onto Rte. 32 east. Take the Broken Land Parkway exit north toward Columbia. From the right lane of Broken Lane Parkway, almost immediately make a right turn onto Snowdon River Parkway. Then turn left at the first street, Minstrel Way.

CHADD of Anne Arundel County

The Anne Arundel County Chapter is in the process of blooming, even though winter is upon us. Thanks to the recent efforts of our very exuberant and energetic resigning coordinator, Kirk Hadsell, we now have an enthusiastic new group of volunteers to serve on the Board of Directors. We still have several vacant positions and are continuing to actively recruit new leadership. For more information about joining our team, please contact Carol Robbins at carolarobbins@hotmail.com, or call us at (410) 721-2468.

We are continuing to partner with the Greater Baltimore CHADD Chapter in co-sponsoring support groups in Linthicum, for adults, and in Columbia, for parents. Kirk Hadsell has also been reaching out to the public giving very entertaining and well-received talks at local schools and

other forums. Keep up the good work, Kirk!

We are enthusiastic about our upcoming speaker meeting presentations listed below, and hope to see you there! CHADD of Anne Arundel County Steering Committee

CHADD of Anne Arundel County Board of Directors

Carol Robbins, Ph.D.

Coordinator

Kirk Hadsell

Meeting Facilitator and Outreach Coordinator

Christina Burris Chapter Treasurer

Sharon Finn Public Relations Chair

Maureen Hewins

Communications & Telephone Support Chair

Eric Hewins Webmaster

Diane Kruszka Membership Chair Database Administrator Mick Terrone
Director of Membership and
Chapter Services,

CHADD National

Member-at-large/Consultant

Professional Advisory

Board

Anne Arundel County Meetings

Meetings are held the second Tuesday of every month at 7 PM at the Severna Park United Methodist Church.

Tuesday, January 14
Medications, Trials and
Fewer Tribulations
Peter Dozier, M.D.

Tuesday, February 11 Negotiating Your Child's IEP Joyce Cooper-Kahn, Ph.D.

Tuesday, March 11
Animal Crackers: Social skills
for Kids with AD/HD
Linda Jacobs, Ed.D.

Tuesday, April 8

Stephen Spector, J.D.

Tuesday, May 13 Coaching Adults with AD/HD:Getting on the Track You Choose and Sticking with It

Kerch McConlogue, C.P.C.C.

Tuesday, June 10 AD/HD Collides with Aduthood:

Directions From I-97, take the Benfield Road exit east for approximately one-half mile. Severna Park United Methodist Church will be on the

For more information on meetings or any additional questions, call 410-721-2468, or e-mail Mick Terrone, m_terrone



Thomas L. Baumgardner, Ph.D., Is a Licensed Clinical Psychologist and Neuropsychologist in Maryland. He earned his doctorate in 1994, completing postdoctoral training in pediatric neuropsychology at the Learning Disabilities Research Center, under the supervision of Dr. Martha Denckla. He was later appointed to the faculty of the Kennedy Kreiger Institute and the Johns Hopkins Medical School, conducting NIMH-funded research in developmental learning disabilities and behavioral genetics. He has written numerous articles, abstracts, and book chapters on topics related to learning disabilities, AD/HD, and neurogenetic conditions such as Tourette Syndrome, Turner Syndrome, Fragile-X Syndrome, and Neurofibromatosis. Dr. Baumgartner is currently in full-time private practice providing neuropsychological assessment and consultation to patients of all ages with specialization in learning and attention disorders. He also maintains a practice of individual and family-oriented psychotherapy and executive coaching.

Joyce Cooper-Kahn, Ph.D., a Clinical Psychologist, is Co-Director of Psychological Resource Associates, Severna Park, MD. Dr. Cooper-Kahn specializes in services to children and families, including psychological assessment of cognitive, educational, emotional and behavioral problems. She consults with parents and schools on the topics of special education and attention deficit disorders. Dr. Cooper-Kahn serves on the Board of the Anne Arundel County Chapter of CHADD.

Peter M. Dozier, M.D., Board Certified in Psychiatry and Neurology, is in private practice in Annapolis. He graduated in Biology from George Mason University, and earned his M.D. from Eastern Virginia Medical School in Norfolk. His special interests include childhood mood disorders, adult ADHD, and pediatric psychopharmacology.

Linda L. Jacobs, Ed.D., is the Founder and Executive Director of The Harbour Schools, with campuses in Annapolis and Owings Mills. Dr. Jacobs' Bachelors, Masters, and Doctoral degrees are in the field of Special Education. She is the creator of the Village Curriculum, and serves as a visiting faculty member at Johns Hopkins University, Towson University, and The College of Notre Dame. She has presented numerous papers at national and international conferences. She is on the Professional Advisory Board of CHADD of Greater Baltimore.

Kerch McConlogue, C.P.C.C., a personal coach for adults with AD/HD, is a member of the CHADD of Greater Baltimore Board of Directors, Attention Deficit Disorder Association (ADDA), and the Guild of American Papercutters; and is President Elect of the Baltimore Regional Chapter of the National Association of Women Business Owners (NAWBO).

Stephen H. Spector, J.D., is the Director of Public Policy and has been head of the Public Policy Department of CHADD since June 1999. He holds a B.S. degree in Business Administration from C.W. Post College of Long Island University and a J.D. degree from George Washington University. He has served on the School Board of Falls Church, Virginia, a past Board member of CHADD of Northern Virginia, and an officer of the Northern Region of the Virginia School Boards Association. He was the National School Boards Association's federal relations network representative for his Congressional District. A member of the Virginia State Bar and the ESL Advisory Committee of the Falls Church City Public School System, Steve spent 13 years in the U.S. Department of the Interior in various regulatory and legislative positions. He is a past co-chair of the Administrative Law Section of the Federal Bar Association.

Steve received remedial support for dyslexia during secondary school in the 1950s. While in college in the 1960s he also benefited from extra supporti ndiagnosed Al ducator;

they ha

CHADD in Linthicum

Support group for adults with AD/HD meets monthly in Linthicum —Kerch Mc

-Kerch McConlogue, C.P.C.C.

Wouldn't it be great to have someone else manage the details of

your life? Someone else who could always find your stuff or get you out of the house on time? Parents usually do that for kids: set a structure so they can get their school work done on time or find their papers or get out of the house on time. But who does it for adults—especially AD/HD adults? The impulsivity and disorganization that got us in trouble as kids can still trip us up as adults.

Personal education, like reading about adult AD/HD, is an important start; it is the beginning of understanding. But in order to fully assimilate the meaning and then put the information to use, it's helpful to look at the facts from lots of angles. Talking with others helps solidi-

fy ideas and plans. Commonly, we are shy for fear that sharing information about our AD/HD will leave us feeling isolated. But we are not alone!

A supportive group of like-minded adults, we share tips and frustrations, systems and structures that work both personally and professionally. We talk about different treatments—what's working for some, what's not working for others, and how to know the difference. We have talked about the process of diagnosis and the advantages of having one late in life. We have shared tips for organizing our time, our space, and our lives.

If somehow you have managed your life for years and now find yourself falling apart, missing appointments, worrying about work issues, losing belongings, committing to too much, taking unnecessary risks, or feeling too overwhelmed to try anything new, check us out! Participation in the group does not require that you have a formal diagnosis, nor is CHADD membership required, although membership information is available at the meetings.

The adult support group of Baltimore CHADD is small and welcoming. Kerch McConlogue, C.P.C.C., a certified coach who works with adults with AD/HD, leads the meetings. Diagnosed herself at age 45, she is a member of the CHADD of Greater Baltimore Board of Directors.

The group meets twice a month, once following the regular speaker meeting on first Wednesdays at Loyola's Timonium facility, and now also on the third Wednesday of each month from 7 to 8:30 PM at St. Christopher Episcopal Church, 116 Marydell Rd., Linthicum Heights, MD 21090. Directions appear at our website at http://chadd-mc.org/cgi-bin/schedule.pl. Find the entry for the adult support group and click on Linthicum.

Meetings are scheduled on these Wednesday evenings from 7-8:30 PM: (None in January), February 19 • March 19 • April 16. For more information: For directions, check our website at http://chadd-mc.org/cgi-bin/schedule.pl. Find the entry for the adult support group and click on Linthicum.

Is your child reaching his or her potential this year?

If not, consider that Norbel School offers:

- 6:1 student-to-teacher ratio
- Individualized curriculum
- · Social skills program
- · Multi-sensory methods

Norbel is an independed first through tenth grade (future to the twelfth grade) school for children with learning differences that include language-based disabilities and AD/HD.

Now in our new home in Howard County.

Bus transportation from northwest Baltimore



JOIN OUR COMMUNITY. WE EDUCATE FOR A DIFFERENCE. 410-796-6700 • www.norbelschool.org

CHESAPEAKE Psychological Services of Maryland

Specializing in the Diagnosis and Treatment of ADHD and related conditions

Clinic Director Kathleen G. Nadeau, Ph.D.,

is a nationally recognized authority on AD/HD who works closely with her staff in providing the highest quality of service.

Testing for Adults, College Students, Teens, and Children

- Individual and group therapy
 - Couples Therapy
- ADD Coaching
 Consultations
- Special ADHD issues of girls and women
- Workplace issues/Career consultations
 - College advising—accornmodations,
 Course selection, Career direction

Offices in Silver Spring and Annapolis For an appointment, call **301-562-8448**.

CHADD in Prince George's County

Hole-in-the-Fence Gang

A brand new CHADD Chapter is under construction right down the street from the CHADD National Headquarters. Currently holding planning meetings at the Natonal office are Robert DuHart, Chapter Coordinator; Mick Terrone, Director of Membership and Chapter Services, CHADD National; and a small group of interested

construction workers. Professionals and adults and parents with AD/HD should don a hard hat and join us on site as we pour the foundation for CHADD's newest Maryland chapter. E-mail M_Terrone@CHADD.org to join the fun.

Our informational meetings will take place on the second Wednesday of every month at $7 \, \text{PM}$, beginning January 15, at The National CHADD Office, 8181 Professional Place, Suite 201 Landover Maryland, 20785.

Because the Chapter is in its planning stages, we are looking for volunteers to help shape the agenda for the coming year. Those interested in making a difference in the lives of people around them please call Robert DuHart Sr., CHADD of Prince Georges County Chapter Coordinator, 301-203-9745.

Directions to meeting location:

From the Capital Beltway, North of meeting location: Take Capital Beltway I-495South/I-95 South toward Richmond /Andrews AFB. Take US 50 West, exit 19B, toward Washington.

Turn Slight Right onto Cobb Road, which becomes Corporate Drive. Turn Right onto Garden City Drive, MD950. Turn Right onto Professional Place.

From the Capital Beltway, South of meeting location: Take Capital Beltway/I-495 North /I-95 North toward Baltimore. Merge onto US 50 West via exit number 19B. Take Garden City Drive, exit 6, toward Ardwick/Ardmore Road /Metro and Amtrak station. Proceed straight onto Garden City Drive/MD

CHADD in Harford County CHADD of Harford County is in the process of becoming the Harford County branch of CHADD of Greater Baltimore. We are working hard to schedule a series of support group

meetings in the Bel Air area. With support from the board of CHADD of Greater Baltimore, a small steering committee has been formed. Want to get involved? Interested in support group meetings in Harford County? E-mail Barbara Hawkins, CHADD168@aol.com, for more information.



