

A preliminary study of individuals with autistic spectrum disorders in three special hospitals in England

by **Dougal Julian Hare** - Clinical Psychologist, NAS; **Judith Gould** - Clinical Director, NAS; **Richard Mills** - Director - NAS Services, and **Lorna Wing** - Consultant Psychiatrist, NAS. Published in 1999.

*This work was carried out when working for the National Autistic Society at the Centre for Social and Communication Disorders, Elliot House, Bromley, Kent.

Contents

- **ABSTRACT**
- **INTRODUCTION**
 - 1-1 The autistic spectrum**
 - 1-2 Autism**
 - 1-3 Asperger's syndrome**
 - 1-4 Wolff's 'loners'**
 - 1-5 The prevalence of all autistic spectrum disorders in the total population**
- **METHODOLOGY**
 - 2-1.1 First stage**
 - 2-2 Second stage**
- **RESULTS**
 - 3-1 Prevalence of autistic spectrum disorders in the special hospitals**
 - 3-2 Demographic features**
 - 3-3 Sub-groups among the autistic disorders**
 - 3-4 Previous psychiatric diagnosis**
 - 3-5 Neurological conditions**
 - 3-6 Neuro-cognitive, psychological & psychiatric abnormalities in the autistic spectrum**
 - 3-7 Circumscribed interests, repetitive routines & obsessive behaviour**
 - 3-8 Mental health act status & hospital classification**
 - 3-9 Nature of offending**
- **DISCUSSION**
 - 4-1.1 The initial screening questionnaire**
 - 4-2 Prevalence**
 - 4-3 Hospital placement**
 - 4-4 Gender**
 - 4-5 Age**
 - 4-6 Length of time in hospital**
 - 4-7 Autistic spectrum sub-groups**
 - 4-8 Circumscribed interests & repetitive routines**
 - 4-9 Neurological conditions**
 - 4-10 'Primary' psychiatric diagnosis**
 - 4-11 Index offences**
 - 4-12 Reasons for offending**
- **CONCLUSIONS AND RECOMMENDATIONS**

- **REFERENCES**
- **TABLES TO MAIN DOCUMENT**
 - Table 1 - Features of the autistic spectrum (*essential diagnostic criteria)**
 - Table 2 - Distribution of scores from initial screening questionnaire**
 - Table 3 - Patients scoring 5 and above the screening questionnaire**
 - Table 4 - Classification of patient scoring above cut-off level on screening questionnaire**
 - Table 5 - Gender**
 - Table 6 - Mean time in hospital**
 - Table 7 - Age**
 - Table 8 - Type of autistic spectrum condition**
 - Table 9 - Previous primary diagnosis (pre-1995)**
 - Table 10 - Previous primary psychiatric diagnoses (pre 1995) for autistic spectrum group**
 - Table 11 - Neurological conditions**
 - Table 12 - Neurological, psychological & psychiatric abnormalities in autistic spectrum group**
 - Table 13 - Circumscribed interests, repetitive routines and obsessional behaviour**
 - Table 14 - Circumscribed interests of the autistic spectrum group**
 - Table 15 - Mental Health Act status**
 - Table 16 - Intra-hospital classification**
 - Table 17 - Index offences**
 - Table 18 - Index offences of patients in autistic spectrum group**
- **APPENDIX**
 - Screening questionnaire for Asperger's syndrome**
- **ACKNOWLEDGEMENTS**

Abstract

There was a concern among Special Hospitals professionals to establish the numbers of people with an autistic spectrum disorder detained under mental health legislation in secure psychiatric hospitals in England and whether such settings are appropriate. This paper reports on the first full-scale empirical study of the prevalence of autistic spectrum conditions among the population of the three Special Hospitals in England.

A total of 1305 patients were assessed using a screening questionnaire for autistic spectrum disorders in adults. This yielded a total of 240 patients, approximately 18% of the total Special Hospital population, to be further examined on the basis of their apparent impairments in social and interpersonal functioning. Of these, 215 were available for investigation.

The prevalence of autistic conditions in this group of patients is estimated. Psychiatric and neurological characteristics and the nature of the offences or behaviour leading to compulsory detention are examined. Some of the questions relating to meeting the needs of this group of people are discussed. Suggestions for further study are made.

