

ADHD: CREATING CONTINUING DILEMMAS FOR EDUCATION IN SCOTLAND.

JOAN STEAD AND GWYNEDD LLOYD

ABSTRACT

Over the last fifteen years the diagnosis of Attention Deficit Hyperactivity Disorder (ADHD) has acquired a high level of professional acceptance and public awareness in Britain. A range of critiques have also developed in relation to the concept of ADHD, the constellation of symptoms that make up the 'disorder', its diagnosis and the use of medication. However diagnoses and medication rates continue to increase. This increasing medicalisation of behaviour is paradoxical in relation to current policy and legislative direction of Additional Support for Learning in Scotland.

This paper summarises some of the critiques of the concept of ADHD, discusses their minimal impact on practice and refers to research data to highlight some issues for education. The data from a small pilot study highlights the role primary schools take in the diagnosis of ADHD, their relationship with the diagnosing professionals and the management of prescription medication during the school day. Finally the paper argues for further social and educational research on this important issue.

ADHD AND THE CONTROVERSIES

ADHD and its management with medication, including the drug methylphenidate hydrochloride (often as Ritalin), are still controversial (Scottish Intercollegiate Guidelines Network - SIGN 2001). The contested nature of ADHD has its roots in a number of inter-related factors: the very rapid increase in diagnosis (Safer *et al.* 1996); the risks associated with both short term methylphenidate use (Schachter *et al.*, 2001) and long term methylphenidate use (Gilmore, Best & Milne 1998); and the normative nature of ADHD diagnoses (Lloyd & Norris 1999; Cohen 2006). Meta-analyses (Jalad *et al.* 1999; Klassen *et al.* 1999) and the publication of clinical guidelines (National Institute of Clinical Excellence – NICE 2000; SIGN 2001) have not yet resolved the controversy. There is substantial professional and academic disagreement surrounding the validity of the diagnosis and treatment of children and young people thought to have ADHD (Baldwin & Cooper 2000). Disagreement over ADHD involves competing genetic, neurological, dietary, psychosocial, sociological, educational and environmental explanations (British Psychological Society – BPS 2000; Bailey 2006). Although neurology has attained a degree of dominance in the discussion of ADHD, the disorder has been, and remains, mired in controversy on both aetiological and treatment fronts (Rafalovich 2005).

National medical guidelines such as 'SIGN' in Scotland, and 'NICE' in England both acknowledge that there is no consensus over the existence of biological markers. The SIGN Guidelines states:

Considerable controversy therefore surrounds the extent of these disorders (ADHD and HKD- Hyperkinetic Disorders), for which there are, as yet, no robust diagnostic tests; thus their definition continues to be debated. The use of psychostimulants remains controversial and there are concerns about prescribing such medication to children. (SIGN 2001:1)

DIAGNOSING ADHD

Attention Deficit Hyperactivity Disorder (ADHD) originates in the USA. It refers to children and young people whose behaviour appears impulsive, overactive and/or inattentive to an extent that is unwarranted for their developmental age and is a significant hindrance to their social and educational success... (BPS 1996).

Most clinicians in the UK, particularly paediatricians and child psychiatrists, now use the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM-IV APA 1994) as a guide for diagnosis. The DSM, currently under a further revision, is a categorical classification system, in which children's behaviour is checked off against '...clusters of clinical criteria which are either present or absent' - as one critic puts it, this process 'strictly speaking, is a yes-or-no, an either or affair'... (Bailey 2006: 9, citing Hempel 1965:151). This diagnosis of ADHD has largely replaced in the UK the diagnoses of Hyperkinetic Disorder (HKD) from the International Classification of Diseases (ICD-10 ref) previously used; a key change as the predicted rate of occurrence of ADHD is significantly higher than that for HKD - 5% for ADHD, 1.5% for HKD (NHS Scotland 2007). As ADHD is identified disproportionately in boys the predicted incidence might therefore apparently be more like 8 or 9% of the male school population.

