ESSENCE in a life-time perspective

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Edinburgh, November 2013
Neurodevelopmental disorders/ESSENCE

• ESSENCE - Early Symptomatic Syndromes Eliciting Neurodevelopmental Clinical Examinations

• Predictors of academic failure, social exclusion, substance use, psychiatric disorder, empathy problems, and antisocial lifestyle later in life
  – ADHD with or without ODD/CD (Oppositional Defiant Disorder/Conduct Disorder) 5-7%
  – SLI (Language disorder) 5%
  – DCD (Developmental Coordination Disorder) 5%
  – IDD (Intellectual Disability/Intellectual Developmental Disorder) 2%
  – ASD (Autism Spectrum Disorder) 1.2%
  – TD/TS/OCD (Tic disorders/Tourette syndrome/OCD) 1%
  – RAD (Reactive Attachment Disorder)? 0.5-1%
  – (BPS (Behavioural Phenotype Syndromes, including FAS and VAS) 1%)
  – (EP/NEUROMUSC (Epilepsy syndromes and other neurological/neuromuscular disorders (HC, CP, Duchenne, myotonic dystrophy, neurometabolic): Landau-Kleffner Syndrome, CSWS, FS+, FS? 0.6%)
  – (PANS (Pediatric Acute-onset Neuropsychiatric Syndrome)? 0.1%)
Important research projects at the GNC

• DAMP (ADHD with DCD) study (5000 6-year olds screened, followed clinically on five occasions – 7, 10, 13, 16 and 21 years)
• ADHD and ODD in preschool children follow-up after 15 years
• GAP (Gothenburg Autism/Asperger Project; epidemiology, genetics, neuropsychology, neurophysiology, neurochemistry, screening, intervention, and outcome, 320 population cases followed for 5-50 years)
• Faroe Islands autism study from 7-25 years (67 population cases)
• Longitudinal Anorexia Nervosa study (5000 teenagers screened, those with Anorexia Nervosa and controls followed for 25-30 years)
• The Young Swedish twin study of ESSENCE (30,000+ twins)
• Japanese Environment Cohort Study (100,000 families)
• AUDIE study (Autism Diagnosis and Intervention in Early life)
• Early ABA intervention and outcome in autism in 208 children follow-up after 1, 2 and 6 years
• Febrile seizures/epilepsy in under 5-year-olds, cross-cultural (screening population 6000)
• Epilepsy in autism and autism in epilepsy
• Behaviour in school children who had status epilepticus
Research projects at GNC continued

- Girls with social and/or attention problems: follow-up in adult age (100 cases)
- Screening measures (ESSENCE-Q, FTF, ASSQ, ASDI, A-TAC, ASSERT) for ESSENCE (altogether 215,000 children and adolescents)
- Genetic studies on ESSENCE with the Pasteur Institute of the GAP, Faroe Islands, ABCD, and Swedish Twin Study Cohorts (>1,000 families)
- Neuroimaging of ESSENCE
- Vitamin D, CMV, ultrasound studies on ESSENCE in Sweden, Japan and Faroes
- Autism, ADHD and schizophrenia in adults
- ADHD in the elderly and in MCI
- ESSENCE in adult psychiatric patients
- Behavioural and psychosocial effects of mild IDD
- Behavioural phenotype studies (22q11, FraX, TS, Moebius, FAS, VAS)
- Stimulant and non-stimulant intervention for ADHD and ODD
- Metabotropic glutamate receptor antagonist for FraX
- Bumetanide for autism