ADHD EVALUATION & MANAGEMENT

Behavioral Pediatrics

SERVICES PROVIDED

- ADHD Comprehensive Assessments and Management
- Medication Evaluation and Management
- Behavior Modification
- Parent Training Program
- Case Management

Bonnie Compton, RN, MS

Certified Pediatric Nurse Practitioner
Parenting Partners, Inc.
Dorsey Hall Medical Center
9501 Old Annapolis Rd, Ste 201
Ellicott City, MD 21042

410-531-1248

Notes from the 14th Annual CHADD International Conference

Of the folks who made it to Miami for the Conference, these four participants brought back glowing reports of the events. As Garrison Keillor might describe it, "The weather was beautiful, the offerings good looking, and all the presentations were above average."

The 14th Annual CHADD International Conference in Miami from October 17 through 19 offered an array of outstanding speakers and session topics to choose among. Conference planners organized the approximately 120 sessions into nine suggested conference tracks for "Beginning Parents," "Advanced Parents," "Physicians," and so on, but it was difficult to stay within one track when your favorite expert or priority topic was being offered in another.

Some sessions delivered up-to-the-minute information on the latest developments in understanding and treating AD/HD. For example, Tom Brown, Ph.D., from the Yale University School of Medicine, gave an excellent presentation on *Social Ineptness & Emotional Intelligence in AD/HD*.

Other sessions focused on delivering practical support and real-world techniques to help handle the daily challenges presented by AD/HD. For example, Mary Fowler presented the session *Maybe You Know My Teen* based on her own experience and her book by the same name. First, she discussed "The Ten Tasks of Adolescence" that all teens have to work and grow through, followed by "The Five Basics of Parenting Adolescents." She then elaborated on four emotion-driven parenting strategies that fuel AD/HD behavior problems: "All Talk, No Action;" "Tit For Tat;" "Be Nice and Forget;" and "Russian Roulette." In fact, teens with AD/HD need the same kind of parenting as non-AD/HD teens, only more of it. After discussing "The Ten Principles of Mindful Parenting," she fielded questions.

Maureen Gill, M.S.W., presented *Doing All the Work, Taking All the Blame: Mothering the Child with AD/HD* in which she shared accounts from her own journey helping her two sons and husband—all with AD/HD. Her main message to mothers was that we must become experts in understanding AD/HD so that we can be both educators and protectors. She explained the importance of advocating for your child in numerous environments outside the family unit, including the extended family, neighborhood, school, activities, and sports. She also shared practical ways to help your child be successful each school year. An essential element for success is the right teacher—one who is not too strict but creative, firm but flexible, not a drill sergeant but loving and, most

importantly, one who really likes your child. She spoke of the importance of interviewing teachers for the upcoming year to determine whose personality fits best with your child's.

Other conference highlights included the Plenary Sessions; the Exhibit Hall packed with school, vendor, and research displays; the catered lunch, with the opportunity to meet and chat with other attendees; and of course the perfect Miami sunny sky, sandy beach, and warm ocean right out the back door. All in all, the 14th Annual CHADD Conference was an outstanding time to add new knowledge and recharge drained batteries before returning to our challenges refreshed and better prepared than when we left.

-Maureen Hewins, parent

Attending a CHADD National Conference

is both an exhilarating and an overwhelming experience. The wealth of information, the generosity of the presenters, the friendliness of the attendees, and the camaraderie of the coordinators is just wonderful. After I took a while to recover and digest what I learned, two presentations made a particular impact on me.

• IDEA Authorization

The Federal Assistant Secretary for Special Education addressed us about the reauthorization process for the special education legislation IDEA, and asked for comments and feedback. At least twenty members of the audience spoke on the problems they and their children have encountered with the special education as it is implemented in their states. Some of the stories were truly heartbreaking.

We were invited to continue to submit comments and given the address, which follows. Please consider sending a written comment on your experiences or problems with the special education process to:

Mr. Tom Irwin, 3030 Switzer Building, 330 C Street, S.W., Washington, D.C. 20202.

· Adolescents and AD/HD

At the other end of the emotional spectrum was the most delightful panel of adolescents and young adults, all of whom have AD/HD and are surviving. Organized by Chris Dendy, M.S.W., whose wonderful video and books are available from

the Chapter library, this was a refreshing, unique opportunity for adults to hear what life is really like for young people diagnosed with AD/HD. They generously answered questions posed by parents, psychologists, and physicians about what bothers them and what works well for them. I was so impressed that I hope to schedule a similar panel for our Chapter next year.

—Barbara Hawkins, Chapter Coordinator, CHADD of Greater Baltimore

Most would agree that many with AD/HD experience significant chronic problems in social relationships. A session by Thomas E. Brown, Ph.D., of the Department of Psychiatry, Yale University School of Medicine, highlighted the problems with social ineptness and emotional intelligence in those with AD/HD.

Emotional intelligence is in part the ability to monitor feelings in oneself and others, to discriminate among those feelings, and then to use this information to guide thinking and action. Couple emotional intelligence problems with issues of social ineptness—being viewed as too hurried, or too intense, too clueless or too isolated—and the results can be painful for all.

Dr. Brown noted that while researchers and clinicians often report that AD/HD children are less adept at identifying and interpreting emotion in themselves and in others, the symptom is not addressed in the DSM-IVs list of characteristics for an AD/HD diagnosis.

The Conners Parent Rating Scale includes "easily frustrated" as one of the twelve items that indicate children at risk for AD/HD. Similarly, the Utah Criteria for AD/HD in adults include: affective lability, hot temper, and emotional overreactivity. Oppositional issues, even to the untrained eye, would certainly seem to be issues of regulation. The ability to regulate personal speed to match the situation, for example, can be a social adjustment problem that spells impairment in relations at school, in family situations, with peers, and even in spare time activities. Dr. Brown suggests that emotional intelligence be evaluated when assessing for AD/HD and that psychosocial interventions may be warranted in specific situations.

However, Dr. Brown always has respectful recommendations for those in the fray. He makes these five suggestions for authority figures:

First, recognize the disappointment of the child, the hurt in parents, siblings, and others, but address the child privately. Second, acknowledge the complexity of social interaction. Determine ahead of time activities to engage in or to avoid. Third, teach perspective. Just how important is any given situation? Is it, in fact, an elephant or an ant?

Fourth, children learn by example. So teach appropriate social behavior by modeling it, by noticing it and by role playing. Finally, he suggests using a notebook to keep track of examples of behavior both positive *and* negative in your child's life. This report draws extensively on the handouts Dr. Brown provided by for his talk.

—Kerch McConlogue, Board Member, CHADD of Greater Baltimore

As usual, the Conference was great!

What a wealth of top notch, science based information on AD/HD. Speakers included medical professionals and researchers such as Tom Brown, Russell Barkley, Peter Jensen, Larry Greenhill, Sam Goldstein, Harvey Parker, Tom Phelan, Kathleen Nadeau, Pat Quinn, Michael Finkle, Tim Wilens, Gabrielle Carlson, and many more world-renowned leaders. We also had the top educators including Sheryl Pruitt, Clare Jones, Chris Dendy, Sandra Reif, and Sharon Weiss—to name just a few. Legal experts included Matt Cohen, Carl Smith and Gerald Rouse. It was so exciting to see Art Robin, Bill Pelham, and Stephen Faraone receive CHADD's highest award and be inducted into CHADD's Hall of Fame.

Mick Terrone, CHADD Director of Membership and Chapter Services, presented Barbara Hawkins with a special plaque at the Coordinators' luncheon for her efforts in staging the Mid-Atlantic Conference last spring. Way to go, Barbara! It certainly was wonderful to see her rewarded for her volunteer efforts.

Our own Carol Watkins gave an outstanding presentation on *Medications for AD/HD and Coexisting Conditions*, a workshop covering the latest on stimulants and other medications used to treat AD/HD, anxiety, depression, and bipolar disorder. Carol's session reviewed their benefits, side effects, and cognitive and behavioral enhancements. You may recall that Carol was the 2001 Volunteer of the Year at the conference held in Anaheim.

Sheryl Pruitt's *Teaching the Tiger: AD/HD, Tourette Syndrome, OCD & Executive Function* was another terrific session. Sheryl had a host of practical strategies and resources to provide aid to parents, teachers and other professionals working with children and adults with AD/HD and comorbid disorders. Sheryl's book, *Teaching the Tiger,* is in the CHADD of Greater Baltimore library.

—Tish Michel CPA, MBA, CHADD of Greater Baltimore

Plan to attend the 15th Annual CHADD International Conference in Denver October 30-November 1, 2003.

The Largest Treatment Study of AD/HD Ever Conducted: Results from the MTA

This article is reprinted from Attention Research Update, a free email newsletter that helps parents, professionals, and educators keep up with new research on AD/HD. It was edited for this publication and appears with the permission of the author, Dr. David Rabiner of Duke University. You can learn more about the newsletter at www.helpforadd.com.

Over the past year you may have seen preliminary reports of results from the Multimodal Treatment Study of Children with AD/HD (MTA), the largest and most comprehensive treatment study of AD/HD that has ever been conducted. In this summary, I will try to combine the findings.

Overview

This study represented the combined efforts of investigators at six different sites around the country and included 579 children ages 7 to 9.9 years who were diagnosed as having AD/HD, Combined Type using state-of-the-art diagnostic procedures. Approximately 20% of the participants were girls and about the same percentage were African American. Participants were then randomly assigned to one of four different treatment conditions. Fourteen months later, the participants were carefully evaluated so that the impact of the different treatments could be evaluated. Each treatment condition is described below.

Medication Management

Children in the medication management condition received medication treatment only. This began with a 28-day, double-blind placebo-controlled trial that evaluated the effects of four different doses of methylphenidate—the generic form of Ritalin. The doses tested were 5, 10, 15, and 20 mg. Children received a full dose at breakfast and lunch, and then a half-dose in the afternoon. A team of experienced clinicians compared parent and teacher ratings of children's behavior on each dose, and selected by consensus the best dose for each child.

For children not obtaining an adequate response to methylphenidate during this initial trial, alternate medications were tested: dextroamphetamine, the generic version of dexedrine; pemoline, the generic version of Cylert; and imipramine, a tricyclic antidepressant. Note: This study was begun before Adderall was available for use. Of 289 participants initially assigned to receive medication in either the medication management condition or the combined condition, 256, or 88.6%, successfully completed this initial titration period. For the remaining children, parents either refused to try their child on medication, there were intolerable side effects, or parents could not cooperate with the careful titration procedures.

For about 69% of the children completing the initial medication trial, an adequate response was obtained with at least one of the doses of methylphenidate, and they began their treatment on this dose. Twenty-six children who did not respond to methylphenidate did respond appropriately to dextroamphetamine and began on this medication. A final 32 did not begin on any medication because they had such a strong placebo response that no clear benefits of medication could be demonstrated. In addition to this very careful initial trial to determine the optimal medication and dose for each child, half-hour monthly visits were scheduled during which the provider reviewed information provided by parents and teachers about the child's behavior over the past month. After carefully reviewing this information, dosages were adjusted. Adjustments that involved increases or decreases of more than 10 mg/dose required approval by a cross-site panel of experts.

