

Thursday
April 14th

Plenary lecture - 1

Autism Birth Cohort study

A study of autism and autism spectrum disorders, based on the Norwegian Mother and Child study.
Synnve Schjølberg, Camilla Stoltenberg, Kari Kveim Lie, Ted Reichborn-Kjennerud, Per Magnus
Norwegian Institute of Public Health.

Synnve Schjolberg, Specialist in Clinical Psychology
Research Psychologist, Institute of Psychology, University of Oslo

Reports of increasing prevalence of autism spectrum disorders (ASDs), a set of highly genetic conditions, are intensifying interest in the role of environmental exposures, including infectious, immune, and toxic factors. Retrospective studies exploring associations between environmental factors and ASDs are compromised by selection bias, small sample sizes, possibly invalid diagnosis, and absence of biological measures.

This prospective study will employ an unselected birth cohort of 100,000 in which cases are ascertained through screening of the entire population. The diagnosis will be established using uniform procedures, extensive histories and clinical data obtained, and biological samples collected serially throughout pregnancy and early childhood. In the longer term, the application of high throughput laboratory assays to derive maximal information from developmentally-influenced, finite and nonrenewable biological samples as well as the inclusion of early screening and diagnostic assessments will permit unprecedented view of the longitudinal trajectory and signs and symptoms of ASDs. It will facilitate discovery of biomarkers and afford unique insights into the role of gene:environment interactions in the ASD pathogenesis.

Development of a screening instrument for the broader phenotype of autism in adults – a progress report

P. Magnusson^{1,2}, E. Saemundsen, G. Bjornsdottir, R. Fossdal, S. Steinberg, S.J. Hreidarsson, O. Gudmundsson, B. Lauth, J. Smari, J. Thorhallsdottir, M. Frigge, K. Stefansson, T.E. Thorgeirsson, and K. Kristjansson.

1) Department of Child and Adolescent Psychiatry, Landspítali University Hospital, Dalbraut 12, 105 Reykjavik, Iceland.

2) deCODE Genetics Inc., Reykjavik, Iceland.

Developed in the context of a study of the genetics of autism, the Development, Social Interaction and Mood (DSIM) questionnaire is designed to assess symptoms of the broader autism phenotype and depression in adults. The questionnaire consists of four subsections: a) Seven items tapping developmental deficits in childhood; b) Thirty-eight items dealing with autistic traits; c) Seven items intended to assess impairment; d) Seven items evaluating depressive symptoms. There are two versions of the questionnaire; a self report version and an informant version. In order to assess the validity of the instrument five studies were planned:

Study I: The self report version of the instrument was completed by 293 students at the University of Iceland

Study II: Self report and informant versions have been administered to more than a 1000 relatives of probands with autism.

Study III: Data collection is in progress in this study where the self report version is completed by 20-30 high functioning participants with autism spectrum disorders. The informant version is completed by their caregivers.

Study IV: The self report version of the questionnaire will be completed by 300 participants, a randomly selected general population sample stratified by age and gender.

Study V: In this study the Autism Diagnostic Interview-Revised (ADI-R) will be employed as an external criterion. The ADI-R will be administered to groups of relatives with high and low DSIM scores respectively.

Analyses of the autistic traits subscale showed good internal stability. Mean total scores were higher for males than for females, mean scores for relatives were higher than for students, and mean scores on the informant version were higher than on the self-report version. Further results on validation as well as analyses of the association between subscales will be presented based on incoming data.

- The research is supported by the Simons Foundation

Violence risk in child and adolescent psychiatric patients with autism spectrum disorders

by Riittakerttu Kaltiala-Heino and Anna-Kaarina Roto

Name and affiliation of the presenter:

Riittakerttu Kaltiala-Heino, Psychiatric Treatment and Research Unit for Adolescent intensive Care (EVA), Tampere University Hospital, Finland

Child and adolescent aggressive behaviour is a serious concern for school, health care and child welfare services, and often a reason for referring a minor to child or adolescent psychiatric assessment and treatment. Increasing awareness of possibility of autism spectrum problems behind conduct problems has emerged in psychiatric services. Clinical impressions from treatment of children and adolescents with pervasive developmental disorders, on the other hand, suggests that problems with aggression control in this group may be increasing, perhaps influenced by cultural and technological developments. To ensure appropriate treatment, youth with autism spectrum disorder have to be recognised from among youth with aggression control problems related to other disorders. Empirical research on the role of autism spectrum disorders for aggression control problems and violence risk in child and adolescent psychiatry is too scarce. It is not known if factors contributing to violence risk in short and long term are different in youth with autism spectrum problems from those in youth with other psychiatric diagnoses. The aims of this study are to

1. study the prevalence of autism spectrum disorders in children and adolescents referred to psychiatric services due to violent aggressive behaviour or severe threat of violent behaviour
2. assess the violence risk, and the factors contributing to violence risk, in child and adolescent psychiatric patients with autism spectrum disorders as compared to risk and factors contributing to the total risk in child and adolescent psychiatric patients with main diagnosis of conduct disorder, ADHD or psychosis without co-morbid autism spectrum diagnosis.

Materials and methods

In the first part of the study, 100 -150 consecutive children and adolescents referred to the child psychiatric or the adolescent psychiatric services of Tampere University Hospital (outpatient and inpatient) due to violent behaviour or severe threat of violent behaviour (severe verbal threats, severe

attempted assaults) are evaluated for autism spectrum disorders using structured diagnostic approaches. Prevalence of autism spectrum diagnoses is calculated.

In the second part, violence risk, and the factors contributing to violence risk, are compared between the autism and the non-autism groups by carrying out SAVRY violence risk assessment with adolescents aged 12-17, and EARL-B / G violence risk assessment with children aged less than 7-12. 100 minors are assessed in both groups.

Temporal cognition in children with autistic spectrum disorders

Francisco Pons* (University of Aalborg, DK), Jill Boucher, Sophie Lind and David Williams (University of Warwick, UK)

**Presenter address: University of Aalborg, Faculty of Humanities, Department of Communication, Kroghstræde, 3, 9220 Aalborg East, Denmark. Phone: +45 9635 7265, E-mail: pons@hum.aau.dk, Webpage: <http://www.hum.aau.dk/~pons/>*

Clinical and anecdotal reports suggest that people with autism have a poor intuitive sense of time. However, almost no relevant research has been reported. The research reported here was designed to begin to remedy this situation, using paradigms from the literature on normal development. Specifically, the ability to utilise a diachronic perspective was investigated, the diachronic perspective being defined in terms of the ability to use temporal concepts and knowledge in thinking and reasoning. Twenty-three children and teenagers with autism were compared with 23 age and ability matched controls on tests of (1) diachronic Tendency (comparable to what has been termed "mental time travel"); (2) qualitative Transformation (understanding that objects and situations change qualitatively over time); (3) temporal Dissociation (the ability to dissociate the temporal succession of one set of changes from the temporal succession of another, related, set of changes); and (4) dynamic Synthesis (the ability to conceive of a temporal succession of states or events as compressed into a single superordinate event). The materials and methods used closely resembled those used to test typically developing children. Results showed that the experimental participants were markedly impaired on diachronic Tendency, qualitative Transformation, and dynamic Synthesis and showed a trend towards impairment on temporal Dissociation. Performance was not related to chronological age, verbal ability (British Picture Vocabulary Scale) or non-verbal ability (Ravens Matrices) in the experimental group. The same was true for the controls except that in this

group non-verbal ability correlated with performance on temporal Dissociation. Children and teenagers with autistic spectrum disorders have impaired ability to think and reason using temporal concepts and knowledge. This may reflect a specific impairment in processing time unrelated to general ability.

Follow-up of children diagnosed with pervasive developmental disorders: stability and change during the preschool years

Jónsdóttir, S.L., Saemundsen, E., Ásmundsdóttir, G., Hjartardóttir, S., Ásgeirsdóttir, B.B., Smáradóttir, H.H., Sigurðardóttir, S., & Smári, J.

Presenter:

Sigríður Lóa Jónsdóttir

Objective: Description of a clinical group in Iceland with ICD-10 PDD diagnoses and receiving eclectic services in preschool settings.

Methods: Participants were all children in four birth cohorts in Iceland who were diagnosed with PDDs during the preschool years (Time 1) and reassessed before starting elementary school around 6 years of age (Time 2). Forty one children met intake criteria. At Time 1, all the children had a physical examination including a pediatric neurological examination and a thorough diagnostic work-up using the ADI-R and the CARS and appropriate cognitive tests (BSID-II, WPPSI-R). At Time 2, the cognitive tests were applied again as well as the CARS and a measure of adaptive behavior (VABS). Children diagnosed with Childhood autism (CA group) were compared with children with other PDD diagnoses (Other PDDs group).

Results: Mean cognitive performance of the whole group was stable ($p > .05$) over time, however, there were changes within the group in both directions. Autistic symptoms decreased ($p < .01$) as measured by the CARS. Over 90% of the children diagnosed with CA at Time 1 received the same diagnosis at Time 2. Outcome measures at Time 2 showed more impairment for the CA group than for the Other PDDs group: autistic symptoms were more severe ($p < .01$), and mean IQ/DQ scores ($p < .05$) and VABS scores were lower ($p < .05$). Of the CA group, 30% had IQ/DQ scores of ≥ 70 and 60% had phrased speech, while the figures for the Other PDDs group were 73% and 100% respectively. Medical conditions with suspected etiologic relationship with autism were found in 17% of the children (six of the children in the CA group and one child in the Other PDDs group). A history of temporary regression was reported in 33% of the children in the CA group and 27% in the Other PDDs group.

Conclusions and implications: Children diagnosed with PDDs according to ICD-10 seem to fare better

as a group than reported in previous studies on children with autism. It is important to monitor the general development and the symptoms of autism of preschool children diagnosed with PDDs. Reassessment at the end of the preschool period may increase the likelihood that individual children will be provided with a suitable educational placement. It is of importance in research on treatment efficacy to classify children according to diagnostic categories.

Workshop 2, Diagnosis

Styrerom 2-3

The Prevalence of Autism Spectrum Disorders in Northern Finland

M Kielinen, M-L Mattila, A Rusanen and I Moilanen

In Finland, the tide began to turn in the early 1980s and the awareness and recognition of autistic spectrum disorders (ASD) increased. The diagnostic procedures commonly used have become conceptually more uniform upon the adoption of the new criteria in the DSM-IV and ICD-10 diagnostic manuals (APA, 1994; WHO, 1993). The aim of this study was to estimate the prevalence of ASD in Northern Finland.