ADHD is also frequently co-diagnosed with an increased rate of other 'disorders', including depression, anxiety, other behavioural disorders, tic disorders, specific learning difficulties and developmental disorders. The USA National Institute of Mental Health (NIMH 2003) states that between 20%-30% of young people with ADHD also have specific learning difficulties and as many as one third to one half of children with ADHD have ODD (Oppositional Defiant Disorder). A diagnosis of ADHD is therefore often conflated with other diagnosed difficulties, some specific, others more global in character where the behaviour identified may take place in the context of a range of family, social, educational and other interacting factors. ADHD has also been used to explain wider social concerns such as a rise in criminal conduct (Tait 2003; Kewley 1999), with Kewley stating that possibly 30% or more of those convicted of serious and recurrent offences may have untreated ADHD and Conduct Disorder (Kewley 1999:184).

Widely varying patterns of diagnosis and levels of prescriptions are reported both in the USA (Cohen 2005), in Europe (NHS 2004), and in Scotland (Scottish Health Statistics 2005) supporting the view that it is professional judgement, preference and subjectivity, rather than measurable incidence of children's behaviour, which lead to a formal diagnosis of ADHD. There is no nationally collected data on the incidence of ADHD diagnoses (such data would be useful); in the absence of these figures prescription rates are used as a, rather unsatisfactory, proxy. However in answer to a Scottish Parliamentary Question (September 2007) the following answer was provided by a health minister:

National estimates can be given, based on the number of patients seen in general practices participating in Practice Team Information, for the proportion of the population who consult and the number of patients seen at least once during a given year for ADHD (including attention deficit disorder), in the year ending 31 March 2006:

Deprivation Category (SIMD)	Number of People Consulting Per 100,000 Population Per Year	Estimated Number of Patients who Consulted at Least Once
1 (least deprived)	13.1	150
2 17.3	200	
3 32.2	350	
4 26.2	300	
5 (most deprived)	36.9	400
Scotland	25.2	1,350

Note: Estimated numbers of patients are rounded to the nearest 50. Total figures may not add up to the sum of the parts due to rounding. The Scottish Index of Multiple Deprivation (SIMD) is used here as a proxy for socio-economic group. (Scottish Parliamentary question, 10 September 2007)

So there is a clearly disproportionate number of children from the most disadvantaged areas. This raises important questions about the relationship of diagnosis and poverty. Over the last few years there has been an increase in the numbers of successful claims for Disability Living Allowance (DLA) in relation to children with 'behavioural disorders' in Scotland; many of these are likely to relate to ADHD as a medically based diagnosis is required for the award. Awards of DLA on these grounds increased from 3,600 in 2000 to 6,480 in 2006 (figures requested from ISD).

In Scotland the prescribing of drugs indicated for ADHD grew by 15.6% between 2004/05 and 2005/06, up from 42,832 to 49,258 prescribed items. The modified release (MR) forms of methylphenidate now accounts for 54.9% of all methylphenidate prescribing. The largest single user in 2005/06 of ADHD drugs is NHS Fife with 179.98 prescribed items per 1,000 population aged 6 to 14. The Scottish average for the same period was 82.56 prescribed items per 1,000 population aged 6 to 14 (ISD 2006). It is also noticeable that the prescription levels in Lothian (including Edinburgh) and Greater Glasgow (the largest NHS Board in Scotland) are below the national average. Given that these figures do not correspond to other variations in area profiles, such as those of school exclusions and indicators of poverty, it would appear that they do largely reflect a medical preference for diagnosis and medication.

