

Attention-Deficit Hyperactivity Disorder among children in respite care

Room for doubt

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Attention-Deficit Hyperactivity Disorder (ADHD) is currently the diagnosis of choice for children displaying a range of attentional and hyperactive-impulsive behaviours. Diagnostic criteria are set out in the DSM-IV, but considerable overlap with a number of other disorders continues to pose diagnostic problems. A further potential difficulty is that the diagnostic criteria describe, but do not explain, behaviour, increasing the risk for misdiagnosis. A group of children in a respite care program previously diagnosed with ADHD and medicated by paediatricians, serve to illustrate these issues.

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The decade of the '90s has seen a significant increase in the number of children diagnosed with Attention-Deficit Hyperactivity Disorder (ADHD). Children with this condition display a range of behaviours associated with inattention, impulsivity and hyperactivity, with these disturbances being seen in a number of settings but especially in the home and school.

The distinguishing features of ADHD are set out in the DSM-IV (APA 1994) which defines the criteria for diagnosis. Attentional problems and problems of hyperactivity-impulsivity are separated in the diagnostic profile of the DSM-IV, with greater emphasis now being placed on problems of inattention and not just hyperactivity. The distinguishing features of ADHD (DSM-IV) are:

1. **Symptoms of inattention** (six or more persisting for at least 6 months to a degree that is maladaptive and inconsistent with development level):
 - (a) often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities;
 - (b) often has difficulty sustaining attention in tasks or play activities;
 - (c) often does not seem to listen when spoken to directly;

- (d) often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace;
- (e) often has difficulty organizing
- (f) often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort;
- (g) often loses things necessary for tasks or activities;
- (h) is often easily distracted by extraneous stimuli;
- (i) is often forgetful in daily activities.

2. **Symptoms of hyperactivity - impulsivity** (six or more persisting for at least 6 months to a degree that is maladaptive and inconsistent with developmental level):

Hyperactivity

- (a) often fidgets with hands or feet or squirms in seat;
- (b) often leaves seat in classroom or in other situations in which remaining seated is expected;
- (c) often runs about or climbs excessively in situations in which it is inappropriate;
- (d) often has difficulty playing or engaging in leisure activities quietly;

- (e) is often 'on the go' or often acts as if 'driven by a motor';
- (f) often talks excessively.

Impulsivity

- (g) often blurts out answers before questions have been completed;
- (h) often has difficulty awaiting turn;
- (i) often interrupts or intrudes on others.

Apart from the above items the DSM-IV also adds a number of other criteria to be taken into account during the diagnostic process. These are that some hyperactive-impulsive or inattentive symptoms were present before age 7 years, that some impairment from the symptoms is present in two or more settings, and that there must be clear evidence of clinically significant impairment in social, academic or occupational functioning.

While seemingly straightforward to diagnose, a number of potential difficulties need careful consideration. The first is that research now suggests problems relating to impulsivity developmentally precede problems relating to inattention, which come to prominence during the early school years (Barkley, 1996). This in turn suggests that the picture presented of ADHD may change over time in a single child, and that different items from the criteria list may have to be selected to properly assess a younger, as opposed to an older child.

Indeed Barkley (1996) suggests that the items for inattention may have a wider developmental applicability across school-age ranges of childhood while those for hyperactivity, in contrast, seem more applicable to younger children and less appropriate, or not at all, to older teens.

This has implications for our understanding of prevalence. Epidemiological studies conducted in the USA estimate the range of ADHD from 2% to 6% depending on the method of assessment, selection of study populations, etc (eg, Szatmari 1992). Prevalence may also vary with age, eg, rates may be 2-3% in females but 6-9% in males during the 6-12 year age range, but fall to 1-2% in females and 3-4% in males by adolescence (cited in Barkley 1996). While males are between 3 and 5 times more likely than females to be

