

Letter to the Editor

Research culture reduces scientific misconduct**La cultura de investigación reduce la mala conducta científica**

To the Editor:

Scientific misconduct is one of the effects of rising growth of articles. Iran has the highest ranking in scientific misconduct¹ and while Iranian scientists admit some of the research problems, having said that, they defend the general principle of their research². In the former paper have mentioned the serious actions of the Iranian authorities about this problem, which included the support of Iranian researchers³. After reading the letter to the editor³, the writer was eager to attach some vague and untold issues to present letter in order to help to clarify the matter, as well so, the author expressed his opinions.

Recently, one of the Persian journals in the field of computer science (miscellaneous)* has released own new statement: all researchers must send the certificate of plagiarism (via Hamanand joo[†]) for us. Since plagiarism is the first type of Iranian scientific misconduct⁴, therefore, it is anticipated that, if this requirement was as instruction in all journals, notably medical journals, will help to reduce scientific misconduct and improve research culture. On the one hand, the author as a former expert of a Persian journal, doesn't see any Persian retracted articles in Iranian journals or Iranian databases. It is likely that there will be found retractable articles in Persian articles and if this issue were true, might the rate of Iran could change in the world¹. Of course, a brief search on Scopus database showed[‡] that most of retracted articles written in English, therefore, this matter maybe is everywhere. Nonetheless, Iran compared to many of countries is significantly suffering from defects of research culture^{1,4,5}. On the other hand, If the culture institutionalized at national level, improving the situation internationally is not unexpected. One of the reasons for lack of retracted articles in Iran is fear of results, lack of necessary infrastructures or Iranian culture. All things considered, in addition to the rules and current actions, it seems

a native database for monitoring, following and reporting about retracted documents is useful for non-native English countries.

Now that the certificate of plagiarism in Persian articles has begun, maybe saying idea “Certificate of reference access” is scary but not strange. The results showed that Iranian scientists have the most use of Sci-Hub website⁵. Therefore, the certificate represents the author's legitimate access to the resources used in their articles. Although above idea comes with challenges and slows down scientific production at first, nevertheless this international idea, firstly, it leads to more research ethics. Secondly, prevention of financial damage to journals⁵. And thirdly, shows value of database providers.

All things considered, the need for research culture is a global issue and scientific misconduct is not limited to Iran², what is clear, the research culture tree should now be planted, if the tools and methods of growth are not suitable, its results will cause disease of all sciences and spread everywhere.

References

- Oransky I. Volunteer watchdogs pushed a small country up the rankings. *Science*. 2018;362:395.
- Larijani B, Niaz K, Pourabbasi A, et al. Not only Iranian rise in science marred by fraud: misconduct is a global problem. *EXCLI J*. 2017;16:1099–102.
- Dakhesh S, Hamidi A. Scientific misconduct and Iranian scientists. *Gac Sanit*. 2019;33:598.
- Moradi S, Janavi E, Kazemi H. A comparative study of scientific misconduct through the world. *National Studies on Librarianship and Information Organization*. 2018;28:75–94.
- Bohannon J. Who's downloading pirated papers? *Everyone*. *Science*. 2016;352:508.

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* IRANDOC. <https://jipm.irandoc.ac.ir/>

† <https://tik.irandoc.ac.ir/>

‡ Searched in 18 October 2019.

Institutionalization of health impact assessment: a matter of equity in public health**Institucionalización de la evaluación del impacto en salud: una cuestión de equidad en salud pública**

To the Editor:

Health impact assessment (HIA) is promoted by the World Health Organization in order to identify and address health co-benefits and risks, as well as measures to improve health and reduce health inequities. At a European level, health issues have been featured in European treaties since the formation of the European Union and governments are expected to promote health equity. Essential values underlying HIA (e.g. equity, democracy, trans-

parency) which are required to be believed in their relevance by practitioners and decision makers must be taken into account.¹ Currently, HIA is not a legal requirement in the European Union and implementation and institutionalization are incomplete in all concerned countries.² Despite the growing policy concerning and activity aimed at institutionalizing HIA, the majority of HIAs are done voluntarily, outside legislative or regulatory requirements.³ In Spain, the National Public Health Act 2011 incorporated HIA to the Spanish legal system 8 years ago.