The data were collected from the hospital records and the records of the central institutions for the intellectually disabled in the Provinces of Oulu and Lapland in 1996-2004. Each child with ASD had been evaluated and assigned the diagnosis of autism based on the clinical judgement by a panel consisting of a child psychiatrist or a child neurologist, a psychologist, a pedagogical specialist, a speech therapist and a physiotherapist. The children and adolescents have been evaluated by using a single classification system, i.e. ICD-10 and DSM-IV (APA 1994). In the screening study of Asperger Syndrome the high functioning Autism Spectrum Screening Questionnaire (ASSQ), the Wechsler Intelligence Scale for Children (WISC-III), the Autism Diagnostic Interview -Revised (ADI-R), the Asperger Syndrome Diagnostic Interview (ASDI) and the Autism Diagnostic Observation Schedule -Generic (ADOS) were used.

Autism turned out to be more common in this geographical area than previously believed. In line with the recent prevalence studies from other countries, the prevalence of ASD was close to 7/1000. According to this study, the prevalence of ASD in Northern Finland is threefold compared to 16 years ago. The increasing awareness and recognition of ASDs have increased the prevalence.

Whether there is also a genuine rise in prevalence remains an open question.

Early signals and early intervention. A case study presenting an infant from 3-30 months of age having developmental problems in the autistic spectrum. Nina Jahr, Kristi Aarethun, and Anne Margrethe Rostad

During the last 4 years more than 20 infants have been followed by professionals from “Knutepunktet- barn med tidlige samspillsvansker.” Children between 0-24 months of age are included if they show developmental problems that can be associated with problems in the autistic spectrum.

The following problems connected to one infant which was diagnosed at the age of 36 months with Asperger syndrome.

- 1) What early specific signals were discovered during infancy?
- 2) What was in focus during intervention?
- 3) How did development change during follow-up sessions?

Data from the period 3 -30 months are available.

This presentation focuses on the child's function in various dimensions: Attention and reaction to social and no-social cues, initiative from the child, motor functions, and communication. Attention will also be given to how early intervention was introduced, and integrated during the daily care in the home and the kindergarten. Important elements in intervention include training and organizing a positive learning situation at home as well as in the kindergarten.

This will be an oral presentation with many video clips to illustrate early problems, and strengths of the child.

Autism spectrum disorders in children with seizures in the first year of life.

Saemundsen¹, P. Ludvigsson², I. Hilmarsdottir³, and V. Rafnsson⁴,

¹State Diagnostic and Counseling Center, Digranesvegur 5, 200 Kopavogur, Iceland,

²Department of Pediatrics, National University Hospital, Reykjavik³Medical Faculty, University of Iceland, Reykjavik,

⁴Department of Preventive Medicine, University of Iceland, Reykjavik

Objective: To describe autistic spectrum disorders (ASDs) in a cohort with a history of unprovoked seizures, other than infantile spasms (IS), with onset in the first year of life.

Methods: The primary source of data was computer records from the National University

Hospital, Reykjavik and the Regional Hospital, Akureyri. Children born 1982 to 2000 in Iceland who had at least one unprovoked seizure, other than IS, with onset between 28 days and 12 months after birth (N=102) were invited to participate in the study. Parents of all participants not known to have a neuro-developmental condition were interviewed by telephone. Any parental concern in relation to development or behavior of the child was an indication for further examination. The Social Communication Questionnaire (SCQ) and the Strengths and Difficulties Questionnaire (SDQ) were applied, followed by an extensive examination. This included the Autism Diagnostic Interview-Revised (ADI-R), the Autism Diagnostic Observation Schedule (ADOS) or the Childhood Autism Rating Scale (CARS), Schedule for Affective Disorders and Schizophrenia for School Age Children (K-SADS-P/L), and appropriate cognitive tests and/or measures of adaptive behavior. Thirteen children reached or exceeded the cutoff (≥ 10) on the SCQ. The ADI-R was subsequently administered to their parents. Ten children received the ADOS and three the CARS. All autism diagnoses were based on the ICD-10 classification scheme.

Results: Eighty six (84.3%) agreed to participate, 29 boys and 57 girls (1:2). The total number of children with known neuro-developmental disorder and children without known such disorder but with parental concern was 30 (34.9%), 11 boys and 19 girls. Of those, 21 (24.4%) children had verified neuro-developmental diagnoses. Eleven (12.8%) had mental retardation (MR), seven (8.1%) had cerebral palsy, of which five had also MR. Less severe disorders included hyperkinetic disorders, language disorders, reading disorders, and other disorders of scholastic skills. Seven children (8.1%) had ASDs, two boys and five girls. Three had childhood autism, three had atypical autism, and one other pervasive developmental disorder. All the children were mentally retarded of whom five had intelligence quotients below 50 and two above. One had mental age below 24 months. Three of the children with ASD had congenital cerebral anomalies.

Conclusions: Unprovoked seizures in the first year of life, other than IS, are associated with increased prevalence of neuro-developmental disorders. The rate of ASDs in the present cohort (8.1%) is considerably higher than among similar age groups in the general population (0.48%).

Friday
April 15

Plenary lectures - 2

Assessment of metaphor comprehension

Comparing normally developing children, recently immigrated adults and individuals with Asperger syndrome

Kari Steindal & Terje Nærlund

The Autism Unit at the Department of Special Needs Education University of Oslo

A test of metaphor comprehension was constructed (Steindal). The test includes 40 Norwegian metaphors or idioms which were presented both orally and in writing. The participant's task was to choose from four alternative meanings for each metaphor. The alternative meanings offered for each metaphor fell into three categories: *Correct metaphorical meaning*, *figurative incorrect meaning* and *literal meaning*.

The test was administered to 173 school-children ranging from 9 – 16 years of age; 11 immigrants with less than two years experience with the Norwegian language, and 24 adolescents and adults with the diagnosis of Asperger syndrome.

The school-children illustrated the normal development of metaphor comprehension. From the random interpretation of the figurative language among the nine-year-old, to the mastery of over 90 percent of the metaphors among the older age group.

Individuals with Asperger syndrome show a delayed development of metaphor comprehension. Adolescents (10-19 year of age) with Asperger syndrome had more difficulties with the interpretation of the metaphors than the schoolchildren of same age.

Adults (23-49 Year of age) with Asperger syndrome showed, as a group, no obvious lack of metaphor comprehension. Averagely 85 percent of the metaphors were correct interpreted by the group.

Neither the *number* nor the *kind* of erroneous interpretation of metaphors is phenomena able to characterise the population of individuals with Asperger syndrome. It seems however that deviant metaphor comprehension is a clinically significant phenomenon at the individual level.

Combining multimedia with interaction:

- an alternative route for developing literacy and communication skills among children with autism

Mikael Heimann¹, Tomas Tjus² & Mats Lundälv³

¹University of Bergen, Norway; ²Göteborg University, Sweden & ³The Queen Silvia Children's Hospital, Sweden

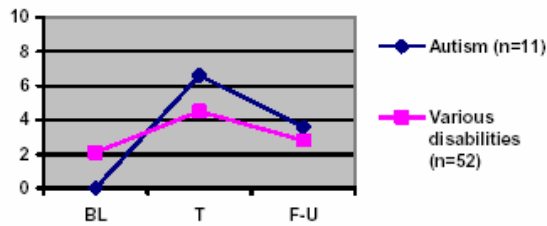
Field studies have demonstrated that multimedia combined with supportive interaction might boost literacy and communicative development in children with autism (Heimann et al, 1995; Tjus, 1998; Basil & Reyes, 2003). Enjoyment and good teacher support leads to both better language and communication skills. In short, the strategy employed consists of three equally important building blocks:

1. **Multimedia** programs that offer immediate feedback of text material through clear animations and digitized speech in order to represent the same semantic content in different modes.
2. **Interaction**. The teacher acts as a supportive dialogue partner.
3. **Recasting**. Whenever appropriate the teacher uses recasts based on the child's verbal utterances or written sentences created within the multimedia environment.

These three blocks are developed out of a specific theory, the Rare Event Learning Model (REL). This dynamic cognitive theory tries to outline the fundamental components necessary for language learning for children with disabilities (Nelson et al, 2001). Some basic assumptions are:

1. Language delays are produced by multiple factors.
2. Different factors can operate in individual cases.
3. Processing capacities influence the interactive dialogue with important partners and contribute to the observed delay.
4. Children's current language structures needs to be challenged by appropriate new input.
5. Combinations of conditions need to converge to maximize support

The MIR strategy has proven to be effective in creating a rapid progress in learning for children with various disabilities. Gains in literacy have been documented (see Figure).



The presentation will discuss how our educational framework has been implemented and how it might be used for children with special needs. A small part of the presentation will also focus on a newly developed multimedia program (Omega-is; Heimann et al., 2004). This is a software that, when combined with a focused interaction strategy, creates good possibilities for adapting the activities to the unique needs of the child.

Plenary lecture 3

Strengthening Social Competence in Young Persons with Autism Spectrum Disorders (ASD)

Børge Strømgen and Luke Moynahan
University of Ulster at Coleraine and Glenne
Autismesenter

There is a growing impetus for the establishment of training social competence as a mandatory subject in Norwegian schools. The challenge for professionals working with children with Autism Spectrum Disorders is to be part of this initiative. Aggression Replacement Training (ART) (Goldstein et al., 1998) is an effective prescriptive programme for strengthening social competence and replacing aggressive behavior in normally functioning children and youth. ART can also be effective for students with ASD when delivered in mixed groups of children. Elementary school pupils with Autism Spectrum Disorders received 30 hours of school-based Aggression Replacement Training (ART) from teachers trained as ART trainers. Enhancement elements were added to the standard ART training formula. Social skills, problem behaviours and internalising and externalising behaviours were measured pre and post by standardised parent and teacher rating scales. Results show that 30 hours of standardised ART has a positive effect for children with ASD at school, and that parents report a positive but not significant improvement.

Autism Spectrum Disorders in a Forensic Psychiatric Clinic

PhD, licensed psychologist Bengt Persson

Background: neurodevelopmental disorders are common in forensic psychiatry. Söderström, Sjödin, Carlstedt and Forsman (2002) found a prevalence of 18 % autism spectrum disorders, ASD, in a study of 100 consecutive violent and sexual offenders referred for pre-trial forensic psychiatric investigation. Many patients with an ASD are convicted to jail but some go to forensic psychiatry. The Forensic Psychiatric Clinic of Växjö, Sweden had the capacity of 82 in-patients, 65 male and 17 female.

Aims: to investigate the prevalence of ASD in patients in the Forensic Psychiatric Clinic in Växjö.