The rapid increase in prescription rates has re-emphasised the claims to expertise of medical professionals in a process, which may only minimally involve schools and teachers in inter-agency practices. These claims to expertise have been challenged in terms of ethical concerns about wide-scale medication and control, and the commercial interests of the pharmaceutical industry (Norris & Lloyd 2000; Lloyd *et al.* 2006). The commercial interests are considerable, with the rise in prescriptions, and the recent introduction of once-daily dosage of methylphenidate that is three to four times more expensive than the single doses previously prescribed. The gross ingredient cost of Central Nervous System stimulants and other drugs in relation to ADHD in Scotland increased by 30.4% between 2004/05 and 2005/06, up from £1.45 to £1.89 million (ISD 2006). In a study recently completed at Brandeis University (USA) overall psychotropic drug prescriptions for teenagers

were found to have increased by 250 percent between 1994 and 2001, leading the authors to suggest that the impact of direct-to-consumer advertising and other marketing strategies needed further scrutiny (Brandeis University 2006). In the UK the rise in diagnoses can be clearly seen to be associated with a range of factors, one however is clearly the decision in the early 1990s by US based pharmaceutical companies to respond to reducing market share in the USA by actively marketing in the UK (Lloyd & Norris 1999).

So we do have information about prescription patterns, about the relationship between prescription and disadvantage. However we have less knowledge of how this rapid increase in the medicalising of behaviour has affected schools or what their role is in this process.

ADHD IN SCOTTISH PRIMARY SCHOOLS

Policy and legislation in Scotland are moving away from deficit based models of special educational need towards broader more functionally based conceptualisations of additional support (Additional Support for Learning Act 2004). Inter-agency working is increasingly promoted, and is valued by professionals from different sectors when it works well; although there are still many obstacles (Lloyd *et al.* 2001). The process of medicalisation, indicated by the fast increasing diagnosis of ADHD and the associated level of prescription of medication, therefore seem to be out of step with current policy directions.

Anecdotal evidence from schools had suggested many teachers accepted the validity of the diagnosis of ADHD and a medicalisation of accounts of difficult behaviour in the classroom, although others maintained scepticism towards the diagnosis. There also appeared to be a growing argument that, because of the increasing numbers of pupils diagnosed with ADHD, school staff needed training in the management and administration of psychostimulant medication. However clear research information about issues for schools had not been gathered. The project discussed below represents an initial exploration of the role of the school in the process of identification and ‘treatment’ of ADHD.

This pilot project set out, in one Scottish city, to find:

- the numbers of pupils primary schools identified ‘with’ ADHD
- how many of those pupils were currently on medication
- whether school staff were involved in the diagnostic process
- if school staff had meetings with medical staff regarding pupils diagnosed with ADHD
- if teachers felt adequately prepared to support pupils with ADHD in the classroom.
- and to develop questions for further research

An easy to complete questionnaire was sent to half of all the primary schools in one large city council in Scotland at the beginning of the school year 2004/5 (to 51 schools). This council’s prescription rates are less than the Scottish average and half that of the highest prescribing council/health board. Thirty-two schools completed the questionnaire, representing one third of all primary schools in this council. Data from the questionnaires revealed:

- 24 of the 32 schools had pupils formally diagnosed with ADHD.
- The majority of schools (22) had between 1-3 pupils diagnosed, with 2 schools having between 4-7 pupils diagnosed - a total of 54 pupils
- 2 further schools had previously had pupils diagnosed with ADHD (no numbers provided).
- 21 schools had provided evidence for the medical diagnosis of all or for some of their diagnosed pupils; 3 schools had not.

- Evidence had been provided by schools in relation to 41 pupils but none had been provided prior to diagnosis for 13
- 40 children were known to be on medication
- 11 schools said they felt adequately prepared to supporting pupils
- 11 schools did not feel adequately prepared.
- 11 schools said there had been meetings with medical staff, but in 2 of these schools this would only occur if the pupil was already attending regular multidisciplinary review meetings
- In 15 schools there had been no such meetings

Four issues will be highlighted here: the role of school staff in the diagnosis of ADHD; the responsibility and practicalities of managing the administration of prescribed medication; inter-agency working; and whether school staff felt adequately prepared in supporting pupils diagnosed with ADHD.

