

Citation rates for bilingual English/Spanish Colombian medical publications: a natural experiment

Tasas de citación en publicaciones médicas colombianas bilingües, inglés / español: un experimento natural

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INTRODUCTION

Medical publications from non-English speaking countries have been progressively moving from their native languages to English. European journals have been leading the way with barely all PubMed-indexed Scandinavian and Dutch medical journals published solely in English, most German and Italian journals doing the same, while the French and Spanish are lagging somewhat behind (1). In Latin America, Portuguese-speaking Brazil has been ahead of all the main Spanish-speaking countries (México, Argentina, Chile and Colombia), but even these are moving towards English, sometimes as their only language of publication, sometimes providing simultaneous bilingual editions (2).

Perhaps the main reason for rejecting their mother tongue and accepting English as the universal language for science is to gain visibility, beyond their own borders (3). One measure of visibility, of course is, citation rate. Di Bitetti et al. compared citation rates for 6 journals from 5 countries and concluded that 33,7% of the articles published in English, had not been cited, while 46,3 % of the articles published in other languages had not been cited (4). Another way in which visibility can be measured is impact factor, Tellez-Zenteno et al. compared the mean impact factor of different groups of journals from 4 South American countries, grouped by publication language and concluded that while the mean impact factor for 11 journals written in English was 0,74 (0,12-2,1), the mean impact factor for 18 bilingual journals was 0,53 (0,09-3,2), and the mean impact factor for 8 journals written in native language was 0,28 (0,06-0,56) (5).

In Colombia, four PubMed-indexed journals have implemented a practice by which articles are published both in English and Spanish, providing for a natural experiment, in which we can independently search for citations of both publications, and compare the final figures.

Using PubMed, we searched for all the references (including full-articles, letters to the editor, case reports or editorials) which under “language of publication” included both Spanish and English. Using Google Scholar, we looked at the number of citations for the title both in Spanish and in English. Searches were performed by two members of the research group, when differences arose, a third member of the team would intervene. Descriptive analysis of the results is hereby presented.

Between 2002 and 2020, there were 504 articles that fulfilled the inclusion criteria. These were published in the following journals: Biomédica had 234 references; Revista Colombiana de Psiquiatría (Rev Colomb Psiquiatr) had 172; Investigación y Educación en Enfermería (Invest Educ Enferm) had 62, and Revista de Salud Pública (Rev Salud Publica (Bogota)), 34. Two articles had been published in 2002; no references were taken from years 2003 to 2006, while most of the references were published since 2018 (2018 had 100 references, 2019 had 283). Overall, 328 references (65.1%) had received no citations in either language, which was true for 157 of the Spanish versions (62,3%) and 171 (67,9%) of the ones in English. English versions had received 471 citations, while the Spanish versions had 252 (an average ratio of 1.87 to 1). The top five most cited articles received the following English (Spanish) number of citations: 47 (0);

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43 (5); 26 (4). 197 articles had more citations in English than in Spanish, while the opposite was true for 66.

One of the most influential articles whose Spanish published version has been cited more than its English published version is “Influence of habits on depression in the Peruvian medical student: Study in seven administrative

regions” published by Vargas M. et al. in “Revista Colombiana de Psiquiatría”. The English version of this article has only been cited twice, while the Spanish version has been cited 15 times (6). The option of publishing in both languages seems a reasonable decision, benefiting local readers as well as improving international visibility.

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