Methods: all in-care patients were screened in April, September and December 2001. In all, 104 patients were screened, utilising the Autism Spectrum Disorders in Adults Screening Questionnaire (Nylander & Gillberg, 2001). 36 patients obtained points above the decided cut-off of 5 points. These patients subsequently went through a regular diagnostic procedure including psychological testing.

Results: 12 patients, 4 men and 8 women, or 11.5 % of the screened population received an ASD diagnosis.

The diagnostic procedure will be presented and the results will be discussed in the presentation.

Workshop 3, Comorbidity Styrerom 1-2

Psychopathology in Autism: A theoretical analysis of the concepts.

Author:

Sissel Berge Helverschou, Specialist in Clinical psychology
The Autism Unit, Department of Special Needs Education, University of Oslo

Collaboration: The National Autism Network of Norway have established a Node Function – organised as a project for 5 years – with the objective to ensure necessary services for adult individuals with autism, learning disabilities and psychiatric disorders in collaboration with two departments at Ullevål University Hospital in Oslo; Department for Habilitation of Adult People and Department for Psychiatry for Mentally Retarded. The project is headed by Professor Harald Martinsen, University of Oslo and Project coordinator and co-worker on the presented project is Tine- Lise Bakken, Ullevål University Hospital.

Background: The prevalence of psychiatric disorders is assumed to be higher in persons with learning disabilities and autism than in the general population. However, reported rates of psychiatric disorders vary significantly. Identifying psychiatric disorders in persons with autism and learning disabilities is difficult due to the vast overlap of symptoms between autism and psychiatric disorders. The identification process is further complicated by the impaired language and communicative skills and idiosyncratic or atypical symptoms of psychiatric disorders in persons with autism. The ordinary instruments for identifying psychiatric disorders in persons with learning disabilities are of limited value. The overlap of symptoms makes it difficult to differentiate between the diagnostic groups. Instruments for case recognition or diagnostic criteria for diagnosing psychiatric symptoms in persons with autism have not been developed. **Aims:** The aim of this project is to explore how psychiatric symptoms can be identified in individuals with autism and learning disabilities. It is focused on how symptoms of psychiatric disorders might be differentiated from the core characteristics of autism.

Procedure: The diagnostic criteria for autism and for four major psychiatric disorders - psychoses, anxiety disorder, depression and Obsessive Compulsive Disorder (OCD) - was theoretically examined with regard to the possibility of separating the concepts. To get valid and accepted indications on psychiatric disorders, characteristic items for each of the four major disorders were chosen from existing checklists. These items were compared to items characterising autism. 254 items were selected representing core symptoms of the four major psychiatric disorders and autism. The

items were randomly presented and theoretically analysed by nine experienced clinicians.

Results: The theoretical analysis identified 98 items with overlap between symptoms of autism and symptoms of psychiatric disorders, and indicated the possibility of separating between symptoms of autism and psychiatric symptoms on a theoretical level. The remaining items can be a basis for clinical descriptions of how psychiatric disorders in individuals with autism and learning disabilities can be recognised and identified and for developing a checklist for case recognition.

Prevalence of psychiatric disorders in children and adolescents with Autism spectrum disorders

Personal investigator: Eili Sponheim, MD PhD
Research fellow: Elen Gjevik, MD
Special teacher Torill Fjæran
Psychologist Sigmund Eldevik

A collaborative study between Ullevål University Hospital and Norvoll School and Centre for Autism.

Background: A variety of medical disorders have been described in ASD and a majority of individuals with ASD are mentally retarded. High levels of psychiatric disorders among mentally retarded are well documented. Relatively few studies have looked at psychiatric disorders in ASD and even fewer have used standardized instruments and interviews (Gillberg and Billstedt 2002, Sverd 2003, Lainhart-99, Ghaziuddin 2002).

DISC-P was used in a Dutch community based study of 7 to 20 year old intellectually impaired individuals (Dekker et al 2003). They concluded that most disorders can be identified in intellectually disabled children using standardised instruments. This population also included individuals with ASD. No study of our knowledge has used the Kiddie-SADS or any other commonly used standardized instrument based on ICD-10 or DSM-IV criteria in an ASD population.

Aim: The primary objective of this study is to estimate the prevalence of psychiatric disorders in a population of children and adolescents with ASD using the Kiddie-SADS interview.

Material: 95 children and adolescents age 6 to 17,9 years registered in 2003 at a special school in Oslo (Nordvoll), all with a former confirmed diagnosis of ASD, were invited to participate. They represented 1,5/1000 of all children and adolescents at the same age in Oslo. A total of 69, age 6-17.9 years, 55 boys 14 girls were included, i.e. response rate 73%.

Instruments:

The schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime version (K-SADS-PL)
 Autism Diagnostic Interview-Revised (ADI-R)
 Vineland Adaptive Behaviour Scale
 Language tests
 Cognitive tests
Clinical implications: Diagnosing psychiatric disorders may lead to better understanding of the different subgroups in ASD, and more specific and better treatment of each individual.
Preliminary results will be presented:

Asperger Syndrome and co-occurring disorders: true comorbidity or overlapping diagnostic criteria?

Christian Hjort

Technically the term comorbidity means something like “two (or more) diseases present at the same time in the same patient”. Comorbidity is a phenomenon that can have different explanations. WHO’s ICD-10; Diagnostic Criteria for Research has several diagnoses normally regarded as having few similarities with Asperger syndrome that have diagnostic criteria that resemble the criteria for Asperger syndrome. Some of these are exclusion diagnoses for Asperger syndrome. The diagnostician is faced with several dilemmas: Does apparent comorbidity represent true comorbidity or is it the result of different diagnostic traditions? How many diagnoses are relevant to the treatment of the patient, and which diagnosis should be given priority?
 I will give examples of diagnoses that have overlapping diagnostic criteria with Asperger syndrome and discuss the dilemmas this poses for the clinician.

Workshop 4 – Treatment Styrom 3-4

Neuropsychiatric and neurodevelopmental outcome at age 6 and 7 years of children who screened positive for language problems at 2.5 years. A community-based study.

Presenter:

Gudrun Nygren M.D, Queen Silvias Children’s Hospital, Sahlgrenska University Hospital and Department of Child and Adolescent Psychiatry Sahlgrenska Academy at Göteborg University, Sweden and

Carmela Miniscalco M.Sc Lic fac, Department of Logopedics and Phoniatrics, Sahlgrenska Academy at Göteborg University, Sweden

Objective: Prospective study at school age of neuropsychiatric and neurodevelopmental outcome of language dysfunction suspected at child health screening around 30 months of age. **Method:** In a community sample, 25 children screening positive and 80 children screening negative for speech-language dysfunction at age 30 months were examined in detail for speech-language dysfunction at 6 years. The screen-positive children were then followed for another year and subjected to an in-depth neuropsychiatric examination by assessors blind to the results of prior testing.

Results: Detailed follow-up results at age 7 years were available for 20 children and partial results for 2 children. Twelve of the 20 (60%) examined children had a major neuropsychiatric diagnosis (autism, atypical autism, Asperger’s syndrome, attention-deficit/hyperactivity disorder (ADHD), or combinations of these), and two (10%) children had a borderline IQ with no diagnosis. **Conclusions:** Children who screen positive for speech and language problems in the general population before age 3 years are at extremely high risk of autism spectrum disorders and/or ADHD at 7 years of age. Remaining language problems at age 6 years strongly predicted the presence of neuropsychiatric/neurodevelopmental disorder at age 7 years.

Follow-up study of adult patients referred to neuropsychiatric assessment.

Lena Nylander, Maria Holmqvist, Sven Jönsson, Christopher Gillberg, Lars Gustafson

December 1998 to September 2001, 231 persons (140 men, 91 women; mean age 31.3 [males] and 31.7 [females] years) were referred/self-referred to a clinical assessment at the Neuropsychiatric Diagnostic Team for adults in Lund, Sweden. After clinical assessment, including extensive neuropsychological testing and parent interview, one of four possible diagnoses was arrived at. 81 (35.1%) patients got no neuropsychiatric diagnosis, 64 patients (27.7%) autism spectrum disorder (ASD), 81 patients (35.1%) ADHD or DAMP, and 5 patients (2.2%) Tourette’s syndrome.

The follow-up study started in October 2002, a year or more after the diagnostic evaluation of the last patients of this material. At this time, 4 of the patients had died (whereof one with ASD) and 2 had moved abroad and could not be reached. Thus, 225 patients remained, and to this group a questionnaire was distributed by mail. The questionnaire, constructed for the purpose of this study, contained 32 questions, relating to the

subject's opinions on the evaluation process and correctness of diagnoses, current socio-economic circumstances, satisfaction with current circumstances, and ongoing treatment. The answers to the questions about current circumstances are to be compared to socio-economic data at the time of assessment, as described in the medical records.

121 patients (52.4%) answered the questionnaire. The proband (= responders) group comprised significantly more females (47.9%) than the attrition group (30%) and also more patients with ASD. Otherwise there were no significant differences between the two groups.

Of patients diagnosed with ASD, 41 (64.1%) answered the questionnaire. Of these, 11 (26.8%) had a FSIQ<70.

The 3 most common previous diagnoses in probands with ASD were mental retardation (8 cases), psychosis/schizophrenia (8 cases) and OCD (5 cases).

2 men in the ASD group did not know their own diagnoses, and one woman said she had not been diagnosed. 90% of patients in the whole proband group were correctly informed about their diagnoses.

In the ASD proband group, only 2 (4.9%) had a partner or children, 22 (55.0%) persons had independent living, and 7 (17.9%) had income from work. Probands in the ASD group had less contact with physicians and less medications than the other groups.

Probands with ASD scored slightly higher than the other groups on some questions regarding satisfaction with current living circumstances (daily occupation, housing, treatment and support) but lower on a question regarding expansion of social network. Overall satisfaction with present life situation was 3.6 (on a scale 1 – 5) in the ASD as well as the ADHD group.

The data collected in this study, which also include questionnaires sent to a small group of probands' parents, need to be further studied.

Presenter: Lena Nylander, MD, Department of Psychiatry, University Hospital of Lund, Sweden.

"Quality of life" among individuals with autism in Norway, aged 20-67. A comparative study

K. Lyng, Autism Unit, Institute for Special Educational Needs, University of Oslo, Norway

This paper examines Quality of Life (QoL) among individuals with autism between 20-67 years, as QoL can be "extracted" from a survey on the living conditions in a population with learning disabilities/mentally retarded in Norway.