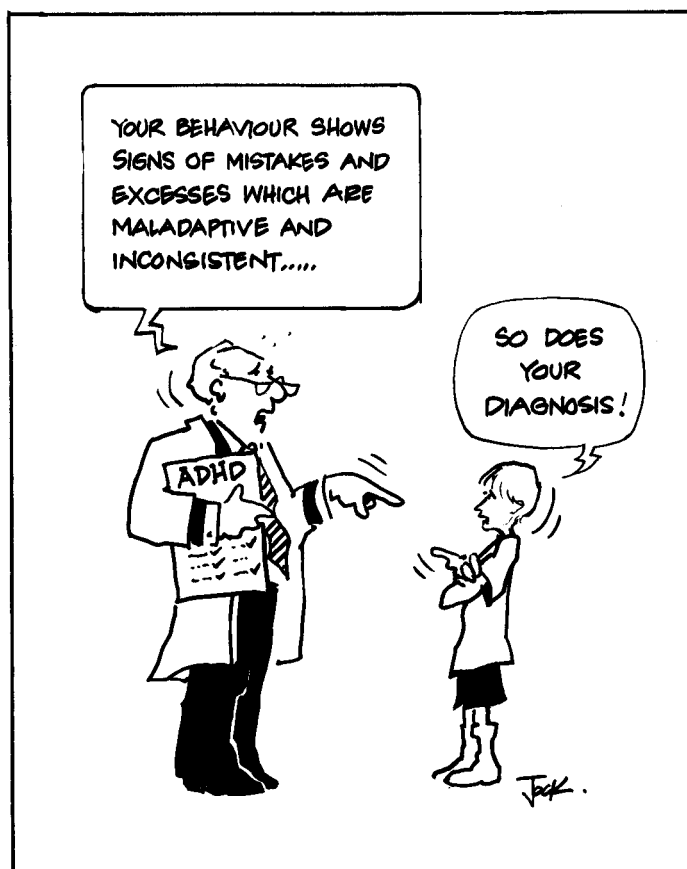
important area of research in recent years, as studies reveal that a high percentage of children with ADHD also suffer from other problems (Rostain 1991). This author lists learning difficulties, oppositional defiant behaviour, mood disorders (particularly depression) and anxiety disorders as some of the most common disturbances presenting as or with ADHD.

In a three-way comparison study of children diagnosed with ADHD, children with other psychiatric problems and children in the community, Jensen et al (1993) found that children diagnosed as having ADHD were indistinguishable from children with other psychiatric diagnoses on the basis of either self- or parent-reported depressive and internalizing symptoms. These authors found a significant level of co-morbidity with anxiety and depressive conditions, and such children also had significantly higher levels of life stress.

Cotugno (1993) reassessed 92 children who had been referred to a community mental health centre with a previous diagnosis of ADHD. Each child was given a comprehensive assessment of cognitive, academic, social, developmental and behavioural functioning, and based on these results only 22% of this sample were given a primary diagnosis of ADHD. However 35% were

given a primary diagnosis of Anxiety Disorder and 26% received a primary diagnosis of Mood Disorder.

Studies such as these have highlighted the importance of a careful and thorough assessment process (Murphy & Hagerman 1992; Rostain 1991). Recommendations include a detailed developmental history exploring pregnancy and the early years, childhood and academic functioning, family history and the child's social and emotional functioning. Interview data is



diagnosed with ADHD, gender differences may be as high as 9 : 1 in clinic populations, suggesting that males are significantly more likely to be identified with ADHD-type problems and referred to mental health clinics than are females.

The picture is further complicated by the fact that the core criteria upon which diagnosis of ADHD is based are also associated with a variety of other childhood emotional and behavioural problems. Co-morbidity has become an

Table 1. Number of males and females on medication by age range

Age group (years)	0-4	5-7	8-11	12-14
male	3	23	41	8
female	-	7	6	1
TOTAL	3	30	47	9

regarded as more useful if supplemented by standardized testing, eg, intelligence and academic achievement tests, while parent and teacher rating scales are also recommended. Without taking into account all factors relating to the child's history and current life circumstances, there is the risk of misdiagnosis, which runs the further risk of inappropriate intervention.

CHILDREN IN RESPITE CARE

The South Australian agency, Emergency Foster Care Inc, operates a Respite Care Program designed to assist children, who are at risk of abuse or at risk of coming into full time care, to remain in their families, by providing regular, planned respite with caregiver families. The majority of children come from single-parent families, but common reasons for children coming into the Respite Care Program include families under stress, children at risk of neglect and abuse, and psychiatric illness or ill health of a parent.

Children up to the age of 14 years are usually offered a weekend a month with the same carers for a 3 month period. Programs can be more frequent and can be extended if the referring social worker's assessment indicates the need for this to occur. Generally, programs are extended beyond 6 months only if the family has been referred by the Department of Family & Community Services (SA).

Over a 2 year period, May 1995 - May 1997, 410 (male = 229, female = 181) children entered respite care programs. Of these, 89 (male = 75, female = 14) were on medication because of a diagnosis of ADHD. This represents 33% of boys and 8% of girls on medication, with a gender ratio of 5.4:1.

