



LETTERS TO THE EDITOR:

Strategy to Promote Scientific Publications in Dental Students

Estrategia para fomentar las publicaciones científicas en estudiantes de odontología

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Dear Editor,

Research is one of the core missions of every higher education institution, alongside teaching, with which it maintains a productive relationship (1). The faculty is the pillar that supports the process of knowledge transmission and holds the responsibility of fostering curiosity and research among students, striving to turn them into habitual practices (2).

However, not all university faculty members engage in formal research activities. This leads to an artificial division between the teaching-focused faculty members (dedicated exclusively to instruction) and the teacher-researcher (who combines teaching with scientific production), despite the presence of clear incentives for research, such as academic prestige and financial rewards. In Colombia, the economic incentive for academic productivity, as outlined in Decree 1279 of 2002 (3) and the researcher classification system established by the Ministry of Science, Technology, and Innovation (4) are clear examples of the benefits that faculty members receive for engaging in research.

Traditionally, faculty members assume that their sole function is teaching; however, this is a limited and outdated conception (5). Understanding that research is an intrinsic part of teaching is the first step toward becoming a teacher-researcher. Attaining high levels of academic training, such as master's and doctoral degrees, is important for developing autonomy as a researcher; however, it is neither an exclusive requirement nor a full guarantee of such independence.

On the other hand, if research forms the foundation for generating new knowledge and teaching involves transmitting that knowledge, how can education be conceived without research? Furthermore,



how can a faculty member who does not engage in research ignite the spark of scientific curiosity in their students? While not impossible, it is undoubtedly easier and more effective when the instructor has been actively involved in research.

One of the most challenging tasks from the beginning of our careers as university faculty has been fostering research among undergraduate students. Six years later, this effort has yielded results, with more than a dozen published articles in which students have taken center stage-some of them making multiple contributions.

The strategy for promoting scientific publication within the dentistry program that we have implemented over these years can be summarized in the following key points:

1. Invite outstanding students from the course to engage in research activities leading to publication. Over time, even those who were not initially selected will feel motivated to participate.

2. Present a research topic to them from the outset or allow them time to propose one. It is important to set clear time limits from the beginning; those who are genuinely interested will try to meet the deadline.

3. Once the topic has been defined, it is essential to establish a detailed writing plan with specific deadlines. Based on our experience, a timeframe of 2 to 3 weeks is generally sufficient for students to draft the first version of a section. Additionally, writing the methodology and discussion sections may require more time and guidance.

4. It is essential to guide the student throughout the process by reviewing their draft, making corrections, and returning it with feedback using track changes and comments (in Word). A student will not achieve a successful outcome without dedicated time for reviewing their work; investing

in their development is crucial. When a student appears to be stuck in a loop, virtual meetings may be necessary to clarify doubts and provide more direct guidance.

5. Before starting the writing process (preferably) or during it, it is important for students to become familiar with the use of scientific databases, reference management software, and the selection of scientific journals based on their impact factor. These skills enhance their research performance. In some cases, brief instructional sessions on these topics have been necessary to ensure proper understanding and application.

6. Providing a "guiding article" authored by us has been particularly useful in helping students understand the structure of the type of publication they are working on, as well as the writing style we recommend. This offers them a clear and concrete model to guide their work.

7. We generally recommend that students begin their scientific writing journey with short publications, such as letters to the editor-preferably observation-based rather than commentary-based letters (6) or editorials (7). This approach provides them with confidence, writing agility, and a higher likelihood of manuscript acceptance, while also requiring less time for drafting.

8. Selecting the right journal for the first publication is essential. Securing acceptance in an appropriate journal is more valuable than aiming for a high-impact journal from the start (this will come with time and experience). We recommend choosing university-affiliated journals indexed in at least two recognized databases, such as Lilacs, SciELO, Latindex, Dialnet, Redalyc, or preferably Scopus or Web of Science. This reduces the chances of falling prey to predatory journals.

9. Once the first publication is completed, the student is encouraged (or may propose)

to take on a greater challenge. For instance, if they successfully published a letter to the editor, the next step could be a short article. Gradually, their accumulated experience and successes will strengthen their confidence. Eventually, they can progress to more complex publications, such as original research articles or review papers.

10. Finally, true satisfaction is achieved when the student appears to embody the scientometric aphorism "success breeds success" (8) (Figure 1), which is reflected in a significant increase in their self-confidence, recognition from others (peers, fellow students who see them as a mentor or advisor, and even faculty members who invite them to collaborate), as well as a higher likelihood of securing job opportunities or pursuing postgraduate education, including access to scholarship.



Figure 1. The Virtuous Cycle of the Undergraduate Student-Researcher Emulating the Aphorism "Success Breeds Success".

There are no magic formulas for introducing future dentists to research activities. However, it is essential for faculty members to have strong dedication, prior experience, and unwavering perseverance in the face of challenges to achieve this goal.

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CONFLICT OF INTEREST

None.

AUTHOR CONTRIBUTION STATEMENT

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