

## **The problems currently faced by biomedical journals in Bosnia and Herzegovina: how to resolve the present situation?**

Today's biomedical medical periodicals with scholarly content in Bosnia and Herzegovina number only 10 journals indexed in not very relevant world index bases (apart from the Medical Archives and the Bosnian Journal of Basic Medical Sciences, which are indexed in the Index Medicus/Medline), and they are issued two or four times a year, printed sometimes as double issues, or even quadruple. The reason for this, in the opinion of most editors, is the mediocre quality of the studies sent to the editors of the journals and the lack of funding for publication of journals. These difficulties are characteristic of journals in what is known as the "scientific periphery" (1), and, seen from the perspective of Bosnia and Herzegovina, which is on the periphery of that region, a greater production of scientific works cannot even be expected since the conditions for scientific research in biomedicine are very modest, in terms of the state's science policies, staffing and equipment, since the end of the war to the present. In these conditions, it is almost impossible to plan a long-term strategy for scientific research work for individuals, teams or "scientific institutions" which could realistically make better quality work possible.

For this reason, we are today witnesses of a large number of poor quality studies published in biomedical journals in Bosnia and Herzegovina, which, alongside the difficulties already mentioned, are mainly the

result of the laws on institutions of higher education in Bosnia and Herzegovina, which require an unrealistically high number of studies from candidates applying for scientific teaching posts. The insistence on quantity in modest conditions for scientific research work, is stimulation in the wrong direction, that is, stimulation of publication at any price, or, quite honestly, stimulation of the publication of poor quality works. The editors of journals and the review procedure also make a significant contribution to this. That is to say, mainly because of the language in which the studies are written, reviews are written by local reviewers, or reviewers from neighboring countries resulting from the break-up of the former Yugoslavia, that is from an area where almost all professionals know one another, even though it is well known that in these conditions it is impossible to maintain objectivity in the review process (2). Moreover, an analysis of the works published, written by teaching staff at universities in Bosnia and Herzegovina, frequently shows "high scientific productivity" by these staff members in the year before the expiration of their term of office, and the cessation of publication after appointment to a higher position, which all leads to the conclusion that they publish at any cost, and that the legislation on the selection of teaching staff at universities is satisfied in the same way. All this results in

a very meager number of citations of studies published in biomedical journals in Bosnia and Herzegovina, shown by an assessment of their citations in international scientific biomedical journals, which is also confirmed by the fact that no journal from Bosnia and Herzegovina has any official impact factor.

### **How to resolve this situation?**

In this situation the question may quite rightly be asked "Do medical journals in Bosnia and Herzegovina fulfill the basic role of a journal, that is, the transfer of scientific information?" The reply may be found in the fact that the studies published in journals in Bosnia and Herzegovina are very rarely cited in studies by relevant world biomedical journals, meaning that the transfer of scientific information they offer is almost non-existent. It emerges that studies published in journals in Bosnia and Herzegovina only serve the authors to gain promotion on the university teaching profession ladder.

The solution to this situation demands the change of the current, already deeply rooted way of thinking about biomedical studies and journals in both those who decide on the funding that is vital for scientific research work and publication of journals, and those who are involved in scientific research work and publication. This can only be achieved by all those who should be involved in creating a high quality journal taking responsibility for this. Institutions and their founders, who would like their names, whether directly or indirectly, to be associated with scientific activity, much provide financing for scientific research work, and those who do the research and publish it, must accept the international standards for that work. This is not hard to achieve, if there is a common interest involved. These institutions should supply at least 2% of their gross income for scientific research work to meet regulations founded on worldwide criteria for the allocation of those funds, and those

doing the research and publishing it, as well as publishing in world journals, should also publish in domestic journals.

The question now arises of which journals in Bosnia and Herzegovina promise progress towards indexation in prestigious world index bases. The answer is clear and unambiguous. These are journals published in English, whose editors strictly respect international standards for the publication of biomedical journals, above all the standards for the review process, that is, those journals which ensure at least three international reviews, of which one must be solely of the statistical processing of data, if statistically tested results are presented. In this process, those who wish to have a good quality work published, do not have to be afraid of the strict supervision of competent reviewers, because this kind of review assesses the study in the true sense of the word, and the useful suggestions are an attempt to improve it, to meet the criteria for publication. This is the way in which we can improve the quality of biomedical journals in Bosnia and Herzegovina, since it should not be forgotten that the value of an article is measured by the value of the journal in which it is published (3).

### **References**

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