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Services for adults with attention-deficit hyperactivity disorder: national survey

AIMS AND METHOD

The aim of the study was to obtain numbers of adult patients with attention-deficit hyperactivity disorder (ADHD) on consultant adult and adolescent psychiatrists' case-loads. A brief semi-structured confidential postal questionnaire was sent to 1947 consultant psychiatrists in England and Wales.

RESULTS

There were 1030 consultants who responded (52.9%), which clearly indicates that there is an increasing demand and need for a service, and the resources, to treat adult ADHD. Only 197 consultants offered a service for adults with ADHD. Adult ADHD is more commonly diagnosed in males (*n*=995, 73%), and the total number of patients with a diagnosis of adult ADHD was 1345. Most patients were aged 18–25 years (*n*=209, 54%). The most commonly prescribed stimulant medication was methylphenidate (*n*=251, 55%).

CLINICAL IMPLICATIONS

There is a clear need to improve services and funding for adults with ADHD. The study shows there are already services available for adult ADHD patients in some areas of the country. However, more research is needed to establish the prevalence of adult ADHD in England and Wales.

Attention-deficit hyperactivity disorder (ADHD) has been known by various names. In the 1960s, the disorder was given the term 'minimal brain dysfunction' (American Psychiatric Association, 1968). Around the late 1980s ADHD was recognised in adults. It is a medical condition that should be treated in order to prevent serious functional impairment to life and resulting costs. Currently in the UK there are limited reports on the prevalence of adult ADHD. We decided to survey all consultant adult and child and adolescent psychiatrists in England and Wales using a semi-structured questionnaire to obtain an estimate of the number of patients with adult ADHD in their current case-load and whether they provide any service for people with adult ADHD.

Method

The contact details of consultant psychiatrists in England and Wales were obtained from the Royal College of Psychiatrists. Local ethical approval was obtained prior to commencement. The anonymous questionnaire (see Box 1) was disseminated along with a covering letter on 6 May 2006 to 1947 consultant psychiatrists. The project duration was 6 weeks from the date of posting. The questionnaire was designed to obtain the numbers of patients with adult ADHD currently receiving treatment from consultant adult and adolescent psychiatrists along with what treatments and diagnosis are used. Respondents were also asked to indicate the age range of patients and gender, who monitors patient medication and approximate number of referrals of suspected adult ADHD received per annum. Participants were also invited to add any other comments they felt were relevant to this study. Microsoft Excel was used for data analysis.

Results

There were 1030 respondents, giving an overall response of 52.9%. Only 197 consultants (19%) offer a service for people with adult ADHD. There were 234 child and adolescent psychiatrists who responded and 12 were providing a service for adults with ADHD; this figure is included in the total number of consultants offering a service (*n*=197). Some of the child and adolescent psychiatrists commented that they were managing patients until they were 20 years or above. A total of 1345 patients are currently being treated for adult ADHD. It is difficult to predict the prevalence of adult ADHD from this survey. However, Table 1 shows that 1748 new referrals with suspected adult ADHD are received by consultants in England and Wales per year (mean 3.74 per consultant, s.d.=15.27).

Box 1. Questionnaire sent to adult and child and adolescent consultant psychiatrists

- Do you offer a service for patients with adult ADHD?
- Approximately how many adult ADHD patients are you treating currently?
  Give exact number of patients, if known.
- Approximate number of male patients with adult ADHD?
- Approximate number of female patients with adult ADHD?
- Approximate number of patients on stimulants or other medications?
- What treatment do you use?
  - Methylphenidate
  - Atomoxetine
  - Dexamphetamine
  - Other
- Age group of most patients
- Who monitors the medication?
- Approximate number of referrals of suspected adult ADHD you receive per year?
- Do you have transfer meetings from CAMHS to the adult team?
- If so, approximate number of transfer meetings in the past 12 months?
- Which diagnostic criteria do you use? Please list the criteria.

CAMHS, child and adolescent mental health service.

