SCIENTIFIC LETTER

Characteristics of top citations to articles from the New Zealand Journal of Medical Laboratory Science

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Citations to published articles are a measure of those articles' worth in the biomedical literature. The more citations to an article, the more it is deemed of worth and importance (unless controversial). It is estimated that the average citation rate to published articles is 1.75 citations per article and that articles with ≥10 citations are in the top 24% of most cited research worldwide. About 12% of articles are never cited and citations to articles within a given journal are skewed. Weale *et al.* estimated that in immunology and surgical journals one-sixth of articles gather about a half of all citations and that the degree of non-citation varies between journals and the subject fields (1). Additionally, the number of citations is increased if the journal is listed in the Web of Science and PubMed data bases. The *New Zealand Journal of Medical Laboratory Science* (the Journal) is not covered by those two databases but is covered by Scopus, second only to PubMed. The objective of this study was to list the top ten most cited articles in the Journal and determine some characteristics of them. The Scopus database was searched for total number of articles published therein from 1999-2022 and how many times they had been cited in the world literature. The top ten cited articles were then examined for several characteristics (country of origin and subject matter).

A total of 420 articles (1999-2022) from the Journal were in the Scopus database, of which 127 articles were cited at least once (30.2%). Fifty-seven of these articles had been cited one time only, the rest of cited articles (n=70) more than once. The ten top cited articles in the Journal were cited between eight to 29 times (medium: 10 citations). The top cited article was by Omoregie *et. al.* from Nigeria which has been cited 27 times to date (2). The first New Zealand article in the top ten came in at number five with 10 citations (3). In total, six of the top 10 cited articles came from overseas, the rest (n=4) from New Zealand. Publications from overseas came from Nigeria, Thailand, United Kingdom, United Arab States, Singapore, Italy, Australia, India, and Bahrain (some of these overseas articles had authors from different countries). Five of the top 10 cited articles were in the field of microbiology (n=3) and haematology (n=2).

Citations to published articles are deemed a good indicator of the article's significance and a useful measure of its scholarly impact. An article attracting ≥10 citations is deemed of significant importance. Six of the Journal's top cited articles each had ≥10 citations. Despite the Journal not indexed in the Web of Science or PubMed databases, a number of articles have attracted significant numbers of citations in the biomedical literature worldwide, as evidenced by the top 10 cited articles. Some of the citations to some of the top 10 cited articles in the Journal were self-citations, i.e., where a Journal article cites another Journal article. This could be a limitation of the study. However, this was not determined as one would have to see whether this journal self-citation was justified or not.

In conclusion, despite not being covered by the Web of Science or PubMed databases, the Journal has attracted citations to its published articles in the world biomedical literature as evidenced by the top 10 citated articles.

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