1 Introduction

1-1 The autistic spectrum

1-1.1 The autistic spectrum (Wing 1996; Wing and Gould, 1979) is similar to but broader than the category of pervasive developmental disorder in ICD-10 and DSM-IV.

1-1.2 The spectrum covers a range of conditions that have in common the triad of impairments of social interaction, communication and imagination (that is the ability to think about possibilities as well as facts and to consider the consequences of one's actions).

1-1.3 This triad is associated with a narrow repetitive range of activities and interests. It can occur together with any level of cognitive ability and with any other physical or psychiatric disorder. (See Table 1).

1-1.4 The problems are, typically, present from birth or early childhood. There are rare cases in which conditions occurring later in childhood, such as viral encephalitis, can cause brain damage and a pattern of behaviour that is closely similar to an autistic spectrum disorder.

1-1.5 Sub-groups among the autistic spectrum disorders are suggested in ICD-10 and DSM-IV. However, the criteria include items referring to development before three years of age. Such information was not available for the individuals taking part in the present study.

1-1.6 It was more appropriate to use a system of sub-grouping based on recent and current descriptions of behaviour patterns. These sub-groups will be described below, with particular reference to offending behaviour.

1-2 Autism

1-2.1 Kanner (1943) was the first worker to publish a description of one sub-group of the autistic spectrum that he called early infantile autism. The characteristics of the young children with this developmental disorder were;

- Profound lack of affective contact with others
- Intense resistance to change in routines
- Muteness or abnormalities of language
- Fascination with manipulating particular objects, but not using them for correct function

Visuo-spatial or rote memory skills much better than other functions

1-2.2 Workers since Kanner have modified and expanded these criteria for autism. It is now known that the picture changes with increasing age, though the basic impairments remain throughout life.

1-2.3 In the present study, the diagnosis of autism was used for individuals who had little or no interest in social interaction or communication, and whose repetitive routines were directed towards objects rather than the more intellectual interests of those classified as Asperger's syndrome.

1-2.4 Most individuals in these sub-groups have moderate to severe learning disabilities and would not be considered legally responsible for any anti-social acts. In the past, a few were admitted to Rampton Hospital because their behaviour presented extremely severe management problems.

1-2.5 Only the minority of people with these forms of autism who have borderline, average or high intellectual ability might appear to be responsible for their actions in legal terms.

1-3 Asperger's syndrome

1-3.1 Asperger's first paper on this pattern of behaviour, which he referred to as "autistic psychopathy", was published in German in 1944 towards the end of the second world war. His ideas were known in continental Europe well before they received attention in English speaking countries.

1-3.2 Van Krevelan & Kuipers, both from the Netherlands, published a paper on the subject in English in 1962 but current clinical and research interest in what is now termed Asperger's Syndrome dates from Wing's (1981) seminal paper.

1-3.3 Since its publication, understanding and diagnosis of this condition has steadily increased and it is now generally considered to be within the spectrum of autistic conditions (Frith 1991; Tantam, 1988a; 1991; Wing, 1991). The features of the syndrome described by Asperger and put in operational form by Gillberg (Ehlers & Gillberg, 1993; Gillberg & Gillberg, 1989) are as follows;

- Severe impairment of social interaction, shown in odd, inappropriate behaviour rather than aloofness and indifference
- All absorbing, narrow interests, often to the exclusion of other activities
- Imposition of repetitive routines on self and others
- Good grammar and vocabulary but inappropriate use of speech.
- A tendency to engage in monologues on special interests
- Limited or inappropriate non-verbal communication
- A degree of motor clumsiness

1-3.4 In the present study, those with inappropriate social interaction, good grammar and vocabulary, but repetitive speech used for monologues rather than for conversation were classified as Asperger's syndrome

1-3.5 Although not usually associated with learning disability (most individuals with this syndrome have full scale IQ of 70 or above), the level of social handicap conferred by Asperger's syndrome often leads to needs and service requirements similar to those of the learning disabled.

1-3.6 Moreover, although global intellectual impairment is not a diagnostic feature of Asperger's syndrome, problems with a variety of cognitive processes are characteristic. These include difficulties with 'parallel' processing of information (Walker 1997) and abstract thinking.