The role of school staff in the diagnosis of ADHD. The majority of schools (21) had provided some evidence for the medical diagnosis; however 13 children had been given a diagnosis without any input from the school (contrary to diagnostic guidelines). Most did not specify the nature of this evidence but one school did report they had been ‘requested’ to complete Connors’ Teacher Rating Scale (which contains scales for hyperactivity, conduct problems, emotional-over indulgence, anxious passivity, asocial behaviours, and daydream - attention problems that characterize the behaviours of a child and compare them to levels of appropriate norm groups). However this was requested for only one child out of three pupils in the school who were prescribed methylphenidate. The Connors scale is generally the most widely used tool for diagnosis.

Two schools indicated that they had more children ‘with ADHD’ than currently diagnosed, and two other schools underlined ‘diagnosed’ suggesting that they also felt that there were more pupils in the school ‘with ADHD’.

Inter agency working between school and medical staff was more difficult to gauge. The questionnaire asked if school staff have meetings with medical staff and a ‘no’ answer was given in more than half of the schools with pupils with a diagnosis. Our question did not ask how often these meetings might take place or whether these meetings also included other professionals such as social workers. There was one response which stated that medical staff would be ‘invited to all IEP Reviews’ but no indication as to whether medical staff took up this invitation. Another school said they had attended a clinical consultation but this would appear to have been a ‘one off’ event as they then commented: “*Staff are not invited to meetings with parents and medical staff. Therefore no information is passed on*”.

One school recognised the need for multi agency liaison but felt that: “*Multi-agency training is required.*” There was a sense of some schools feeling isolated and ‘out of the loop’ regarding information sharing and contact with other professionals.

The responsibilities and practicalities of managing the administration of medication. These were seen as an issue by a majority of respondents. There were indications that responsibility for this was often placed with classroom assistants and/or auxiliary staff and that this responsibility was an extra duty that took time away from other duties. Monitoring whether or not a pupil received their medication was seen as problematic when designated staff were absent; “*because it is difficult to “keep tabs on who has to get it”*”. One school also indicated it had problems providing secure storage for the medication. The following comments illustrate some of these issues:

Auxiliary/learning assistant had to take on the responsibility of ensuring medication was administered at the correct time. Pupils did not always remember to go at lunchtime so the auxiliary had to find them.

Not had enough time to assess this. Pupil has been excluded already.

Staff taken away from other duties. We have had to buy secure storage units.

Getting the child to swallow them.

There were clear concerns in relation to the administration of prescribed medication. These concerns may be reduced with the increase in the use of single dose medication, administered at home. However one school did express worries that “one child does not receive his medication regularly at home”. These findings do raise issues about safe and effective administration and comprehensive monitoring of the impact and effects of the drug on individual pupils. The guidance and the literature on medication stress the need for careful titration of doses and therefore for the regular monitoring and management of this medication.

Did school staff feel adequately prepared in supporting pupils with ADHD?

Responses were split with 11 schools saying ‘yes’, and 11 schools saying ‘no’ by ‘ticking’ the appropriate box, but when asked to explain this response the comments made were often ambiguous. Comments following ‘yes’ tick stated:

We have the opportunity to attend in-service course. Notes and books on ADHD are available to all staff.

Our positive behaviour programme takes account of children who have difficulty, whether medically diagnosed or not, we have had training and many staff have read a variety of research into AD/HD.

Both these comment suggests that there is information available for those who choose to engage with it, although as we discuss later, this information is likely to offer an uncritical medicalised perspective. Those indicating that they did not feel prepared in supporting pupils with ADHD raised several issues:

More info regarding practical issues in the classroom setting would be useful.

Staff needed to book CPD courses to support pupils diagnosed during session. This resulted in supply/organisational problems and delays. No extra support is made available after the audit process is completed (from August onwards).

Lack of designated time apart from LS liaison times.

The main angst is knowing whether the behaviour relates to ADHD or not and how to handle it in a whole school/class/group situation.

This is a combination of lack of knowledge, strategies and extra man hours in the classroom.

We are relatively ‘new’ at having children diagnosed with ADHD and feel we need more info on this.

I am aware that there is training available for staff – however time and money can restrict this.

