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Autism: Evaluating a treatment

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How can we judge whether a suggested treatment is worthwhile?

Both parents of children with autism and professionals working with children often ask this question. Go to the local library, surf the net, watch television, listen to the radio....autism and suggested treatments, even cures for it, are everywhere. It can be difficult to work out whether or not treatments described in the media, on line and in books are valid. So how can we go about determining whether or not treatments are legitimate? The most common way to start is by searching the autism treatment literature and evaluating widely used interventions according to specific research criteria.

Francis (2005) recently published a critical update of autism interventions and found that there was a lack of solid scientific data on the efficacy of most of these methods/ interventions. Interventions evaluated were grouped according to: Psychoeducational/Behavioural approaches - TEACCH, ABA and PECS; Psychopharmacological interventions; Less traditional/complementary approaches – auditory integration therapy, sensory integration, music therapy.

Many studies failed to fulfill basic research criteria such as:

- Random assignment to different treatment conditions
- The use of standard intervention protocols that capture a wide range of skills and symptoms
- The use of outside evaluators
- Assurance of high compliance with the defined treatment protocol
- The use of longitudinal designs that evaluate treatment effects both during treatment and at set points after the treatment has been accomplished
- Sample sizes, matching of controls and assessment issues (Francis, 2005).

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Research criteria and grades of evidence such as those listed above must be met in order to determine whether or not a treatment/intervention has been properly empirically validated.

When you read an article describing a treatment for autism ask yourself the following:

- Is this a reputable publication? Is this a peer reviewed journal of high quality?
- Was it a randomised controlled trial? How were the groups allocated into treatment or non treatment (control group)? Is the sample biased in any way?
- Was the sample well described? Did the children have autism, how do you know?
 How big was the sample? Was the treatment group matched with a control group who did not receive treatment?
- Was the treatment well described? Does the treatment cover a wide range of symptoms of autism and skills? Is there a description of how clinicians made sure they all provided the same treatment? How was the treatment evaluated? By whom? What measures were used and were they reliable and valid instruments?
- Did the clinicians who delivered the treatment also measure effectiveness? Is there information about treatment effectiveness over time?

Given our current state of knowledge, there is not only one way to manage/teach a child with autism. A multi-modal approach to treatment is more likely to promote development, improve behaviour and reduce stress experienced by the child and family. The efficacy of behavioural and educational interventions and their cost effectiveness often lack solid data. There is a need for rigorous studies following evidence-based recommendations in order to help parents and professionals to decide which approach will be more effective at meeting their child's needs (Jordan et al, 1998; NAS National Autism Plan for Children, 2003)

Treatment studies therefore remain a priority for research.

Who has written best practice guidelines?

This is a list of some recent documents that outline best practice in autism assessment, diagnosis, early intervention and treatment.

- 1996 New York State Dept of Health Early Intervention Programme.

 Clinical Practice Guideline. Report of the Recommendations. Autism/Pervasive

 Developmental Disorders. Assessment and Intervention for Young children (Age 0-3 years). (Updated 2003)
- 1999 Iowa Dept of Education/University of Iowa Hospitals.
 Best Practice Guidelines in Assessment, Programme Planning and the ECSE Supplement for Individuals with Autism. An action plan to develop a statewide

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strategy for addressing issues governing the special education and related services for children with autism.

- 2002 California Dept of Developmental Services.
 Best practice Guidelines for Screening, Diagnosis and Assessment.
 (Document re treatment due end of 2007)
- 2002 Department for Education and Skills: Autism Working Group. London. Autism spectrum disorders: good practice guidance.
- 2003 Children's Mental Health Ontario.
 Evidence-Based Practices for Children and Adolescents with Autism Spectrum Disorders.
 - ** highly recommend**
- 2003 National Autistic Society for NIASA in collaboration with The Royal College of Psychiatrists, The Royal College of Paediatrics and the All Party Parliamentary Group on Autism.
 - National Autism Plan for Children: Plan for the identification, assessment, diagnosis and access to early interventions for pre-school and primary school aged children with autism spectrum disorders.
- 2004 New Mexico Public Education Dept/Dept of Health Family Infant Toddler (FIT) program.
 - Autism spectrum Disorders: Guidance on providing supports and services to young children with ASD and their families.

References

Children's Mental Health Ontario (2003) *Evidence-Based Practices for Children and Adolescents with Autism Spectrum Disorders*.

Francis, K. (2005). Autism interventions: a critical update. Developmental Medicine & Child Neurology, 47, 493-499

Freeman, B. (1997). Guidelines for Evaluating Intervention Programs for Children with Autism. *Journal of Autism and Developmental Disorders*, 27, 641-651

Howlin, P. (1998). *Children With Autism and Asperger's Disorder. A Guide for Practitioners and Carers.* Chichester: John Wiley & Sons.

National Autistic Society for NIASA in collaboration with The Royal College of Psychiatrists, The Royal College of Paediatrics and the All Party Parliamentary Group on Autism (2003). National Autism Plan for Children: Plan for the identification, assessment, diagnosis and access to early interventions for pre-school and primary school aged children with autism spectrum disorders.

National Institute of Mental Health http://www.nimh.nih.gov/publicat/autism.cfm