Biographical Information

Tony Charman, Ph.D., is professor of neurodevelopmental disorders at University College London. He received his undergraduate degree in Natural Sciences at Cambridge University, and completed his clinical psychology training and a Ph.D. at the Institute of Psychiatry, University of London. Charman was a lecturer in Clinical Psychology in the Psychology Department, University College London before moving to the Behavioural & Brain Sciences Unit at the Institute of Child Health, University College London in 1998. He is an Honorary Clinical Psychologist at Great Ormond Street Hospital for Children NHS Trust where he works in a diagnostic service for children with complex neurodevelopmental conditions. His main research interest is the investigation of early social cognitive development in children with autism and the clinical application of this work via screening, early intervention and epidemiological studies. He is Editor-in-Chief of the Journal of Child Psychology and Psychiatry; an Associate Editor of the Journal of Autism and Developmental Disorders and is on the Editorial/Advisory Boards of Autism: The International Journal of Research and Practice, the Journal of Intellectual Disability Research, the British Journal of Developmental Psychology and Research into Autism Spectrum Disorders. He has served on a number of expert panels for the Medical Research Council in the UK and NIH in the USA. He is a scientific member of the Advisory Group to the All Party Parliamentary Group on Autism.

Presentation Abstracts

Looking for subgroups amongst children with autism spectrum disorders (4 pm)

Diagnosis of autism spectrum disorders relies largely on behavioral and developmental characteristics. While subtypes within this disorder have been explored for many years, the boundaries between strictly defined autism and other autism spectrum disorders remain ill-defined. Further, it is well known that the behavioral phenotype of autism and the broader autism spectrum disorders includes individuals with different ultimate etiologies, so even when biological or genetic markers are found they will not be present in all individuals with the phenotype. The fact that autism is not a unitary ‘disorder’ presents a significant challenge to epidemiological, genetic, biological, neurological and psychological research. In several areas of investigation people are attempting to define subgroups – at the behavioral, cognitive and biological level. Drawing on data from our population-representative sample of children with autism in the UK we are attempting to determine whether any of the suggested ‘subtypes’ hold up to scrutiny and whether apparent subgroups exist in our dataset. This talk will outline our initial attempts to join others in identifying meaningful subgroups that might aid scientific inquiry into autism.

The prevalence of autism spectrum disorders: Recent evidence and future challenges (6 pm)

Until a decade ago, best estimate prevalence rates for autism spectrum disorders were 5 per 10,000 for autism and 20 per 10,000 for the broader spectrum. Recent reports have suggested that the prevalence of autism and related spectrum disorders is considerably higher than previously recognized. A number of recent studies, including our own study in the UK, have suggested that the rates for the broad autism spectrum may be as high as one percent. Whilst ICD-10 and DSM-IV diagnostic criteria and standard diagnostic instruments have been used in recent prevalence studies, they still allow scope for variation in interpretation and different severity thresholds applied within the same qualitative domains of impairment, resulting in different prevalence rates. Increased recognition, the broadening of the diagnostic concept over time and methodological differences across studies may account for most or all of the apparent increase in prevalence but other explanations cannot be ruled out, including a true rise in incidence. In this talk I will review recent evidence on the prevalence of autism spectrum disorders, discuss whether we can rule out or rule in a ‘real’ increase and highlight some directions for future epidemiological work. Notwithstanding these scientific challenges, services in health, education and social care will need to recognize the needs of children with some form of autism who constitute 1% of the child population.