The data used comes from a national evaluation of the effect of the reorganisation of the care for the mentally retarded in Norway, 10 years after. The evaluation is based on a survey of the living conditions among those who moved from institutions into sheltered homes with various levels of care, in the communities where they were born. No information was collected directly from the individuals. Data collection was based on information given by staffs and focused on "objective" information about participation, housing standards, work, but also information about activities, behaviour problems and everyday skills.

A total of 427 individuals, randomly selected from a representative sample of communities, participated in the study. Fifty-eight individuals had the diagnosis "autism" or showed "autistic traits". We grouped the variables to reflect 8 QoL dimensions (as suggested by Robert Schalocks, 2000): Interpersonal relations, Emotional well-being, Material well-being, Social inclusion, Autonomy, Physical well-being, Personal development, Legal rights). To examine younger and older cohorts the population were split into two age segments, those under and over 40 years old.

Data from the study will be presented and discussed.

Saturday
April 16

Plenary lectures – 4

The acquisition of alternative communication forms in children without comprehension of spoken language:

Theoretical basis and a case study

Stephen von Tetzchner
Department of Psychology, University of Oslo
s.v.tetzchner@psykologi.uio.no

A significant proportion of children with autism do not develop spoken language and need to develop alternative means of communication. The comprehension of spoken language varies considerably in this group. Some of them gain an understanding comparable with their cognitive skills, while others develop no comprehension of spoken language. In some cases, the impaired processes may be related to speech rather than language and communication, and the children are able to learn non-vocal communication systems, provided the intervention includes functional strategies and give the child non-language cues to the meaning of the manual or graphic signs taught.

The present study describes graphic communication intervention with a girl with intellectual impairment and autism who did not develop comprehension of spoken language. The aim of the intervention was to help “Mari” acquire a graphic vocabulary that reflected her interests and preferences, and the activities and routines of her daily life, by providing sufficient cues to the meanings of the graphic representations so that she would not need to comprehend spoken instructions. The girl's comprehension (and hence use) of spoken language remained lacking over a three-year period, she acquired an active use of over 80 photographs and pictograms. The study demonstrates that some children cope better with the cognitive and attentional requirements of graphic communication than those of spoken language, and that it is possible for communication-impaired children to learn to use an alternative communication system without speech comprehension, provided the intervention utilises functional strategies and non-language cues to the meaning of the graphic representations that are taught.

Searching for the subjective: Can “inner life” be made accessible through restrictions in how you are allowed to speak about – and to a person?

K. Lyng & E. Grindheim
Autism Unit, Institute for Special Educational Needs,
University of Oslo, Norway

How can we then get access to “inner states” in a group that don’t express their feelings or intentions in ordinary language? How can emotions be read and interpreted when they are not expressed in verbal language? This paper discusses if the subject and the subjective best can be accessed when the activities of the subject is understood in the context of a dialogue and a narrative.

Individuals with autism without proper skills in using verbal language, cannot express their “inner life” in ordinary codes. Consequently, intentions and emotions, pain and bodily states cannot easily be communicated, nor can observers easily read them. Lack of skills in using language as a cultural (and communicative) tool will also exclude the individual from a culturalization process, and from a shared cultural ground (reference system), including values and coding of emotions and bodily states.

Because language acquisition is a process taking place in interaction between individuals already capable and individuals who are not, language acquisition is also a social process. This process is also considered basic to cognitive development and self-regulation. Such a dialogic relationship implies two subjects interacting in a certain speech genre, or as taking part in certain language games, enforcing certain stylistic aspects (like this abstract!) and restricting the way things can be spoken about.

In this study we have explored the potentials of narrative enforcement for accessing the subjective in three adults (55-60 years old) with autism.

Staffs were instructed to observe interaction with the person and write down the interlocutor’s comments and replies as if the person could express herself in ordinary language. Only 1. person singular statements were allowed. The utterances allowed were restricted to everyday language containing emotional and intentional content, and should also reflect the personality of the interlocutor. Two formats were used: texts (play scripts), and as picture series (cartoons) with text bubbles. The staffs also had to give reasons for why the individual should express emotions in this particular way, and how they could get access to the emotional content (like gestures, sounds, breath, mimics, posture etc). Non-verbal signs (sounds, gestures, breath etc) were mapped into individual dictionaries. Most of the materials delivered were based on video recordings. The

work was reported, supervised and commented upon in monthly meetings with the staffs during one year.

The results from this study will be reported and discussed in relation to the method's ability to describe and understand "inner states" and to create shared meaning in the interaction with persons with autism. The consequences for constructing the individual as a person with intentions, will and emotions acting upon an environment will also be discussed.

Workshop 5 – Treatment

Styrerom 1-2

The staff's pedagogical work with an adolescent boy with autism and intellectual disability

Marie Hübel (presenter), Karin Linder
Bengt Sivberg

Autistic Spectrum Disorders (ASD) are severe and lifelong developmental disabilities, which affect the individual's behaviour, communication, cognitive abilities and social relationships. The cognitive deficits and problems in communication imply a functional disorder demanding environment adapting including teaching methods as an important part of the treatment for making it possible to live with the disorder. Today society's policies are that children with autism should be integrated and receive individual special teaching methods. This study reports the unique living situation of an adolescent boy with autism and intellectual disabilities, over a period of three and a half years living together with his four caregivers. The study was designed as a longitudinal single case study using different methods such as diary reports and semistructured interviews. The aim of this study was to describe and evaluate the working process and the staff's pedagogical work. Findings indicate that the process of establishing structure in the work was influenced by the working situation in this particular case. The staff's perceptions of the working process and the boy's life situation, changed from a positive to a more negative view, which seemed to affect their choice of pedagogical strategies. The use of different pedagogical strategies to improve the boy's development and communication competence turned out to be both successful and less successful. The analysis of the diary notes and the interviews showed that staff more often used different successful pedagogical strategies during the first year when they felt more optimistic, resulting in feedback from the boy and improvement of skills. The unsuccessful strategies as threat and punishment were dominating during the later period when the staff felt resigned and mistrusted and resulted in the boy's stagnation and lack of improvement in different skills.

Imitative interaction as intervention for children with autism: Feedback to practice.

Cand.san. Kari E. Laberg, cand.san. Bodil Nordøen & prof. Mikael Heimann,
Eikelund Resource Centre / University of Bergen

Studies conducted in France and the US (Nadel et al., 2000; Field et al., 2001; Escalona et al., 2002) suggests that immediate imitation promote proximal social behaviour among children with autism. Recently, these results were replicated and extended in a Norwegian setting (Heimann et al., in press; Laberg & Nordøen, 2004). Twenty children with an autism spectrum disorder (ASD) were randomly assigned to an intervention based on either imitation (n=10) or a contingently responsive interaction without imitation (n=10). The children had little or no functional speech, and their developmental age averaged 25 months. Both groups were presented with repeated sessions of a modified version of Nadel's "still face" paradigm (still face/ intervention/ still face/ spontaneous play). The analysis revealed a significant increase of both proximal and distal social behaviours (touch and look at person) for the imitation group, which confirms previous reports. In addition, an increase in elicited imitation as measured with the PEP-R was also observed for the imitation condition. This finding extends earlier reports in that it suggests that the social expectancies unlocked by the imitation intervention also spread to tasks outside the experimental procedure.

The focus of this presentation will be implementation of the findings in the clinical setting. We want to discuss a project idea on how to adapt and integrate imitation with current psycho-educative programs for children with autism.

Individual variation in the need for structure

Authors: Eva Norberg, Katrine Hildebrand and Kine Kolstad.

Children and youth with Autism show great differences in their way of behaving. By focusing on every individual and their special way of functioning we assume it to be possible to understand and appreciate the individual variation.

This is the background for "Prosjekt Væremåte"/"Project Individuality". The project is established at Section for teaching children and youth with Autism at Åsveien school in Trondheim, and funded by the National Autism Network of Norway.

The main perspective for "Prosjekt Væremåte"/"Project Individuality" is : *" To construct adequate systems that make it easier to choose the right techniques, methods or procedures*

in teaching children and young people with autism. The purpose is to tailor educational methods to the individual needs”.

To identify the individual variation we have constructed a "checklist" of 295 items containing relevant topics that is of importance in the education of children and young people with Autism. This checklist was tested in a pilot study on 57 children and youth with Autism. After analysis of the material, the checklist was revised, and the revised version consists of 177 items. Results from 159 informants scored by the revised version of the checklist are so far analysed.

On the workshop we want to present and discuss results regarding structure and routines.

Children and youth with Autism have large problems with understanding and interpret their environment. A main focus in education is to adjust daily life and the teaching methods to every individuals needs in understanding and interpretation. In this connection, the need for structure is one of the important topics. 18 of the items in the checklist – "Væremåte" – (way of being) are questions related to the topic structure and routines.

From the material it has been possible to identify following five subgroups regarding the topic structure and routines:

- Children with Autism who are focused on structure (structure focused)
- Children with Autism who are dependent on structure (structure dependency)
- Children with Autism who are “driven” by the structure (structure driven)
- Children with negative reactions to environmental changes, such as new elements, foreign people, new settings or new situations
- Rigidity
-

Workshop 6 – Outcome

Styrerom 3-4

Therapeutic communication in learning disability nursing

Author: Trine Lise Bakken, Psychiatric division, Ullevål University Hospital

Supervisor I: Harald Martinsen, , Professor of the National Autism Network of Norway, University of Oslo.

Supervisor II: Svein Friis, Psychiatrist, PhD, Professor, Ullevaal University Hospital (UUS), Oslo.

Institution: The Autism Unit at the Department of Special Needs Education, University of Oslo /

Psychiatric division, Ullevål University Hospital

Background

Communication and social interaction is severely impaired in persons with psychoses, intellectual disability and autism, particularly by symptoms of severe disorganization.

Communication skills in professional caregivers of these patients have not to date been investigated systematically. The caregiver must master both a wide range and complex communicative skills due to idiosyncrasies and symptoms of disorganization.

Theoretical background

A concept of therapeutic communication was derived from theories including existentialism and positivistic philosophy, locus of control-theory and theories from developmental psychology.

Aims

The aim of the study was to elaborate measures for observation of communicative skills in order to evaluate communicative skills in the professional caregivers.

Subjects and methods

Patients and professional caregivers were included in this study from a project conducted by The National Autism Network of Norway. All participants were recruited from a special unit at Ullevaal University Hospital in Oslo, Norway.

Observation categories were elaborated from available literature and research on communication skills recommended for persons with psychoses, intellectual disability or autism.

Data is based on observation of sequences of behaviour; i.e. turn-takings in patients and caretakers.

Caregiver and patient communicational behaviour was observed in naturalistic settings of social interaction. Video camera was used. Measures were scored by two independent scorers.

