

Undergraduate Surgical Research

Investigación en cirugía durante el pregrado

Dear Editor:

With the rapid advances in science and the need to promote the spirit of innovation in the field of surgery, the article *Research in surgery: an easy road?*, written by Manuel Ferrer Márquez and Ricardo Belda Lozano, demonstrates the intrinsic limitations of surgical research and papers, focusing on surgeons themselves. The road of surgical research is long and difficult, and it is therefore necessary to start on it well in advance. A surgeon's desire for research should be stimulated from the very beginning, that is, as an undergraduate.^{1,2}

Very few students participate in undergraduate research, and even fewer dare to venture into surgery-related issues. Many choose to do rotations in different surgical departments, where the promotion of research activity is limited. Inexperience in surgical technique and the lack of knowledge in strictly pathophysiological concepts should not be enough to justify not participating in research.³ Despite the limitations that are typical of undergraduate students, it is possible to collaborate in areas that the surgeon is unable to tend to.

Student participation in surgical research would be more rewarding if students contributed in areas such as reviewing evidence-based surgical articles, bibliometric research, analyzing the working relationship between the surgeon and surgical team, epidemiology of surgical diseases, along with other options that do not involve exposure to direct patient management. Research could be used as a tool for early induction of undergraduate students into the world of surgery, with no exposure to risks or responsibilities that are beyond their abilities. If this were the case, there would have to be adequate training before, during and after the research process, which would undoubtedly be a vital aspect.

Through continuous education in surgery, it is possible to offer courses on introduction to research, statistical analysis, database management and manuscript drafting, while evaluating their applicability during undergraduate work and residency. The final objective of these measures would be to create a research culture during the academic stage that would continue throughout these future surgeons' professional careers.

While our surgeons of tomorrow are completing their undergraduate studies, they should not fall into the vicious

circle where the inability to do research promotes lack of knowledge, and where the lack of knowledge of how to do research generates the inability to do it.

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Conflict of Interests

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Sebastián Bernardo Shu Yip^{a,*}, Luis Ricardo Herrera Medrano^b

^aFacultad de Medicina Alberto Hurtado, Universidad Peruana Cayetano Heredia, Lima, Peru

^bDepartamento de Cirugía, Hospital Nacional Arzobispo Loayza, Lima, Peru

*Corresponding author.

E-mail address: sebastian.shu.y@upch.pe (S.B. Shu Yip).

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