LETTERS

READING DIFFICULTIES AND COLOUR

Coloured filters may help those with visual stress in dyslexia

Henderson and colleagues did not consider one obvious explanation for the endorsement of coloured filters by dyslexia charities: these charities are in close contact with their members, some of whom provide feedback on benefits from coloured filters. Coloured filters are not a treatment for dyslexia but reduce symptoms in individuals with visual stress, which affects only about one third of people with dyslexia. Consequently, studies that ask whether coloured filters treat reading difficulties will probably find that they do not.

Reviews that ask the same question, such as those cited by Henderson and colleagues, will also be likely to produce a negative finding. We know of more than 20 studies of the effects of overlays on reading rate, and few of them were included in these reviews. These studies, published in peer reviewed journals, include various controls for placebo effects, none of which provides for an improvement in reading rate as great as that observed with an overlay. Uccula et al provide a balanced review.

We accept that the diagnosis of visual stress is challenging and more research is needed. In the meantime, it would seem a sensible precaution for children with reading difficulties to be asked if words appear to blur or move, and if reading causes a headache. For such cases, the College of Optometrists’ guidelines advocate ruling out conventional visual factors and screening with coloured overlays.

If a child finds an overlay helpful for a sustained period and an improvement is noted by their teachers or parents, then they can be tested with the Intuitive Colorimeter (patented by the Medical Research Council) to see whether coloured lenses would help further. Practitioners who can undertake the necessary assessment may be found via the Society for Coloured Lens Prescribers (www.s4clp.org), whose members have subscribed to a code of conduct.

Bruce J W Evans director of research, Institute of Optometry, London SE1 6DS, UK admin@ioo.org.uk

Peter M Allen professor of optometry and visual science, Department of Vision and Hearing Sciences and Vision and Eye Research Unit, Anglia Ruskin University, Cambridge CB1 1PT, UK


Authors’ reply

The charity websites we reviewed refer to colour as though it offers a scientific, evidence based treatment; none referred to feedback from the membership. For example, one charity website makes the claim that “Research in the UK and in Australia shows that people who use colour filters, who are said to have visual stress, need to have exactly the right colour.” This is incorrect. The research overwhelmingly shows little advantage, or at best conflicting results.

We stated in our editorial that colour does not directly deal with the causes of reading difficulty. Nonetheless, we note that the dependent measure in most of the trials of overlays is reading; either of naturalistic text or of unrelated words. Indeed, elsewhere in their letter the authors refer to “20 studies of the effects of overlays on reading rate.”

Systematic reviews select trials according to predefined statistical criteria that minimise the risk of bias. Some of the studies referred to by the authors were likely to have been excluded because of methodological shortcomings. It is widely accepted that systematic reviews are less vulnerable to bias than narrative reviews. According to the code of conduct of the Society for Coloured Lens Prescribers (www.s4clp.org), members should adopt an evidence based approach “using evidence from systematic peer-reviewed research,” and “In particular, double-masked randomized placebo-controlled trials.”

The Medical Research Council patent solely refers to the colorimeter as a device for obtaining a desired tint, not as a therapeutic device. The only double masked randomised controlled trial of lenses selected with this device showed no improvement in reading speed, accuracy, or comprehension using optimum tint compared with placebo tint.

We caution against asking children with reading difficulties if text appears to move as a leading questions often elicit positive answers.

Philip G Griffiths consultant ophthalmologist, St Bernard’s Hospital, Harbour Views Road, Gibraltar philip.griffiths@gba.gi

Lisa M Henderson lecturer, Department of Psychology, University of York, York, UK

Robert H Taylor consultant ophthalmologist, Department of Ophthalmology, York Hospital, York, UK

Brendan Barrett professor of visual development, School of Optometry and Vision Science, University of Bradford, Bradford, UK

Competing interests: None declared.


INNOVATION IN MEDICAL DEVICES

Orthopaedics in the UK is ahead of proposed regulations

Nieuwenhuijsje and colleagues’ article on the evidence base for introducing new implants in joint replacement along with Kesselheim and Rajan’s accompanying editorial on regulating incremental innovation in medical devices may engender concern in the wider medical community that new orthopaedic devices lack regulation. However, steps have already been taken in orthopaedics in the UK to counter the problem of unregulated new technologies.

Championed by the British Orthopaedic Association and specialist societies, orthopaedics in the UK is currently one of the most open and highly regulated specialties. The National Joint Registry was introduced in 2002 and is now, to our knowledge, by far the world’s largest such registry, and mortality and outcome data for surgeons were publically released in 2013. Another initiative, Beyond Compliance, was introduced in 2013 as a...
voluntary method to regulate the introduction of new orthopaedic devices.²

Registry data promote conservative practice but may stifle innovation as a result. Beyond Compliance was introduced in collaboration with surgeons, governing bodies, and implant companies to promote innovation through careful and close independent postmarket surveillance.³ Currently seven new orthopaedic implants have been chosen to be released under its umbrella.⁴ Outcomes are independently evaluated through Beyond Compliance to ensure that the implants are safe and effective for patients before open release.

Orthopaedics in the UK is already one step ahead of the proposed regulations.²

Jonathan R Phillips arthroplasty fellow jonphillips99@hotmail.com

Peter James consultant orthopaedic surgeon, Department of Orthopaedics, City Hospital Campus, Nottingham University Hospitals, Nottingham NG5 1PB, UK

Competing interests: None declared.