1-3.7 Neuro-psychological signs associated with varying degrees of right-hemispheric dysfunction (Ellis et al 1994; McKelvey et al 1995) and frontal lobe pathology (Ozonoff et al 1991) appear to be present in many people with this condition. The cognitive problems are often not recognised and offenders with Asperger's syndrome are usually assumed to be legally responsible for their actions.

1-3.8 Asperger's syndrome and offending

Asperger (1944) noted that some children with his syndrome perpetrated 'mischievous, malicious acts' without regard for the consequences for other people. Other authors have described criminal offending in a minority of individuals with the syndrome and have discussed the possible reasons for such behaviour (Mawson, Grounds & Tantam 1985; Baron-Cohen 1988; Chesterman & Rutter 1993; Everall & Lecouteur 1990; Wing 1997).

1-3.9 Prevalence of offending behaviour in Asperger's syndrome

Mawson and his colleagues have speculated that the association between Asperger's syndrome and violent behaviour may be relatively robust, but as yet there have been no empirical studies examining this hypothesis, other than a review of published case reports (Ghaziuddin, Tsai & Ghaziuddin 1991).

1-3.10 However, the limited epidemiological research available to date (Scragg & Shah 1991) does appear to indicate that people with Asperger's syndrome may be over-represented in particular settings, such as secure psychiatric provision, as a consequence of a range of offending and anti-social behaviours.

1-3.11 To make useful comparisons for both research and clinical purposes, information is required on the level of occurrence of offending behaviour in the total population of people with Asperger's syndrome, but such information is not currently available. One possibility is that those people with Asperger's syndrome in secure provision may comprise the majority of the offending group within the whole Asperger's population, resulting in an inflated prevalence among the secure hospital population.

1-3.12 Offenders with Asperger's syndrome, because of their impaired social skills, may be more likely to be detected than are other offenders. For example, their ability to understand and use deception when perpetrating offences may be impaired. Anecdotal evidence would seem to support this theory, but more definite evidence is lacking.

1-3.13 Wing (1981) noted that 4 (12%) of the 34 individuals in her study, who had Asperger's syndrome in full or partial form, had committed bizarre anti-social acts.

1-3.14 In a survey of long-term users of mental health services who were regarded as socially isolated and eccentric, Tantam (1988b) found that 77 % of this group were subsequently diagnosed as having Asperger's syndrome. Of the total of sixty, two (3% of the sample) had been committed to secure hospital provision. However, it was noted that a substantial minority (44% of the sample) had committed isolated offences and 23% had committed actual criminal offences, primarily involving violence against other people.

1-3.15 Tantam reported that a "morbid fascination" for violence was displayed by 6 people in his sample, while 3 others had actually carried out anti-social actions. Both Wing's and Tantam's group were found from users of mental health services and, in this respect, were a biased population.

1-3.16 The prevalence of Asperger's syndrome among offenders

1-3.17 The need for prevalence studies in secure units was stated by Mawson et al (1985) and has been subsequently restated by Baron-Cohen (1988) and Ghaziuddin et al (1991). Scragg & Shah (1994) examined the prevalence of Asperger's syndrome among male patients in one of the Special Hospitals in England.

1-3.18 A prevalence rate of between 1.5% to 2.3% of the total male population in the hospital was found, depending on whether 3 individuals with equivocal diagnoses were included in the total. Scragg & Shah compared this to the prevalence of Asperger's syndrome and other high functioning autistic disorders in the general population, which has been estimated at about 0.7 % (Ehlers & Gillberg 1993) (see below).

1-3.19 However, given the manifest differences between the general population and that of a special hospital, it is not clear that this is a valid comparison to make.

1-4 Wolff's 'loners'

1-4.1 Sula Wolff (1995) has studied a group of individuals with average or high cognitive skills but marked social impairment. She originally referred to them as having 'Schizoid personality of childhood' but now considers that they overlap to a large extent with Asperger's syndrome and represent the most able end of the autistic spectrum.

1-4.2 Wolff calculated that the risk of delinquency in boys with this syndrome was only slightly higher than for boys of the same age in the general population.

1-4.3 However, she found that the rate for girls was significantly higher than for a control group of female clinic referrals. There are no population based studies of offending behaviour in adults in this group.

1-4.4 The prevalence of 'loners' among offenders