By the end of the study 14 months later, about 74% of participants of the 289 in the medication or combined treatment groups were being successfully maintained on methylphenidate, 10% on dextroamphetamine, and just over 1% on pemoline. Only two children were on any other type of medication. Monthly monitoring of side effects were reported to show either none or mild side effects over 85% of the sample. This approach differs from what often occurs in community management primarily because of: 1) the use of a double-blind trial to establish the best initial dose and medication for each child; and, 2) regular follow-up visits to evaluate ongoing medication effectiveness based on parent and teacher reports with systematic adjustments made as needed. It is also important to note that almost all the children were judged to be effectively managed on one of the standard stimulants —either methylphenidate or dextroamphetamine—and none were judged to require a combination of medications to effectively manage their AD/HD symptoms. I think this underscores how rarely medications need to

Behavioral Treatment

Behavioral treatment included parent training, child-focused treatment, and a school-based intervention. Parent training, which involved 27 group sessions and 8 individual sessions per family, focussed on teaching parents specific behavioral strategies to deal with the challenges that children with AD/HD often present. The school-based treatment was a summer treatment program

be combined to treat AD/HD when a

careful procedure is used to test out the

different types of stimulants available.

that children attended for eight weeks, five days a week, during the summer. This program employed intensive behavioral interventions administered by counselors' aides under supervision by the therapists conducting the parent training.

Children were able to earn various rewards based on their ability to follow well-defined rules and meet certain behavioral expectations. Social skills training and specialized academic instruction was also provided.

The school-based treatment had two components: 10 to 16 sessions of biweekly teacher consultation focused on classroom behavior management strategies, and twelve weeks of a part-time paraprofessional aide who worked directly in the classroom with the child. During the school year, a Daily Report Card was used to link the child's behavior at school to consequences at home.

The report was brought home daily with rewards at home provided for a successful day. Consistent with actual clinical practice, the family and child's involvement in behavioral treatment was gradually tapered over the 14 month period.

The main point to take away from this brief summary of the behavioral treatment that children received is that it reflects absolute state-of-the-art practice that would be virtually impossible to obtain in a typical community setting. Thus, one would expect that the benefits of behavioral treatment as implemented in this study would be likely to be greater than would typically be obtained.

Combined Treatment

Children in the combined treatment group received all the treatments outlined above. Individuals supervising the child's behavioral and medical treatments conferred regularly, and guided overall treatment decisions. By the end of the study, children in the combined group were being maintained on lower daily doses of methylphenidate than children who received medication alone Average doses were 31.2 mg/day for the combined group and 37.7 mg/day for the medication only group.

Community Care

It clearly would not be ethical to assign children with AD/HD to a no-treatment control group for a study that persisted for 14 months. Instead, some children were randomly assigned to a group that received "community care." Following their child's diagnosis of AD/HD, parents of these children were provided with a list of community mental health resources and made whatever treatment arrangements they preferred. Most of the 97 children in this group—over two-thirds—received medication from their own providers during the 14 months.

Several things are interesting about the medication these children received compared to children who received medication as part of the study. First, community care children received less medication each day. For those treated with methylphenidate, the average daily dose was 22.6 mg/day compared to the average daily doses of 31.2 mg and 37.7 mg noted above. In addition, community care children received an average of 2.3 doses per day compared to the 3 times/day dosing for children in the study. Finally, while none of the children receiving medication in the study were maintained on either clonidine or a combination of medications, four children seen by community physicians were treated with clonidine and ten children received more than one medication. Thus it appears that physicians in these communities were in some ways more conservative in their use of medication—i.e. prescribed lower doses of methylphenidate—and in some way less conservative—i.e. were more likely to use medications other than the widely used stimulants.

Study Questions

The MTA Study was designed to address three fundamental questions about the treatment of AD/HD:

- 1. How do long-term medication and behavioral treatments compare with one another?
- 2. Are there additional benefits when they are used together?
- 3. What is the effectiveness of systematic, carefully delivered treatments vs. routine community care?

The Results

Some of the principal findings covered in this paper include discussions of:

- Primary AD/HD symptoms—ratings provided by parents and teachers;
- Aggressive and oppositional behavior—ratings provided by parents, teachers, and classroom observers;
- Internalizing symptoms (e.g. anxiety and sadness)—ratings provided by parents, teachers, and children;
- Social skills—ratings provided by parents, teachers, and children;
- Parent-child relations—rated by parent;
- Academic achievement—assessed by standardized tests.

In general, children in all four groups showed significant reductions in their symptoms over time in most respects. Thus, even though some treatments were clearly superior to others in certain domains, overall, even children receiving the "least effective" treatment tended to show important improvement. Thus, these data should not be interpreted in a framework of "what worked" and "what did not work." but rather what seemed to be most effective among treatments that all produced some improvement.

- 1. For both parent and teacher ratings of primary AD/HD symptoms (i.e. inattention and hyperactivity/impulsivity), medication management alone was clearly superior to behavioral treatment alone. On all the other outcome measures reported, medication management and behavioral treatment did not differ significantly. Thus, although medication was found to be superior to behavioral treatment on core AD/HD symptoms, this improvement did not extend to other important areas of children's functioning such as oppositional behavior, peer relations, and academic achievement.
- 2. Combined treatment and medication management treatment did not differ significantly in any of the six domains. This suggests that for most children with AD/HD, adding behavioral intervention to well-conducted medication management is not likely to yield substantial incremental gains.

However, other conclusions can be drawn from this data. For example, in the rank ordering on different outcomes for children in the different groups, while children in the combined treatment group did best on 12 of 19 outcome measures, those in the medication management group were best on only four.

In addition, when the individual outcome measures are combined into composite measures, or when children's outcomes are grouped into excellent response vs. less dramatic response, children receiving combined treatment did modestly but significantly better. Compared to behavioral treatment alone, combined treatment was found to be superior on parent and teacher ratings of primary AD/HD symptoms, on parent ratings of aggressive/oppositional behavior, on parent ratings of children's internalizing symptoms, and on results of the standardized reading assessment. Consequently, adding medication to the treatment of a child already receiving behavioral intervention is likely to yield substantial benefits for most children.

3. While both combined treatment and medication treatment were superior to community care for parent and teacher reports of primary AD/HD symptoms, behavioral treatment was not. In general, parents and teachers tended to report a decline of approximately 50% in inattentive and hyperactive/impulsive symptoms for children in the medication and combined treatment groups. For children receiving community care, the declines reported were in the 25% range, comparable to those reported for children receiving behavioral treatment. In the non-AD/HD domains—e.g. oppositional behavior, internalizing symptoms, social skills, and reading achievement—combined treatment was always superior to community treatment, with particularly dramatic differences in parent reports of oppositional/ aggressive behavior. Medication management and behavioral treatment were superior to community treatment on a single domain only.

Overall, these data indicate that although children treated in the community made modest gains over the course of the study, those receiving medication treatment in the MTA study—either alone or in combination with behavioral treatment—did significantly better. This was especially true for children receiving the combined treatments.

Follow-up Analyses

In general, there were no substantial differences in the effectiveness of the different treatments depending on these variables. Thus, similar treatment results were found for boys and girls and for children with and without a co-occurring behavior disorder.

There was some indication, however, that for children with a co-occurring anxiety disorder, behavioral intervention alone was as effective as both medication management and the combined treatment. It is also worth noting, however, that children with anxiety disorders who received medication only did not have a poorer response to medication than other children. Thus, these results contradict prior and less intensive studies in which it has been reported that children with AD/HD and an anxiety disorder do not do as well on stimulant medication.

How Well Were Treatment Recommendations Followed?

Acceptance/attendance was higher for the medication management treatment —78% of families completing treatment as intended—than in behavioral treatment—63%—or combined treatment—61%. Thus, almost 40% of families were unable and/or unwilling to fully take advantage of state-of-the-art behavioral treatment even when provided at *no charge*.

In terms of the impact of treatment adherence on child outcome, only the medication management group showed significant effects. Thus, for children who followed the recommended medication management procedure more closely, the outcomes were significantly better. For the behavioral and combined treatment conditions, in contrast, no differences in outcomes depending on treatment adherence were found.

Summary and Implications

Although the children in this study are no longer receiving their treatment as part of the study, they do continue to be followed. This will enable the researchers to examine the sustained impact of different treatments beyond the 14-month outcome data presented in this initial paper. It is certainly possible that results based on two- or three-year outcomes may look somewhat different from what was found after 14 months.

Also, it is important remember that in this study children with the inattentive subtype of AD/HD were specifically excluded. Hence, these results cannot be generalized to children with this subtype of AD/HD. And, treatments investigated in this study were limited to those with the greatest empirical support to date: medication and behavioral treatment. Additional comparably careful and well-conducted research on other treatment options is certainly needed.

What are some of the important conclusions to be drawn from the data presented so far and what do these results mean for parents and health care providers who are concerned about doing the best they can for their child and their patients?

For this particular population, medication alone is likely to be an effective and perhaps even sufficient treatment when care is taken to determine the optimal medication dose for each child and when the ongoing effectiveness of medication is carefully monitored. I am aware that many people may find this conclusion distasteful, but I think it is a reasonable one to draw from these data.

Children who received medication alone tended to do about as well as children who received the combined treatment. This was true even though the behavioral treatment provided in this study was far more intensive than would be routinely available in any community setting. I think it is reasonable to say that the behavioral treatment provided in the MTA setting could simply not be duplicated in any other context. This does not mean that

there is no place for behavioral treatment in the management of children with AD/HD (see below). However, it suggests that a reasonable approach may be to begin with carefully conducted medication trial to be certain of attaining maximum possible benefits from medication.

When this has been done, and important difficulties in a child's behavioral, academic, and/or social functioning remain, behavioral or other psychosocial interventions that specifically target these residual problems should be added. These interventions can make an *important* difference for an individual child, even though the benefits at a group level are apparently not so dramatic.

Combining behavioral treatment with medication management did enable children to be maintained on a somewhat lower dose of medication. While the significance of this difference is unclear, many parents and physicians may regard it as quite important. Thus, parents for whom maintaining their child on the minimum dose of medication required to yield optimum results is important, will seek to combine medication treatment with carefully executed behavioral interventions.

Behavioral intervention—when used in isolation—is likely to be less effective than medication management, harder for parents to implement, and more expensive. This suggests that behavioral treatment for many children may not be appropriate as the sole intervention, but helpful if carefully incorporated into a child's treatment to address problems not sufficiently helped by medication alone. How medication is prescribed makes a difference; parents need to insist that their child's physician have an objective procedure in place to determine the optimum medication or dose for their child, and to carefully monitor the ongoing effectiveness of medication treatment.

Children who received medication from the MTA staff did significantly better than children who received medication from community physicians. Although the reasons for this cannot be determined with certainty, it seems quite likely that this effect accounts to the care taken initially to determine the optimum dose for each child, and the careful vigilance and adjustment as needed. Parents need to insist that this be done. Physicians need to use more objective procedures for evaluating medication response on a routine basis. This is not hard to do but it does take time.

Some of the differences in medication treatment in the MTA group and the community care group can be ascertained.

