

order to «restart the science»; - Provide information(1) in suitable for understanding way (reviews) and for accurate data description(2) (handbook). - Create more effective communication between specialists;

**Methods** The model of database includes:

1. Reviews/handbooks with the appropriate translation to other languages;
2. Comments below the topic;
3. Discussion.

Reviews/handbooks are done by a group of scientists that works on a specific issue. The translation occurs from regional to international language and reversely. This database collects information that is written in a regional language and automatically translates it into the international language. It means that the text structure must be universal for all languages. The translation must be done by regional-international and international-regional interactions, escaping regional-regional translations. A text structure is designed for a better 'RL-IL-RL' translation. The structure reduces translation mistakes. After that a reader will contextually improve the text. Comments (a forum) are created below the text for the correction of mistakes, as well as suggestions to use additional information that is based on a novel scientific data. Discussion is a platform (similarly to ResearchGate) that is based on scientist's activity suggesting topics that must be discussed. The discussion gives better verification due to variety of specialists involved in the conversation. Specialists create a community that checks information from all perspectives. Four levels of discussion will be made:

- Red – Urgent issues (require an immediate solution);
- Yellow – Important scientific questions;
- Green – Novel ideas, hypothesis, future perspectives;
- Grey – Other.

**Results** Thus, we can solve issues related to: - The quality of information; - Amount of information; - The quality of the language. This system also implies the constant up-to-date verification of information.

## REFERENCES

1. Piñero D. Scientific information overload in vision: What is behind? *J Optom* 2018;**11**(1):1–2.
2. Hall A. *et al.* (2004). Information overload within the health care system: a literature review. *Health Info Libr J*, **21**: 102–108.
3. Davis D. *et al.* (2004). Solving the information overload problem: a letter from Canada, *Med J Aust*, **180**, pp. 68–71
4. Barnett G. *et al.* (2004). Overcoming information overload: An information system for the primary care physician. *Stud Health Technol Inform* 107. 273–6.
5. Amano T. *et al.* (2016). Languages Are Still a Major Barrier to Global Science. *PLoS biology*, **14**(12), e2000933.

66

## PROPOSING AN ALTERNATIVE TO DOGMATIC RESEARCH APPROACHES

Daniel Lane. *University of Calgary, Calgary, Canada*

10.1136/bmjebm-2019-EBMLive.74

Proposing an Alternative to Dogmatic Research Approaches Collaboration between clinicians and methodology experts is essential to ensuring research evidence is relevant, replicable and accessible to end-users. However, failing to suitably explore the methodological assumptions or limitations inherent to any

particular study, a potential consequence of insufficient collaboration, may result in questionable research practices and biased results. One manifestation of this failure is the dogmatic use of a single analytic approach to similar study types - for example, the ubiquitous use of 'statistical significance' to interpret a study's main finding despite widespread admonishment of this practice by methodological experts. Practices that promote a transparent exploration of methodological assumptions and limitations may help to improve the quality of research for end-users. Defaulting to familiar practices is a tendency among all researchers, therefore, a strategy to encourage critical exploration of assumptions needs to be imbedded within research reporting. In the Methodology section of submitted manuscripts, the International Committee of Medical Journal Editors (ICMJE) currently recommends authors provide 'clarity about how and why a study was done in a particular way.' While this practice is designed to allow replication of research projects, it does not convey any exploration of the assumptions inherent to the selected approach. One strategy to better highlight assumptions could be the addition of an 'Alternative Analysis' section to manuscripts. Based on using the same information available for the present study, the authors would be asked to identify a suitable alternative analytic strategy to address their primary research question, such as using a different statistical paradigm (e.g. Bayesian vs. Frequentist), a different class of outcome (e.g. ordinal vs. binary), a different summary estimate (e.g. absolute vs. relative risk), or an alternative approach to generating the same estimates (e.g. adjusted vs. unadjusted). Then authors would be asked to outline how the assumptions for this alternative differs from their selected approach and explore how this may (or may not) change the interpretation of their results. With no shortage of analytic strategies available to address any study question, the Alternative Analysis section will encourage authors to explore the fundamental assumptions inherent to their approach while highlighting alternatives that could be used in future studies. Requiring an Alternative Analysis section may incentivize earlier and better collaborations of clinicians with methodological experts. Clinicians will be encouraged to conduct a more thorough exploration of study assumptions prior to publication (when the analysis may still be improved) rather than after the study has already been published. As clinicians seek guidance to complete the new section of written work, they will naturally gain further insight into the limitations of their selected approach, increasing the quality of published work. Meanwhile, insufficient collaboration may help limit the publication of questionable studies that fail to identify suitable alternatives, curbing the dogmatic use of the same approach for similar study types. The exploration of underlying assumptions should already be done during the scientific process – the Alternative Analysis section will simply make it an explicit component of the final product.

67

## FIXING EVIDENCE-BASED MEDICINE REQUIRES TRANSPARENCY, STRATEGIC CAMPAIGNING, AND EDUCATION

Henry Drysdale. *University of Oxford, Oxford, UK*

10.1136/bmjebm-2019-EBMLive.75

Fixing Evidence-Based Medicine requires transparency, strategic campaigning, and education When patients ask their doctor about the benefits and harms of a treatment, the doctor can