

## **Appendix 1: Diagnostic criteria for autism and Asperger syndrome**

Diagnostic criteria for autism from the two main diagnostic classification systems, the International Classification of Diseases and Related Health Problems (ICD) and the Diagnostic and Statistical Manual of Mental Disorders (DSM)

Taken from the *International Classification of Diseases and Related Health Problems (ICD –10)* (World Health Organisation, 1992)

### **(a) Qualitative impairment in reciprocal social interaction, three from the following five areas:**

- failure to use eye gaze, body posture, facial expression and gesture to regulate interaction adequately;
- a failure to develop (in a manner appropriate to mental age, and despite ample opportunity) peer relationships that involve a mutual sharing of interests, activities and emotions;
- rarely seeking and using other people for comfort and affection at times of stress or distress and/or offering comfort and affection to others when they are showing distress or unhappiness;
- a lack of shared enjoyment in terms of vicarious pleasures in other people's happiness and/or a spontaneous seeking to share their own enjoyment through joint involvement with others;
- a lack of socio-emotional reciprocity, as shown by an impaired or deviant response to communicative behaviours;

**(b) Qualitative impairments in communication, two from the following five areas**

- a delay in, or total lack of, spoken language that is not accompanied by an attempt to compensate through the use of gesture or mime as alternative modes of communication;
- a relative failure to initiate or sustain conversational interchange (at whatever level of language skills is present) in which there is a reciprocal to and fro responsiveness to the communication of the other person;
- stereotyped and repetitive use of language and/or idiosyncratic use of words or phrases;
- abnormalities of pitch, stress, rate, rhythm and intonation of speech;
- a lack of varied spontaneous make-believe play, or when young, social imitative play.

**(c) Restricted repetitive and stereotyped patterns of behaviour, interests and activities, two from the following six areas**

- an encompassing preoccupation with stereotyped and restricted patterns of interest;
- specific attachments to unusual objects;
- apparently compulsive adherence to specific, non-functional routines and rituals;

- stereotyped and repetitive motor mannerisms that involve either hand/finger flapping or twisting or complex whole body movements;
- preoccupation with part-objects or non-functional elements of play materials (such as odour, the feel of their surface, or the noise/vibration that they generate);
- distress over changes in small, non-functional details of their environment.

**(d) Developmental abnormalities must be present in the first three years for the diagnosis to be made**

**(e) Clinical picture is not attributable to other varieties of pervasive developmental disorder, specific developmental disorders of receptive language with secondary socio-emotional problems; reactive attachment disorder or disinhibited attachment disorder, mental retardation with some associated emotional/ behavioural disorder, schizophrenia of unusually early onset; and Rett syndrome.**

Taken from *Diagnostic and Statistical Manual of Mental Disorders (DSM- IV)*  
(American Psychiatric Association, 1994)

**(a) A total of six (or more) items from (1), (2) and (3), with at least two from (1), and one each from (2) and (3).**

(1) Qualitative impairment in social interaction, as manifested by at least two of the following:

- marked impairment in the use of multiple non-verbal behaviors such as eye to eye gaze, facial expression, body postures and gestures to regulate social interaction;
- failure to develop peer relationships appropriate to developmental level;

- lack of spontaneous seeking to share enjoyment, interests or achievements with other people (e.g. by lack of showing, bringing, or pointing out objects of interest);
  - a lack of social or emotional reciprocity;
- (2) Qualitative impairments in communication as manifested by at least one of the following:
- delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime);
  - in individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others;
  - stereotyped and repetitive use of language;
  - lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level;
- (3) Restricted, repetitive and stereotyped patterns of behaviour, interests and activities, as manifested by at least one of the following:
- encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus;
  - apparently inflexible adherence to specific, non-functional routines or rituals;
  - stereotyped and repetitive motor mannerisms (eg hand or finger flapping or twisting, or complex whole body movements);

- persistent preoccupation with parts of objects;
- (b) Delays or abnormal functioning in at least one of the following areas (with onset prior to 3 years of age)**
- social interaction;
  - language as used in social communication;
  - symbolic or imaginative play.

**(c) The disturbance is not better accounted for by Rett disorder or Childhood Disintegrative disorder.**

**Asperger syndrome definition from the *International Classification of Diseases and Related Health problems – 10<sup>th</sup> Edition (ICD-10)***

A disorder of uncertain nosological validity, characterized by the same kind of qualitative abnormalities of reciprocal social interaction that typify autism, together with a restricted, stereotyped repetitive repertoire of interests and activities. The disorder differs from autism primarily in that there is no general delay or retardation in language or cognitive development. Most individuals are of normal intelligence but it is common for them to be markedly clumsy; the condition occurs predominantly in boys (in a ratio of about eight boys to one girl). It seems highly likely that at least some cases represent mild varieties of autism, but it is uncertain whether or not that is so for all. There is a strong tendency for abnormalities to persist into adolescence and adult life and it seems that they represent individual characteristics that are not greatly affected by environmental influences. Psychotic episodes occasionally occur in early adult life.

**Diagnostic guidelines**

Diagnosis is based on the combination of a lack of any clinically significant general delay in language or cognitive development plus, as with autism, the presence of qualitative deficiencies in restricted, repetitive, stereotyped patterns of behaviour, interests, and activities.

There may or not be problems in communication similar to those associated with autism, but significant language retardation would rule out the diagnosis.

### **Diagnostic criteria for Asperger syndrome taken from ICD-10**

(a) There is no clinically significant general delay in spoken or receptive language or cognitive development. Diagnosis requires that single words should have developed by 2 years of age or earlier and that communicative phrases be used by 3 years of age or earlier. Self-help skills, adaptive behaviour and curiosity about the environment during the first 3 years should be at a level consistent with normal intellectual development. However, motor milestones may be somewhat delayed and motor clumsiness is usual (although not a necessary diagnostic feature). Isolated special skills, often related to abnormal preoccupations, are common, but are not required for diagnosis.

(b) There are qualitative abnormalities in reciprocal social interaction (criteria as for autism).

(c) The individual exhibits an unusual intense, circumscribed interest of restricted, repetitive and stereotyped patterns of behaviour interests and activities (criteria as for autism; however, it would be less usual for these to include either motor mannerisms or preoccupations with part-objects or non-functional elements of play materials).

(d) The disorder is not attributable to other varieties of pervasive developmental disorder; simple schizophrenia schizotypal disorder; obsessive-compulsive disorder; anankastic personality disorder; reactive and disinhibited attachment disorders of childhood.