1. Children treated by community physicians may be routinely undermedicated. Children treated with medication alone in the MTA study who did well on methylphenidate received an average of almost 38 mg/day in three separate doses. Children treated with methylphenidate in the community received an average of about 23 mg/day-a dose reduction of about 40%—spread over two doses per day. Even though children in the combined treatment group were on lower doses than in the medication-only group, they still received a substantially higher dose than the community-treated partici-

These data do not mean that every child should be on the average dose used in the MTA study. Some children do better on lower doses than others, and the best dose for each child needs to be determined by a careful trial. It is important to remember that the daily total dose and three administrations per day noted above was for methylphenidate and would certainly be different for other medications. For example, recent data suggests that Adderall—not used in this study because it was not available when the study was conducted—can produce benefits at least comparable to those of methylphenidate with fewer administrations per day.

2. Children treated by community physicians are often put on non-stimulant medications and/or combinations of unnecessary medications. Recall that virtually every MTA participant receiving medication was able to be managed effectively on either methyphenidate or the generic version of dexedrine. Very

few needed to be prescribed a different class of medication like an antidepressant and not a single child was prescribed a combination of meds, such as methylphenidate and clonidine. In contrast, over 10% of children treated by community physicians were on multiple medications and over 16% were treated with an antidepressant. What I conclude from these data is that stimulant medication prescribed with adequate care will eliminate all but a very few cases where another class of medication needs to be used, and almost all cases requiring multiple medications. What may often happen in the community is that physicians give up on stimulants before trying an adequate dose or alternative stimulants.

Instead, a switch is made to a different type of drug or a new drug is combined with the stimulants. This is problematic for several reasons. First, no other class of drugs has been shown to be as effective as stimulants for treating AD/HD. Second, despite the concerns on the parts of many about possible adverse consequences of stimulant medications, support for the long-term safety of these medications is greater than for the other medications that are often substituted or added.

If I were a parent of a child with AD/HD, I would ask many questions of my child's physician before I allowed a change to non-stimulant medication or multiple medications. Parents can ask, "Why don't we try a higher dose first?" "Why don't we test the effect of another type of stimulant first?" Moreover, providers of medication should consider these data carefully before recommending such a switch.



Commentary on MTA Review Kenneth Tellerman, M.D.

As a community-based pediatrician, I am in general agreement with the conclusions and advice outlined in the MTA review by Dr. Rabiner. I would like to add a few reflections.

In my practice, I see children with AD/HD across the spectrum from mild to severe. It is my experience that medication alone works well for the majority of these children. However, since AD/HD is by no means a homogeneous disorder, children will present with countless variations of behavioral, social and academic issues. It is imperative that interventions therefore be tailored to the individual needs of the child. Behavioral interventions, social skills groups, and educational tutoring can be lifelines for many children whose difficulties are not addressed by medication alone. The additional reality, however, is that these wraparound services are frequently costly, not always covered by insurance, and consequently unavailable to many families.

Regarding the use of stimulants, some of the conclusions of the MTA study have become outdated as clinicians have shifted to increasing use of long-acting medications. While medication dosing must be carefully monitored and increased when necessary, there is a tendency to hit a parental wall of resistance to increasing dosage, particularly when children begin to display side effects such as appetite loss, weight loss, and insomnia.

Last, successful use of medication relies on close feedback between clinician, parent, and school personnel. My experience has been that this feedback is not always forthcoming. Missed AD/HD follow-up appointments and difficulty getting teachers to fill out checklists are among chief reasons that children receive inadequate medication. In addition, those compleing checklists often fill them out inadequately, or omit important details, such as the time of day the child is being observed by the teacher.

What tips are helpful to parents?

- If your child is on medication, make certain to establish an ongoing dialogue with the prescribing clinician.
- Parents can be an active liaison between the teacher and clinician to ensure that all parties communicate and use checklists effectively.
- Teacher checklists should include subject and time of day the class is taught.
- In middle and high schools, it is often necessary to designate a central onsite professional such as the the school nurse, guidance counselor or psychologist to make sure checklists are appropriately distributed and returned.
- If medication alone is not effective, try to ascertain whether your child's difficulties are behavioral, social, or academic, and seek services selectively.

—Dr. Kenneth Tellerman is a developmental pediatrician in private practice in Baltimore City who serves on the Professional Advisory Board of CHADD of Greater Baltimore and the Governor's Task Force on AD/HD.

SPECIAL EDUCATION SOFTWARE

For students with learning or reading difficulties, our software will increase

reading speed and comprehension at any grade level.

- Kurzweil 3000 for reading
- textHELP! for writing
- · Inspiration for organizing

ideas

Promotes reading/learning at grade level

Is used locally and nationwide, at all levels—elementary, middle, senior and collegenvi—

William Stixrud and Associates

8720 Georgia Avenue, Suite 300 Silver Spring, Maryland 20910

Our tutoring service provides support for students with educational disabilities, such as learning disabilities, attention, and organizational weaknesses.

All tutors are college-educated and trained by Dr. Stixrud.

We recognize our students' strengths while meeting their educational needs.

For more information contact

Edward Strozier

301-565-0534, extension 279

Communication Disorder and Children with Psychiatric and Behavioral Disorders, by Diana Rogers-Adkinson and Penny Griffith (Editors).

This compilation covers known relationships between children's psychiatric and behavioral disorders and their ability to communicate effectively with others and with themselves. Although good documentation exists concerning the impact of psychiatric and behavioral problems on education and personal relationships, there is very little understanding of the potential for language ability to interact with emotional well being.

According to the American Speech-Language-Hearing Association, about ten percent of children and youth have some type of speech and/or language impairment. Most are identified in their early school years and receive interventions. Many such problems resolve with therapy, but an unknown number probably are reclassified as some form of Learning Disability in the middle school years. Among children who have behavioral or emotional diagnoses, 40% to 67% also have speech-language problems, many of which will not be diagnosed.

In 12 chapters, this book covers foundations for understanding the relevant issues, assessment practices, and implications for intervention and further research. For example, you will find coverage of the communication problems of aggressive children with poor social awareness who have difficulty making friends; differential diagnosis of AD/HD and Central Auditory Processing Disorder vs. Language Processing Disorder; intervention

issues for children with communication disorders, AD/HD, and oppositional tendencies; the role of caregivers; school-based intervention models; development of metacognitive and metalinguistic skills, including self-management, self-monitoring and self-talk. Written for professionals, this book would be a valuable resource for special educators, speechlanguage pathologists, psychologists, and others who work with children and adolescents for whom there are behavioral concerns, including attention and executive function.

ISBN 1-56593-746-5. Published by Singular Publishing Group, Inc.; available through www.Amazon.com for \$69.95.

Reviewed by Linda E. Spencer, Ph.D.

The AD/HD Autism Connection, by Diane M. Kennedy (Foreword by Temple Grandin, Ph.D.)

The author is the mother of three children with dual diagnoses of AD/HD and Autism. Her first son's difficulty learning in school initiated school testing, which disclosed a high IQ and symptoms of AD/HD. Although his attention improved with psychostimulant medications, he continued with delayed social and motor skills. Eventually, her other two sons were diagnosed with AD/HD, as well, but even with medications the boys continued to have additional problems including Oppositional Defiant Disorder, social isolation, inflexible resistance to change, and tactile hypersensitivity. Eventually, all

three of the authors sons as well as her husband were diagnosed with Asperger Syndrome, a specific subtype of high functioning Autism.

The author's premise is that Autism and AD/HD share many characteristics, making it very difficult to make an accurate differential diagnosis in many cases. Her view is that failure to recognize and appropriately diagnose the Asperger Syndrome resulted in lost opportunities for interventions at a young age that would have helped her sons develop social skills and cope with many of their problems.

From the her own experience and that of others with similar family profiles, she deals straightforwardly with the impact of AD/HD and Asperger Syndrome on careers, marriages, and rearing children. She reflects that most children diagnosed with Asperger Syndrome today have at least one parent who also has the disorder who did not have early intervention to improve their ability to relate emotionally.

This book can be useful to parents who are concerned by their children's bewildering behaviors, and for professionals to gain a parents-eye-view of the journey toward appropriate diagnoses and interventions.

ISBN 1-57856-498-0. Published by Waterbrook Press, Colorado Springs, CO, and available through www.Amazon.com. at a list price of \$14.99.

Reviewed by Linda E. Spencer, Ph.D.



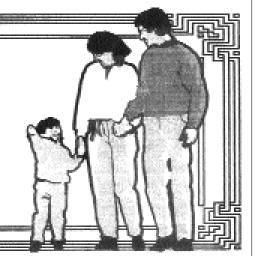
ATTORNEYS AT LAW

Special Education & Family Law

HELPING CHILDREN & FAMILIES WITH SPECIAL NEEDS

Ellen A. Callegary & Wayne D. Steedman

(410) 576-7606 (410) 576-0454 fax www.CallegarySteedman.com



Updates: Our Professional Advisory Board

New Additions to the Professional Advisory Boards

CHADD of Greater Baltimore is pleased to welcome the following new members to the Professional Advisory Board:

Claudette McDonald Brown, J.D. received her bachelor's degree from Boston University and the Juris Doctor Degree from the University of Maryland School of Law. A member of the Maryland and District of Columbia Bars, she has served as a judicial law clerk to the Hon. Alan M. Wilner of the Court of Appeals of Maryland, engaged in the private practice of Law, and served as Director of School House Legal Services, a statewide educational advocacy program for children. She is currently a Master in Chancery for the Circuit Court for Baltimore City and hears delinquency and child abuse and neglect cases.

Bonnie Compton, RN., CS., CPN.P., is a child and adolescent therapist and a Certified Pediatric Nurse Practitioner with a private practice, Parenting Partners, in Ellicott City. A graduate of the University of Maryland, she specializes in the evaluation and management of AD/HD, the behavioral and emotional problems of children, parenting skills, and family relations.

Karen Cruise, Ph.D., was formerly with the Kingsbury Center and the Children's National Medical Center. She holds a Ph.D. in child and family psychology from Michigan State University and is a former adjunct faculty member at Loyola College, Baltimore, and the George Washington University Medical School. Dr. Cruise is currently in private practice in Columbia and specializes in evaluations, therapy, and school consultations with a particular emphasis on learning disabilities and AD/HD.

Loyola College Opens New Center for Multidisciplinary Assessment

The Center for Multidisciplinary Assessment, part of the umbrella organization called Loyola Clinics, is a new facility housed at Belvedere Square in Baltimore. The Center provides comprehensive evaluations and consultation for children and adults in primary school up through college age who have been identified or are suspected of having learning or language disabilities or AD/HD.

Clients receive a combination of one-to-one neuropsychological, cognitive, language, and achievement testing enabling clinicians to create individualized profiles of each child's specific strengths and weaknesses. This information is then incorporated into an educational plan designed to help the student succeed, with consultation provided to the parents and schools. Assessment is scheduled over three days, and is priced far below other evaluating agencies, as Doctoral and graduate-level students from Loyola assist the faculty in these evaluations. To schedule a comprehensive evaluation, or for more information, call 410-617-2479.

Quality mental health care starts with an in-depth evaluation.



