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Facilitation of scientific initiation research in undergraduate medical school - understanding different acronyms and abbreviations

Facilitação da iniciação científica na graduação em Medicina - entendendo inúmeras siglas, abreviaturas e acrônimos

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We read with great interest the article by Souza et al.¹ on research programs for undergraduate students. A discipline of Scientific Initiation (SI) started to be offered at our university in 1995², for Undergraduate Research, but this year it became mandatory in all semesters.

And we are faced with frequent doubts among students, related to the lack of knowledge of the meaning of the different acronyms and abbreviations used in scientific research, and based on this finding, we began the study of these items used in relation to research, publication of articles, books, book chapters and some terms in English. Surely, some acronyms or names are easy to understand such as Google Scholar, Google Books and PUBMED, and are of common use in our academic environment such as ABNT, CAPES, CNPQ, DOI and QUALIS. However, without having the correct understanding in some cases, such as LILACS, MEDLINE, SciELO and SCOPUS, which can lead to misunderstanding, while others use a miscellany of letters that often surprise the student, such as: BDTD, BIREME, BVS, CEP, COCHRANE, CONSORT, COPE, CROSREEF, GATER, EMBASE, EQUATOR, ICJME, ISI, SIS, JCR, ISSN, ISBN, OPAS/OMS, OPEN ACESS, PRISMA, SPIRIT-AI, STARD, STROBE, STREGA, TCLE and TREND, among others, as well as terms in English such as Web of Sciences, peer review, preprint and predatory journals. To address these issues, facilitate the understanding and use of these abbreviations, we use face-to-face and practical classes throughout the semester.

We know there will always be abbreviations and acronyms in scientific practice, as well as specific technical terms in publications, which are often spoken quickly by teachers in SI classes, but students have only limited knowledge about them.

It is important to demonstrate an adequate knowledge of research methods, including qualitative and quantitative approaches in scientific investigation, as the students must have sufficient content to allow them to carry out a critical analysis of research forms, and reach the final conclusion, regardless of what the authors have presented. Whether they are the results of a scientific study, published in articles or presented at conferences, the conclusions of the student reader or participant in an event must also be critical, in addition to those presented by the authors.

In their study, Fendos et al.³ conclude that medical students who develop research training programs expect their advisors to significantly support them, and this is the only way the research program can improve its results.

And we also agree with Cuschieri⁴, who reports that many factors contribute to a negative attitude shared by many medical students in relation to conducting research. We believe that one of the main factors related to the difficulty in developing projects is associated to the stages of the research, combined with the lack of knowledge about the frightening amount of abbreviations, and acronyms used at the beginning of this process. This is the reason why we started to teach this content, creating SI classes aimed at teaching topics of relevance in research, which will certainly be useful in undergraduate school and professional life.

Souza et al.¹, in their study with a systematic review, state that the student must be more familiar with a certain subject, and develop skills to criticize research projects; therefore, knowing the meanings of abbreviations and acronyms clarified the understanding of the SI contents, improving the research process and encouraging publication, including in other disciplines.

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AUTHORS' CONTRIBUTIONS

Cristina Fontes: study concept, manuscript writing, review and editing. Gabriel Santos Vieira: manuscript writing, preparation of the original draft and visualization. Juliana Trindade: methodology, research and manuscript writing.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

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