Time needed to access support would appear to be an important issue here, with training being recognised as important in the development of knowledge and understanding of ADHD. Four other schools indicated that they were 'partly' or 'not always' prepared. When asked to explain comments made included the following:

Yes partly. Staff have researched ADHD on the Internet, attended courses and read books.

We have literature on the topic and advice sheets listing useful strategies. In the past we have had to rely on parents to share info.

Advice/courses are available, but little specific advice for specific pupil.

What appears striking in the comments above is the disparate array of resources mentioned and the apparent reliance on individual staff having the commitment, and finding the time, to search out resources. Although some of the comments above could be interpreted as relating to both teaching and non teaching support staff, there was no explicit recognition that non-teaching staff may also need training in order to support pupils diagnosed with ADHD.

The final question asked for further comments and 2 respondents took the opportunity to comment here on their concern about the diagnosis and treatment of ADHD:

The use of prescribed medication is disturbing...

In 37 years I have seen 3 pupils who, in my opinion, needed to be mediated for ADHD ... I need hardly add that I feel we are living in a culture of over-medicalisation.

DISCUSSION

The model of ADHD offered by most of the medical, and indeed educational, literature is typified by Kewley who contends that there is 'strong scientific evidence' (Kewley 1999: 175) that ADHD is primarily a disorder of brain dysfunction, and that: 'if medication is not considered as part of the management strategy in a person with significant untreated ADHD, the condition will usually progress with a poor diagnosis' (Kewley 1999: 95). Although many have criticised this 'strong scientific evidence' on the basis that there is no evidence that can unequivocally identify such brain dysfunction (Rafalovich 2005), the resulting pressure on parents and on young people to take medication is formidable.

Labels such as ADHD can give a clear indication of which professional group holds power and control over the labelling process. As the rise in prescriptions for methylphenidate show, the medicalising of behaviour is the 'accepted/majority' response to a diagnosis of ADHD. There may, however, also be pressure on professionals to diagnose and medicate from some parents who see the label ADHD as removing 'blame' from them and from their child; using the label of ADHD as one of 'forgiveness' thereby exculpating the parent and the pupil of responsibility (Lloyd & Norris 1999). At the same time, increased access by parents to information about 'conditions' like ADHD, particularly from the internet, as well as a growth in organised pressure, in the context of a developing culture of individual responsibility for health, has created a more challenging client group, with an increased emphasis on a right to diagnosis. This escalated right to diagnosis has resulted a proliferation of conditions relating to the 'behaviour' of young people, as the boundaries and understandings of what is/should be considered normal behaviour for pupils in schools, and in society, comes under increasing scrutiny.

... as the boundary between childhood and adulthood is disappearing [there]is a growing sense that children themselves are a risk with some children coming to be viewed as too dangerous for society and needing to be controlled, reshaped and changed (Timimi 2005: 61).

Tait (2003; 2006) observes that contemporary pupils may be no longer simply 'too lively', they are now suffering from ADHD or Oppositional Defiance Disorder, or Conduct Disorder, and he further suggests that pupils are no longer simply 'quiet or shy', they are reclassified as suffering from Generalised Social Phobia, or Selective Mutism, or Avoidant Personality Disorder. So, just as some parents are looking for diagnosis as a label of forgiveness, there are those, perhaps overworked teachers, who appear equally grateful for a label that will rationalize/justify some behaviour as 'outside' their responsibility, 'expertise' and control: hence the 'specialisation' of learning and behaviour support teachers in our schools today. The pressure on teachers to maintain classroom discipline and deal with the 'new' problems of children may therefore strongly influence decisions to diagnose and prescribe (Cohen 2005; Timimi 2005), though teachers would appear more proactive in this way in the US than currently here in the UK. Concerns about the role played by teachers in possible over-diagnoses of ADHD have led some school districts in the USA to instruct teachers not to discuss possible ADHD diagnoses with parents.

The increasing trend to pathologise and medicalise behaviour might suggest a 'disordered identity' is now required in order to access financial and educational support (Lloyd 2003). The emergence of ADHD as 'the disability of the 21st Century' (Tait 2006) therefore raises significant questions about policy and practice which seeks to label and regulate 'different' children who challenge the structure and culture of 'special' education and 'able' parenting (Corker & Davis 2000; Davis 2006).