The incorporation of HIA to the Spanish legal system was deemed positive in technical and scientific environments. However, Spain is a decentralized state and most policies (e.g. health governance) are based in the gradual development of federal arrangements through its regional governments, also known as Autonomous Communities.⁴ Despite multijurisdictional countries

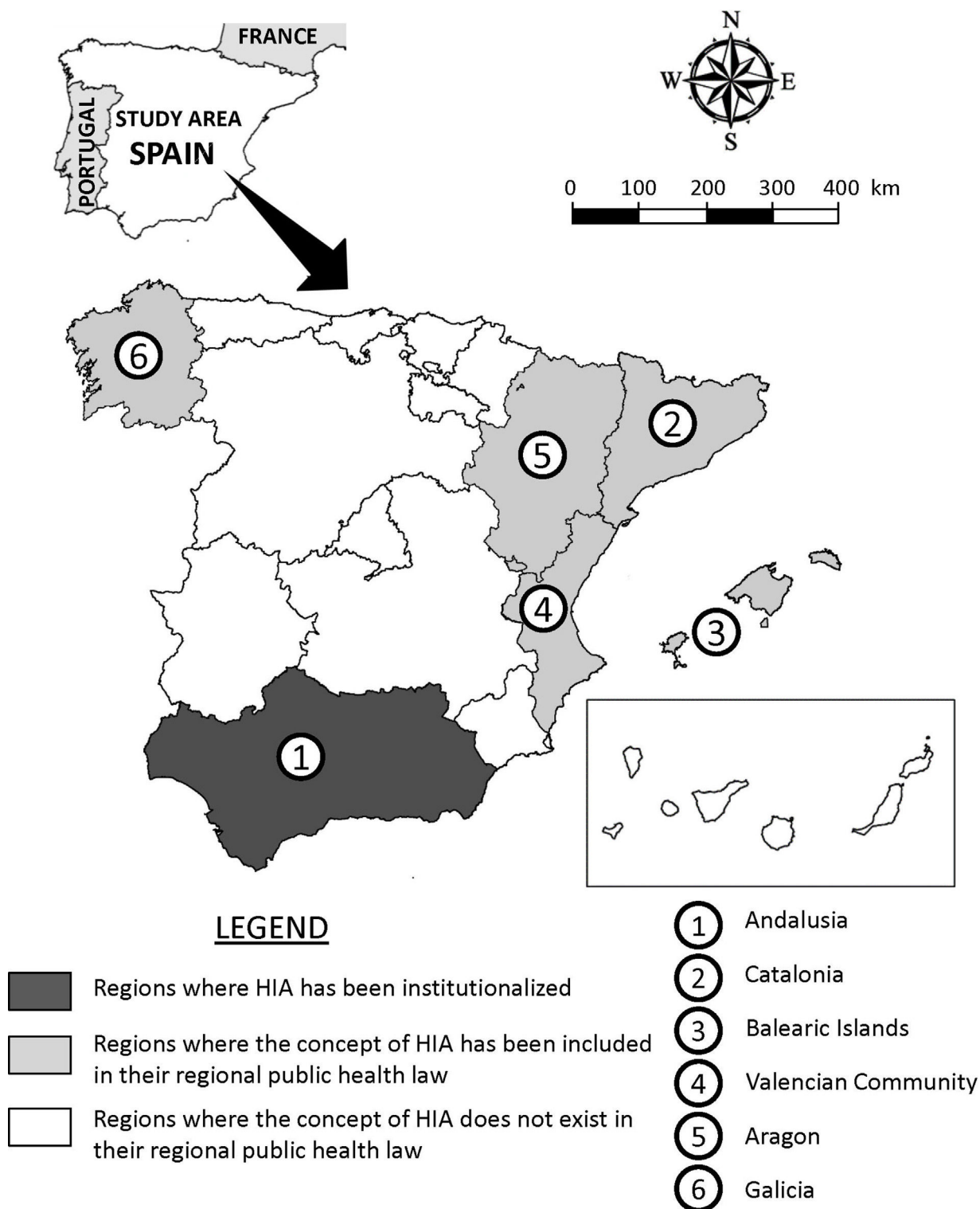


Figure 1. Institutionalization of health impact assessment in Spain.

are supposed to facilitate better matching of citizen preferences, sometimes, there is a lack of basic common rules at a national level. On a regional level, HIA has been institutionalized in only one out of 17 autonomous communities (as is the case of Andalusia). On the other hand, HIA is also mentioned in regional Public Health Laws in the Autonomous Communities of Catalonia, Valencia, the Balearic Islands, Aragon and Galicia (Fig. 1). However, there has not been further regulatory development of HIA in these

last Autonomous Communities, where only some pilot HIAs have been conducted, mostly in urban planning, as well as within the Basque country. In short, Andalusia is leading the implementation of HIA in Spain, and more than 700 HIAs have been conducted in different activity sectors between the years 2015 and 2018 in Andalusia.

Despite the limited development of HIA in Spain, it has already been documented that some stakeholders perceive it as

a competitive limitation and a possible disadvantage in economic development between Autonomous Communities.⁵ This approach is a serious threat that may conduct HIA towards a bureaucratic drift and the trivialization of the process could generate more rejection than its expected positive results.⁶

In this context, implementation of HIA faces many difficulties and barriers at different levels, including poor governance and lack of political support,³ which can cause a lack of equity in health and its determinants. Thus HIA practice should be based on a legal obligation within European Union, in order to avoid inequities in health and its determinants between groups of people within regions and between regions. In this sense, a general consensus exists today that the European Union treaty provides grounds for upgrading the status of HIA.³

Authorship contributions

C. Iglesias-Merchan and E. Domínguez-Ares conceived and designed the manuscript. The first draft of the manuscript was written by C. Iglesias-Merchan. E. Domínguez-Ares authored and reviewed all versions of the manuscript. Both authors have reviewed and approved the final draft.

