Narrowing the diagnostic gap: Autism over 30 years

Infectious Diseases in Children, January 2017

To mark our 30th anniversary, Infectious Diseases in Children will be examining some of the chronic conditions and infectious diseases that have impacted pediatric care over the past 3 decades.

In 1981, English psychiatrist Lorna Wing published an academic paper based on the little-known research of Hans Asperger, an Austrian pediatrician who had described a type of high-functioning autism several years before Leo Kanner’s iconic 1943 article.

Unlike Kanner, Asperger’s research had portrayed autism as an interruption in early brain development rather than a form of cognitive disability. However, as his research was written exclusively in German and seldom translated, Asperger’s contribution to the field remained largely overlooked for nearly 40 years. Discovered anew by Wing, Asperger’s research would later redefine the discussion of developmental disorders and introduce Asperger’s syndrome to the medical lexicon.

Challenging the previously accepted model of autism, Wing used Asperger’s syndrome as supporting evidence for her assertion that autism should be recognized not as a singular disorder but as a spectrum of disorders that shared a common origin. Wing’s influential paper would ignite a heated debate on the appropriate classification of
INFECTION DISEASES IN CHILDREN
first debuted 30 years ago, in Octo-
ber 1987. Throughout 2017, we will
be examining some of the chronic
conditions and infectious diseases
that have significantly impacted pe-
diatric medicine and, with the help
of leading experts, explore how the
approach to treatment has changed
over the course of those 3 decades.

While significant diagnostic progress has been made over the past 30 years, pediatricians still rely heavily on
their own examinations in combination with family history and parental perspectives to make an ASD
diagnosis. With increasing numbers of children with ASD being seen in the pediatric office, the focus on early
diagnosis has never been more pressing.

**Addressing an ‘epidemic’**

According to 2016 estimates from the CDC’s Autism Developing Disability Monitoring (ADDM) Network,
autism spectrum disorders affect one in 68 children – or approximately 1.5% of the U.S. population.
Compared with older CDC estimates from the 1980s that cited one in 10,000 children exhibited ASD, this
figure represents a staggering rise in the number of children diagnosed with development disabilities.

“More children than ever before are being diagnosed with ASD. [However,] when analyzing changes in ASD
prevalence over time, it is important to look at data collection systems using a consistent methodology over
time,” **Daisy Christensen, PhD**, an epidemiologist at the CDC’s National Center on Birth Defects and
Developmental Disabilities, told *Infectious Diseases in Children*. “In 2000, estimated ASD prevalence in the
ADDM Network was 6.7 per 1,000 children aged 8 years; by 2012, estimated ASD prevalence more than
doubled, to 14.6 per 1,000 children aged 8 years.”
While these baffling increases have led both political officials and lay media outlets to declare an ‘autism epidemic,’ the epidemiology of ASD has never supported this conclusion. There is no argument that the number of ASD diagnoses has increased; however, recent data indicate that, these figures are a result of broadened diagnostic criteria, increased surveillance and improved public awareness.