Statistical significance in contingency tables was computed by Chi-square.

Results The preliminary results indicate that the observational categories work as expected. The results show that therapeutic communication in disability caregivers in this sample decrease the probability of disorganised behaviour in the patient significantly. **Conclusion:** The observational categories work as expected according to validation criteria and prove that principles of communication can be transferred into observational categories. Therapeutic communication might decrease disorganization in the patient.

Adapted Physical Activity for people with ASD Examples from practice

Name on presenter

Erwin Borremans, Physiotherapist MSc.,
Keskuspuisto Vocational Institute, Helsinki,
Finland

The presentation gives an introduction in 'for people with ASD adapted physical activities'. It is trying to bridge the gap between basic theories of adapted physical activity and practise. What is exactly psychomotor therapy or psychomotricity? How can we come from research evidence that states the importance of motor movements, to real hands-on practise? Some special effects and benefits of physical activities will be highlighted and practical information what to do; to improve a specific activity-session will be presented. How one can improve communication or initiative during individual or group sessions. With help of lot's of video material from practise basic ideas will come clearer.

The main target group are therapist or professionals working in the field of movement but it can also give researching some more ideas of practise.

Keywords:

- Research on psychomotor activity of persons with ASD
- Effects and benefits of APA on persons with ASD
- Practical tips and examples how to improve good practice

Asperger syndrome – a comperative follow-up study of 100 males more than 5 years after original diagnosis

Mats Cederlund, M.D & Bibbi Hagberg, B.A
BNK, Otterhällegatan 12 A, 411 18 Göteborg
Sweden

Background

Prospective in-depth follow-up study of 100 males with Asperger syndrome (AS) more than 5 years after original diagnosis. All males were of normal intelligence (IQ>70), above 16 years and fulfilled the Gillberg & Gillberg criteria for AS. The mean age at primary diagnosis was 11.3 years.

Methods

One-hundred males with AS, diagnosed at 5-24 years of age, were followed up and re-evaluated after 5-19 years at ages 16-36 years. The instruments used at follow up included Diagnosis of Social and Communication Disorder schedule (DISCO-10), WAIS-III, Vineland Adaptive Behaviour Scales, neurological- and

psychiatric examination and the Global Assessment of Functioning scale (GAF). Specific criteria were used for the classification of outcome, taking into consideration employment, higher education, independent living and peer relations. The outcomes were contrasted with those of a similarly aged comparison group of males with autism.

Results

Seventy-five of the original 100 were followed-up. The mean age at follow-up was 21.8 years. We found that all but one of the males assessed were still of normal intelligence. The diagnosis was still valid in the vast majority of cases. A few did not fulfil enough clinical diagnostic criteria for AS. There was good correlation between clinical diagnosis and DISCO- diagnosis at follow-up. Of those who were above 20 years of age only a few had an occupation and a few were studying at University. The vast majority were still living with their parents.

Conclusion

Children with AS have a worse psychosocial outcome than what would be expected, taken their level of intelligence into account, but considerably better compared with intellectually lower functioning individuals with autism. The vast majority were "independent", although leading fairly isolated lives in many cases.

Workshop 7 – Family

Oscar Mathisen

Parents' experience of having a child with autism and intellectual disability living in a group home. A case study

Ylva Benderix

Department of Nursing, Faculty of Medicine, Lund University

Some children with autism and intellectual disability also have deviant behaviour sometimes not possible to regulate, which is stressful not only for the child, but also for family members. This small case study described the experience of ten parents in five families entrusting their 10–11-year-old child to a group home. Results from the hermeneutic phenomenological text analysis of the interviews with the parents before their child moved were themes such as: *Grief and sorrow about not having a healthy and normally developed child* and *Total exhaustion*, and two years later when the child was living in the group home: *It was a relief for the family when the child moved to the group home* and *Being in an ethically difficult situation when entrusting the child to others*.
Ylva Benderix

Families of children with autism spectrum disorders - Parental and family stress, social support and access to information and services

Gudrun Thorsteinsdottir, State Diagnostic and Counseling Center, Iceland
Solveig Gudlaugsdottir, Department of Child and Adolescent Psychiatry, Landspítali University Hospital, Iceland.

The purpose of this paper is to present an ongoing study on the experience of being a parent of a child with autism spectrum disorder (ASD). Research in Iceland has shown that the prevalence of autism has steadily increased over last decades. The authors have many years of experience working with families of children with ASD, and have become increasingly aware of the necessity of having access to information about how ASD affects those families.

We hypothesize that the stress of families with children with ASD, and their ability to take on the complex role of raising a child with ASD, is related to their access to support and services. It is therefore important, right from the beginning of the diagnostic process, to increase the accessibility to services as well as enhancing their quality. Also, that this concerns both the services for the child, as well as support and counseling for the parents and siblings.

Data will be collected with a questionnaire which will be sent to the parents of children who were diagnosed with ASD during the years 2003 and 2004 at the State Diagnostic and Counseling Center. The present authors designed the questionnaire, which is based on prior studies in Iceland, the authors' working experience, discussions with other professionals, and the ASD literature. The questionnaire consists of four subsections: the diagnostic process, current services, family stress, and coping of siblings. Preparation of the project is still in progress.

Case study - the late diagnosis of autism spectrum disorders understanding risk and protective factors and developmental mechanisms

Mette Elmoose Eriksen, Cand. psych. aut.
Ph.D. student, Department of psychology,
University of Aarhus

Even though more standardized methods have been developed and there is an increasing knowledge both among the public and professionals there is still a number of persons who do not receive the autism spectrum diagnosis until adolescence or adulthood. For some persons this may be due to earlier lack of knowledge and methods but this may also reflect the broadening of the diagnostic criteria and a need for more information on the different developmental patterns and manifestations of persons within the autism spectrum. It may also reflect a change in the society's organisation and institutions e.g. in an increase of demands that surpass the competencies and flexibility of persons with cognitive dispositions within the autism spectrum; persons who in other settings might have taken an adaptive developmental path. Some of the persons I have met who are diagnosed late seem to have adapted to the environment for a long period of time or the environment has managed to adapt to the person. I see these persons as great informants on both adaptive and maladaptive development within the autism spectrum.

Using Developmental Psychopathology as a theoretical framework the project seeks to increase the understanding of the interaction between personal and contextual risk and protective factors in the development of persons diagnosed relatively late within the autism spectrum disorders. The project focuses on why the present maladaptation surpass the diagnostic level at this time in life and how this maladaptation can be understood as an interaction of personal and contextual factors.

The project is a multiple casestudy (Robson, 2002) and with this research design the goal is to create in depth knowledge that enables me to get an idea of not only the possible factors of importance to the developmental path but also the developmental mechanisms.

The cases are persons between 14 and 21 diagnosed at Psychiatric Hospital for Children and Adolescents, University Hospital Aarhus with a general and verbal IQ>75 as measured on WISC-III or WAIS-III.

On the workshop the design and preliminary data of the project will be presented and discussed.

Poster presentations

Abstract will stay up during the whole Conference

Torsdag/Fredag: Styrerom 5-6 og styrerom 7-8.

Lørdag: Styrerom 7-8 og Gustav Vigeland

"Language comprehension development through the use of Bliss"

Marie-Louise Bangstad, cand. paed.spec. Torhild Kausrud, cand.ed. Line Kristiansen, Master of Science, Bredtvet Resource Centre.

The relationship between children diagnosed with autism and children with specific language impairment in regards to language, communication, and social functioning is the focus of much current research (Bishop & Norbury, 2002; Botting & Conti-Ramsden, 1999; Jordan & Howlin, 1999). The challenges in classifying these children more precisely have resulted in viewing their difficulties as interrelated rather than separate themes.

Significant receptive language impairments may set restrictions in terms of vocabulary, concept and language structure acquisition, which in turn, may negatively affect development of academic skills. Children with significant language impairments do not seem to respond to traditional special education approaches. These children do not merely represent a pedagogical challenge, but their difficulties also require competence in areas that one cannot expect schools to have. This is a problem we are often faced with in our work at Bredtvet Resource Centre.

In a current clinical case study, we have chosen to meet this challenge by implementing augmentative and alternative communication (AAC) as a methodological tool in facilitating language development. The current project is a part of Bredtvet Resource Centre's collaboration with the Autism Unit (University of Oslo).

The case study's participant is an 11-year-old boy with difficulties in interrelated areas, significant receptive language impairments, and adequate non-verbal abilities. Rationale for implementation of the AAC symbol system Bliss, was due to the child's need for language visualization. Blissymbolics is a logical system, which depicts concept distinctiveness, as well as syntactical and morphological language structures (Balkom, & Donker-Gimbrère, 1996). To our knowledge, Blissymbolics has been used to a small extent as an augmentative tool in the education of children

without physical impairments (Jaroma, 1992; Koerselman, 1996; Kausrud & Ottem, 2000; Ottem & Kausrud, 2001). To date, this approach may therefore be viewed as an untraditional means of teaching children with significant receptive language impairments.

The intervention began Fall 2004 and will extend until summer 2005. The child's difficulties, teaching methods as well as the study's preliminary results will be described in the poster. Preliminary results are currently observed through change in behavior, language and communicative abilities.

Working with children with autism in the Childrens department, National Centre for Epilepsy, Sandvika , Norway.

Kjersti Klonteig, Birgitt Hvesser, Gry Bang-Kittilsen, Christiane Sørensen, Susanne Henning og Per Brandt-Hansen.

In 2004 the Children's department treated 654 patients coming from all parts of Norway. 50 % of the patients were new , more than 50 % had learning disabilities. We are working according to a comprehensive care model.

7 patients , 1 girl and 6 boys, aged 5 – 12 years were investigated according to the autism protocol in our department. The following diagnosis were represented : Rett syndrome, Mb. Down, tuberous sclerosis, Asberger syndrome together with the autism spectre.

We describe how informations were collected, the flowchart in the units, how special orders were carried out, how many people that were involved and how follow up after the hospitalisation.

We conclude that it is a challenge to manage these patients, and we clearly see the need for special units to take care of them.

A Systemic View on Neuropsychiatric Assessment

Annika Åberg Blomqvist, Clinical Child Psychologist
Anders Brynne, Consultant Child Psychiatrist
Ulf Linderholm, Remedial Teacher
Pia Rydberg, Social worker, Family Therapist

A Neuropsychiatric Unit was established in 2000 at the Child and Adolescent Psychiatry Clinic, Ryhov Hospital, Jönköping. Its mission is assessment of

children and adolescents with a complexity of problems, where a neuropsychiatric condition is considered to be an important component.

