

THE BUSINESS OF FALSE SCIENCE AND THE AMPLE ACCESS TO SCIENTIFIC KNOWLEDGE

Exactly one year ago, here in this section of *Revista de Direito Sanitário* (Journal of Health Law) we discussed the issue of the researcher's independence regarding scientific edition and the moral justification of intellectual property rights perceived by publishing houses of scientific journals. Initiatives were remembered, both in the United States and in Europe, in favor of open access (OA) of works published in scientific journals edited by private groups. It was observed, however, that the large platforms, which gather vast scientific fields and have been used as basis for the evaluation of researchers productivity, were originated as "paid" programs and remain discordant with the logic of 'open process'. In that occasion, after analyzing the main obstacles to both 'open access' and 'open process', indispensable to open science, the conclusion of French scientists was reinforced that the overcoming of "all those challenges demand an effort of international cooperation among public entities confronted to the same trends and sharing the same priorities"¹.

Now an international study, performed by a group of journalists reunited in the 'Fake science' Project, examined a database with 175,000 articles and presentations from 'dubious' conferences and published the results in reputable daily newspapers (like the French *Le Monde*, the Norwegian *Aftenposten*, and the German *Süd-deutsche Zeitung and Norddeutsche Rundfunk*, among others). These results were staggering. There is a very well orchestrated business that has been taking advantage of the injunction imposed to publishers of publishing a great deal. It works like this: the societies that publish 'dubious' magazines or organize false scientific conferences write for researchers and companies all over the world and recommend a publication in a scientific journal. Right away they publish – for a fee – the researchers' contributions, many times without the appropriate examination of the content. In this way, even 'dubious' studies come to light without the endorsement of science.

This phenomenon is not exclusive of one region of the planet. The research showed that the number of these 'predator' publications trebled worldwide in the last five years, involving approximately 400 thousand researchers. In Germany one of the main members of the National Board of Science and the Chancellor of Bremen University, for example, published in those journals². In France, in 2015, near 50 articles

¹CNRS – Direction de l'Information Scientifique et Technique. L'Édition de sciences à l'heure numérique: dynamiques en cours (2015). p. 8. Available at: <<http://www.cnrs.fr/dist/z-outils/documents/Distinfo2/Distétude2.pdf>>.

²TAUSENDE Forscher publizieren in Pseudo-Journalen. *Süddeutsche Zeitung*, 19 Juli 2018. Available at: <<https://www.sueddeutsche.de/wissen/wissenschaft-tausende-forscher-publizieren-in-pseudo-journalen-1.4061005>>.

were published by the amount of 46,000 euros in these ‘dubious’ journals reported high education minister of research and innovation, Frédérique Vidal³. India appears as one of the major markets for the business of ‘dubious’ magazines involving more than 300 editors publishing more than 6,000 magazines. Accommodated in an office at a luxury downtown building or a room with only a man and a computer, most of these publications exist on-line; they claim to have a list of specialists as editors but do little or no examination before the publication⁴. It is fair to note, however, that only a small part of the clientele of these ‘predators’ come from India. And France seems to be the world capital of sciences, such is the number of scientific conferences held there. Companies that redeem their costs with two or three participants paying the registration fees organize these ‘parodies’ of scientific conferences. Here it is worth noting that not all the researchers subscribing to this kind of conferences are victims, many regard these as opportunities to travel at the expenses of their institutions, sometimes they do not realize that they are deviating public money.

The canker of false science, as it was denominated in the *Le Monde* newspaper editorial article, has been feeding mainly from two phenomena. On one side the pressure to publish and submit articles in international conferences as a means of gaining points for recruitment processes or promotion of the academic and research systems have been giving incentive to the business of fake science, threatening not only the scientists personal reputation but also trust in science itself. On the other side, the struggle against large scientific publishers monopoly and for the open access to research outcomes ended up introducing the principle of payment to have an article published, in general made by the institution to which the researcher is associated, as a condition to cover the publication expenses and assure free access to all stakeholders. Editors of these pseudoscientific publications have known how to take advantage of such changes in the scientific environment. They can be found in university libraries catalogs, as well as in master and doctorate degrees thesis and are quoted by national and international authorities.

Therefore, the assurance of wide access to scientific knowledge must be a political concern, an issue of national relevance. It is necessary to reform research assessment systems, valuing quality over quantity. But commitment is also necessary so that ‘scientific research results are open to everyone, researchers, companies and citizens, without obstacles, without hindrances, and without payment’⁵. And here perhaps the French incident might be an example. We already remembered

³FOUCART, S.; LAROUSSERIE, D. Impostures scientifiques. *Le Monde*, 20 Jul. 2018. p. 6-7.

⁴YADAV, Shyamal. Inside India’s fake research paper shops: pay, publish, profit. *The Indian Express*, 19 July 2018. Available at: <<https://indianexpress.com/article/india/inside-indias-fake-research-paper-shops-pay-publish-profit-5265402/>>.

⁵PLAN national pour la science ouverte: discours de Frédérique Vidal. Ministère de l’Enseignement supérieur, de la Recherche et de l’Innovation. Available at: <<http://www.enseignementsup-recherche.gouv.fr/cid132531/plan-national-pour-la-science-ouverte-discours-de-frederique-vidal.html>>.

that Law n° 2016-1321 was enacted in 2015, assuring free access to scientific publications originated by public research, though the right of researchers to disseminate their articles after an embargo of 6 to 12 months, independently of the contracts signed with the magazines publishers liberating the reuse of research data (art. 30, including in the Research Code [created by Ordinance n° 2004-545, of June 11 2004] article L533-4, paragraphs I and IV). Now, in July 2018, in the annual conference of the League of European Research Libraries (Liber)⁶, it was announced the National Plan for an open science containing three guiding axes: (i) generalize the opening of publications, turning into obligatory the dissemination in open access to articles and publications originated from research publicly funded, creating a fund for open science to contribute in vesting the scientific community with the control of the publishing system; (ii) structure and, open research data as much as possible, turning into obligatory the dissemination in open access of data originated from research funded with public resources, creating the role of data administrator at the Higher Education ministry of research and innovation and stimulating the association of structured and open data to the articles published by researchers; (iii) made France be the country of open science, transforming scientific practices to incorporate open science to everyday life, stimulating universities and research organisms to adopt open science policies combining the issue of the publications, of data, of competences and assessments and articulating actions nationally, within Europe and internationally.

This is a huge challenge, and the confrontation is urgent for both, the more restricted circle of the researchers who do not wish to be confused with fake prophets, and for all the people who need the knowledge produced with competence and seriousness in order to base their decisions regarding the risks of living in community. Our *Revista de Direito Sanitário* is edited by Institute of Research in Health Law of the *Universidade de São Paulo* (NAP-DISA/USP, in Portuguese) and by the Center of Study and Research in Health Law (Cepedisa, in Portuguese) and the access to all articles published is free and direct. Meanwhile, we wish to engage in a national program, to turn Brazil into an open science country. And as we appreciated, open science will only be constructed when researchers, companies, patients' organizations, teachers, students, agricultors and citizens in general be able to participate in the process. Therefore, we encourage you to send your papers, reviews or comments about a forensic work, or yet your suggestions of topics for discussion and names of eventual debaters. Do not stop contributing!

Sueli Gandolfi Dallari

Scientific Editor

⁶RESEARCH Libraries Powering Sustainable Knowledge in the Digital Age. LIBER Europe Strategy, 2018-2022. Available at: <<https://libereurope.eu/wp-content/uploads/2017/11/LIBER-Strategy-2018-2022.pdf>>.