Table 1. Responses to the questionnaire by consultants in England and Wales

	n	%
Total responses	1030	
Offering a service for adult ADHD	197	19.1
Treating adult ADHD	325	23.9
Patients treated for adult ADHD	1345	
Male	995	73.0
Female	350	26.0
Treatment used		
Methylphenidate	251	55.0
Atomoxetine	91	19.0
Dexamphetamine	53	11.0
Other	72	15.0
Age group of most patients		
18–25 years	209	54.0
25–35 years	126	33
>35 years	49	13.0
Medication monitored by		
General practitioner	54	15.0
Psychiatrist	254	70.0
Combination	56	15.0
Total referrals with suspected adult ADHD per year[1]	1748	
Transfer meetings from CAMHS to adult team[1]	300	29.1
Consultants using ICD–10 criteria	394	38.3

CAMHS, child and adolescent mental health services.

1. These are approximate values.

Discussion

In recent years clinicians and researchers have accepted the validity of ADHD in adulthood (Weiss *et al*, 2002). Currently there are diagnostic criteria available to diagnose adult ADHD but there is controversy and doubts among clinicians about the validity of these for adult ADHD (McCough & Barkley, 2004). Longitudinal studies of children with ADHD followed up into adolescence and adulthood have reported high rates of persistent ADHD symptoms (Weiss *et al*, 1985; Mannuzza *et al*, 1993; Rasmussen & Gillberg, 2000). Comorbid illness makes the diagnosis more difficult (Murphy & Barkley, 1996) and ADHD is often underdiagnosed in adults (Lamberg, 2003).

One of the major difficulties in establishing the prevalence of adult ADHD is that continuity of care is lost during the transition from child and adolescent services to general adult services. This is evident from our survey. Only 300 (29.1%) respondents had transfer meetings. The comments of respondents indicated a widespread reluctance on the part of adult psychiatrists and general practitioners to prescribe stimulants to adults. There are very limited prevalence studies available and the exact prevalence is not known. In the USA, 5% of children have ADHD. Persistence into adulthood varies from 10 to 60%. Approximately 2% of US adults have ADHD, although this is not standardised worldwide (Mannuzza *et al*, 2003).

Currently in the UK there are limited reports on the prevalence of adult ADHD and it seems likely that adults with ADHD are under-recognised and undertreated. Their symptoms are distinct, although similar, to those of children with the disorder, but it is important to remember that adults are not just 'grown-up' children and may have entirely different presentations and problems. It can be confusing for clinicians who have little experience of screening for, or diagnosing adult ADHD. Self-report rating scales such as the Adult ADHD Self-Rating Scale (Kessler *et al*, 2005) and clinician-administered scales may be a helpful starting point, although they cannot replace an extensive clinical history and knowing when to refer the patient to a healthcare professional with experience of adult ADHD.

It is important to remember that adult ADHD remains a clinical diagnosis. This postal survey reveals the increasing demand and need for services and resources to treat adult ADHD. A substantial number of consultants have asked for funding and resources to treat this group of patients. Unfortunately they end up with no support from their trusts. More research needs to be done to establish the prevalence of ADHD in the adult population. The consultants who responded to this survey have expressed very great interest in this topic; one consultant commented 'we need guidelines to assess and treat adult ADHD'. The survey clearly describes a need for a nationwide service for adult ADHD. National guidance regarding the diagnosis and treatment of adults with ADHD would be a welcome development and should perhaps be addressed by the National Institute for Health and Clinical Excellence (NICE).

In conclusion, this survey highlights the importance of adult ADHD. There is clear indication from the survey that the prevalence of adult ADHD in England and Wales is likely to be high. More robust research is needed to find its exact prevalence.

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Declaration of interest

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References

AMERICAN PSYCHIATRIC ASSOCIATION (1968) *Diagnostic and Statistical Manual of Mental Disorders* (2nd edn) (DSM–II). APA.

KESSLER, R. C., ADLER, L., AMES, M., *et al* (2005) The World Health Organization ADHD Self-Report Scale (ASRS): a short screening scale for use in the general population. *Psychological Medicine*, **35**, 245–256.

LAMBERG, L. (2003) ADHD often undiagnosed in adults: appropriate treatment may benefit work, family, social life. *JAMA*, **290**, 1565–1567.

