



## Autism Frontiers: Clinical Issues and Innovations

Shapiro BK, Accardo PJ. *Autism Frontiers: Clinical Issues and Innovations*. 2008, Brookes Publishing, Baltimore, MD. ISBN 978-1-55766-957-5, 256 pages, \$49.95

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*Autism Frontiers* includes a listing of the editors/contributors, a forward by Dr. Mark L. Batshaw and a preface. An additional thirteen chapters follow this and an index all neatly completed within 256 pages.

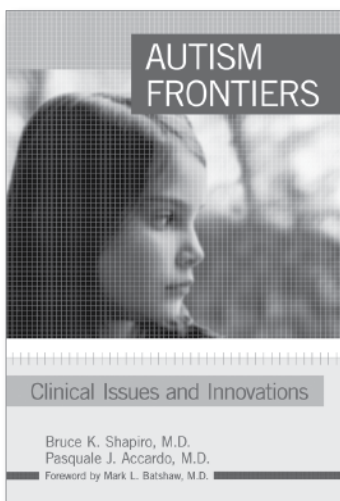
The first chapter is a clinical overview of the Autism Spectrum that starts with the history of the development of our understanding of autism. In 1943 Leo Kanner described 11 children with an unusual developmental disorder. He noted that these children exhibited atypical social interactions, an unusual use of language, and a markedly restricted range of behaviors (echopraxia). The authors of this chapter then go on to note that, “Once thought to be rare, autism spectrum disorders... now affect approximately 1 in 150 children...” This significant increase in prevalence has been attributed to a change in diagnostic criteria, improved awareness and data collection, and diagnostic substitution. This chapter also includes specific *Diagnostic and Statistical Manual of Mental Disorders* 4th Edition diagnostic criteria for Autism, Asperger’s Disorder, and Pervasive Developmental Disorder Not Otherwise Specified (PDDNOS), all of which are now considered part of the spectrum of Autism. The rest of the chapter reviews the spectrum’s associated language and behavior disorders, attentional issues/hyperactivity, lack of social friendships, and various associated disabilities including intellectual disability, anxiety, and seizures.

It is recommended that children being evaluated for an Autism Spectrum Disorder (ASD) receive a comprehensive diagnostic evaluation that includes *use of an instrument with at least moderate sensitivity*

*and good specificity for ASDs*, a complete medical/neurological evaluation, an audiological work up, a speech/language assessment, an evaluation of cognitive/adaptive behavior, a neuropsychological assessment, and a sensorimotor/occupational therapy evaluation. It is also noted that selective metabolic testing, lead levels and genetic testing (looking for Fragile X syndrome) may also be necessary. Hair analysis, celiac antibodies, allergy, micronutrients, and other similar testing need not be done because *there is inadequate supporting evidence for routine use in the absence of specific clinical indications*. It is unfortunate, that with these children exhibiting so many areas of disability, that the authors do not recommend a comprehensive eye and vision assessment as a part of each child’s work up. The rest of the chapter gives a listing of the instruments used to evaluate ASDs, management (including pharmacotherapy), and advocacy.

Chapter 2 “Autism in the Spectrum of Developmental Disabilities” discusses how autism is related to other developmental anomalies while chapter 3 reviews Asperger syndrome, the Nonverbal learning disability and “Einstein Children”. I was particularly interested in the information on the “Einstein Children”. These individuals tend to have a delayed start (especially in speech) but then go on to do very well in life. Table 3 in this chapter satisfactorily lays out the similarities and differences of these 3 disorders.

Developmental regression, autism, epilepsy and developmental language anomalies are covered in chapters 4 and 5 but in limited detail. Chapter 6 continues the discussion of language skill deficits in Autism and Asperger syndrome. A review of the child’s first 3 years of life within the Autism Spectrum Disorder is noted in chapter 7 with early diagnosis being emphasized. Perceptual, sensory, motor, social and communication skills are reviewed. It was noted that under the perceptual and sensory areas little



research has been conducted for children 3 years of age and younger. Chapters 8-11 talk about interventions. These interventions include those used in the classroom, what barriers to success are experienced by families and using psychopharmacologic approaches to control/manage unwanted behaviors.

