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Issues to Publish in Latin America

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Abstract

Scientific knowledge is essential to the development of civilization, particularly in our case for anatomy and physiology of the central nervous system and neurosurgical practice. In this editorial, we are reviewing three critical aspects of scientific publications: The scientific training of physicians, the impact of publications, and the ethical aspects related to elaborating a paper.

Visual Abstract

Keywords

Scientific productivity, Publishing Issues, Latin America, Low-Middle Income Countries, Neurosurgery

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Issues to Publish in Latin America

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Scientific knowledge is essential to the development of civilization, particularly in our case for anatomy and physiology of the central nervous system and neurosurgical practice. In this editorial, we are reviewing three critical aspects of scientific publications: The scientific training of physicians, the impact of publications, and the ethical aspects related to elaborating a paper.

Neurosurgical activity is indeed a challenge with a unique manner in the countries of Hispanic America, in that the probability of publishing a scientific paper with enough quality is reduced by cause of insufficient methodologic preparation of the health professional. Usually, the university medicine programs do not include several topics such as epistemology, scientific methodology, statistical science, and writing article skills. Frequently, colleagues delve into the complex art to write their results or experience, unattended whether the study is observational, a clinical trial, or a diagnostic test. In sometimes, they are not aware that the statistical test is adequate to the design. So, the logical result is that a high percentage of papers have significant observations, or in the worst cases, they are rejected. In Mexico, a healthy person takes around 8.35 years to finish postgrad training [1]. In consequence, the successful neurosurgical scientific publications are elaborated by the most professional groups that have been formed in research and surgery. Nowadays, the chance to complete neurosurgical training with scientific professionalization is increasing but still is

not enough. On the other hand, the percentage of Gross Domestic Product (GDP) varies greatly depending on each country. Generally developed countries applied to research and technology innovation around 3% of GDP, and these funds come from industrial and business activities (Fig. 1) [1]. In Iberoamerica, Brazil has the most prominent scientific inversion, with 1.6% of its GDP.

In contrast, Mexico invests just 0.3% of its GDP. Thus, another relevant fact is a minimal relationship between the private sector and scientific development in Latin America. On the other hand, investment in research in the First World comes in more than 50% from the private sector (Fig. 1) [1].

We must also consider that the authors could feel unmotivated to publish due to the time spent in the revision by a peer, the number of observations for reviewers, the style revision, the process of re-submission, and the final editorial process—usually, the average time to publish a study in a year. Further, the cost of getting a paper is increasing due to the payment of translation and style revision. Additionally, several journals could have an extra fee for the number of colors of figures. So, the amount needed to present a publication could be between 200 and 2500 USD. Companies specialize in providing advice on translation, style, and application management to specific journals. Examples of these are American Journal Expert [2] or American Manuscript Editors [3].

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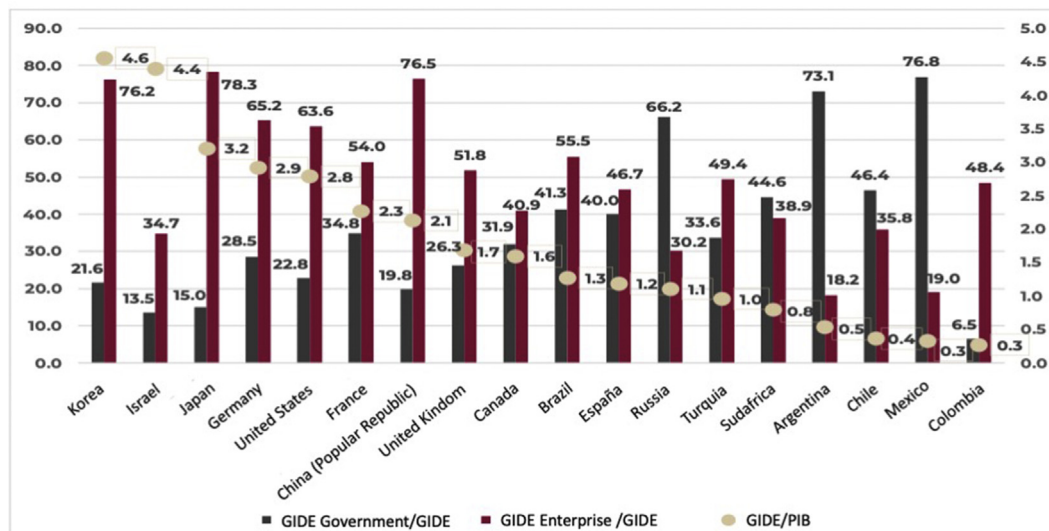


Fig. 1. GIDE for strategic countries to Mexico. 1. Information taken and translated from CONACyT. CONACyT is not responsible for any translation imprecision.

