



## Doctors with dyslexia: strategies and support

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### SUMMARY

**Background:** Looking beyond dyslexia as an individual doctor's issue requires adjusting a working environment to better serve the needs of doctors with dyslexia. With an increasing number of doctors disclosing dyslexia at medical school, how can educators best provide this support? Our research looks at the impact of dyslexia on clinical practice and the coping strategies used by doctors to minimise the effect.

**Methods:** Qualitative data were collected from 14 doctors with dyslexia using semi-structured interviews and by survey. *'In situ'* demonstration interviews were

conducted in order to understand how dyslexia is managed in the workplace from first-hand experience. Employers and educators who have responsibility for meeting the needs of this group were also consulted.

**Results:** Even in cases of doctors who had a diagnosis, they often did not disclose their dyslexia to their employer. Study participants reported having developed individual ways of coping and devised useful 'workarounds'. Support from employers comes in the form of 'reasonable adjustments', although from our data we cannot be sure that such adjustments contribute to an

'enabling' work environment. Supportive characteristics included the opportunity to shadow others and the time and space to complete paperwork on a busy ward.

**Discussion:** Doctors with dyslexia need to be helped to feel comfortable enough to disclose. Educators need to challenge any negative assumptions that exist as well as promote understanding about the elements that contribute to a positive working environment. As a result of the research there is now practice available for educators to identify evidence-based strategies and resources.

**How can educators best provide support [for doctors with dyslexia]?**

A person with dyslexia is deemed to have a disability, albeit physically 'non-evident'

## INTRODUCTION

There has been an increase in the numbers of students declaring dyslexia as a specific learning difficulty on entry to medical school.<sup>1</sup> We can therefore assume that an increasing number of doctors with dyslexia will be identified, and that there will be an impact on their clinical practice. The sorts of difficulties such doctors may face in the workplace relate to written work, reading and poor short-term memory.<sup>2</sup> Educators (both clinical and educational supervisors) who support qualified doctors in the workplace need to be able to provide sound advice and assistance when dyslexia is suspected or identified. Little has been published, however, about qualified doctors with dyslexia and effective strategies that serve to minimise the effects, which we sought to address in this study.<sup>3</sup>

A person with dyslexia is deemed to have a disability, albeit physically 'non-evident',<sup>4</sup> if the 'impairment has a substantial and long-term adverse effect on a person's ability to carry out normal day-to-day activities'.<sup>5</sup> Support for doctors with dyslexia may derive from an understanding of disability, whereby an individual with a disability differs from the norm in a significant way and interventions must correct any deficiencies.<sup>6</sup> There may be negative assumptions associated with this 'deficit' perspective that result in doctors keeping dyslexia hidden, as they do not wish to appear less than capable. There is no evidence to suggest that doctors with dyslexia are unsafe in their practice, and so any such perceptions need to be challenged. Such challenges underpin an alternative understanding of disability: the social model.<sup>4</sup> The way society is structured is the reason for

disability on this model, rather than an individual's difference. In the social model, support is provided for doctors with dyslexia through the removal of 'disabling' barriers in the workplace.<sup>6</sup> In seeking to protect people from discrimination, the Equality Act (2010) requires employers in the UK to make 'reasonable adjustments' for disability to create 'enabling' working environments.<sup>7</sup>

## METHODS

We undertook primary research to understand how qualified doctors (i.e. post-medical school training) across primary and secondary care managed their dyslexia and are supported in the workplace. Existing research tends to be self-reported, based on the views of individual doctors with dyslexia.<sup>2</sup> In wanting to fully explore this area, we also sought the perspectives of educators and employers who have responsibility for accommodating the needs of this group. We anticipated difficulties in recruiting doctors with dyslexia to the study, so in order to encourage participation, a combination of different data-collection techniques were used, from which respondents could choose.<sup>7,8</sup> The sampling strategy of doctors was purposive, as the participants had received support for dyslexia from a professional support unit or were known to the unit as being dyslexic. The unit invited 24 participants to take part in the research, and those who accepted the invitation were given an information sheet by the researchers that explained the purpose of the research, and were asked to provide written consent. Given the potentially sensitive nature of the topic, the researchers asked for only a minimum level of personal data in the study, and an assurance was given about confidentiality and that individuals would not be identifiable in any outputs.