The chapter that will capture the interest of many of *Optometry & Vision Development's* readership will be the one on complementary and alternative medicine. Thomas D. Challman, who is an Assistant Professor of Pediatrics at Jefferson Medical college in Danville, PA, shows his biases in the very first paragraph, where he states: "*Despite HL Menchen's admonition that 'there is always a well known solution to every human problem-neat, plausible and wrong', people faced with a medical problem that defies easy treatment often resort to unproven remedies in an effort to ameliorate their conditions.*"

I always try to keep a skeptical but open mind to CAM (complementary and alternative medicine), but he dismisses it out of hand....in fact, why bother reading this chapter once you read the first paragraph? I think he does a distinct disservice in his approach to CAM and just demonstrates allopathic medicine's arrogant attitude towards anything they do not practice or understand. On the other hand, most CAM therapies have a long way to go before they will become mainstreamed into the care of these patients.

It has been shown (though not necessarily in the case of a child with Autism) that Traditional Chinese medicine, meditation, biofeedback, Yoga, massage, acupuncture, and various herbs, vitamins and other supplements can be effective in the treatment or prevention of several systemic anomalies. Challman chooses to ignore the evidence in these instances. He is correct (as far as I know) however, that none of these approaches appear to be effective in the treatment of Autism.

Even as Challman cries about the lack of scientific "proof" for these approaches; he then immediately takes a "pot shot" at any academic medical center that dares to evaluate (as he calls it) "pseudoscience". OK, Dr. Challman, you cannot have it both ways. You cannot say there is no science behind CAM and then say it is a waste of time to evaluate these approaches. We should support the research that evaluates these methodologies. We should be scientifically skeptical, but keep an open mind of the researcher... and we should not bias our writings if they go against our beliefs. Challman does a major disservice to the readership with his prejudiced approach to CAM. I would suggest that if this book goes into another

edition that Dr. Challman not be invited back to write this chapter.

"Can Autism Resolve?" asks chapter 12. I find this a strange way to ask if Autism can be cured. As you read the chapter, it seems as if the authors mean, "Can you start at a more dysfunctional diagnosis on the spectrum and with treatment move to a higher level of function"? Of course, if you were present at one of COVD's recent meetings and heard Temple Grandin, PhD speak; you know that the answer to this question is a resounding Yes! (Dr. Grandin had severe Autism as a child and is currently a PhD and Associate Professor at Colorado State University.)

The final chapter, Autism Spectrum Disorders: A Conceptualization, attempts to *present a rough working model of ways to think about ASDs that can be used to address the most serious issue for the primary health care provider - screening and early diagnosis.* The author of this chapter, Dr. Accardo, produces several very useful charts and figures, but the bottom line is his *Screening Protocol for Autism Spectrum Disorders.* This protocol has 3 parts. Part A concerns communication, Part B involves a family history of autism; Pervasive Developmental Disorder, Autism in a sibling; eye contact issues; reaction to faces; hand flapping and eating habits. With the final part noting a head circumference greater than 1.5 standard deviations above the mean, posteriorly rotated ears and the observed presence of toe walking. This is a screening most optometrists could probably very readily do as a part of their case history and general observations of the child and his/her family.

Although this text really does not break any new ground with its review and discussions, it does put all the current thinking about this disorder (or should I say group of disorders) in one fairly brief (about 220 pages) concise, and easy to read text. Most of these authors do a fine job of communicating what they need to get across to the reader in an unbiased and straightforward manner. I found that the best part of many of the chapters were the figures and/or tables. They usually summarized the topics nicely.

I would recommend this text to any optometrist who routinely sees children with autism... and because of its last chapter and its concern about early diagnosis... I would even recommend this book to those doctors who do not routinely examine these children. I would recommend that we use the screening protocols noted in the book, so that our patients can receive early and appropriate care.