The assessments are conducted from a systemic point of view, including evidence based assessment methodology, within a Child and Adolescent Psychiatry framework. The child is viewed within the family context, partly for differential diagnostic purposes, but also in order to aid the family in mobilizing its resources. It is seen important to support the family in understanding the child's difficulties and acknowledging them into the family system. Also seen as important are a high degree of involvement in the process both by the referrer and other carers and supporting agencies around the child and family.

The assessment process builds on forming a relation with the family in order to encourage alliance. We see this as a requirement for the family to develop the trust necessary to give a description in depth of the child, of its assets and shortcomings and of important aspects of the child's situation. The development of the child and of the problem are investigated in the family setting. The family participates in creating their own meaning of the assessment. Promoting a constructive attitude through integrating the assessment into the family's own conception is thought to increase the chance of stability over time. The referrer participates in the synthesis of the outcomes in dialogue with the team and family and are thus co-creators of the shared meaning underpinning the coming support work.

Dyspraxia
Dyspractical difficulties with voluntary acts
among people with autism.
Katrine Hildebrand

Children and youth with Autism show, great differences in behaviour. By focusing on every individual and their special way of functioning we assume it to be possible to understand and appreciate the individual variation. This is the background for Project Individuality. The project is established at Section for teaching children and youth with Autism, at Åsveien School in Trondheim, and funded by the National Autism Network of Norway.

The main perspective for Project Individuality is:

"To construct adequate systems that make it easier to choose the right techniques, methods or procedures in teaching children and youth with autism. The purpose is to tailor teaching methods to the individual needs".

To identify the individual variation we made a questionnaire, of 295 items, containing relevant topics that are important in the teaching of children and youth with Autism. The questionnaire has been tested in a pilot study with a selection of 57 informants. Then we made a revised version of the questionnaire which consists of 177 items. Scores from 159 informants are so far analysed based on the revised version of the questionnaire.

At this conference I will present a poster with the topic dyspraxia.

In the Project Individuality we define dyspraxia as problems with voluntary acts. People with this disorder, have difficulties accomplishing conscious activities. Dyspractical difficulties is seen when focus is drawn to the performance of a specific activity or movement. If the movement is automatic or non-conscious, the activity is completed without difficulties. It is important to identify people with both autism and dyspraxia, because we have to think differently about the techniques, methods and procedures used in educating these individuals, opposed to those used with non-dyspractic autists.

13 of the items in the questionnaire are related to the topic dyspraxia. From the collected data, it has been possible to categorize five important criterions that describe the topic of dyspraxia:

1. The person may halt or freeze in situations with focus on time pressure.
2. The person may halt or freeze when getting instructions which imply focus on the activity.
3. Focus may also cause problems with speaking; the person will whisper or talk with great effort and tense muscles.
4. When the person halt or freeze carrying out an activity a typical characteristic will be locked movements.
5. Depending on the situation, the person may vary between having- and not having problems with voluntary acts.

**Mainstreaming the Schoolchild with High –
Functioning Autism and/ Asperger Syndrome**

Psykiologspesialist Gun Iversen, Barne- og ungdomspsykiatrisk avdeling Helse Bergen, Haukeland Universitetssykehus.

Social interaction problems seem to be the greatest challenge in living with autism, even for high functioning persons. Increased risk for mental health problems has been reported by many professionals. With respect to the schoolchild the

social learning difficulties and developmental problems should be taken care of as good as possible.

In the last decade several new teaching methods have been introduced and used, and there is for the time being a great optimism about using cognitive methods in social skill training. Lately there has been an important contribution to these methods, a cognitive – affective training program named KAT – Kit Cognitive Affective Training (Callesen et al. 2002).

Although these newer methods seem to be useful, we still know very little about the effects that they might have on the developmental course and social difficulties. How the teachers in the ordinary school should be prepared to use them is also a question of interest.

The project will study the social learning process in 8 -10 children aged 9 -12 years old with normal school placement. Intervention will start in September 2005. Each child will receive individual training using the KAT – Kit in two sessions weekly and social skill training in a smaller group from the class, during one school year. The Social Story technique and Comic Strips Conversation method will be used as instruction methods in accomplishing the KAT –Kit.

The teachers, parents and the child will be introduced to the training program before start, and the teachers will be regularly supervised and guided in the training process.

The training will be individualized according to the child's developmental needs and social difficulties.

The effects of the cognitive – affective training program on the children's social development will be done as a clinical replication in a single –case study with multiple baselines. The question of how the teacher's competence develops will be an exploratory part of the study.

The child's social behaviors pre and post training will be assessed by using four instruments: a) a questionnaire, the PIPPS (Penn Interactive Peer Play Scale, Fantuzzo & Hampton 2000), b) The Observation Profile for special needs within the Asperger syndrome (Cumine et al. 1998), c) The Strength and Difficulties Questionnaire SDQ – Nor (Goodman 1999), and d) a rating scale: Sosial atferd hos elev (Iversen 2004). The child's emotional and social understanding will be assessed by using Twelve Small Stories about Feelings (Nielsen, Kaland and Rasmussen 2003). Norwegian translations will be used in all tests. Repeated measurements through the intervention period will

be done by using the rating scale Sosial atferd hos elev.

The selection of measurement methods to evaluate the effects of training and guiding the teacher has not yet been done, and is still in work.

The toolbox

Kine Kolstad

Children and youth with Autism show great differences in their way of behaving. By focusing on every individual and their special way of functioning we assume it will be possible to understand and appreciate the individual variation.

This is the background for “Prosjekt Væremåte”/“Project Individuality”. The project is established at Section for teaching children and youth with Autism at Åsveien School in Trondheim, and funded by the National Autism Network of Norway.

The main perspective for “Prosjekt Væremåte”/“Project Individuality» is:

“ To construct adequate systems that make it easier to choose the right techniques, methods or procedures in teaching children and young people with autism. The purpose is to tailor educational methods to the individual needs”.

There are lots of different educational methods and aids, techniques and procedures which are used in education of people with autism. We have no tradition for making a survey of tools which are used in education of children/youngsters with autism in Norway. Knowledge of educational methods and training principles are often attached to few resourceful individuals or for example resource centres.

Project Individuality has created a questionnaire which can help us making a survey of the different practical methods and techniques which are used in education of children and youngsters with autism. The questionnaire has been used in five different special schools in Norway. The enquiry has resulted in 44 different toolboxes from 44 different children/youngsters with autism.

The project wants to establish a large toolbox which function as an ideas bank and starting point for peoples who are responsible for education of children and young people with autism. Persons in charge can use this toolbox to tailor educational method to the individual needs. The toolbox is also a unique possibility to gain insight into the practical treatment of children and young people with autism in Norway.

The poster presentation will contain information about the questionnaire and also present the analysis of some of the results.

The questionnaire is divided into 7 different topics and these topics are going to serve as a starting point regarding the results from the survey:

1. Predictability
2. Motivation
3. Arranging of the physical and social milieu
4. Social interaction
5. Communication
6. Challenging behaviour
7. Independence

Experienced social anxiety in boys with Asperger syndrome

S Kuusikko, K Jussila, R A Pollock, M-L Mattila, H Ebeling, I Moilanen & D L Pauls
University Hospital and University of Oulu, Finland
Massachusetts General Hospital/Harvard Medical School

Background: Asperger syndrome (AS) is a type of pervasive developmental disorder (PDD) defined by qualitative impairment in reciprocal social interaction, qualitative impairment in verbal and non-verbal communication and imagination, and markedly restricted repertoire of activities and interests. Rituals and obsessions are often viewed as an anxiety-reducing behaviour that gives a feeling of control for individuals with PDD. However, social anxiety is a psychological disorder, which might lead to suspicion of AS. Socially anxious individuals may be socially clumsy, have abnormalities in communication and lack of emotional expression. Also, a common coping style for anxious individuals is to create certain routines and rituals to ease anxiety symptoms. Special interest can work as a reason to avoid social activities.

Objective: To examine experienced social anxiety in boys with AS.

Methods: Participants included 26 clinically diagnosed boys with AS (8-15 years old, $M = 11.5$ years, IQ greater than 80). Clinically made AS diagnoses were confirmed with The Autism Diagnostic Interview- Revised (ADI-R) and with The Autism Diagnostic Observation Schedule Generic (ADOS-G). The non-AS control sample was collected from Oulu area and included 44 healthy boys (8-15 years old, $M = 11.8$ years). Participants completed self-report measures of social anxiety (SASC-R), situational related anxiety (STAIC-S), and general anxiety (STAIC-T).

Results: Significant differences were found in social anxiety ($p < .01$) and general anxiety ($p < .05$) between 13-15 years old boys with AS ($M = 14.1$ years) and their control counterparts ($M = 14.1$ years). 13-15 years old boys with AS reported more fear of negative evaluation from peers ($p < .05$), more social avoidance and experienced distress in new situations and with unfamiliar peers ($p < .05$), and more generally experienced social avoidance and distress ($p < .01$) than their control counterparts. However, no significant differences were found between younger participants.

Conclusions: The prevalence of social anxiety and general anxiety symptoms are higher in male adolescents with AS than in their control counterparts. It seems that boys with AS realize their social and communicative impairments in adolescence which might cause the dramatic change in their experienced social anxiety and lead also to more generally experienced anxiety.

Effect of training joint attention skills in young children with autism – an intervention study

Anett Kaale¹, Eili Sponheim², Lars Smith³

- 1) Regionsenter for barn og unges psykiske helse (R-BUP), Helseregion Øst og Sør,
- 2) Ullevål universitetssykehus, SSBU
- 3) Universitetet i Oslo, Psykologisk institutt.

A poster with the same title as above will be presented at the conference.

There has been substantial focus on the extensive difficulties children with autism experience with respect to joint attention and there is a connection between the children's ability to initiate and respond to joint attention and their subsequent language abilities. These findings highlight the importance of focusing on joint attention in early intervention programs for children with autism.

Aims: The aim of this study is to increase knowledge about how intervention may improve joint attention skills and language abilities in young children with autism. Through a systematic implementation of an intervention method designed to develop joint attention skills the project attempts to answer the following research questions:

Is it possible to use intervention to influence the development of joint attention in three years old children with autism?

- To what extent does intervention result in long term changes in the children's joint attention abilities?
- Does the intervention effect generalise to situations other than those in which these abilities are acquired?

- Does intervention have a different effect on responding to joint attention, as compared to initiation of joint attention?

What is the effect of intervention targeted at joint attention on the children's language development?

- To what extent does intervention result changes in the children's language abilities?
- Is the effect on understanding language different than the effect on language production?

