

Letters to the editor

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Scientific student research in tune with current trends

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Dear editor:

The noticeable scientific-technological development achieved by Cuba in the last years is a faithful reflection of the desire to work in pursuit of progress [1]. All this is based on a solid principle expressed by a great thinker, referring in 1960 to the phrase "men of science" [2].

The innumerable resources directed to education and health demonstrate a political will for continuous development. Higher medical education has the special responsibility of preparing persons for the most humane work that can be exemplified, saving lives. We have a National Health System with the necessary resources to position ourselves among those with the highest quality indicators, at the level of developed countries like Canada and the United States. To speak of the Cuban public health, is to denote great part of the history of Cuba, a part that is among the most recognized internationally.

Today, the development of future health professionals is a result of a large set of teaching-educational strategies whose consequence is a doctor, nurse or technologist with an integral vision and a humanistic approach to the healthdisease process. Advanced higher education is required, with curricula that respond to the main problems of the local, municipal, provincial, national and international context, as well as something very important: the development of skills around the three main features of the future professional training: teaching, health care and research.

Scientific research is a fundamental pillar in the training of the university student, especially in the student of health sciences. The constant application of the scientific method, like the clinical method, in search of the solution to a problem, makes the professional a researcher par excellence. This is why there is an insistence for the development of investigative skills throughout the years of university career in each student. This element eliminates the erroneous idea that "scientist" is an exclusive label for those who work in an experimental laboratory. A scientist is anyone, independent of his academic degree, who develops or uses a method based on a hypothesis that leads to the solution of a problem. Given the above statement then a question arises: Can a student be considered a scientist?

The student scientific movement at the Cuban university of medical sciences is backed by a framework of laws that support student research; to this is added the will of each institution represented by individual strategies. Furthermore, there is an annual investigative cycle that includes a set of events to be carried out from the base to the nation. The gradual opening of the different national and international competitions, where student participation is increasing, has been very successful if we value our youth will be the relay and must guarantee the historical continuity of our social processes [3].

Today's society demands from young people a continuous commitment to work in science. In addition to carrying out research fulfilling all the requirements, a constant updating of contents and methods is necessary. All this taking as a reference the most current tendencies of the international scientific community, in order to continue raising the prestige achieved by our country.

Today, according to the authors' opinion, there are four aspects that are poorly exploited, which shall significantly increase the quality of research: information literacy, interinstitutional and international collaboration, scientific publication and scientometrics.

The lack of studies where there is evidence of collaboration between different institutions prevails in student scientific production. This is of vital importance if one takes into account that collaborative studies enrich the quality of the scientific process by increasing experience, new ideas and, in short, results are obtained with greater coverage and impact.

The scientific student publication has not yet achieved its maximum development, if one takes into account the



relationship between the existing number of young researchers and the scarce scientific production, features evaluated in different studies [4],[5]. It is always considered that publication is the most effective way to disseminate the results achieved in an investigation.

The acquaintance with the new tools for the evaluation of science today is vital for any researcher. Scientometrics, as a central axis, favors this process by evaluating productivity and visibility. To identify our index h, to explore scientometrics and altmetrics resources, to use the academic social networks, to master the characteristics that a manuscript must fulfill to be published, are only examples to consider in order to measure scientific quality.

Information literacy is indispensable for a young researcher; from the search of the information with the use of the most suitable databases and the work with bibliographic resources, to the selection of the dissemination space for the obtained results, keeping close relation with scientometrics.

It is inconceivable an advanced research movement that does not adopt the current tendencies of science, and much more when the resources exist for the student to investigate at the height of the 21st century.

There is a need for an awareness on the part of the student about the need to investigate. Reward the new ideas, the arduous work, the desire to investigate and the ethics; eliminate conformism, fraud and paternalism. Then, we will be more updated, and beyond that, we will be better scientists.

Notes

Conflicts of interest

Authors declare no conflicts of interest.

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Referencias

- Castro Díaz-Balart F. La ciencia para el desarrollo en el siglo XXI. Revista Anales de la Academia de Ciencias de Cuba. 2012; 2(2):1-10. | <u>Link</u> |
- Castro Ruz F. Discurso pronunciado por el Comandante Fidel Castro Ruz, Primer Ministro del Gobierno Revolucionario, en el acto celebrado por la Sociedad Espeleológica de Cuba, en la Academia de Ciencias, el 15 de enero de 1960. La Habana; 1960. [on line]. | Link |
- Gonzalez-Argote J, Garcia-Rivero AA. Student scientific events in Cuba: an opportunity for all. Medwave 2017 Mar;17(2):e6878. | <u>CrossRef</u> |
- Gonzalez-Argote J, Garcia-Rivero AA, Dorta-Contreras J. Producción científica estudiantil en revistas médicas cubanas 1995-2014. Primera Etapa. Inv Ed Med. 2016;5(19):155-63. | <u>CrossRef</u> | <u>Link</u> |
- Garcia-Rivero AA, Gonzalez-Argote J. Panorama de las revistas estudiantiles cubanas 2005-2015. Primera parte: análisis bibliométrico. Educ Med. 2017. | <u>CrossRef</u> |

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