Currently, the scientific journals can be rated by the Journal Impact Factor (JIF) that is provided for several organizations as Journal Citation Reports - Web of Science – Clarivate [4]. According to this index, until July 2018, there were 12,986 journals listed in this metric. The JIF values range from 0.000 to 508.702. This value is calculated by adding the total number of citations from two previous years and dividing by the total number of publications in the same period. So, JIF for 2021 derives from citations from 2019 to 2021 for a specific journal [5]. The biggest JIF in 2021 was CA: A Cancer Journal of Clinicians (JIF: 508), then much lower appears Nature Reviews Molecular Cell Biology (JIF: 94.444), New England Journal of Medicine (JIF: 91.245), Nature Review Drugs Discovery (JIF: 84.694) and Lancet (JIF: 79.321). The JIF and accessibility to studies in each journal are essential elements that authors and readers look for when publishing or reading. This situation means that a journal with higher JIF and better accessibility will be reading and refereed many times more than others with lower JIF. So, the editorial team will be looking found the procedures to increase the quality of scientific and ethical requirements at the same time to decrease timing for publication.

The National Council for Science and Technology (CONACyT) of Mexico has published the three major countries contributing to the worldwide productivity of scientific journals in 2018. The United States and Austria have 16.63% each of this production while China has 15,28%.

The add of five principal countries of Latin America is 3.56% (Brazil – 2.0%, Mexico – 0.67%, Argentina – 0.40%, Chile – 0.4% and Colombia –0.24%) (Tables 1 and 2) [1].

However, the highest average JIF for five years period (2014–2018) were Island (1.96), Estonia (1.78), and Switzerland (1.65), considering the highest impact over the number of publications [1]. In Iberoamerica, we can observe that most cited papers came from Colombia and Chile, each with 1.15. Meanwhile, Argentina had 0.95, Brazil 0.85, and Mexico 0.83 [1]. It is fascinating to notice that there is no direct correlation between the GDP and JIF of journals.

Additionally, the authors of medical scientific studies must observe if their protocols include investigation subjects as clinical trials, cohort studies, and diagnostic tests to review the mandatory ethics and regulatory research aspects. The clinical journals ask about the Investigational Research Board (IRB) approbation and the Biosecurity Board in some cases. It is necessary to declare the interest conflicts, the role of each participant has in the study, and of course, the absence of plagiarism, self-plagiarism, or different forms of scientific fraud. Usually, the Author's Guidelines establish these rules. Indeed, today is essential to declare and show that the team of researchers has acted with rigorous scientific methodology according to world bioethical norms, particularly with these special rules that the journal established. Given the relevance that bioethics has taken, neuroethics appeared as a new and vital area

Table 1. Relation between Global Domestic Product and participation percentage in the global production of scientific papers. 1. Information taken and translated from CONACyT. CONACyT is not responsible for any translation imprecision.

OCDE									
Position	Country	Gross Domestic Product per capita	Participation Percentage in the Global Production of Scientific Papers		Position	Country	Gross Domestic Product per capita	Participation Percentage in the Global Production of Scientific Papers	
			2018	2014–2018				2018	2014–2018
1	United States	59,927.93	16.63	17.75	19	Austria	53,879.30	16.63	17.75
2	United Kingdom	44,896.26	5.15	5.38	20	Mexico	19,432.21	5.15	5.38
3	Germany	52,574.26	4.53	4.73	21	Norway	62,182.24	4.53	4.73
4	Japan	41,958.96	3.22	3.38	22	Israel	38,867.76	3.22	3.38
5	France	44,255.94	2.98	3.20	23	Portugal	32,554.30	2.98	3.20
6	Canada	46,723.32	2.84	2.96	24	Finland	46,348.96	2.84	2.96
7	Italy	40,981.28	2.77	2.86	25	Czech Republic	38,019.58	2.77	2.86
8	Australia	49,653.72	2.71	2.76	26	Greece	28,579.79	2.71	2.76
9	Spain	39,037.38	2.45	2.53	27	New Zealand	20,438.57	2.45	2.53
10	South Korea	38,824.12	2.43	2.48	28	Chile	24,248.86	2.43	2.48
11	Netherlands	54,503.08	1.66	1.72	29	Ireland	77,596.36	1.66	1.72
12	Switzerland	66,299.63	1.30	1.33	30	Hungary	28,798.64	1.30	1.33
13	Sweden	51,404.79	1.19	1.21	31	Slovenia	36,153.38	1.19	1.21
14	Turkey	27,878.61	1.19	1.25	32	Slovakia	32,371.22	1.19	1.25
15	Poland	29,930.99	1.18	1.19	33	Estonia	33,447.83	1.18	1.19
16	Belgium	49,411.87	0.93	0.97	34	Luxembourg	107,640.56	0.93	0.97
17	Denmark	54,356.45	0.81	0.82	35	Iceland	55,322.09	0.81	0.82
18	Lithuania	33,252.84	0.86	0.00	36	Latvia	28,362.14	0.86	0.00
Latin America					BRICS				
1	Brazil	15,662.25	2.00	1.94	1	China	16,782.21	15.28	13.14
2	México	19,432.21	0.67	0.63	2	India	7168.99	2.91	2.81
3	Argentina	20,843.16	0.40	0.40	3	Brazil	15,662.25	2.00	1.94
4	Chile	24,248.86	0.40	0.38	4	Russia	25,766.93	1.60	1.55
5	Colombia	14,507.26	0.23	0.21	5	Mexico	19,432.21	0.67	0.63
					6	South Africa	13,458.96	0.61	0.60