Table 1 shows the number of males and females on medication by age range, while Table 2 shows the number of males and females on each type of medication prescribed. It can be seen that children between the ages of 5 and 11 years are those most likely to be medicated, while Dexamphetamine is the most popular choice of medication, with 38% of all children on medication prescribed this drug. Over the period of their contact with the Respite Care Program, a number of children were on multiple medications, with a mix of Dexamphetamine and Catapress being the most common combination.

A common feature of the children admitted to this Program is the stressful and sometimes dysfunctional family background that helped bring them to notice in the first place. Children from such backgrounds can manifest a range of disturbed behaviours, many of which overlap with those describing ADHD in the DSM-IV. In describing features characteristic of emotionally abused and neglected children, Iwaniec (1995) includes severe non-compliance and stubborn defiance, short attention-span

(inability to concentrate), aggressiveness and temper tantrums, hyperactivity and poor relationships with siblings and peers. This author added,

...some children may be very lethargic and withdrawn, while others will practically run from one activity to another, unable to maintain on-task behaviour. Similarly, some will scream and cry, while others will sulk and be irritable (p.41).

Similarly, Jaffe, Wolfe and Wilson (1990), in describing children from violent homes, reported that limited tolerance for frustration, poor impulse control, academic underachievement and poor social skills are among the problems commonly associated with this population.

Children with this condition (ADHD) display a range of behaviours associated with inattention, impulsivity and hyperactivity, with these disturbances being seen in a number of settings but especially in the home and school.

Cotugno (1993) demonstrated the potential for diagnostic confusion that arose when greater weight had been given by the referring sources to the symptoms of inattention, distractability and overactivity to the exclusion of symptoms characteristic of other disorders. He noted that this finding appeared to be a direct function of the nearly exclusive use of observational data and the collection of only limited and restrictive developmental data. Jensen et al (1993) concur, cautioning mental health care providers to,

...carefully assess aspects of the emotional functioning of children with attention deficit disorder rather than maintain too exclusive a focus on these

Table 2. Number of males and females by type of medication

	Dexamphetamine	Catapress	Ritalin	Melleril
male	28	19	13	15
female	6	4	1	3
TOTAL	34	23	14	18

children's attentional and hyperactive symptoms (p.1207).

Issues of diagnostic confusion aside, the use of medication in the treatment of children presenting with symptoms of inattention, impulsivity and distractibility is still unresolved.

The picture is further complicated by the fact that the core criteria upon which diagnosis of ADHD is based are also associated with a variety of other childhood emotional and behavioural problems. Co-morbidity has become an important area of research in recent years, as studies reveal that a high percentage of children with ADHD also suffer from other problems (Rostain 1991).

Rostain (1991) concluded that whereas medication has proved often to be of short term benefit for children with ADHD, longitudinal studies have failed to demonstrate sustained effects. He stated that the decision to use medication is mediated by several factors, including the child's age, severity and profile of the child's symptoms. It was stressed that medication is only one aspect of treatment, and that without behavioural interventions the child's difficulties at home and at school are likely to persist. This view is shared by Murphy and Hagerman (1992) who pointed out that, while stimulant medications help increase attention span and concentration and decrease impulsivity, this may depend more upon the setting and the environment, and that medication must be accompanied by appropriate psychosocial interventions.

CONCLUSIONS

Although ADHD is the most widely studied behaviour disorder in childhood (Rostain 1991), its cause remains unclear and its outcome variable. The diagnostic criteria set out in the DSM-IV describe a range of behaviours, not all of which are required to make a diagnosis of ADHD. This disorder is therefore more of a behavioural syndrome which allows for some subjectivity of diagnosis, the more so since there is considerable overlap between the behaviours described under ADHD and those found in a range of other childhood disorders.

Twenty-two per cent of the children admitted to the Respite Care Program described in this paper were on medication due to a diagnosis of ADHD. It is probable that backgrounds of family stress and dysfunction significantly contributed to the general presentations of these children, and that ADHD was overdiagnosed. Populations of children such as these run the special risk of misdiagnosis (and hence over-medication), and serve to highlight the difficulties in developing an objective and uniform approach to the assessment of this disorder.

It is recommended that ADHD be a diagnosis of exclusion (Jureidini 1996). The assessment process must not merely describe the behaviour, but should gather sufficient information on the child's history and current life circumstances to look behind the presenting problem and, as far as possible, attempt to explain it. A diagnosis of ADHD should only then be made after the exclusion of more compelling explanations. □

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