



LETTERS TO THE EDITOR

The scientific impact of the health research

El impacto científico de la investigación en salud

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Dear Director:

The fundamental role of health research is now well established, as it contributes to improving health and stimulating national economic growth. ⁽¹⁾

In recent decades, when evaluating research in general, and especially in health, the use of the term "impact" has been emphasized. According to the dictionary of the Royal Spanish Academy, this term comes from the Latin "impactus" and means, in its second meaning, "mark or mark left by any action or event on someone or something." ⁽²⁾ According to the authors, determining the impacts of science and technology is therefore a strategic necessity for sustainable social development.

It is also necessary to clarify that in terms of health, this means determining how the results and effects of these research actions are understood in terms of health values and benefits, which are generated through science and innovation. ⁽²⁾

The impact of science and technology can be evaluated in three fundamental dimensions: scientific or knowledge impact, economic impact, and social impact. Scientific or knowledge impact is essentially determined by the novelty and contribution to theoretical and practical knowledge produced as a result of the research process. It must, in turn, be accepted by the scientific community and promptly disseminated through scientific publications. This impact should not be understood solely as the achievement of research results, but also as the individual development process of the researcher and the scientific community within them. ⁽³⁾

Based on the above, we propose to analyze four categories that, in the authors' opinion, are the most reliable tools for measuring scientific impact:

A- Scientific or knowledge products ⁽³⁾

Generally, in the process of scientific development and technological innovation, new knowledge and theories are obtained as contributions, representing a qualitative and quantitative leap forward in solving the research problem. This category, in turn, is expressed through the following elements:

- Total number of publications and visibility of scientific articles in indexed and peer-reviewed journals that are part of national and international databases; Analysis based on so-called bibliometric indicators, which measure the impact of journals. In the academic and scientific world, publications in indexed journals are considered one of the main indicators of research quality and relevance.
- Publications of books and monographs in digital and paper formats, with their corresponding ISBN.
- Patents, the acquisition of which is inextricably linked to the existence of a new product or service.
- Awards and recognitions obtained as proof of scientific and/or social contributions on the topic in question.

B- Knowledge Exchange ⁽³⁾

- Participation in national and international scientific events with presentations.
- Membership in prestigious scientific societies, which are places where scientific knowledge is shared.
- Consulting services provided on the scientific topic in question, which demonstrates the scientific community's recognition as an opinion leader on a specific research topic.

C- Knowledge Usability ⁽³⁾

- Citations received from other researchers for their work, based on scientific results provided through the use of scientometric analysis (a discipline that applies bibliometric techniques to examine the development of science).
- New innovative products obtained from research results.

D- Attention Capture ⁽³⁾

- Attract new funding through research and cooperation projects, which will address the insufficient availability of material and financial resources for research in developing societies.

It is vital for the health system to identify the impacts generated by scientific research, as only in this way can its development be encouraged to solve health problems.

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STATEMENT OF AUTHORSHIP

ALGH: Conceptualization, formal analysis, investigation, methodology, visualization, writing - original draft, writing - review and editing.

YLG: Conceptualization, formal analysis, investigation, methodology, visualization, writing - original draft, writing - review and editing.

CONFLICT OF INTERESTS

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