Northern County Psychiatric Associates Helping you achieve your goals

Carol Watkins, MD Glenn Brynes MD And Associates Offices in Monkton and Lutherville 410-329-2028

Visit our web site to download our publications on adult and child AD/HD http://www.baltimorepsych.com



The Attention Deficit Disorder Association

Proudly Presents
The Ninth Annual Conference

Connections 2003

May 2–4
Portsmouth, Virginia

Connect to Riveting Presenters All your favorite presenters have been invited to speak:Novotni, Latham,Quinn,Nadeu,Solden,Goldstein, Hartmann,plus many more.

Connect to a Relaxing Atmosphere You will feel welcomed and surrounded by new friends.

Connect to Reasonable Prices Your registration of \$245 entitles you to over 15 hours of presentations with the nation's foremost authorities on ADHD.

This is an ADDA Conference you won't want to miss.

For more information or to register go to our website at **www.add.org** or call us at **847-432-2332**.



CHADD IS GETTING TEED OFF!

On Monday, May 12, 2003, CHADD will sponsor its Third Annual Charity Golf Tournament.
Golfers will tee-up at Norbeck Country Club 17200 Cashell Road, Rockville, Maryland

Proceeds from the tournament will support the programs of CHADD, a nonprofit, tax-exempt IRS Section 501(c)(3) charitable organization that works to improve the lives of people affected by attention deficit/hyperactivity disorder, and participaffng CHADD Chapters. Volunteers to help during the day of the event are welcome and will

Walley Academy

A private secondary college preparatory school for students with learning



Patricia Utz Director of Admissions 301 W. Chesapeake Avenue



410~828~0620 (ext: 306) fax: 410~828~0438 email: utzp~valleyacademy.org

Testing, Testing, Testing!

-Vincent P. Culotta, Ph.D., and Sarah Weden, Psy.D., NeuroBehavioral Associates

When considering the possibility of an attention disorder, learning disability, or other behavioral health problem, people are often referred for testing of one type or another. Testing typically means the administration of measures to help further the diagnostic process, direct treatment, or measure response to an intervention.

The most common types of testing conducted by a psychologist include psychological, psychoeducational, and neuropsychological assessment, each with various strengths, limitations, and roles in assessing attention-deficit/hyperactivity disorder (AD/HD) and other behavioral health conditions. Many of these procedures are appropriate for adults as well as children, and can answer many questions about different types of skills that are important for social, educational and vocational functioning.

Psychological Testing

Psychological testing, administered by a doctoral trained psychologist, involves intelligence testing and measures that assess social, emotional, and behavioral functioning. While it may or may not include academic or achievement testing, psychological testing is general in scope compared to psychoeducational and neuropsychological testing.

Because the testing is based upon a "bio-psycho-social" model, the psychologist conducting it will review biological, psychological, and social factors that may contribute to an individual's symptoms or problems. Relevant biological factors include a family history of mood disorder, attention disorder, or learning disability, which are hereditable. Psychological issues may include coping mechanisms, personality style, frustration tolerance, flexibility, and insight.

An individual's functioning may be influenced by certain social factors, such the quality of family relationships or financial strain, or by more general stressors like terrorism or war. The psychologist who conducts the testing will use information from the patient's self-report, in the case of an adolescent or adult, or parent reports for a child, as well as the data from the formal tests themselves, to determine strengths and weaknesses.

Psychological testing may or may not be helpful in the diagnosis of AD/HD, depending upon the actual tests used. The most helpful psychological testing in addressing AD/HD are measures of executive functioning, behavioral checklists and a continuous performance test. Psychological testing may also be helpful in determining other problems that result from difficulties with attention and self-control. Psychological testing may require two to four hours and will likely cost approximately \$500–1000.

Psychoeducational Testing

Psychoeducational testing is administered by a clinical or school psychologist and focuses on the relationship between intelligence and educational achievement, and may not include a review of social or emotional functioning. In school systems, this kind of assessment is used to determine whether or not a child qualifies for special education programs or services.

Psychoeducational testing is often driven by what is referred to as a "discrepancy model," which compares the level of intellectual ability to the level of achievement to determine whether or not the child is learning at a rate consistent with his/her capabilities. While discrepancy scores have historically been used in determining eligibility for special educational services, more recent studies have suggested that discrepancy models are not reliable for detecting learning disorders.

Psychoeducational testing often does not address cognitive issues specific to AD/HD and will not provide adequate information to determine emotional, behavioral, or social problems that may be impeding a child's or adult's academic performance—for example, impulsivity or anxiety.

Psychoeducational testing may require two to four hours and costs approximately \$500 to \$1000.

Neuropsychological Testing

Neuropsychological assessments are provided by a neuropsychologist. Most neuropsychologists are doctoral-level clinical psychologists with additional training and supervision in the neurosciences.

Neuropsychological testing helps to identify brain-behavior relationships and are useful

in diagnosing suspected brain dysfunction and neurologically-based behavioral disorders. Based upon a "neurobehavioral" model, a neuropsychological assessment includes a comprehensive evaluation of intellect, achievement, executive functioning, attention, learning and memory, language skills, visual-spatial skills, motorcoordination, and behavioral/emotional/ social functioning. Elements of a neurobehavioral model include genetics, brain development and function, behavior, and the environment.

The neuropsychological assessment is particularly helpful with multiple problems or co-occurring symptoms. For example, a child or an adult with attentional difficulties may also have mood instability, learning and social difficulties. Neuropsychological testing aids in reaching a differential diagnosis and identifying the course, prognosis, and appropriate treatment of known neurobehavioral disorders. The limited number of neuropsychologists may make access to neuropsychological testing difficult. Neuropsychological testing may require four to eight hours and costs approximately \$1000 to \$2000.

Information obtained from testing may be useful to your physician in determining. appropriate medication. Testing may help in obtaining school services, rehabilitation services, or counseling services. Test results may identify strengths and weaknesses relevant to occupational and vocational goals.

Helpful Hints

Here are some suggestions that will help you get the most from testing:

- Make sure you know what questions you want the testing to answer. Ask the professional who has referred you, as well as the psychologist doing the testing, what type of information you should expect to receive and how it will help in making a diagnosis and arriving at decisions about intervention.
- Expect a written report you can understand. If you are unsure about how to interpret the results of the testing, or how to implement the recommendations, be sure to ask the psychologist to arrange a separate appointment after the evaluation has been

completed so that you can ask questions and receive additional information.

- · Make sure the results are valid and reliable—that they truly have measured the behavior that was being tested. For example, if you or your child forgets to take the medication that you usually use to improve attention, the results of the testing may not describe how you work or learn under more typical learning conditions, and the test results would not be viewed as valid. "Reliable" means that if you had the same test administered at another time or by an equally well qualified tester, approximately the same results would be obtained. Obviously, if the test results are valid, they also are reliable, but the reverse is not always true.
- Ask your psychologist if medications for attention should be taken prior to testing because, as discussed above, making the wrong assumption could compromise the validity of the testing.
- •If a child is to be tested, make sure that the practitioner has training and experience with children.

- Investigate your insurance company and the terms of your own insurance policy to determine if testing services are covered. Ask whether the psychologist is able to bill your insurance directly, or whether you will be provided with instructions for completing the claim yourself.
- Expect confidentiality and control over your written report. If you need to share the results of your evaluation with others who are working with you or with your child, you will be given an opportunity to sign a form called a "Release of Information," where you will indicate who can receive a copy of the report or even a telephone call or e-mail. Because the exchange of information about a patient without his or her knowledge and consent is a very serious breech of professional ethics, providing written authorization for members of your professional team to confer with each other is very important.
- Do not expect to be given test protocols, the printed forms that the psychologist uses to record responses to the individual items on the test. Tests require extensive sampling

- to develop norms; the tests, including the associated response forms, are copyright protected.
- Make sure your psychologist uses the most current test version. Tests typically are updated from time to time in order to conform to new information about the skills and abilities being tested. Different versions of the same test will be similar in many ways, but may not be directly comparable in every respect. When comparing more recent test results to previous testing, it is wise to determine whether the same versions of the test were used at each administration.

In the table below, you will find lists of tests that typically are used in psychological, psychoeducational or neuropsychological evaluations. All are considered "formal" tests, meaning that they are administered under specific conditions using specific materials, and that the items on these instruments have been tested on a large number of individuals. They are considered valid for the measurement of specific skills and abilities, as long as they are administered according to the specified criteria.

IQ Measures

Differential Ability Scales
Kaufman Brief Intelligence Test
Wechsler Adult Intelligence Scale, Third Ed.
Wechsler Intelligence Scale for Children,
Third Ed.

Standford-Binet Intelligence Scales, Fifth Ed. Test of Nonverbal Intelligence, Third Ed.

Achievement Measures

Gates-MacGinitie Reading Tests

Gray Oral Reading Tests, Third Ed.

KeyMath Revised

Nelson-Denny Reading Test, Forms G and H

Wechsler Individual Achievement Test, Second Ed.

Wide Range Achievement Test, Third

Woodcock-Johnson Tests of Achievement, Third Ed.



Common Assessment Measures

Personality Measures

Beck Anxiety Inventory

Beck Depression Inventory-II

Child Behavior Checklists

Children's Depression Inventory

House-Tree-Person Test

Kinetic Family Drawing

Minnesota Multiphasic Personality Inventory, Adolescent

Minnesota Multiphasic Personality Inventory, II

Personality Assessment Inventory,

Revised Children's Manifest Anxiety Scale

Roberts Apperception Test

Rorschach Inkblot Test

Sentence Completion Test

Thematic Apperception Test

Neurocognitive Measures

Boston Naming Test

California Verbal Learning Test, Children's version

California Verbal Learning Test, Second Ed.

Category Fluency Test

Clock Drawing Test

Controlled Oral Association Test

Developmental Test of Visual-Motor Integration

Halstead-Reitan Neurological Test Battery

Intermediate Visual Auditory Continuous Performance Test

Judgment of Line Orientation

Kaufman Assessment Battery for Children

NEPSY: A Development Neuropsychological Assessment

Rey Complex Figure Test

Stroop Color and Word Test of Variables of Attention

Wechsler Memory Scale, Third Ed.

Wide Range Assessment of Memory and Learning

Wisconsin Card Sorting Test

Dr. Culotta is a neuropsychologist in practice in Columbia, MD. He has made presentations to CHADD on topics related to the neurological bases of AD/HD. **Dr. Weden** is a recent graduate of Nova Southeastern University and currently practices with Dr. Culotta at NeuroBehavioral Associates in Columbia.

ADD Mom

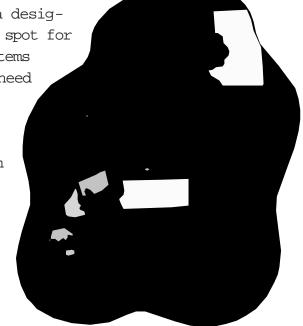
-Patricia Quinn, MD.

Parenting can be overwhelming-probably because of the tremendous amount of energy, organization, and emotional stamina it takes to get through each day. This picture can be even more complicated if Mom also has to battle her own: ADD symptoms. These can burden an already hectic schedule and make any day seem more frenzied. In this issue, I address the rush that takes place each morning to get everyone out the door.