Experimental design/Procedures: In order to measure effect of the intervention a single case with multiple baselines design has been selected. The project will recruit twelve to fifteen 3 years old children diagnosed with autism. The children will be in the same experimental situation, but the point in time at which the intervention commences is being displaced for each child (after 2 – 10 weeks in baseline). The effect of the intervention is demonstrated when the change in joint attention skills of several children coincides with the systematic and sequential introduction of intervention. The children's joint attention skills will be recorded frequently and extensively in structured and unstructured situations designed for eliciting joint attention skills through baseline and intervention and again at follow up one year after. The videotapes will be coded for frequencies of specified joint attention skills. Furthermore, the interaction between the children and significant adult persons will be filmed in 10 minutes sections of free play on a regular basis. Generalization of joint attention skills (to the home situation) will be assessed by video recording parent-child interactions in the children's homes and by using Pictorial Infant Communication Scale (PICS; Smith in cooperation with Delgado, Mundy and Block). The children will also be examined by standardised tests of joint attention (ESCS; Early Social Communication Scale) and language (CDI; MacArthur Communicative Development Inventories and the PLS-3; Preschool Language Scale-3) before and after intervention, and at follow up.

Intervention: Joint attention skills will be trained by preschool teachers in mainstream nursery schools using a combination of behavioural techniques (shaping, prompting...) and milieu teaching (following the child's lead...). The intervention will be based on Kasari et al. (2001). The nursery school staff will be trained in implementing the intervention method and they will receive consultation every second week throughout the intervention period.

Epilepsy and Autism Spectrum Disorders – Assessment for differentiation between epileptic seizures and challenging behavior.

Iren Larsen, Moshen Miryahaeyi, Vibeke Snarset, Siv Skarstein
National Centre for Epilepsy.
Supported by researcher Elisabeth Grindheim, the Autism Unit, University of Oslo

As a node function in the Autism network, The National centre for Epilepsy has developed a three-faced model for quality improvement in service delivery for people with double diagnoses of ASD and epilepsy. This model implies a treatment procedure which includes pre- and post hospital procedures for establishing active involvement of local health personnel to ensure common understanding of each patient's situation. The experience of prehospital collaboration with local health personnel showed the necessity of working out an assessment procedure for registration of epileptic seizures in patient's habitat. In a pilot project two registration procedures for use in the patient's everyday were adapted to former registration systems. One based on a 24 hours registration of activities and occurrence of seizures called: "Døgnklokke" and a schedule for description and identification of seizures named: "Schedule for functional analysis. The aims of these procedures are ensuring joint understanding of the behavior expressions of seizures and to enable differentiation from challenging behavior. A second goal is identification of possible contextual factors influencing seizures.

The poster presentation will contain the model for quality improvement in multidisciplinary treatment and the assessment procedures. In addition some preliminary results will be presented.

The support of the environmental context of one school aged autistic child with difficult behavioural problems with special reference to video feedback

Vuokko Marttila, O.T. Rehabilitation Unit/Child Neurology Unit, Central Hospital of Kymenlaakso and Leena Määttä, O.T. Child Psychiatric Unit, Hospital of Kuusankoski, Finland

This 2-year project collaborating with child psychiatry and neurology units is a preliminary experiment utilising systematically video feedback, a new method for us, aimed to support the environmental context of one 9 year old non-verbal autistic boy with severe behavioural problems. Two occupational therapists, one from both units, have worked together in the project supported by the child psychiatry team. The purpose of this project

was to facilitate daily living and the coping between the child and adults by enhancing adults' understanding of the behaviour of the child, especially his socio-emotional and sensory needs. As well, the aim was to improve the ability of the adults to respond to those needs of the child. Thus the focus has been on the pre-language area e.g. non-verbal gestural and emotional communication and on the sensory modulation. Earlier studies have revealed that by using video-feedback adults can reflect their own function and further, to identify facilitative strategies, which can then lead to closer interpersonal interaction between the child and adults.

The theoretical basis derives from the theory and studies of the normal child development and natural infant-parent interaction. Early interaction and successful socio-emotional experiences have been considered as the predictors and critical underpinnings for later development of communication, social and cognitive skills, socio-emotional well-being and behaviour. Therefore it can be assumed that before an autistic child can be successfully taught e.g. language skills he/she must first learn the precursors e.g. how to joint attention, imitate, take turn and understand meanings conveyed in social signals. The dyadic interaction (e.g. dyadic contact and sustained interaction, the co-construction of shared expressions and shared meanings), is compulsory to achieve before the child is competent for triadic interaction e.g. play with object together or use of AAC (Augmentative and alternative communication) equipment. Therefore the approach is both developmental and relationship-based.

It is generally known that autistic children have impairments in social, communicative, imagination and sensory processing skills, which often lead to secondary behavioural problems. Therefore, parents and other adults need a lot of support, encouragement and knowledge how to engage the child during routine interactions to achieve optimal development and behaviour for their child. We assume that by developmental approach and relationship-based intervention it is possible to facilitate outcomes to the child's levels of communicational, social and behavioural functioning in sensitive, individual and natural way when supporting and adapting the environment in natural context.

The videotapes have been filmed at home, school, and nursery, then analysed by the project therapists and finally, the videotapes have been watched together with the persons on that specific tape. When the parents, teachers, assistants and nurses watch and see successful situations they can find things that work in the interaction and coping with the child. The important findings and further

suggestions have then been discussed. In this project we have had only two video-circuits. At the beginning, we had meeting with all the participants to hear their opinions and to discuss about the whole situation and the problems in daily living and to determine common goals for the project and intervention. In the second meeting after the first circuit, the opinion of the participants was that this kind of support is useful and each participant wanted to continue the project to the second video-circuit. Finally, the last meeting will be on April 2005 to discuss about the experiences and about the things what we have learned during the project. Results will be reported in the future. Although we started our experiment from one of the most difficult cases, it seems that video feedback may be the method that is worth while to test and use for children with problems in social-emotional and communicative skills, especially interaction. As one of the participants said after the first video-circuit: "We have never before had so good support to the intervention of autism."

Sensitivity of the high functioning autism spectrum screening questionnaire (ASSQ)

M-L Mattila, K Jussila, S Kuusikko, M Kielenen, S-L Linna, H Ebeling and I Moilanen

Clinic of Child Psychiatry, University and University Hospital of Oulu, Finland

C

Background: The high functioning Autism Spectrum Screening Questionnaire (ASSQ) is an instrument for assessing the symptoms of Asperger Syndrome (AS) and other High Functioning Autism Spectrum Disorders (HF-ASD) in children aged 7 to 16 years with normal intelligence or mild mental retardation. The ASSQ comprises 27 items rated on a 3-point scale, 0 indicating normal, 1 some abnormality and 2 absolute abnormality, with the range of possible scores 0-54. The cut off scores of 19 for parents' and 22 for teacher's rating were suggested for identifying likely HF-ASD cases.

Objective: To evaluate the sensitivity of the ASSQ as a parent and teacher rating scale for the screening of HF-ASDs in Finnish primary school age population.

Methods: The sample of participants was drawn: 1) Of the total population epidemiological study of AS: The parents and the teachers of all 8 year old children, n = 5484, living in Ostrobothnia Hospital District in autumn 2000, were asked to complete the ASSQ. Of the rated children nine were outpatient children with HF-ASD. 2) Of the clinical study of outpatient children with HF-ASD: The ASSQ was completed by the parents of 35 outpatient children with HF-ASD aged 7 to 12 years. Of these 35 outpatient children 34 were rated also by teachers.

The children were divided into two groups: 1) From the epidemiological study nine and from the clinical study 35 outpatient children with HF-ASD, all of them, $n = 44$, rated by parents and 43 rated by teachers and 2) Controls from the epidemiological study, 3521 rated by parents and 4338 rated by teachers.

Results: In children with HF-ASD the medians of total score on the ASSQ were 25.0, range 8-40, SD 8.1, rated by parents, and 27.0, range 4-43, SD 9.4, rated by teacher, in controls correspondingly 1.0, range 0-29, SD 3.2, rated by parents and 0.0, range 0-33, SD 3.0, rated by teacher. In the group of children with HF-ASD, 81.8 % rated by parents, 72.1 % rated by teacher and in either parent or teacher ratings 95.5 % were scored above the cut off scores.

Conclusions: The ASSQ seems to have a good sensitivity for identifying HF-ASD cases in Finnish primary school age children.

Social and communicative abilities in boys and girls: a factor analytic study of the Asperger Syndrome Screening Questionnaire

Moilanen I¹, Mattila ML¹, Laurila J¹, Jussila K¹, Kuusikko S¹, Pyper A², Linna SL¹, Kielinen M¹, Ebeling H¹, and Pauls D³

¹Clinic of Child Psychiatry, University and University Hospital of Oulu, Finland ²University of Wisconsin-Madison, USA,

³Massachusetts General Hospital/Harvard Medical School, USA

Objective: Symptoms of child psychiatric disorders often differ between boys and girls, probably due to girls' better social and communicative abilities. This might be especially true for Asperger Syndrome (AS). The aim was to compare the high functioning Autism Spectrum Screening Questionnaire (ASSQ) in boys versus girls in general population and in AS.

Methods: The *population study group* (PSG) is made up of all 4382 children with age 8, from the Northern Ostrobothnia Hospital District area. The *clinical sample* (CS) consists of all AS-children from PSG, enriched by AS outpatients, aged 7-10 (23 boys and 8 girls), from the Child Psychiatric Clinic of Oulu University Hospital, diagnosed by the Autism Diagnostic Interview -Revised and the Autism Diagnostic Observation Schedule -Generic. All subjects, having $IQ \geq 50$, were rated on the ASSQ by parents and PSG children also by teachers.

Results: The factor analysis of the PSG produced four factors on the teachers' ASSQ: 1) social reciprocal interaction, 2) nonverbal communication 3) stereotypes 4) verbal communication, which were used to form sum variables. In PSG, boys scored higher on teachers' ASSQ in all factors,

while in CS, AS girls did not differ from AS boys in any.

Conclusions: Factor analysis distinguished two key symptom areas of AS as own factors: social reciprocal interaction and stereotypes, however separating the aspects of communicative abnormalities to the second and fourth factor. Also worth noticing is that girls have better social skills than boys in general, which can make their symptoms of AS more difficult to notice, probably leading to lower numbers of girls with AS.

