

## **Medicine as a paradigm shift**

**Oana Săndulescu\*, Mihai Săndulescu**

Carol Davila University of Medicine and Pharmacy, Bucharest, Romania

\* [oana.sandulescu@umfcd.ro](mailto:oana.sandulescu@umfcd.ro)

### **Abstract**

Research in itself is not only a paradigm, but a paradigm shift at the same time, as each new piece of information has the potential of completely reshaping the way we see the world. But this can only happen by gaining access to multiple information sources and listening to different opinions, from scientists with different backgrounds, who share the same work and research ethics. And when it comes to medical publications, this can only be achieved through peer-review.

### **Medicine as a paradigm shift**

Research in itself is not only a paradigm, defined as a set of concepts, rules or standards, but a paradigm shift at the same time, as each new piece of information may have the potential of completely reshaping the way we look at the world around us.

In medicine, there can never be enough research. And there can never be enough information. As a discipline that strives for perfection, medicine also strives for knowledge, the kind of unbiased knowledge that can only be obtained by accessing multiple sources and listening to different opinions, from scientists with different backgrounds but sharing the same concepts in terms of work ethics and research ethics.

As Thomas Kuhn described it, science is not cumulative, but revolutionary in nature. The same can be said about medical research, our paradigm has shifted multiple times over our known and documented history, as new information has arisen, giving us a fresh view and a completely new understanding of disease pathophysiology. However, the opposite may also be true as scientific realism and Kuhn's hypothesis might not in fact be mutually exclusive: research also has a cumulative side to it, as after each of Kuhn's 'revolutions', we embark on a new knowledge quest,

a new exponential learning curve begins, and new information is now gradually accumulated, until it again shall peak and revolutionize our understanding of the world in general and of medicine in particular.

To ensure that research is in itself useful and communicated to the world, we must ensure that the product of research, namely the scientific publication, is made available in its best possible form. And this is where peer-review comes in. As no journal can have the sufficient manpower and the necessary cumulated expertise to singlehandedly give a fair evaluation of each and every one of the articles they receive, we as editors contact our peers, reaching out to the most competent specialists, recognized experts in the specific topic of each individual article. The peer-reviewers' expertise aids immensely in evaluating the correctness and completeness of the information presented in each article, in improving the process of reporting research methods and results, and in carefully contributing to the best possible presentation form for the articles selected for publication.

During the past five years, within our working group, we have started two new medical journals, and we have benefited from the expertise of over 250 peer-reviewers from over 70 countries in selecting the best articles for publication. We started back in 2011 with the Infectious Diseases publication 'Germs', which was among the first Romanian journals to use reputed international manuscript management systems such as ScholarOne Manuscripts, and which has been accepted for inclusion in international databases or repositories such as Scopus and PubMed Central, shortly after completing its second year of publication.

'Journal of Contemporary Clinical Practice' soon followed in the steps of its predecessor, maintaining the same set of high publication standards and the open access policy, while adopting a wider scope, to respond to the request for knowledge from a larger pool of clinicians, coming from different backgrounds and different specialties, all united through their vivid interest in clinical topics, and in research that is translated into practice and moved from the workbench to the patient's bedside.

We are now 5 years down the road and we continue to offer the same excellence in publication services, and we have collaborated with authors from more than 20 countries for the successful publication of their meaningful research.

As we are now halfway through a new learning curve, as Thomas Kuhn would say, we can probably expect a brand new technological and medical paradigm shift during the next five to ten years, or multiples thereof, as new insight builds up and we are getting ready to open up to a whole new era of medical research, medical peer-review and medical publication.