- Ask for help! Have a family meeting and clearly delineate who will oversee the various steps involved in getting out of the house in the morning. For example, Dad will supervise dressing and brushing teeth and Mom will be responsible for breakfast and carpool. For single moms, clearly establish what role the kids have each morning.
- Write up a morning schedule. Post it where all can see. Use pictures for the younger kids so they will know what is their responsibility. By referring to the schedule all can remain organized and see what needs to be done next.
- Practice how long it takes to complete each task. Be creative! Use a timer to move things along, if necessary. One family recorded their morning schedule on tape with various songs as accompaniment. They knew that if "When Irish Eyes are Smiling'' was playing they should all be down to breakfast.
- · Store all breakfast items in the same drawer or kitchen cabinet-bread, cereals, pancake syrup, granola bars' coffee, sugar, tea bags, mugs, bowls, etc. Keep a large bowl of fresh fruit

- on the table. Make pancakes or rolls the right before and store in the refrigerator. These can be easily reheated in the microwave the next morning.
- Do as much as you can the night before. Make lunches, check bookbags, and make sure everything is packed. Choose the clothes that you and the children will wear the next day. Make sure that they are clean, mended, and that no buttons are missing. Know where both shoes are located. Taking a bath or shower the night before can also save time in the morning.

• Have a designated spot for all items that need to be taken with you in the



Grandparents and AD/HD

Grandparents have always played an important role in the life of a child or adolescent. When a child's parents work outside the home, a grandparent may be the daytime caregiver. In some cases, when a parent is unable to care for a child, a grandparent functions as a parent. Some grandparents live far away from their grandchildren, and may only see them a few times each year. In all these situations, a grandparent has a special meaning to a child and can influence the child's self-esteem.

When grandparents learn that a grandchild has been diagnosed with AD/HD, they may not know what to do or say. First, they should educate themselves about the different types of AD/HD, sometimes also called attention deficit disorder or ADD. AD/HD has three basic features. These are:

Inattention, distractibility, daydreaming or "spacing out" Physical hyperactivity, fidgetiness, constant motion,

often switching tasks

Impulsivity, acting without thinking, and often later regretting it.

Children with Inattentive AD/HD have trouble paying attention but may not show the physical hyperactivity or the impulsivity. This type is more common in girls. Combined AD/HD involves inattention along with hyperactivity and/or impulsivity. This is the classic but not exclusively "boy type" AD/HD. These children can be creative and charming, but may require more of parents' time and effort than other children.

AD/HD is not "bad behavior," but rather a physical problem that is often inherited. Sometimes children "outgrow" or learn to manage the symptoms of AD/HD as they grow up. But in many—if not most—cases the condition persists into adult life. When children are diagnosed with AD/HD, it is not uncommon for their parents to recognize that they too have or had similar problems. Even grandparents may make similar discoveries. It helps to recognize this since symptoms of AD/HD are quite often treatable in adults.

Family support is important during and after the time of the initial diagnosis. Parents may feel defensive and inadequate. They may compare themselves unfavorably to their own parents or inlaws. The nuclear family—parents and child—may experience even innocent remarks as judgements and react by withdrawing.

While extended family can be an important source of support, it can also be a source of tension. Grandparents and others may base their opinions on inaccurate or biased information from the popular press. Previous generations attached a greater stigma with mental illness and behavior disorders. If someone perceives AD/HD as shameful, he or she doesn't want to think it could appear in their family. If there were already conflicts in the extended family, the AD/HD child may serve as the focal point for these simmering conflicts. Grandparents should not spank this child or tell the parents to do so. One should take special care to avoid such punishment in AD/HD children when they act impulsively. This sends a message to the child that hitting or violence can be used to resolve conflicts. Even if gentler methods seem to take longer, they provide the child with a better model of how to resolve disagreements.

Sometimes, grandparents may see the signs of AD/HD before parents notice them. The grandparent should not make a diagnosis on his or her own. Approaching the subject tactfully, one might suggest discussion of the matter with the child's pediatrician or teacher. It helps to reassure parents that this suggestion is not a judgement about their parenting. In other cases, it may be

—Carol Watkins, M.D. and Glenn Brynes, Ph.D., M.D.

prudent to wait and let the parents figure it out for themselves. Childproofing may become an issue when the hyperactive AD/HD child visits grandparents. They may display valuable breakable objects on open shelves, or have moved into a smaller home without a place for children to run and play. This can present both parents and grandparents with a dilemma. The parents may feel on edge during the whole visit. They may feel the need to follow the child everywhere to make sure that nothing is broken. They may feel defensive about the child's behavior even if the grandparent says nothing. The grandparents may be puzzled or offended by the child's impulsive behavior and the parent's anxiety.

Parents can have a more relaxing visit if they do not have to constantly worry about something being broken. There is some simple childproofing that can be done in anticipation of the active child's visit. Valuable and breakable things can be temporarily moved, or the rooms with breakables can be closed or gated off. If the grandparents have the space, a spare room can be set aside for the children. It can contain old worn furniture, children's books and some durable, safe toys. If there is a yard, most of the visit can be spent outside. If none of these options is available, the family can go to a park. Going on a walk can help a child discharge enough energy to permit conversation. Though television and videos will frequently hold even a very hyperactive child's attention, they will also cut down on communication between the child and grandparents. The child might teach the grandparent how to play an interactive video or computer game.

When a child is having behavioral problems, misunderstandings and defensiveness are common. Avoid comments such as "None of my children did that," or "It would go away if you disciplined them more." In the past, many children with AD/HD went undiagnosed. Some of their parents instinctively came up with their own structured behavior plans. The trick is to bring this up without being perceived as intrusive or judgmental. A grandparent might say, "You know, your husband was like that when he was a boy. He was a great kid, but sometimes it was tough. I know things are different today, and you have to figure out your own way to do things. If you ever want to know how we handled it, let me know."

Grandparents can fill an important psychological role in a child's development. Children tend to perceive a grandparent's acceptance as unconditional. In some cases, grandparents can be a source of advice and comfort for the parents. A child with AD/HD may sometimes have more than the usual amount of conflict with his or her parents. He or she may feel different from his or her peers. In such situations, grandparents can provide a loving time of respite and understanding for the child. During adolescence, a child who pulls away from parents may still maintain closeness to grandparents.

Ultimately what is most important for both parents and grand-parents is to instill in the child a positive self-image and an attitude of responsibility and mastery. The entire family including the child should be encouraged to learn all they can about AD/HD. With appropriate help, children can learn how to manage their own symptoms better. Even with a physical condition like AD/HD, it is the child's responsibility to learn as best he or she can to "fit in" to the world.

Carol Watson and Glenn Brynes, husband and wife, are psychiatrists who practice in Baltimore County.

Internet Resources

Here are some internet resources that we have gleaned from a varrety of sources, focusing on those that come from credible sources that offer useful information. Readers who have come across other resources are invited to share them with us for future publication.

The following citations are from The ASHA Leader, a publication of the American Speech-Language Hearing Association, and are used with the permission of ASHA, as well as the author of the internet column, Judith Kuster.

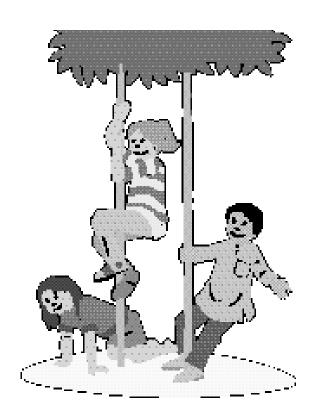
- www.emedicine.com—This site is available to physicians, health professionals, and the general public. "The most exciting part of eMedicine is what is freely available from the Patient Education Center (www.emedicine.com/ splash/patient/pub.) This clinical knowledge base has been built by approximately 10,000 primarily physician authors and covers 7,000 diseases and disorders. The information is current and peer reviewed." Information of potential interest to HyperTalk readers includes:
- Pervasive Developmental Disorder, Autism—www.emedicine.com/ped/topicl80.htm
- Anxiety Disorder: Social Phobia and Selective Mutism www.emedicine.com/ped/topic2660.htm
- Communication Disorders—www.emedicine.com/pmr/topic 153.htm
- www.dontlaugh.org—This part of the Operation Respect project, the goal of which is to eliminate bullying in the schools, was begun by Peter Yarrow of folk group Peter, Paul, and Mary. Three curricula are available that contain assistance for classroom teachers or others trying to reduce bullying.

Other Resources:

New Horizons for Learning, in existence since 1980, has
educational change as one of its goals. They are supported by
numerous foundations, individual contributors, and subscribers to their journal. Topics on their home page include:
News from the Neurosciences, Transforming Education,
Teaching and Learning Strategies, Special Needs/Inclusion,
Lifelong Learning, and Student Voices. Subscribe at—
http://www.newhorizons.org.

- Bridges4kidsnewsdigest—Published in Michigan, this site covers news related to education and disability issues, legal issues including IDEA, and upcoming presentations. They email their news digest to subscribers periodically. Subscribe at—http://www. Bridges4kidsnewsdigest-subscribe~topica.email-publisher.com.
- The Special Ed Advocate is a free online newsletter about special education legal and advocacy issues, cases, tactics and strategy, and internet resources. Subscribers receive "alerts" about new cases, events, and special offers on Wrightslaw books. The principals are Pete and Pam Wright, nationally recognized attorneys and advocates for the rights of children. Pete was diagnosed with Learning Disability in high school, yet went on to academic and professional success.

The December 10 issue of the *Advocate* featured tips for visiting your child's school and advice on writing effective letters to school. A previous issue contains a lengthy document, "Tests and Measurements for the Parent, Teacher, Advocate & Attorney," containing everything needed to interpret standardized tests appropriately. Subscribe at—http://www.wrightslaw.com/subscribe.htm.



My picks for AD/HD sites

—Kerch McConlogue, c.c.c.p.

Reprinted with permission from the Summer and Fall issues of *FOCUS*, the newsletter of ADDA, the Attention Deficit Disorder Association.

National Institute of Mental Health (www.nimh.gov/pubticat/ad/hd.cfm) This site maintained by NIMH (National Institute of Mental Health) contains the full text of NIH Publication No.963572—pretty much everything you ever wanted to know about the basic straight scoop on AD/HD. As expected, the links in the first panel of the site work like an automated table of contents, directing jumps to identified sections in the text. However, like a book, the whole of the information is published in one great long line, so you can just start reading at the beginning and get to the end.

If you click on "Print Version" under the logo of NIMH you will get complete instructions on how to download the file and read it from your own computer. Downloading pdf files which are using Adobe Acrobat Reader is perhaps the safest way to retrieve information from the web.

ADDitude Magazine (www.additudemag.com) is an independent national magazine for people with AD/HD. Their web site says they are committed to being the number-one source for AD/HD consumer and services information. And they do a pretty good job of holding onto that mission.

In the links under the main title of the site, the Community destination has a list of forums, or bulletin boards, where the general public can ask questions and offer advice based on their own experience. The content is moderated by magazine personnel; that means they can edit, delete or prune any posts in their forums. It is a little like censorship, but it keeps the conversations civil and the information accurate. (As of this writing, the forums seem to be invisible to visitors using Netscape as a browser.)