Diagnoses such as ADHD can also act as a catalyst to provide services and support not previously offered to the child and parent (Cohen 2006). Norris and Lloyd state:

Labels such as ADHD therefore denote which professional knowledge constructs them, and to some extent which professionals attempt to take control. This makes it difficult to challenge by the layperson or by other professionals who do not have access to this specialised discourse. (Norris & Lloyd 2000: 508).

Lloyd and Norris (1999) argue that labels that minimise social disadvantage and emphasise individual need should be understood in the context of prevailing political relationships between systems of resource allocation and the implementation of policy and practice, for example in Additional Support for Learning and local Council use of audits in Scotland. In a study of primary schools in two councils in England (Wilson 2002) the prevalence of pupils diagnosed with ADHD was correlated with data on the percentage of children in each school receiving free school meals, and ward scores from the Index of Multiple Deprivation and the Child Poverty Index. Although the study suggests a modest link between AD/HD and indicators of deprivation, the management of AD/HD in schools was also a key issue and there was considerable variation in awareness of the support and resources currently available to schools. Evidence discussed above about ADHD and economic disadvantage suggests ADHD may be more associated with social and economic disadvantage in Scotland than in the USA, where private health insurance tends to encourage more middle class diagnoses. If this were to be the case then it raises issues about the similarity of the phenomenon across cultures. Research on the social and economic background of families with children with a diagnosis of ADHD would be of considerable interest.

Very often parents, children and teachers are initiated by medical professionals into a medical culture which does not allow space for them to challenge traditional orthodoxy, and that fails to recognise conflicts of interests between children, parents and professionals (Avery 1999; Shakespeare & Watson 1998). Indeed Cohen (2006) describes the paradox of many psychosocial professionals in Canada who are dissatisfied with procedures/interventions for ADHD which rely on medication, but who nonetheless recognise that their interventions consist almost exclusively of medication. Adams, in a recent paper agrees with Tait, above, that there can be clear interests for teachers in a redirection of responsibility, and in the access to support, created by a diagnosis. However he expresses surprise that there has not been a more vociferous challenge to the '...causal simplicity of the medical view', arguing that teachers are engaged in a 'positioned mediation of 'post-welfare' rhetoric concerned with including 'problem' children into mainstream school' (Adams 2006: 9-10).

Adams agrees with Tait (2001) that the concept of ADHD can no longer be disputed:

... the decision as to its veracity will be made in locations other than the schools, and by knowledge other than those produced by educators... After all, it is not just medicine and psychology that produced ADHD; it was also the individuating/differentiating logic of the contemporary school (Tait 2001; 100).

Adams and others have argued that those involved in education should understand the complexities of the processes within which they operate, their role in the construction of ADHD but also the possibilities for the enhancement of their professional contribution to the discussion (Adams 2006; Lloyd 2006). Timimi (2005) argues that we need to see ADHD clearly as a cultural construct. Research into ADHD however continues to be hugely dominated by medically based projects, with entirely uncritical perspectives on the concept. Projects listed, for example on the National Register for Research tend to be on topics like *Identifying susceptibility genes for Attention Deficit Hyperactivity Disorder with antisocial behaviour as a covariate* (by the East Lancashire Hospitals NHS Trust).

ISSUES RAISED AND NEW DIRECTIONS FOR RESEARCH

As we have indicated the diagnosis of ADHD is rising across the world (Lloyd, *et al.*, 2006) and this study suggests that some staff in primary schools in Scotland appear to be unsupported by health and medical professionals in their support for, and in managing medication for these pupils, with limited opportunity to meet and discuss issues or concerns. Within our study, schools had not provided evidence for a quarter of pupils who were diagnosed with ADHD. This discrepancy between the number of pupils diagnosed and the number of those where evidence was provided by the school is worrying given the centrality of school behaviour to the diagnosis of ADHD. If school staff are not regularly and routinely involved in the discussions leading to a diagnosis and support of ADHD their ability to *critically engage* with this process and understand and support the pupil can only be diminished. This situation further suggests that no formal (or informal) precedence or structure has been initiated that would foster continued communication between schools and health professionals regarding the monitoring of dosage and behaviour, except in certain authority pilot projects. By focusing on the diagnosis and medication of behavioural 'disorders', educational solutions are often not pursued or developed.

