Editors from middle- and low-income countries are isolated in their home countries in Africa, Asia and Latin America. The learned associations and their journals stand in a unique position to inspire editors globally. *Eur Sci Ed* brings one important message for us - build your own editorial networks and teach local editors.

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**Authors and editors, take references seriously!**

In this issue, Salman Yousuf Guraya1 presents a study on the accuracy of references in biomedical journals, with the disturbing result that 18% of the analysed references contained errors. Almost 5% of the references were not retrievable at all.

Incorrect references are not a new problem. Almost four decades ago, Goodrich and Roland2 reported an error rate of 29% in the references of 10 major US medical journals. Despite a long array of subsequent studies showing the same pattern, partly documented by Guraya, the general situation has not improved significantly. Guraya's finding of a declining error rate in the journals he examined is encouraging, but it needs broader confirmation.

Medical researchers are not the only sloppy authors, of course. Similar, or even higher error rates have been reported, for example in entomology,3 paleontology,4 and business and economics.5 The references section of a scientific paper is often seen as a mere technical necessity or even a nuisance, something that needs to be done, but with the least time invested. References often get copied from bibliographic software where assistants have entered them in the first place, or out of other papers, or from online databases.

Why is this a problem? Quite often, incorrect citations suggest that an author has not read the cited paper. Following patterns of repetition of misprints in citations, Simkin and Roychowdhury conclude that 70–90% of scientific citations are copied from lists of references of other authors.6 While I want to believe that this estimate is too high, other studies hint at the same trend. In his famous work *Sociobiology*, Edward O. Wilson used an incorrect word in the title of an important reference, a paper by W. D. Hamilton. Twenty three per cent of all subsequent authors who cite both Wilson's book and the Hamilton paper made the same mistake.7 They have just copied from Wilson's book without consulting the original reference, which for pre-desktop computer times is an indication of a deliberate disregard of the source publication. Even more damningly, another study found one in four citations in marine biology papers failing to support the assertion for which they were cited, indicating that the cited papers were not read.8

How can we improve the situation? The whole citation process is affected by citers motivations outside the scientific realm, be it friendship, animosity, or just convenience or sloppiness.9 While authors are unlikely to suddenly turn into unemotional robots or saints in choosing references, we can at least avoid carelessness. The compilation of the literature list, even if typed from the cited papers *de novo*, only takes a negligible fraction of the time involved in executing and writing up a scientific study. Consulting the papers we cite and getting the citations correct, being essential parts of scientific diligence, are increasingly easy to do in the digital era, and absolutely vital in our era of metrical research evaluation.

Why is correct citation vital? Typos in author names or other crucial bibliographical details are likely to harm our colleagues if they are exposed to any sort of citation-based assessment. Different spellings of the same author name can lead to lower performance indicators, such as the $h$ index,9 as does the splitting of a reference into several spelling variants. By compiling reference lists, authors provide the raw data both for their own and for their colleagues' performance evaluations, be it for career purposes or just for an informal check of a colleague's Google Scholar profile. Authors and editors, take the references section seriously! It is much more than a technical necessity and becomes a nuisance only if *not* taken seriously.

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