Near the bottom of the list of forum titles, there is a section especially for adults with AD/HD. You can browse through the emails posted there by subheading within the topic. To search for a specific topic in the forums, use the Search link under Additude Forums because the link at the top of the screen seems to search everything on the she BUT the forums. Also under the main page title, check out the Ask The Experts link. While most of the articles seem to be geared to parents and kids, there is plenty of stuff there for adults, too.

Using the navigation panel on the left side of the screen, (It begins with Subscribe, Special Order, etc.) click on "Ourselves." The destination "Adult ADDitude" has links to articles specifically for adults. The June 1 page lists articles on "Communication Skills" and "Your Career and Making it Past the First Date."

North County Psychiatric Associates, Baltimore Maryland

(www.nenamd.com/index. html) is a user friendly site with complete information on a wide variety of mental health issues. The information specific to AD/HD is particularly comprehensive. There is an easy-to-use Search Our Site Box. Navigation bars down the left are clear and simple to figure out.

The ADDvance website (www.addvance.com) created in 1996 by Patricia Quinn, M.D. and Kathleen Nadeau, Ph.D., leaders in the field of AD/HD, is dedicated to improving the lives of women and girls with AD/HD. This site is one to check for information especially about that group. The navigation on this site is easy and dear. The resources link takes the vistor to a list of articles, web casts (video on demand of appearances by Drs. Quinn and Nadeau), and other selected links.

"Add in the Workplace: Juggling the Dual Responsibilties of Home and Work" addresses issues that women face when working outside the home. But the artide called "Using a Day Planner as a Life Planner" has information on skills valuable to all adults.

Tuning Your Surfing Skills

So we don't have to explain the words each time, here are a couple of common terms:

The Link Label (sometimes just Label and sometimes only Link) is the part of web page that invites you to "click here." This can be a underlined specifically colored word or phrase, or it could be a graphic. When you move your cursor over either of these, the pointer usually changes from an arrow to a little hand.

The Destination shows on your screen after you click the Label. The Destination is sometimes referred to as "where you go" after you click a link.

Navigation Labels are those that are used to maneuver around the website.

Navigation panels, list of links, can be anywhere on the screen. The best sites have a consistent navigational system to make finding information easiest.

Web addresses or URLs will be shown beginning with the www part of the address, the http://" title part generally not necessary to actually type in by hand. Internet Explorer, Netscape and AOL all use this convention. Make better use of search engines.

Ever notice when you use a search engine, you find lots of sites consistently unrelated to what you are looking for? You search for a personal coach and find a basketball coach who works personally with start? Next time try this: Put quotes around terms that must be found in a certain order, like this: "personal coach." Then, to find a string of terms all on the same page, put a plus sign (+) before terms that must be in the results and minus sign (-) before terms that do not need to be included. So +"personal coach"-basketball (notice no spaces after the sign and before the words) will return personal football coaches, but the list will be shorter. Perhaps try –sport to shorten it.

Fostering Social Skills in Children with AD/HD

—Joyce Cooper-Kahn, Ph.D.

Jake is a bright, exuberant eight-year-old boy with AD/HD. Each week, as he enters my office he greets me with a wide grin and a stream of excited chatter about whatever is at the front of his mind. Last week he was bubbling over with information about the Yugiyo cards he had brought with him. The week before, it was a video game that he wanted to tell me about. I always enjoy my time with Jake, even as I work to structure the conversation and to help him to shift his attention to other topics. His peers, however, are not very understanding of his non-stop talking and excitability. In fact, he has few companions at school and seems confused that the other kids do not want to play with him.

Why do so many children with AD/HD have difficulties with peers? If we think about the behaviors which define the syndrome of AD/HD, it is easy to see how the child's social world could be affected. The primary symptoms of AD/HD—inattention, distractibility, impulsiveness, difficulties with self-monitoring and self-regulation—affect a child's social interactions, just as surely as they affect school performance.

David Guevremont, Ph.D., has researched and written extensively about the kinds of behaviors that lead to peer rejection and isolation among children with AD/HD. Dr. Guevremont underscores the importance of distinguishing between a true social development disorder and the more common scenario of the youngster whose AD/HD is expressed in a social context. Often peer problems are directly related to the AD/HD, itself. As he points out, if you take away the AD/HD, you eliminate the peer problems.

Of course, we can't take away the AD/HD, much as we wish we could. So, how can we help them? Much of my thinking about helping youngsters with AD/HD to build more successful social skills was sparked by an article by Guevremont which appeared in *CHADDer* magazine in 1992. This article summarizes and provides my own perspective on his main points.

Modifying Specific Behaviors

In order to help your child to be more successful socially, you must first identify the specific behaviors which get in the way of smooth social interaction. Observe your child with other children in your home, neighborhood, or team activities and observe their interactions within the family. Using for a guideline Guevremont's list of behaviors, make up a list of the positive social behaviors and negative social behaviors that your child exhibits. Remember to praise your child for the positive social behaviors that you want to encourage. To address the negative behaviors, follow the general plan below.

Choose one or two very specific behaviors to work on. Be careful not to go after everything at once. (Remember, whenever you are focussing on a particular area of deficit, you must

be careful to double your efforts to look for positive social behaviors and praise those. Sometimes we get so focussed on stamping out a problem behavior that we do more damage than good, despite our intentions.)

Define behavioral goals by flipping the negative behaviors into their positive alternative. For example, Jake's parents identified excessive talking as a major problem and flipped that into a positive behavioral goal that they defined as "listening as much as talking." So, they taught Jake to use a simple greeting followed by a brief comment which prompted the other person to talk. ("Hi, Alan. That's a great Lego set. Where did you get it?") Provide very specific skills training by modeling the appropriate behavior, having your child rehearse the positive behavior, and/or role-playing the correct behaviors.

Once you've taught the skills, you should look for opportunities for your child to practice and be sure to prompt the desired behavior ("Remember, you're going in to Aunt Sue's birthday party and there will already be people there. What are you going to do when you walk in?") Praise occurrences of the behavior and provide kudos for attempts to do things differently. When you see good models of the appropriate behavior, gently point this out.

Watch your tone, because an accusatory tone will undo all the good you are trying to do. Your tone and words should convey the true spirit of teaching. ("Wow! Did you notice that smooth move?" Not "Why can't you come into a room quietly like your brother does?")

Guevremont has identified several other ways that parents can help a child to build social connections. These include efforts to arrange positive peer contacts at home and in the community.

Arrange Positive Peer Contacts at Home

If there is a child who shows an interest in playing with your child, or who seems to have the potential for friendship, then you can arrange a structured contact in your home. Your child's teacher may be able to help you to identify some potential friends. Sometimes children are so used to rejection that they fail to notice the kids who are not rejecting them. Ask the teacher if there are any children whose interactions with your child seem to be mostly positive. Remember, involvement with younger children is better than no friends at all, so don't shy away from a child who is a year or two younger. When you first invite a potential friend over to the house, plan a structured activity (e.g. rent a movie, go bowling). Structure an ending time and make the visit relatively brief. It is far better to leave the children wanting more contact than to wait until they are tired of each other. Stay nearby so that you have an opportunity to prompt your child if needed. If you do need to prompt your child, don't embarrass him or her by doing it in front of their peer. Use some pretense to call your child out of the room and then keep your prompt positive and brief.

Arrange Positive Peer Contacts in the Community

Another way to expose kids to positive peer interactions is in community groups. Determine whether your child works better in small or large groups and proceed accordingly. Examples of small group activities might be swimming or gymnastics classes, art lessons, a hands-on science class, or a sports clinic rather than a team. Look for activities that include close adult supervision and are structured.

Sports teams are great for athletically talented kids who can raise their social status by their performance. However, for some kids, the attention to complex rules, the need for coordinated team work, the amount of down time and the competitive nature of the activity are disastrous.

Create an activity, if you need to. Invite one or two kids over and have them make cookies together and let them divide up the work and then share the cookies. Or plan an activity with a few families in the neighborhood, such as working together to make a meal for a homeless shelter.

Ask the teacher to join your team

If the teacher has a good relationship with your child, ask him/her to help. Develop a simple behavior monitoring system which builds in rewards at home for positive social behaviors. Enlist the teacher's help on the behaviors you have identified at home.

Peer attitude is greatly affected by the attitude conveyed by the teacher. Children who are frequent recipients of negative interactions within the classroom tend to be rejected by the other children. Efforts should be made to keep corrective feedback as private as possible.

Encourage the teacher to enhance your child's social status in the classroom by assigning a leadership role whenever possible. Perhaps your child could have an opportunity to be a special helper from time to time.

Set Reasonable Goals

Not every child is a social butterfly. Remember that there is a difference between being popular and having friends. Popularity refers to how well someone is liked by the peer group as a whole. Friendship involves having a special relationship with someone. Many AD/HD children are not very popular, yet they do have friends. Having friends, even just one or two friends, serves as a buffer against isolation and adds to a person's wellspring of resilience. Having a friend greatly improves the quality of children's lives, whether or not they are popular with the larger peer group as a whole.

Helping a child to become more socially competent is a slow, painstaking process. It requires perseverence, creativity and patience. The good news is that with maturation and your active, positive input you can expect improvements to happen. The payoff is in your child's smile!

Behaviors that make it difficult for children with AD/HD to socialize and make friends:

High Rate, Intrusive Behaviors

Excessive talking

Disruptive behavior

Dominating activities

Noisy interactions

Obnoxious behavior

Monopolizing discussions

Deficient Communication Skills

Limited turn-taking in conversations

Less responsive to others' initiations

Likely to ignore peers' questions

Problems shifting roles between giving

and receiving information

Inappropriate and/or disagreeable verbal exchanges

Difficulty remaining on task or on the same topic

Poor eye contact and motor regulation

Biased or Deficient Social Cognitive Skills

Limited self-awareness

Less knowledgeable about appropriate behavior

Deficient in social problem-solving

Overattribute hostility to actions of others toward them

Inattentive to important social cues

Poor Emotional Regulation

Aggressive behavior

Temper outbursts

Excitability

Overreaction to minor events

Poor at moving from one activity to another

Adapted from D. C. Guevremont, "The Parents' Role in Helping the AD/HD Child with Peer Relationships", *CHADDer*, Fall/Winter, 1992, p. 17-39.



What Is Different About the Wiring of the Brain in AD/HD?

One thing that anyone with AD/HD might wonder is, "What is wrong with the wiring that causes me alt the problems associated with AD/HD?" Let us say up front that we do not think that having AD/HD means that there is anything wrong with the wiring of the brain just that it is different. In AD/HD the brain leaps to the most interesting thing—not necessarily the teacher in the classroom, but the dogs fighting on the lawn outside; not necessarily the business meeting you are attending but to the date you have for Saturday night.

But in these busy times, having your mind leap to the most interesting thing can cause problems. The student needs to concentrate on his term paper, the businesswoman on the meeting, the homemaker on all the tasks that need to be accomplished before the kids get home from school. So, back to the original question - what is different about the brain's wiring that causes someone to leap to the most interesting things and ignore the humdrum realities of everyday life?

First, let us say that not all people with AD/HD have the same wiring differences. We know, for example5 that some people have the attentional problems without the hyperactivity and vice versa. So' even in the simple differences in how AD/HD presents we can see that wiring problems may differ from one AD/HD person to another. But what do we know about some of the many possible causes that can lead to AD/HD?