Comments from our study indicated that some teachers have looked to the Internet for information, but many prominent sites are often at least partially funded by pharmaceutical companies, and inevitably offer a medicalised perspective. Other sources of information, such as advice in the form of books or leaflets for

teachers, also tends to ignore the contested nature of ADHD and its treatment, and are often more 'how to do it' manuals with simple and rather over-general claims for the universality of the concept and the value of medication (Lloyd 2003; Lloyd 2006).

Research in secondary schools in Scotland (Lloyd *et al.* 2001) has indicated that inter-agency working may take several forms and that open honest discussion between professionals involved is not always possible. There is also some evidence that mental health services are often not involved in education based decision making about pupils with problems (Lloyd *et al.* 2001). The range and number of different professionals potentially contributing to a diagnosis of ADHD, including General Practitioners, teachers, paediatricians, psychiatrists and educational psychologists, may also provide some explanation for the possible breakdown/lack of communication. Although the British Psychological Society have produced guidelines and principles for successful multi-agency working in the identification and management of ADHD (BPS, 2000), this is premised on 'much common ground' among the many different professionals involved; an assumption disputed by those such as Stead *et al.* (2004). Studies of interagency working in schools have concluded that professional boundaries, language and statutory obligations have often prevented effective communication, understanding and information sharing. (Lloyd *et al.* 2001; Clark, Dyson & Millward 1999; Dyson & Robson 1999). An investigation in one Scottish council also suggested that there can be quite a high level of disagreement between teachers and parents as to which pupils showed behaviour appropriate to a diagnosis of ADHD (Kirkaldy 2003).

CONCLUSION

Although some writers in medical sociology have recently argued that clinicians do acknowledge the contested nature of such issues and respond to them (Rafalovich 2005) nevertheless, public concerns regarding the diagnosis and use of medication for ADHD have been increasing without significant professional review, or public debate, of the wisdom (and consequences) of such large-scale diagnoses and use of psychoactive medication with children. Although schools in Scotland and the UK (unlike many of their counterparts in the US) are not usually the prime instigators of referral for diagnosis, there is evidence that some schools are accepting this medicalisation of behaviour as unproblematic or have no opportunity to challenge it. This increase in the pathologising of behaviour has led to a changing role for the schools in managing, categorizing and normalising difference through their involvement (or not) in diagnoses and medication. The power and dominance of this medicalised approach would therefore appear to have silenced any concerns, not only from parents and teachers, but often also from the other professionals who may be involved.

Understanding challenging or difficult behaviour in children requires reference to an intricate range of social and individual factors. The labelling of children with ADHD takes place in a complex process of competing policy interests, of professional expert discourses, of financial and funding pressures and of commercial promotion. An understanding of ADHD also needs to take into account the subjectivity of diagnosis and the views/evidence of all those involved including school and the pupils themselves. This paper has raised a number of significant concerns about how ADHD is diagnosed and medicated in educational settings. This small-scale study points to the need for much wider research into the professional processes of identification and diagnoses, of the role of education in this, and into the characteristics and social circumstances of those children and young people diagnosed with ADHD. There is an important area for future investigation in the relationship between diagnosis and school disciplinary processes such as exclusion.

The research literature has been dominated by medical research, particularly funded research on the effectiveness of medication – education has largely accepted this dominant perspective, failing to offer a distinctive critical body of research. While there is a growing body of critical literature, the empirical evidence is not yet gathered in support of the critique. In Scotland there is legislative and policy support within education for a broad understanding of children’s difficulties; however there is little educational input into the debate about ADHD.

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