Table 2. Relation between Global Domestic Product and Normalized Citation Impact Average. 1. Information taken and translated from CONACyT. CONACyT is not responsible for any translation imprecision.

OCDE							
Position	Country	Gross Domestic Product per capita	Normalized Citation Impact Average 2014–2018	Position	Country	Gross Domestic Product per capita	Normalized Citation Impact Average 2014–2018
1	Iceland	55,322.09	1.96	19	Germany	52,574.26	1.29
2	Estonia	33,447.83	1.78	20	Greece	28,579.79	1.29
3	Switzerland	66,299.63	1.65	21	Israel	38,867.76	1.29
4	Luxembourg	107,640.56	1.65	22	Latvia	28,362.14	1.25
5	Denmark	54,356.45	1.60	23	France	44,255.94	1.25
6	Netherlands	54,503.08	1.59	24	Spain	49,653.72	1.22
7	Belgium	49,411.87	1.49	25	Portugal	32,554.30	1.21
8	Ireland	77,596.36	1.47	26	Hungary	28,798.64	1.21
9	Norway	62,182.24	1.45	27	Slovenia	36,153.38	1.16
10	Sweden	51,404.79	1.45	28	Chile	24,248.86	1.15
11	Austria	53,879.30	1.43	29	Czech Republic	38,019.58	1.07
12	Finland	46,348.96	1.43	30	Slovakia	32,371.22	1.02
13	United Kingdom	44,896.26	1.42	31	Lithuania	33,252.84	1.02
14	Australia	49,653.72	1.40	32	South Korea	39,037.38	0.93
15	Canada	46,723.32	1.33	33	Poland	29,930.99	0.91
16	New Zealand	20,438.57	1.32	34	Japan	41,958.96	0.90
17	Italy	40,981.28	1.30	35	Mexico	19,432.21	0.83
18	United States	59,927.93	1.30	36	Turkey	27,878.61	0.74
Latin America				BRICS			
1	Brazil	15,662.25	1.15	1	South Africa	13,458.96	1.18
2	Chile	24,248.86	1.15	2	China	16,782.21	1.06
3	Argentina	20,843.16	0.95	3	Brazil	15,662.25	0.85
4	Brazil	15,662.25	0.85	4	Mexico	19,432.21	0.83
5	México	19,432.21	0.83	5	India	7168.99	0.81
				6	Russia	25,766.93	0.68

of neuroscience several years ago. This issue has been represented by the Mexican Association of Neuroethics [6], an institution where many countries of Iberoamerica participate. This association is attached to the International Neuroethics Society [7]. After analyzing the previous information, we can reflect on the effect Archives of Neurosurgery can have in the neurosurgical context. It is a Journal by a peer review editorial process, published in English, in electronic format, and includes several neurosurgical fields, and it has no cost for the authors although it is an Open Access Journal. In this second issue of Archives of Neurosurgery, we publish original studies, case reports, literature reviews, and videos from many Latin American countries. Archives of Neurosurgery aims to be an accessible international forum with methodologic and ethical criteria needed to be an option for worldwide authors. The main challenge of Archives of Neurosurgery is to maintain the pace of quality

required to obtain inclusion into Medline Library. We think that is possible because many neurosurgeons are looking for a special periodic publication.

References

- [1] Informed General del Estado de la Ciencia, La Tecnología Y La Innovación, Mexico 2019. <http://siicyt.gob.mx/index.php/estadisticas/informe-general>; 2021. CONSULTADO EL 16 DE OCTUBRE DE 2021.
- [2] American Journal Experts. <https://www.aje.com/es>.
- [3] American Manuscript Editors. https://www.americanmanuscripteditors.com/?gclid=EAAlQobChMIy4K2wtiV8wIVjsizCh16IwpKEAAYASAAEgITdFD_BwE.
- [4] Journal Citation Reports – Web of Science – Clarivate. <https://clarivate.com/webofsciencgroup/solutions/journal-citation-reports/>.
- [5] Journal Impact Factor List 2021. <https://impactfactorforjournal.com/jcr-2021/>.
- [6] Asociación Mexicana de Neuroética. <https://neuroeticamexico.org>.
- [7] International Neuroethics Society. <https://www.neuroethicssociety.org>.