Choosing the subject of a scientific study for publication

A escolha adequada do tema de um estudo científico para publicação

Encouraged mostly 1-) by the visibility of the scientific journals in the nonprofessional and professional environment resulted from indexation of good quality journals based on electronic data and search tools, allowing the reader (clients or colleagues) to find related publications on the internet, and 2-) by the introduction of Graduate Programs (stricto sensu - master and doctor degrees) of the main universities, and also by the need of young ophthalmologists to distinguish themselves with academic titles, many doctors may become motivated to write scientific papers aiming at publications (1,2).

In the academic environment, we often say that 90% of a scientific study arise from “inspiration” and only 10% arise from “transpiration”. In other words, energy invested in the preparation of the strategy of the study is enormous and much more significant than its production. The certainly most important step in the preparation of a scientific study is choosing the subject.

Scientific research starts from a doubt, something that, in the opinion of the researchers, could be different and maybe more effective. The next step would be looking up in the literature all the information published about the subject, by means of bibliographic research based on electronic data. It would be like asking to the rest of the world what it is known about a certain subject. The objective of the bibliographic review is to discover if someone, in any part of the world, had had this same doubt and if he had tried to solve it (3).

Review of the literature, by selecting and reading the main articles related to the subject, allows us to understand details of a content that would not be available in text books in an updated way. This study is the most effective and practical way of getting updated. In case the initial doubt had already been clarified (published), the expertise acquired about the subject will allow to discover a “gap” in knowledge, which could yet be studied in an unprecedented way. For example, If the original doubt is about the possibility of an aspheric intraocular lens (when improving the visual perception of contrast) influence in diagnostic exams that use the sensibility to contrast and if this doubt had already been responded to the blue-yellow visual field exam, a possible “gap” would be question if the findings were also valid for other types of exams (FDT, for instance) or other types of aspheric lenses (4,5).

In the case of epidemiologic research, the “gap” in knowledge could be, for example, study variables already studied, though in an area with different demographic features. In other words, epidemiologic features and patient needs with indication of cornea graft are not generally the same in southeast and northeast. This information could be useful for the preparation of guidelines in public health (6,7).

Best studies are those prepared to respond to only one specific doubt, and many times ideas for additional studies are also suggested. As a result, medical knowledge progresses.

Since the doubt is defined and novelty is confirmed, the next step is to check if the institution where the study will be conducted has all the materials and humane requisites to carry out research. It is, for instance, an excellent study to evaluate the efficacy of laser for doing the capsulorhexis in intumescent cataracts (8,9). But, first it would be necessary to have the laser available for research. Scarcity of material resources is the principal limitation for carrying out scientific papers in Brazil.

Research do not need to be unprecedented, but have to render some contribution to the existing knowledge. So, we can publish a study with conclusions formerly described. Also, this study should be much more extensive than the original one and the objective would be to confirm the former information. Editors are not willing to publish (and readers are not willing to read) studies that simply repeat what it was done numerous times before.

Authors should consider the importance of the chosen subject as well, because the information resulted from the study has to contribute to the improvement of medical practice in general, increased by what is known about the subject. An article, which describes the epidemiological profile of patients seen at a certain hospital, would hardly be accepted for publication, since this information would only be useful for administrators or that hospital or area. Studies that carry relevant information are those allowing to extrapolate their findings, by transmitting information to a great number of readers.

Publishers are constantly charged by readers and periodically evaluated by bibliometric indexes. Yet, pressure
in this sense, is much greater than diplomatic needs with authors who had had denied submissions (10).

Scientific journals tend to progressively improve their quality and impact. Articles well written, with adequate methodology and mainly relevant information to the existing knowledge, are ardently desired by best journals. Constant improvement of journals is necessary along with competent researchers. Besides university Graduate Programs, there are independent and very well prepared research groups. We believe that all the researchers should encourage the leaders of national ophthalmology to carry out activities related to training in scientific research.

So, the Brazilian Ophthalmology Journal will try to systematically show on its editorials information that help promoting the researchers. Our task is to improve quality of our publications by enriching our authors.

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REFERENCES