Correspondence

The importance of readability

The past decades have witnessed major changes in the ways in which, and by whom, information is accessed. The internet is a great equaliser. It opens up infinite channels of information to anybody with an internet connection. Furthermore, open access publishing opens up the entire gamut of scientific knowledge for everyone: researchers, clinicians, and patients alike. Science is leaving its ivory tower.

Nonetheless, as the article by Barbic and colleagues suggests, access does not guarantee understanding. While some attention has been justifiably paid to the readability of online patient information in past studies, none has been directed towards the readability of academic publications. In this study, psychiatry journals are assessed for their readability. We expect psychiatrists (and other clinicians) to remain informed, providing evidence-based care to their patients. However, with dwindling resources and everincreasing caseloads, it is simply impossible for psychiatrists to remain abreast of the hundreds of thousands of articles published each year.

Selective reading is the best anyone can manage, so many will look to reviews or selectively read the abstract. However, both these were found to be difficult to read, with reviews even less readable than original articles. Selective reading poses several potential issues, only some of which are considered by Barbic et al. Observing that the abstract was not particularly readable, doesn't even consider the accuracy of abstracts. I have read papers whose findings barely resemble those in the abstract. Often this piece of limited text is a 'hook' to draw readers in, and so the scientific equivalent of marketing talk is invoked to make findings sound sexier and more ground breaking than they actually are. Even if overt miscommunication is not present, the limits of the word count can make it difficult to include everything of importance or to include it in a way that is easy to understand. These issues will not necessarily be solved by entering the abstract into an online readability assessment before submission as the authors suggest.

The use of figures, tables, and information boxes is not addressed in this study. Some journals include key points, highlights or quick-read boxes that summarise findings and their clinical applicability. It would be interesting to see whether such devices improve readability. One would suppose that if accurate, clear, and concise, they could offer quick access to the information a clinician requires. Although once more, selective reporting and glamourising of results are a danger. Editors must play a role in ensuring that the results in figures and tables reflect the true results of the research.

What is interesting in Barbic and colleagues' results is that psychiatry journals are doing a particularly bad job (92% very difficult to read) compared with general medical journals (68% very difficult to read). While they suggest that there is a challenge within psychiatry to integrate diverse findings from biological, molecular genomic, and psychosocial fields, I would argue that this is true of other medical disciplines too. We could ask how psychiatry can learn from general medicine to improve communication of its findings.

Rhianna Goozee

Readability of journals

I much enjoyed the article by Barbic *et al* in the last issue of the journal¹. The authors showed (using five different measures of readability) for 11 commonly read journals in psychiatry, that the Introductions were hardest to read, the Abstracts came next and the Discussion sections were the easiest (although still extremely difficult).

The reason that I was pleased with this article was that the findings replicated almost exactly our earlier findings in a study of 80 articles in educational psychology². Here we found that Abstracts were the most difficult to read, followed by Introductions and then the Discussion sections. Here, for comparison, are the mean Flesch readability scores for both studies:

	Abstracts	Introductions	Discussions
Barbic, et al ¹	5.66	4.14	5.41
Hartley, et al ²	18.1	20.5	22.7

These readability scores are extremely low (for both studies) as Flesch scores range from 0 (extremely low) to 100 (extremely high), and scores of 0-29 are rated 'very difficult'.

So I agree with Barbic *et al*¹ that more needs to be done (by authors and editors) to make texts more readable. Perhaps authors should be required to include a readability score for their articles when they submit them, and papers with scores of less than 30 sent back for revision.

James Hartley Keele University, U.K. j.hartley@keele.ac.uk

References

- 1 Barbic SP. et al Readability assessment of psychiatry journals. *European Science Editing*. 2015; 41(1):3-9.
- 2 Hartley J, Pennebaker J, Fox C. Abstracts, introductions and discussions: how far do they differ in style? *Scientometrics*. 2003;57(3):389-398.