

A medium of science communication in our times

Armen Yuri Gasparyan¹, Maciej Banach^{2,3}

¹Executive Editor of *Archives of Medical Science*

²Editor-in-chief of *Archives of Medical Science*

³Department of Hypertension, Medical University of Lodz, Lodz, Poland

Science communication is of paramount importance for academic medical community, and its integrity should be viewed as a driving force of the progress in biomedicine. We live in times of ground breaking discoveries, opening new horizons and launching new fields of science at a rapidly increasing pace. Recent advances in basic biomedical science have led to revising theories of atherosclerosis, oncogenesis and aging, and better understanding of basics of genetic, metabolic and inflammatory changes in human organism. Clinical science has seen great transformation, division into multiple 'narrow' subspecialties, and, yet again, tendency towards integration and formation of new promising specialties such as vascular haematology, vascular rheumatology, immunoinfectology etc. As a result, hundreds and thousands of new journals have emerged, aiming to provide a forum for communication among scientists with diverse professional background, between young specialists and distinguished experts, between scientists bearing knowledge of 'old' theories, practical approaches and those who gained skills in modern sophisticated therapeutic and diagnostic technologies. Fast processing of submissions, timely and expanded circulation of publications have become prerequisites of viability for most biomedical journals, and some have been also fortunate in launching online publication and open access format, which, undoubtedly, promoted world-wide circulation of publications, their visibility and, to some extent, quality. The peer-review process and unbiased editorial management have emerged as factors further increasing quality and integrity of publications, which, after all, not a sole (main) responsibility of author (s). Rapid growth of quantity of journals has raised the issue of not just quality of publications, but rather their 'utility', which promoted the use of a journal Impact Factor (IF; real, unofficial and published). Although some may argue objectivity of IF and may suggest other similar or 'advanced' tools, in our times, IF allows to distinguish top rank oldest journals such as *The New England Journal of Medicine*, *The Lancet*, *Science* from bottom level journals, which sooner or later will either disappear or, having an example of top rank journals, grow closer to them.

Over the past decade, it has become obvious that survival of biomedical and especially national or regional journals is subjected to its abstracting and indexing in the leading catalogues and indexing systems. To reach this goal, it is not enough to have high quality and timely publications. One would think that publication of few issues with few high quality papers in each would be enough. More important is to increase the rate of high quality publications and to expand geography of publications. Globalisation of science communication, which is a product of globalisation of world economy and, obviously, its most positive effect, requires more willingness of integration from local, regional journals and more efforts from leading journals to invite submissions from all round the world. Therefore, survival of both 'high' and 'low' rank journals is linked to

internationalization (globalisation) and the latter should be largely considered as a decisive factor for indexing in leading catalogues and systems. One would argue that standards of research and medical publications are not equal in different countries and only scientists from developed countries can produce high quality papers. This is quite disputable argument. Major criterion of the dispute, in this regard, should be the system of science education, which is more or less universal throughout the world. It's hardly possible to expect well-thought, interesting and potentially usable (citable) paper from junior doctor from any developed country, lacking in educational background in philosophy, sociology, biostatistics and other disciplines of life-long continuous medical education. From the other hand, academics from so called low resource countries often generate ideas, hypotheses and present papers, which serve as a premise for more sophisticated research in the developed world. Brain drain and deep-rooted tendency to execute research and produce papers by emigrants from developing countries under the guidance of Western supervisors is often blamed for the lack of quality production from countries of African continent, Southern America, Iran and some other Asian countries. However, this phenomenon comes to prove that low resource countries have great educational potential and serve as a supplier of fertile scientific medium. Therefore, more efforts are needed to attract more scientists from low resource countries to stay in their home countries and from there contribute to world research. Journalology should pay more attention to stimulating journals to extend their geography by attracting more knowledgeable scientists from developing countries not just to submit own papers, but also to contribute as reviewers and editors.

Given the above-mentioned, it is our great honour that *Archives of Medical Science*, launched just few years ago, has passed a long way in expanding its scope and attracting medical writers from around the globe. Balanced approach has practised to give an equal chance to scientists from Western world and 'low resource' countries to publish their ideas and scientific achievements, which have been stored in a number of leading abstracting and indexing systems. Acknowledgement to reviewers published in this issue of the journal discovers expanded geography of scientists who spent their much valuable time on betterment of submissions.

This year *Archives of Medical Science* marks publication of its 5th volume. The team work of numerous editors and reviewers has allowed to reach this achievement, which oblige us to evaluate what was done, elucidate strong and weak sides of the journal and to outline future goals. We do hope that this year will be crucial for the further development of the journal, as AMS is going to be indexed in Medline/Pubmed and the first official impact factor should be given in June 2009 (as IF2008). To further strengthen positions of our journal and to translate its impact into advances in basic and clinical research worldwide, we count on continuous efforts of our contributors (readers, authors, reviewers, editors and publishers) and encourage them to use tribune of *Archives of Medical Science* for more active communication with global medical community.