MANNUZZA, S., KLEIN, R. G., BESSLER, A., *et al* (1993) Adult outcome of hyperactive boys. Educational achievement, occupational rank, and psychiatric status. *Archives of General Psychiatry*, **50**, 565–576.

MANNUZZA, S., KELIN, R. G., MOULTON, J. L., *et al* (2003) Persistence of ADHD into adulthood: what have we learned from prospective follow up studies? *Journal of Attention Disorder*, **7**, 93–100.

McCOUGH, J. J. & BARKLEY, R. A. (2004) Diagnostic controversies in adult ADHD. *American Journal of Psychiatry*, **161**, 1948–1956.

MURPHY, K. & BARKLEY, R. A. (1996) Attention deficit hyperactivity disorder adults. Comorbidities and adaptive impairments. *Comprehensive Psychiatry*, **37**, 393–401.

RASMUSSEN, P. & GILLBERG, C. (2000) Natural outcome of ADHD with developmental coordination disorder at age 22 years. A controlled, longitudinal, community-based study. *Journal of the American Academy of Child and Adolescent Psychiatry*, **39**, 1424–1431.

WEISS, G., HECHTMAN, L., MILROY, T., *et al* (1985) Psychiatric status of hyperactives as adults. A controlled prospective 15-year follow up of 63 hyperactive children. *Journal of the American Academy of Child Psychiatry*, **24**, 211–220.

WEISS, M., MURRAY, C. & WEISS, G. (2002) Adults with attention-deficit/hyperactivity disorder: current concepts. *Journal of Psychiatric Practice*, **8**, 99–111.

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Changes to mental healthcare for working age adults: impact of a crisis team and an assertive outreach team

AIMS AND METHOD
To investigate changes to admissions, compulsory detentions, diagnosis, length of stay and suicides following introduction of crisis resolution home treatment and assertive outreach teams.

RESULTS
There was a 45% reduction in admissions with an increase in the median length of stay from 15.5 to 25 days. Bed occupancy fell by 22%. The number of suicides remained constant. Detentions under sections 2 and 3 of the Mental Health Act 1983 increased whereas those under sections 5(2) and 5(4) declined.

CLINICAL IMPLICATIONS
The introduction of crisis and assertive outreach teams was followed by a reduction in admissions, particularly short admissions. The impact differed according to gender (reduction in female bed occupancy). This and the increased length of stay need to be considered when determining the number of acute psychiatric beds needed.

Mental health services in the UK continue to develop. The pace and direction of recent changes has been heavily influenced by the publication of the *NHS Plan* (Department of Health, 2000). New services such as crisis resolution teams and assertive outreach teams are now part of the landscape of psychiatric services. The efficacy of these services has been demonstrated in Canada, the USA and Australia (Joy *et al*, 1998), and they have been shown to be as safe as standard hospital care in terms of suicide rates. However, scepticism has remained that the same would apply in the UK. Some of this scepticism centred on the use of hospital-based care as the comparator in trials, rather than standard community care such as provided by community mental health teams.

The *NHS Plan* states that crisis teams should produce a '30% reduction of pressure' on acute in-patient services. Presumably this was to be achieved by reducing the rate and length of admissions. Certainly some of the early studies suggested crisis resolution teams could do both (Hoult, 1986; Dean *et al*, 1993; Marks *et al*, 1994). A recent study in the UK has demonstrated that 24 h crisis teams focusing on home treatment can reduce admissions (Johnson *et al*, 2005). However, this mainly applied to patients with less-severe illness and not to those detained involuntarily (who were less likely to be included in the study). Data from Hospital Episode Statistics (Information Centre, 2006) show that those detained have longer lengths of stay. In addition, there are very limited data on the impact of these service developments on detentions under the Mental Health Act 1983.

A crisis service was established in Newcastle and North Tyneside in 2000. This operates 24 h per day, 7 days a week and provides assessment of psychiatric emergencies, home-based treatment as an alternative to hospital admission and gate-keeping of psychiatric beds. The model used is adapted from that described by Hoult (1986). The assertive outreach service was established in the same year and covers the same population. The