Fourteen doctors from one region with a formal diagnosis of dyslexia took part in the study. Six doctors took part in semi-structured interviews and the same number took part in an online survey. Questions covered the impact of dyslexia and the strategies and resources that they used to support their clinical practice. In addition to the semi-structured interviews, two doctors were interviewed 'in situ' to allow for discussion and the observation of strategies in clinical practice in real time.<sup>9</sup> In addition, interviews were carried out with five key informants who the Professional Support Unit indicated had knowledge about the support available for doctors with dyslexia, or had supported doctors with dyslexia in an educational role. These informants were asked about their experience of dyslexic doctors, the traits of the doctor(s) that they had been involved with and the ways in which these doctors minimise the effects of dyslexia. Eleven local trusts, in the same locality as the Professional Support Unit (i.e. hospital- or community-based health care providers), were contacted and responded to freedom of information (FOI) requests about the support that they provide in the workplace as employers of doctors with dyslexia. Such requests are permitted in the UK under the Freedom of Information Act 2000 that entitles the public to request access to information held by public authorities. The information provided covers policies and standards as it applies to all UK National Health Service (NHS) staff with disabilities.

Qualitative data from the interviews and the survey with dyslexic doctors, and key informants, were analysed following Miles and Huberman's thematic approach to data analysis and triangulated to give a full, detailed description of the area of study.<sup>10</sup> The use of three data collection methods (interview,

Even when doctors had a diagnosis of dyslexia, they did not always disclose their dyslexia

**Table 1. Difficulties experienced relating to dyslexia**

Study participants reported difficulties in a number of areas	Specific examples	Accounts from respondents
Written work	<ul style="list-style-type: none"> <li>Structuring and wording referral letters</li> <li>Taking patient histories</li> <li>Filling in forms</li> <li>Structuring written work</li> <li>Drug names may be misspelled or numbers written incorrectly</li> </ul>	<p>The deterioration in spelling and writing was partly to do with time pressure and trying to write fast and my head, as usual, was always a couple of steps ahead of what I write. If I had more time it would have at least been legible if not spelt terribly well. <b>Interviewee 6</b></p> <p>I'm very slow at writing and [the] same is true of typing. <b>Demonstration interviewee 2</b></p>
Reading	<ul style="list-style-type: none"> <li>Taking longer to read</li> <li>Misreading words</li> <li>Needing to re-read several times to understand text</li> <li>Feeling embarrassed about reading aloud</li> <li>Experiencing distortion of text reading information on charts</li> </ul>	<p>Well, I was never very good at reading, I always found it hard to read, and I was a very slow reader, and because I found it harder to read when I was younger, I used to sort of avoid reading. <b>Interviewee 3</b></p> <p>It takes time to read through all the letters and get the information from them <b>Interviewee 2</b></p>
Verbal communication	<ul style="list-style-type: none"> <li>Verbal expression</li> <li>Undertaking oral presentations</li> </ul>	<p>...writing and expressing myself [verbally] was difficult. <b>Interviewee 7</b></p>
Organisation and time management	<ul style="list-style-type: none"> <li>Prioritising work</li> <li>Sequencing the order of tasks</li> <li>Handover and multitasking difficulties</li> <li>Managing and completing tasks on time</li> <li>Managing administrative work</li> </ul>	<p>The particular case I was involved with was [a] mature graduate who started in year one and [they] showed up fairly early on having difficulties with time management, prioritisation of tasks, sorting out the wood from the trees really, over attention to detail so much so that it was impacting on [their] ability to do [their] job, being able to garner information without paying too much attention to things that aren't important. <b>Key informant interviewee</b></p>
Poor short-term memory	<ul style="list-style-type: none"> <li>Recalling people's names</li> <li>Remembering information to pass on to colleagues</li> </ul>	<p>Remembering the names of medicines and diseases is easy simply because of the ways the words were structured and spelt. <b>Interviewee 7</b></p>

including *in situ* or survey) allowed for 'between' method triangulation. The collective expertise of the research team in qualitative data analysis was drawn upon to interpret and synthesise the data. Study participants' voices were integrated into the findings through the use of quotations representative of the themes arising from the interviews.

## RESULTS

Most of the study cohort was not diagnosed at medical school. Although there may have been

an increase in numbers of doctors with dyslexia diagnosed at medical school, in practice diagnosis happened at different stages in their work and careers. Even when doctors had a diagnosis of dyslexia, they did not always disclose their dyslexia to their employers.<sup>11</sup> Disclosure only tended to occur where they felt comfortable. Some of the older doctors expressed embarrassment about the thought of seeking professional help because of the stigma associated with such difficulties. Some had not disclosed as they self-managed successfully.

Difficulties doctors may have encountered in carrying out their clinical duties were reported to be remembering the names of patients, structuring and wording referral letters, and taking case histories (Table 1). Each doctor was different in terms of the difficulties they experienced. For example, some reported verbal expression and undertaking oral presentations as being challenging, whereas others had strengths in these areas. All difficulties were found to be exacerbated by time pressure.