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Conflicts of interest

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References

1. Bacigalupe A, Esnaola S, Calderón C, et al. La evaluación del impacto sobre la salud: una herramienta para incorporar la salud en las intervenciones no sanitarias. *Gac Sanit.* 2009;23:62–6.
2. Green L, Gray BJ, Edmonds N, et al. Development of a quality assurance review framework for health impact assessments. *Impact Assess Project Appraisal.* 2019;37:107–13.
3. Tarkowski S, Ricciardi W. Health impact assessment in Europe – current dilemmas and challenges. *Eur J Public Health.* 2012;22:612.
4. Agranoff R. Federal evolution in Spain. *Int Political Sci Rev.* 1996;17:385–401.
5. Vela-Ríos J, Rodríguez-Rasero FJ, Moya-Ruano LA, et al. Institucionalización de la evaluación del impacto en la salud en Andalucía. *Gac Sanit.* 2016;30:81–4.
6. Sanz E, Esnaola S, Aldasoro E, et al. Pasos hacia la institucionalización de la evaluación del impacto en salud en España: la percepción de los profesionales de salud pública. *An Sist Sanit Navar.* 2012;35:403–12.

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Contribución a la práctica de ciencia abierta: el uso de *software* libre en GACETA SANITARIA



Contribution to the practice of open science: the use of free *software* in GACETA SANITARIA

Sr. Director:

La ciencia abierta es un movimiento cuyo objetivo no se limita a facilitar el libre acceso a publicaciones científicas y datos de investigación, sino que su finalidad implica el desarrollo de aspectos más amplios y complejos que contribuyan a la producción de un conocimiento científico abierto y colaborativo que responda a los retos de la sociedad actual. En términos generales, la ciencia abierta persigue garantizar el acceso abierto tanto a los procesos como a los resultados de la actividad científica mediante la reutilización, la redistribución y la reproducción de las investigaciones. Esto incluye la libre disponibilidad de aquellas herramientas o instrumentos de trabajo utilizados para la producción científica, desde la recogida de la información y el análisis de los datos hasta la obtención de los resultados. Se trata, a fin de cuentas, de una reforma cultural que busca promover una ciencia más transparente, accesible y reproducible¹.

En la investigación en salud pública es común el uso de programas informáticos (*software*) para realizar los análisis de datos que den respuesta a los objetivos de estudio planteados. Es frecuente encontrar en la literatura científica el uso de *software* analíticos de procedencia comercial, tales como SPSS, SAS, STATA o ATLAS.ti, cuya licencia básica cuesta entre 175 € y 1200 €. No obstante, la práctica de ciencia abierta promueve el desarrollo y el uso de

software libre y gratuito para el análisis de datos de investigaciones científicas, con el fin de favorecer los procesos de apertura y colaboración del conocimiento, y facilitar una mayor productividad científica. En la investigación epidemiológica y de salud pública, los *software* libres de análisis de datos más utilizados son R, Epidat y PSPP^{2,3}.

El uso de *software* libre ofrece dos ventajas fundamentales a la investigación científica. En primer lugar, permite a los investigadores con pocos recursos tener acceso a herramientas de calidad para generar sus análisis, favoreciendo así la democratización del conocimiento científico y la atención a diferentes demandas sociales. Y en segundo lugar, garantiza la reproducibilidad científica, lo que promueve una mayor productividad al mismo tiempo que fomenta la colaboración y el uso compartido de información entre investigadores¹. En este sentido, la difusión del uso de *software* libre en el ámbito investigador de habla hispana sería una práctica altamente recomendable por parte de los principales instrumentos de transferencia de la información científica, como son las revistas científicas, especialmente aquellas que defienden la práctica de la ciencia abierta y el libre acceso al conocimiento científico, como GACETA SANITARIA.

Hemos realizado una revisión con el fin de conocer si los artículos originales publicados en GACETA SANITARIA en los últimos 5 años usan *software* de libre uso. De los 324 artículos originales publicados en el periodo 2015–2019, el 53,1% (n = 172) utilizaron *software* de análisis para responder a su pregunta de investigación. De ellos, el 82% realizaron los análisis con *software* de pago (SPSS, 46,8%; STATA, 24,0%; ATLAS.ti, 4,1%; SAS, 2,3%; Nvivo, 1,8%; y otros, 3,1%), frente a un 18,0% que usaron *software* de libre uso, tales como R (13,5%) y Epidat (3,5%). De los tres *software* de análisis de datos