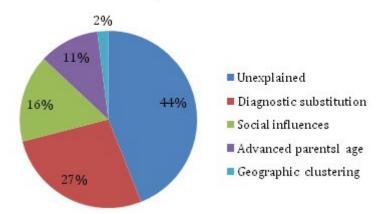
The Rising Incidence of ASD

The United States Centers for Disease Control and Prevention (CDC) has published its 2014 Community Report on Autism. The report summarizes the technical study behind the CDC's new estimate of autism prevalence in the United States: 1 in 68 children. Australian statistics are similar. Is this a true change in prevalence or an epidemic of better diagnosis?

Factors explaining increase in ASD prevalence



Source: http://blog.autismspeaks.org/2011/02/03/s-evaluating-change/

What if it is not just better diagnosis?

In 2011, Autism Speaks and the CDC co-sponsored a workshop entitled "U.S. Data to Evaluate Changes in the Prevalence of Autism Spectrum Disorders." The "Evaluating Change" workshop was designed to bring together stakeholders from the autism community and leaders in the fields of autism epidemiology and public health to consider the factors driving the change in autism prevalence over the past two decades.

Factors such as younger age of diagnosis, broadening of diagnostic criteria, improvements in the availability of services, and better awareness of the disorder have all been attributed to the change in autism prevalence. However, recent epidemiological studies indicate that, while these factors do account for a portion of the change, they cannot account for all of the increase.

While ongoing research is beginning to help us understand the increase in autism prevalence, *almost half of the increase is still unexplained and not due to better diagnosis, greater awareness, and social factors alone.* The actual cause remains in large part a mystery, and is most likely multifactorial, arising from the interaction of biologic, genetic, and environmental factors. *What is becoming increasingly obvious is that there are significant subsets of children with autism that have intestinal inflammation, digestive enzyme abnormalities, metabolic impairments, oxidative stress, mitochondrial dysfunction, and immune dysfunction.*

Autism is being increasingly seen as a whole-body, multi-system disorder. The view is that autism is a constellation of behaviours that may result from a number of different pathways or aetiologies, and are associated with underlying medical problems that can be treated effectively.

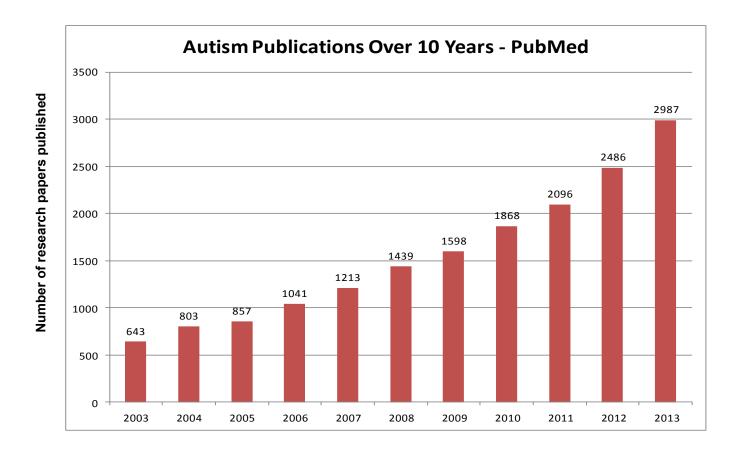
The increase in autism prevalence is real and the public health crisis is growing. More families are affected by autism today than ever before. *We need to acknowledge that there are a subsets of children that can be helped.*We have a moral obligation to identify these subsets of suffering children and their families, and treat them appropriately.

Changing the way we think about treating autism.

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Helping Children Achieve Their Full Potential



A look at the research publications cited in PubMed over the last 10 years shows a dramatic rise in research being published on ASD. From 2003 to 2013 there has been a 365% increase in research papers being published. *Between 2012 and 2013 there has been a 20% increase (over 500 research papers) alone.* With this dramatic increase in research, there are papers being published monthly with new and evolving research. It is most unlikely that health professionals are keeping up with the pace of the latest ASD research being published.

Much of the current research is focussing on a whole-body, multi-system perspective. Genetics has driven much of the early research in the hope of finding a gene or genes that are amenable to pharmacological manipulation. However inherited single gene and chromosomal defects are only found in the minority of cases of ASD. As research in the field of ASD continues, it is becoming clear that the aetiology of most ASD cases involves complicated interactions between genetic predisposition and environmental exposures or triggers.

Considerable new research is rethinking the way we may treat ASD. There is no single cause, indeed there appear to be multiple causes all funnelling into the diagnosis of ASD, based on psychological testing. There are obvious subsets of children that can be identified for which we can offer treatment. Even emerging research into pharmaceuticals has identified this opportunity. *No one drug helps all ASD individuals*. Associate Professor Jeremy Veenstra-VanderWeele is medical director of the Treatment and Research Institute for Autism Spectrum Disorders and said "I am yet to meet a child that has only autism, they present with a variety of behavioural co morbidities, medical co morbidities, a number of biomarkers that may be readily available or through research and genetic findings." So children present with a host of different profiles. In any study, if you zoom in on the small percentage of responders, there is a significant number that show marked improvement. This type of improvement would be striking if seen in a clinical setting. But what we don't know is who those individuals are to target them for treatment. There are groups of dedicated researchers that are working towards identifying the subgroups of ASD children who are potential responders to specific treatments.

References

Neurometabolic Disorders and Dysfunction in Autism Spectrum Disorders. Nassim Zecavati, MD, MPH, and Sarah J. Spence, MD, PhD. Current Neurology and Neuroscience Reports 2009, 9:129–136.

Pathways to New Treatments in Autism, Jeremy Veenstra-VanderWeele. Associate Professor of Psychiatry, Pediatrics, and Pharmacology, Vanderbilt University School of Medicine. SFARI Webinar.http://sfari.org/sfari-community/community-blog/webinar-series/2014/webinar-jeremy-veenstra-vanderweele-talks-routes-to-treatment.