**A 'supportive' team that shared techniques was perceived as valuable by a respondent**

Doctors adopted personal strategies and individualised their ways of coping. One interviewee found writing death certificates challenging, as they must be handwritten using a mix of numbers and small writing. To make sure that they got it right, they made notes on a pro-forma copy, checked spelling on Google, and then copied this onto the actual certificate. A lot of time was spent checking and rechecking work. In developing personal adaptations the doctors in this study sometimes took longer to do things, but this was a way of safeguarding against making mistakes.

When writing, the use of templates assisted with the structure of written work and while reading, changing the font size or colour, breaking text into bite-sized pieces and making summaries helped. Time management issues were helped by using colour coding to identify priorities and by using checklists. A summary of useful workarounds used by respondents and proposed by key informants is shown in Table 2.

Several interviewees used specific medical apps for checking drug names and formulas. There was a mixed reaction to speech recognition software, as it can take a while to set up. As several interviewees mentioned having strong visual learning channels, it is perhaps surprising that more had not investigated the many software programs available: only one interviewee used mind-mapping software.

The trusts that participated in the policy review, through the FOI requests, seemed to be clear about their duty to take steps to avoid employees with disabilities experiencing disadvantage, but in practice none of the policies submitted to the researchers described any specific support provided by the trusts for NHS staff with specific

**Table 2. Effective workarounds**

Writing and spelling	<ul style="list-style-type: none"> <li>• Use of templates to help structure written work</li> <li>• Dictation of notes for administrators to write up (when appropriate)</li> <li>• Use of spellcheckers</li> </ul>
Reading	<ul style="list-style-type: none"> <li>• Changing the font size or colour</li> <li>• Breaking text into bite-sized pieces and making summaries</li> <li>• Visual/audio methods, using internet resources</li> </ul>
Organisation and time management	<ul style="list-style-type: none"> <li>• Colour coding to identify priorities</li> <li>• Using checklists</li> </ul>
Assistive technologies	<ul style="list-style-type: none"> <li>• Using medical apps for checking drug names and formulas</li> <li>• Using dictaphones and speech-to-text apps to record letters for administrators to type up</li> <li>• Internet spellchecking methods</li> <li>• Speech recognition software</li> </ul>

learning difficulties such as dyslexia. When asked what 'reasonable adjustments' had been made for them, the doctors in this study were not always sure which adaptations would qualify as adjustments. It is therefore difficult to ascertain whether satisfactory adjustments had been made to contribute to an 'enabling' work environment.

As each post or rotation was different, a 'supportive' team that shared techniques was perceived as valuable by a respondent. Perhaps not surprisingly an understanding supervisor, sensitive to the challenges that dyslexia can present, was seen as helpful. Opportunities to shadow others helped, as post-medical school training can be difficult because of the pressure of work and level of responsibility. Participants in the study needed time and space to complete paperwork. One doctor described the negative attitude of peers when they had taken themselves off to write-up discharge summaries.

## DISCUSSION

A limitation of the study was the small numbers of participants, indicative of the stigma around dyslexia and being identified; however, although participants experienced difficulties, they had found ways to overcome the challenge presented by dyslexia and had devised useful workarounds. For example, they may exercise extra vigilance, which means dyslexic doctors may work more slowly and differently to others to help manage the effects of dyslexia. The study participants spoke of 'not being held back' by dyslexia, although there was evidence that doctors could feel isolated and unsupported.

Support under the social model of disability requires looking at ways of adjusting working environments to be inclusive of the needs of doctors with dyslexia. In order to qualify for a reasonable adjustment in the workplace a doctor has to disclose their

dyslexia to their employer. Doctors need help to feel comfortable enough to disclose their dyslexia, and reassurance that such a disclosure is not going to set them back in terms of their future careers. Our findings suggest that there is gap in employers providing specific support to individuals coping with dyslexia other than that given to all people with disabilities. A key message for educators is that they need to be prepared to challenge any current negative assumptions and practices that exist, as well as promote greater awareness and understanding of the need for elements that contribute to a positive working environment for doctors with dyslexia.

In terms of effective workarounds, these are detailed in full in practice guidance that has been developed as a result of this research (see [\[www.wessexdeanery.nhs.uk/support/support/professional\\\_support\\\_unit/information\\\_for\\\_educators/dyslexia\\\_information.aspx\]\(http://www.wessexdeanery.nhs.uk/support/support/professional\_support\_unit/information\_for\_educators/dyslexia\_information.aspx\)\). Educators may find this guidance helpful to know what to look for and what support to offer.](http://</a></p></div><div data-bbox=)

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**Educators need to be prepared to challenge any current negative assumptions and practices that exist**

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