Three brain areas seem to be involved in AD/HD: the frontal lobes, the basal ganglia and the cerebellum. Not to get to technical, the frontal lobes (often called the CEO or executive of the brain) are involved in such things as prioritizing, organizing

and strategizing and in the inhibition of impulses - all skills that may be compromised in AD/HD. The basal ganglia (the secretaries to the executive) help decide what information goes up to the CLO for decisionmaking. Once the decision is made, they help carry it out in an organized manner. Finally, the cerebellum, once thought to be involved almost exclusively in co-ordination of the muscles, is now known to co ordinate intellectual, emotional and social activity as well. Like the conductor of an orchestra, if the cerebellum is not working properly, it may result in the other instruments playing out of synch. That could cause the kind of scatter and disorganization experienced by people with AD/HD.

But all these brain regions communicate with each other through nerve messengers or neurotransmitters, by which nerve cells talk to each other by stimulating receptors on neighboring nerve cells. Important neurotransmitters include dopamine and norepinephrine and most medications used to treat AD/HD affect these neurotransmitters. A research study being conducted by one of us involves the medication Wellbutrin or bupropion, which is one of drugs that affects these neurotransmitters.

Genetic studies of families of some AD/HD patients have found differences in the nature of the receptors or reuptake proteins involved in dopamine transmission, suggesting an underlying basis for miscommunication between nerve cells. The medications used in AD/HD may correct these problems with nerve signaling, but we must acknowledge that at this time, we don't understand nearly as much as we would like to about exactly how they produce their effects.

AD/HD Specialist

Carol Ann Robbins, Ph.D.

Licensed Clinical Psychologist

Diagnosis and treatment of children, adolescents, and adults with Attention Deficit Disorder, including addressing the associated academic, workplace, relational, and emotional challenges. Coordination of care with physicians, schools, coaches, tutors, and neuropsychologists.

- · Clinical evaluation and diagnosis
- · Individual marital, and group therapy
- Behavioral management/parent training
- · Compensatory strategies/organizational skills
- Workplace issues/accommodations
 - · Vocational guidance/testing
 - · ADD life management skills
 - · College preparation and selection

Brain Size Differences in AD/HD Not Caused by Medications

A ten-year study by National Institute of Mental Health (NIMH) scientists has found that brains of children and adolescents with Attention Deficit/Hyperactivity Disorder (AD/HD) are three to four percent smaller than those of children who don't have the disorder—and that medication treatment is not the cause. Indeed, in this first major study to scan previously never-medicated patients, they found "strikingly smaller" white matter volumes in children who had not taken stimulant drugs. Still, the course of brain development in the AD/HD patients paralleled that of normal subjects, suggesting that whatever caused the disorder happened earlier.

Drs. Xavier Castellanos, Judith Rapoport, NIMH Child Psychiatry Branch, and colleagues, report on their magnetic resonance imaging (MRI) study of 152 boys and girls with AD/HD in the October 9, 2002 Journal of the American Medical Association

Affecting three to five percent of school-age children, AD/HD is characterized by over-activity, distractibility, and impulsiveness. The disorder affects two to three times as many boys as girls, with as many as twenty percent of boys taking stimulant medication in some school systems. The new study strengthens the validity of the diagnosis by helping to put to rest criticism that structural brain abnormalities seen in AD/HD might be drug-induced. "There is no evidence that medication harms the brain," said Castellanos, who conducted the study at NIMH before joining New York University. "It's possible that medication may promote brain maturation."

Launched in I991, the study used MRI to scan 89 male and 63 female patients ages 5-18 with AD/HD, and 139 age- and gender-matched controls, children and adolescents without AD/HD. Most patients were scanned at least twice, and some up to four times over the decade.

As a group, AD/HD patients showed three to four percent smaller brain volumes, in all regions. The more severe a patient's AD/HD symptoms—as rated by parents and clinicians—the smaller were their frontal lobes, temporal gray matter, caudate nucleus, and cerebellum.

While medicated patients' white matter volume did not differ from that of controls, white matter volume was abnormally small in 49 never-medicated patients scanned. These results held up even after the researchers controlled for the fact that the unmedicated children tended to be younger.

Fibers that establish neurons' long-distance connections between brain regions, white matter normally thickens as a child grows older and represents one gauge of the brain's maturation. A layer of insulation called myelin progressively envelops these nerve fibers, making them more efficient, just like insulation on electric wires improves their conductivity. "Children with AD/HD are often described as less mature than

-National Institutes of Mental Health Child Psychiatry Branch

their peers and this may relate to delays in white matter maturation," explained Castellanos. "While we do not yet know if medication can accelerate white matter growth, we do know that treating children with medication helps their behavior while they're taking the drugs. There is no evidence that it helps after they stop." Animal studies will be required to determine the impact of medication on brain maturation, he added.

In the current study, AD/HD patients' developmental trajectories for nearly all brain regions paralleled growth curves for controls, but on a slightly lower track. "Fundamental developmental processes active during late childhood and adolescence are essentially healthy in AD/HD," say the researchers. "Symptoms appear to reflect fixed earlier neurobiological insults or abnormalities." Evidence suggests that AD/HD runs in families and may have genetic roots.

As might be expected with hyperactive subjects, the investigators had to discard 50 of 594 total scans due to blurring by motion in the scanner. Volumes of various brain structures and tissue were measured and analyzed by an automated system incorporating more than 100 networked computer workstations, developed in collaboration with researchers at the Montreal Neurological Institute (MNI).

While the NIMH group had earlier thought that only certain brain structures were smaller in AD/HD, this largest and most sophisticated study found that the whole brain is affected. It's possible that a recently discovered gene that determines brain size could play a role in the disorder, Castellanos suggested. He also suspects that what is now called AD/HD may ultimately prove to be a group of disorders with different causes. To identify these subtypes, he suggests that the field begin studying "endophenotypes," factors that may predict the risk of AD/HD in the same way that cholesterol predicts the risk of heart disease.

"MRI remains a research tool and cannot be used to diagnose AD/HD in any given child, due to normal genetic variation in brain structure," noted Rapoport. "The measured influence of AD/HD on brain volume can be discerned statistically only across groups of children with and without the disorder.

Also participating in the research were: Drs. Patti Lee, Deanna Greenstein, Liv Clasen, Regina James, Jay Giedd, and Wendy Sharp, Christen Ebens, Jonathan Blumenthal, James Walter, NIMH Child Psychiatry Branch; Dr. Neal Jeffries, National Institute of Neurological Disorders and Stroke (NINDS); Drs. Alex Zijdenbos, Alan Evans, MNI, McGill University.

NIMH and NINDS are part of the NIH, the Federal Government's primary agency for biomedical and behavioral research. NIH is part of the U.S. Department of Health and Human Services.

Research Subjects Needed

MRI study of brain development in children with AD/HD

The Department of Developmental Cognitive Neurology at Kennedy Krieger Institute invites your family's participation in a study of brain development in children ages 8 through 12 with AD/HD. Studies suggest that differences in brain development may contribute to behavioral and school difficulties. Valuable ways in which we acquire comprehensive information about developing brains include neuropsychological testing and magnetic resonance imaging (MRI).

By measuring the specific regions of the brain throught to be involved in regulation of impulsive, hyperactive, and off-task behavior, we can use the information provided by MRI scan to understand the ways in which differences in brain development contribute to the behavioral and school difficulties we see in children with AD/HD.

Children who participate in the study will receive an MRI and a neuropsychological test battery that includes tests of intellectual functioning, attention, and motor control, free of charge. The study is divided into two parts which take place on separate days. You and

your child's participation on the first day will take several hours; on the second day, four to five hours.

Each child participating in the study will receive a gift certificate to an Orioles game and a picture of his or her brain. Families will receive a written report of the test's results. No radiation in involved in the MRI.

Please contact Dr. Stewart Mostofsky at 410-502-8482 to participate.

Adults with AD/HD

Dr. Norman Rosenthal, a local psychiatrist and author, is seeking adults with AD/HD for a clinical trial of a new once-a-day medication. In order to qualify for the study, subjects should be:

- Between 18 and 60 years old
- Have AD/HD (either diagnosed or suspected)
- · Be in good physical health
- Be willing to participate in a 7-week study on an approximately once-a-week basis

The design of the study excludes subjects if they have:

- Not succeeded with two or more previous medication trials
- Certain other psychiatric conditions, such as bipolar disorder or eating disorders
- Major depression at present (it's ok if in the past)
- Uncontrolled high blood pressure or certain other medical conditions.

All subjects will receive a free psychiatric evaluation, physical examination, blood work, and electrocardiogram. In addition, if the study medication doesn't work for them, Dr. Rosenthal will help guide them to other treatment options. Finally, subjects will be modestly compensated for their participation. If you wish to find out more about the study or think you may wish to participate, please contact Dr. Rosenthal, 301-770-7375

THE HARBOUR

More than a Great Education for Special Kids

A Safe Harbour Where



The Harbour School

www.harbourschool.org Grades 1–12

1277 Green Holly Drive 11251 Dolfield Boulevard Annapolis, MD 21244 Owings Mills, MD 21117 410-974-4248 443-394-3760

Since 1982



Why Join CHADD?

There is strength in numbers. CHADD national membership numbers over 20,000, to which the Maryland Chapters contribute more than a thousand active members. We hope to continue increasing that strength throughout 2003. Please join us in our our efforts. Our members receive the most up-to-date, reliable information available about AD/HD. Any new research breakthrough reaches our members through

ATTENTION! and HyperTalk. If an important issue faces the U.S. Congress, our members are hear about it.

National Member benefits

- Attention!, a national bi-monthly magazine on AD/HD
- The CHADD Information and Resource Guide to AD/HD with information on parenting, adults, education rights, classroom interventions, and more.
- Reduced registration rates for the annual national CHADD conference and local workshops.
- Benefits of belonging to CHADD Chapters in Maryland
- HyperTalk, the semi-annual CHADD of Greater Baltimore Chapter magazine
- Monthly meetings give members access to eminent authorities in related fields
- Parent Support and Meetings
- Adult Support and Meetings
- Resources for referrals, networking, and links with other nearby CHADD Chapters

CHADD Membership Application

	Name			
	Occupation _			
	Organization			
	Address			
	City			
	State	Zip		
	E-mail			
	\$45	family or educator membership	□ New Member	
	\$75	Health care professional membersh	n_p Renewal	
	\$35	Student membership	Choose Chapter affilia	a -
	\$250	Organizational membership	-	•
		Hardship/scholarship, call CHADD	tion:	
Met	thod of Paymen	t: \square Check, payable to CHADI	□ Greater Baltimore	
	Visa	□ MC □ Amex □ Exp. date □ □	#168 	
Nar	me on card		 □ Anne Arundel #541	
Cai	rd number		Mail to	
Sig	gnature)



CHADD
is a non-profit, tax
exempt organization
working to improve
the lives of people
with AD/HD through
education, advocacy,
and support.

CHADD of Greater Baltimore



316 Wickersham Way Baltimore, MD 21030 Non-Profit Org U.S. Postage PAID Permit #5530 Baltimore, MD