2. Keselheim AS, Rajan PV. Regulating incremental innovation in medical devices. BMJ 2014; 349:g5303. (9 September.)


Cite this as: BMJ 2014;349:g5894

**LETTERS**

**MILITARY METAPHORS FOR CANCER**

We must all fight against the “battle against cancer”

I’m not a fighter, or at least I’m not a fighter when the fight is pointless. A fight “to beat” metastatic cancer is usually pointless.

This use of military metaphors¹ chimes with modern Western ideas about fighting injustice. It’s a compelling idea (how could anyone say fighting injustice was bad?), unites most of us with a common purpose, and helps us feel good about ourselves. It’s evidently “unjust” to “die before your time,” and so it seems natural to us to use the language of fighting and battles with cancer, rather than that of acceptance and fatalism.

There are many fine oncologists who take a wide overview of their patients, present realistic options, and deliver holistic care in partnership with patients and relatives, but oncologists also cannot escape the wider Zeitgeist of the “battle against cancer.” I have often wondered if some of the aggressive, and occasionally wholly inappropriate, treatment I witnessed patients with cancer receive in my time as a GP in the UK was partly attributable to the prevailing military metaphor.

Without prejudice, I therefore offer this age old joke for reflection to oncologists and all seekers of a “good death”:

Grieving relatives revisit the grave to pay their respects the day after the burial of their 90 year old mother, who had renal failure, heart failure, hemiparesis, and metastatic breast cancer. Lol! They find the grave is empty. It has been dug up. The coffin is lying on the ground, open.

“But where is Mum?” they cry in anguish to the cemetery manager.

“Oh, don’t worry,” says he. “The oncologists dug her up and took her for her next cycle of chemo.”

David W Berger district medical officer, emergency medicine, Broome Hospital, Broome, WA 6725, Australia davidberger@gmail.com

Competing interests: I am a non-executive director of BMJ. I used to be a GP in the UK. I know some really nice oncologists.

1. McCartney N. The fight is on: military metaphors for cancer may harm patients. BMJ 2014; 349:g5155. (15 August.)

Cite this as: BMJ 2014;349:g5862

**REGULATION OF ELECTRONIC CIGARETTES**

EU directive trumps debate on regulation of e-cigarettes

All the current debates on the regulation of electronic cigarettes¹ are academic because the UK government is obliged in 2016 to adopt the European Union Tobacco Products Directive into UK law.

Two of the most important of the many restrictions placed on electronic cigarettes by the directive are that the liquid strength of nicotine is to be restricted to 2% and refillable devices are to be permitted only when there is no possibility of leakage. However, around a quarter of current vapers, those who previously smoked 20 or more cigarettes a day, choose stronger liquids than 2% nicotine. In addition, guaranteeing no possibility of leakage of refillable devices is impossible, and so all refillable devices currently on sale will be banned.

The inevitable consequence of the Tobacco Products Directive is that only disposable cartridge “cig-a-like” devices will be available. For the former smoker of 20 cigarettes a day, these cost about around £50 a week to run, compared with £8 for refillable devices using ready mixed liquid, or £3 using liquid mixed at home from 7.2% nicotine concentrate.

In view of the directive, the tobacco control industry can choose to be as generous, or vindictive, as it wishes towards vapers. The outcome will be the same.

Jonathan H Bagley lecturer in mathematics, School of Mathematics, University of Manchester, Manchester, UK jonathan.Bagley@manchester.ac.uk

Competing interests: None declared.


Cite this as: BMJ 2014;349:g5901

**THE CANCER DRUGS FUND**

Where is evidence for existence of Cancer Drugs Fund?

Professor Peter Clark congratulates the Cancer Drugs Fund (CDF) for reimbursing drugs only at the lowest price proposed for use in the NHS, but he is later quoted conceding that “some [pharmaceutical] companies have seen the CDF as an easy route to funding . . . because they don’t need to compete for the lowest price proposed for use in the NHS, but they have been quite successful in doing so.”¹ Similarly, the Cancer Drugs Fund has been the lack of quality data collection to steer future decision making. There has been no request for data on quality of life or patient reported outcome measures, and no attempt so far to address early evidence that prescription of chemotherapy through the Cancer Drugs Fund may be much shorter than that expected from clinical trials.²

Our message is this: Where is the evidence? We have found no convincing evidence that the English public value cancer above other serious or life threatening diseases or that cancer drugs will prolong cancer survival more than comparable cancer treatments such as radiotherapy or surgery. In fact the reverse is true.³

Where also is the evidence that the Cancer Drugs Fund has provided invaluable data to improve decision making in chemotherapy? The public preference for cancer over other diseases and for cancer drugs over other treatments has been assumed and we are left with the question: Where else might this money have been better spent?

Charlotte Chamberlain NHiR doctoral fellow charlotte.chamberlain@bristol.ac.uk

William Hollingworth professor of health economics, School of Social and Community Medicine, University of Bristol, Canynge Hall, Bristol BS8 2PS, UK

Competing interests: None declared.


Cite this as: BMJ 2014;349:g5901


Cite this as: BMJ 2014;349:g5897