Training social skills with individuals with ASD based on Aggression Replacement Training. Enhancement techniques

Luke Moynahan and Borge Stromgren
University of Ulster at Coleraine and Glenne
Autismesenter

Aggression Replacement Training (ART) (Goldstein, Glick & Gibbs, 1998) is an empirically validated treatment for aggressive behavior in children, youth and younger adults. ART is based upon research and empirical studies conducted within a social learning framework. The present workshop will provide participants with a practical introduction to additional components that have been added in order to achieve outcome success with individuals with Autism Spectrum Disorders (ASD), their families and social networks. These additional components are firmly based in applied behavior analysis. They include, among other things, new skills training techniques and exposure-based treatment of aggressive behavior. Participants will be introduced to techniques such as "the triple dance," "turning point," "the commentator," "the director," "Regaining self control/maintaining composure in provocative stimulus situations," and "Graded Exposure with Alternative Response Strengthening".

Theory of mind and Executive Functions in children with neurodevelopmental disorders

Name of presenter: Anna Karin Ostlin

Anna Karin Ostlin, Annematt Collot d'Escury-Koenigs

Maurits van der Molen, Anne-Liis von Knorring
A.K. Ostlin (□), M.Sc.

A.L. von Knorring, M.D., Ph.D.

Department of Neuroscience

Child- and Adolescent Psychiatry

Academic Hospital

SE-751 85 UPPSALA, Sweden

A. Collot d'Escury-Koenigs, Ph.D.

M.W. van der Molen, Ph.D.
Department of Developmental Psychology
University of Amsterdam, The Netherlands

Abstract

Aim The aim of this study was to examine the performance on Theory of Mind (ToM) and Executive Functions (EF) tasks of children of normal intelligence with autism spectrum disorders, Attention Deficit Hyperactivity Disorder (ADHD) (n=55) and normal controls (n=70). The children were between six and 13 years old. The clinical sample was divided into two groups. In the autism spectrum group 20 were diagnosed with Asperger Syndrome (AS) or Autism (A) and 10 with Pervasive Developmental Disorder Not Otherwise Specified (PDD-NOS) Twenty-five children were diagnosed with ADHD.

Methods First- and second-order ToM tasks were used together with two computerised EF tasks.

Results The main findings were that children with AS, A and PDD-NOS had more difficulties on the second order ToM task compared to the other groups. There were no significant differences between groups on the first order ToM task and the EF tasks.

Conclusion The current findings contribute to recent observations that high-functioning children diagnosed with autism spectrum disorders have a basic understanding of ToM. However they are significantly behind in their acquisition of higher order ToM in spite of normal intellectual and EF functions.

A Systemic View on Neuropsychiatric Assessment

Pia Rydberg, Social worker, Family Therapist
Annika Åberg Blomqvist, Clinical Child Psychologist
Anders Brynge, Consultant Child Psychiatrist
Ulf Linderholm, Remedial Teacher

A Neuropsychiatric Unit was established in 2000 at the Child and Adolescent Psychiatry Clinic, Ryhov Hospital, Jönköping. Its mission is assessment of children and adolescents with a complexity of problems, where a neuropsychiatric condition is considered to be an important component.

The assessments are conducted from a systemic point of view, including evidence based assessment methodology, within a Child and Adolescent Psychiatry framework. The child is viewed within the family context, partly for differential diagnostic purposes, but also in order to aid the family in mobilizing its resources. It is seen important to support the family in understanding the child's difficulties and acknowledging them into the family system. Also seen as important are a high degree of

involvement in the process both by the referrer and other carers and supporting agencies around the child and family.

The assessment process builds on forming a relation with the family in order to encourage alliance. We see this as a requirement for the family to develop the trust necessary to give a description in depth of the child, of its assets and shortcomings and of important aspects of the child's situation. The development of the child and of the problem are investigated in the family setting. The family participates in creating their own meaning of the assessment. Promoting a constructive attitude through integrating the assessment into the family's own conception is thought to increase the chance of stability over time. The referrer participates in the synthesis of the outcomes in dialogue with the team and family and are thus co-creators of the shared meaning underpinning the coming support work.

Manual signs used in communication for adults with autism.

Sylvi Storvik
Autism Unit

This poster will present the research made when I was finishing my master. The research was about persons with autism who had been taught to use manual signs as an alternative to speech in their communication with others. A questionnaire was sent to all adults with autism registered in the "Autismforeningen i Norge". The answers were given according to 29 persons. Their parents or caregivers had answered the questionnaire. When the data were registered, there was a need for more information, and some of the informants were interviewed by telephone.

The questions in the research were about when the persons started to use manual signs, how the persons were able to communicate using manual signs today, how many signs they were using and in what situations they were used, what other kind of communication the persons were using, their possibility to get training or education in using manual signs or other communication means, how the persons around them were communicating with them and their possibility to get training or education within communication and language.

An important question was about how the parents regarded the persons quality of life, their possibility to participate in activities and their possibility to determine over their own lives. Development of challenging behaviour was another important area.

The research questions and the results will be presented in the poster. So will some of the discussion made and the suggestions for what should be done in the future to better the conditions of persons with autism who do not learn to speak or have little functional speech.

Landstinget Kronoberg, Kunskapsutveckling Syd, Kunskapscenter Autism

Autism och sexualitet

Birgit Hubertson

Populationsstudie som inkluderar samtliga kända personer med diagnos autism, mellan 18 och 40 år, inom Kronobergs län, Blekinge län och region Skåne.

Syfte:

Delstudie 1

- att beskriva sexualiteten hos vuxna personer med autism som bor i gruppbostad och vilka konsekvenser för sexualiteten deras funktionshinder kan medföra.

Delstudie 2

- att beskriva föräldrar och anhörigas erfarenheter och attityder till autism och sexualitet.

Delstudie 3

- att beskriva personalens erfarenheter och attityder till autism och sexualitet.

Delstudie 4

- att utarbeta ett etiskt program för att arbeta med sex- och samlevnadskunskap för personer med autism, deras anhörig och deras personal.

Bakgrund:

När det gäller personer med autism, så är dokumentationen bristfällig vad det gäller deras sexuella känslor, behov och möjligheter till sex- och samlevnadskunskap.

Det behövs flera studier inom området.

Personer med autism och deras förmåga eller oförmåga att visa sexuella känslor är beskurna genom deras funktionshinder.

Samhället måste bidra till att skapa förutsättningar för att öka funktionshindrade personers möjligheter till god livskvalite.

Accepterar vi att alla människor har en sexualitet och att sexualiteten har betydelse för livskvaliten,

kan vi inte längre negligera gruppen funktionshindrade.

Hur tror Du samhället ser på sexualitet och funktionshinder?

Finns det ett professionellt förhållningssätt?

Vilka attityder och värderingar har Du omkring sexualitet och funktionshinder?

Vilka svårigheter möter personer med funktionshinder?

Hur mycket sex- och samlevnadskunskap får dessa personer?

Hur mycket kunskap och stöd får föräldrar och personal?

Haracopos (1988) pekade på att behovet är uppenbart, av att det riktas mera uppmärksamhet på sexualiteten, när det gäller personer med autism. Flera studier måste genomföras inom området autism och sexualitet och sexualiteten för minoritetsgrupper måste ha en naturlig plats i samhället.

WHO har fasställt:

Sexualiteten påverkar våra tankar och vårt samspel med andra människor.

Sexualiteten är en central drivkraft i alla människors liv.

Sexualiteten är en mänsklig rättighet och alla måste visa respekt, förståelse och med varsamhet hjälpa, utbilda och stötta funktionshindrade personer även inom detta område.

Alla människor är födda som sexuella individer och sexualiteten försvinner inte på grund av funktionshinder.

Att personer med autism inte har sexuell lust, eller vill ha sexuella relationer – det är något som vi har bestämt.

Hur ska föräldrar förmedla en positiv syn på kärlek och sexualitet till sina funktionshindrade barn?

Hur ska det skapas ett öppet samtalsklimat mellan föräldrar och personal omkring sex- och samlevnadsfrågor?

Vilka problem ställs föräldrar och personal inför och vilka konsekvenser kan de eventuella problemen leda till?

Föräldrar och personal måste också få kunskap om hur man hanterar även detta område.

Frågeställningarna är många och trots alla tänkbara svårigheter som kan uppkomma när man studerar gruppen vuxna personer med autism, är det

angeläget att vi försöker få en klar uppfattning om dessa personers behov och möjligheter till sex- och samlevnad och att det finns en policy i bemötande och kunskapsspridning.

Vi har blivit bättre på att ställa diagnoser och att ge stöd och behandling, men trots detta har utbildning i sex- och samlevnad inte kommit igång.

Tactile-Haptic and auditory perception, interests, and activity in high functioning blind persons with and without autism

Bengt Elmerskog, Harald Martinsen, Magnar Storliløkken, and Jon Magne Tellevik
The National Autism Competency Network
Department of Special Needs Education, University of Oslo; Tambartun National Resource Centre for the Visually Impaired, Melhus

In the present study high-functioning blind youths, with and without autism, who have extraordinary abilities in the use of tactile/haptic and auditory sensory information, were selected as participants. They may all be considered experts in the use of sound and touch in interaction with the physical and social environment. One objective was to describe perceptual qualities that the participants attend to in their daily activity, in order to demonstrate to which extent use of sound and touch may be developed in a person deprived of vision. Another was to describe interests and activities of the participants. It is argued that eminent tactile-haptic and auditory perception is linked with early perceptual interests, and that such interests form the base of later interests, and may act as a buffer against passivity and restricted knowledge about the world. It was further hypothesised that the blind persons with autism would have more unconventional interests and focus their attention on more unusual sound and tactile-haptic qualities, compared with the ordinary blind persons.

Subjects and their parents were interviewed on topics like activities, interests, reaction to and perception of auditory and tactile-haptic stimulation, echolocation, mobility skills, sensory preferences, identification of objects, persons, and events, and interest and perception of object attributes and sensory qualities. The subjects were interviewed about present interests and auditory and tactile-haptic perception. The parents were asked both about their present activities and the characteristics of the subjects at 5 years of age. The results show that subjects were experts in auditory and tactile-haptic identification of common objects. There were, however, group differences showing that subjects with autism demonstrated most unusual and unconventional

auditory and tactile-haptic skills compared to ordinary blind subjects who generally engaged in culturally ordinary activities. Both ordinary blind subjects, who linked the use of sound and touch sensations to ordinary object attributes and activities, and subjects with autism, who put their sensory expertise to a more unusual and unconventional use, demonstrated their sensory interests at an early age. It is suggested that if sensory interests are to act as affordances for an active social life, it seems necessary that it is transformed into perception of sensory information linked with ordinary, culturally common categories and interests. Thus ordinary blind subjects have grown more conventional while blind persons with autism, who had more unconventional interests from start, have in contrast become more culturally marginalized.
