

# Doctors with dyslexia: a systematic review of effective workarounds

Dr Rachel Locke<sup>1</sup>, Dr Samantha Scallan<sup>1</sup>, Dr Richard Mann<sup>2</sup> and Ms Gail Alexander<sup>3</sup>

## Context

An increasing number of medical students are declaring dyslexia as a specific learning difficulty on entry to medical school. The implication of an increasing number of doctors with dyslexia is that it may impact on their performance in the workplace and consequently on patient safety and fitness to practice.

For educators, an awareness of the impact of dyslexia on learners in the clinical workplace is vital:

1. to identify whether dyslexia may underlie certain traits and behaviours; and
2. to provide appropriate advice and support when dyslexia is identified.

## Aim

A systematic literature search and narrative review of studies meeting the inclusion criteria was undertaken<sup>4</sup>. The review focused on studies based on primary research to identify evidence concerning the effects of dyslexia on doctors (in or post training) in the workplace, and adaptive strategies ('workarounds') in use. This review is part of a larger study to undertake primary research with doctors with dyslexia.

## Methods

- A protocol to guide the search was drawn up to define the search and the quality of the results to be evaluated.
- Exclusion criteria defined (pre 2002; no grey; no literature not about doctors/nurses)
- Search of databases (e.g. Medline, ASSIA, Pubmed, Web of Science, SSI, CINAHL and conference abstracts)
- Adoption of typological approach to assessing papers i.e. appropriateness of different types of study design for addressing different types of research questions
- Two stage process to sifting references: Titles and abstracts; and relevant articles retrieved and critically appraised according to the *a priori* research question and methodological rigour of the studies.

## Discussion

- There is little research on evidence-based strategies to cope with dyslexia; what there is deriving mainly from the nursing literature.
- Existing studies are quite old and consequently some of the strategies suggested, in particular those concerning assistive technology, have developed significantly and in ways not anticipated at the time of the research.
- Present studies are based on a deficit model of dyslexia (i.e. phonological and visual difficulties) and tend to be small-scale (3 to 8 participants) and short term.
- Future areas of research could consider: the potential of alternative models of dyslexia e.g. difference model<sup>9</sup>; the practical strategies or 'workarounds' used by doctors and other clinical staff in the workplace to provide an evidence base for those supporting clinicians with dyslexia; the effect of dyslexia on specialty career choice.

## Conclusion

The difficulties associated with dyslexia are varied and may be unexpected. Medical educators may not be aware or knowledgeable about dyslexia and its impact, thus there is a need for promoting greater awareness and understanding of the implications for patient safety.

## Results

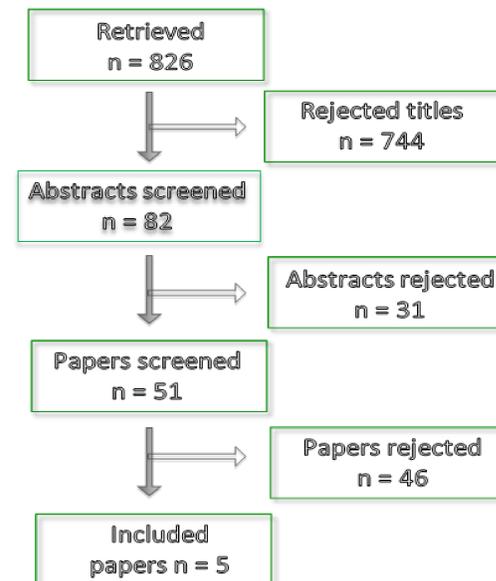


Figure 1: Study selection and exclusion

The review identified five studies on dyslexia and qualified clinicians<sup>5,6,7,8,9</sup>. The impact of dyslexia can include:

- writing or taking notes in a clinical context (eg patient notes, referral letters);
- processing information (eg on ward rounds, handovers);
- distinguishing between similar drug names; and
- recalling patient or colleague names.

Adaptive strategies or 'workarounds' highlighted are:

- use of adaptive technologies, e.g. voice activated software, spell checkers.
- practical strategies: colour coding paperwork; rehearsal of difficult tasks; quiet place to work; and mechanisms to check work.
- the need for more time for mentors and supervisors, and awareness of 'enabling' and 'disabling' environment.

1. Dr Rachel Locke, Senior Research Officer and Dr Samantha Scallan, Visiting Research Fellow, Faculty of Education, Health and Social Care, the University of Winchester.

2. Dr Richard Mann, Consultant for professional support, Professional Support Unit, Health Education Wessex.

3. Gail Alexander, Dyslexia Practitioner, University of Southampton.

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