

Influence of Portuguese Language Publications of Brazil on the Production of Public Health Papers in Spanish Speaking Countries of Latin America

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Introduction

In the last decades several bibliometric and scientometric studies have been conducted to analyse the scientific production of the Latin American and Caribbean region in the health field. Some studies for example have analysed the scientific production of the region as a whole (Garfield, 1995; Pellegrini et al, 1997; Rodriguez Lamoine, 1992). Other have analysed specific countries (Ganz Brown et al, 1991) and disciplines (Figuera and Cantu, 1993; Rodrigues et al, 2000; Weisinger and Vellori-Font, 1999). Similarly, studies have focused on specific journals (Krauskopf, 1997), authorship (Tapia et al, 2002) and less frequently, on the language of publication of the regional production (Bracho-Riquelme et al, 1997).

In the field of public health, a recent bibliometric analysis in Latin America and the Caribbean as conducted in LILACS (Latin American and Caribbean Health Literature Database), indicated that the following eighth countries accounted for 85% of the regional production during the period 1980-2002: Brazil, Chile, Mexico, Argentina, Venezuela, Colombia, Peru and Cuba (Macías-Chapula, 2005). Brazil alone contributed with 42.63% of the total production. Most of the regional production corresponded to papers in scientific journals (67.73%). The five leading journals in the field in descending order were the following: *Revista de Saúde Pública* (Brazil), *Cadernos de Saúde Pública* (Brazil), *Revista Médica de Chile* (Chile), *Archivos Latinoamericanos de Nutrición* (Venezuela), and *Salud Pública de México* (México). The main languages of publication of the regional production corresponded to Spanish (49.26%) and Portuguese (46.19%). English language publications accounted for only 4.03% of total.

Given these findings, the following questions emerged: How much influence in the field of public health research is there between Brazil and the rest of the Latin American and Caribbean countries? Is there a pattern of collaboration or communication among researchers in this field? Which is the role of the

language in the process of scientific communication/collaboration?

Purpose

The purpose of this work is to present the preliminary results of a research in progress on the analysis of the influence of Portuguese language publications in the production of public health papers in Spanish language in the region. The study seeks to identify the communication influence of Brazil in the Latin American region as manifested in the access and use of the Portuguese Brazilian production by Spanish speaking countries.

Method

Due to their high production in the field of public health, a citation analysis of the papers published in the following three leading journals was conducted: *Revista Médica de Chile* (Chile) (RMCh); *Archivos Latinoamericanos de Nutrición* (Venezuela) (ALAN); and *Salud Pública de México* (México) (SPM). Papers published in each journal issue were analysed for the period 2003-2007. Both the SciELO (Scientific Electronic Library Online) platform and the printed version of the journals were used in the analysis. Overall, mainly original research papers were selected from each issue. Editorials, letters, news, etc., were excluded from the study. While *Revista Médica de Chile* is a general medicine journal, with the exception of the clinical papers section, all the research papers in this journal were included in the analysis. In the case of *Salud Pública de México*, the analysis included the supplements to all the volumes in the period of study.

For each paper the following data was collected and tabulated: language of publication of the paper; No. of authors; country of origin of authors (affiliation); No. of references to the paper; language of references; and type of document cited, only in case of Spanish or Portuguese language citations. A file with data of all the papers analysed for each journal was constructed and summarized. For the purpose of this study only the results regarding the language of publication of references is presented.

While Brazil publishes several scientific journals in English language only, the citations to these journals were excluded from the study and analysed separately. Similarly, English language references to other Latin American journals were excluded.

This was the case for example to citations of some papers –published in English language- of *Salud Pública de México*.

Results

References to Portuguese papers accounted for nearly 5% in ALAN and less than 1% each in SPM and RMCh. On the other hand, Spanish language references accounted for over 26% in SPM, 18% in ALAN, and 17% in RMCh. References for English language papers accounted for more than 72% in all journals analysed. Table 1 provides a comparative analysis of papers published, references and language of references to each journal, accordingly.

Table 1. Language of references to papers published by *Revista Médica de Chile*; *Salud Pública de México*, and *Archivos Latinoamericanos de Nutrición* (Venezuela), during the period 2003-2007.

	RMCh	SPM	ALAN
No. of Journal issues	60	42	20
No. of papers analysed	616	399	258
No. of references to all papers	17,137	12,284	9,038
%Eng la ref	82.32	72.23	75.93
%Spa la ref	17.24	26.73	18.86
%Por la ref	.14	.48	4.85
%Fre la ref	.15	.46	.19
%Other la ref	.15	.10	.17

RMCh: *Revista Médica de Chile*; SPM: *Salud Pública de México*; ALAN: *Archivos Latinoamericanos de Nutrición*

ALAN was the only journal that published (14%) original papers in Portuguese language during the period of analysis. Table 2 describes the original language of publication of papers in all three journals during the period of study. This finding coincides with the highest amount of Portuguese references (nearly 5%) found in this journal.

Table 2. Original language of publication of papers in *Revista Médica de Chile*; *Salud Pública de México*, and *Archivos Latinoamericanos de Nutrición* (Venezuela) during the period 2003-2007.

	Spanish	English	Portuguese
RMCh	100%		
SPM	77%	23%	
ALAN	73%	13%	14%

RMCh: *Revista Médica de Chile*; SPM: *Salud Pública de México*; ALAN: *Archivos Latinoamericanos de Nutrición*

A limitation of the study was the lack of comparison –at this stage of the research- between the country affiliation of papers published and the language of publication of papers. Similarly, further research needs to be conducted regarding the influence of English language papers as published by Latin American and Caribbean journals. No conclusions can be obtained at this stage of the

study; however, final results will contribute to identify the influence of Portuguese language in the model of communication of public health research in the region.

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