

Essays

A distinct gateway to science in the Balkans: *Balkan Medical Journal*

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Abstract Trakya University has published the *Balkan Medical Journal* for more than three decades. During the last ten years, Turkey's economic boom and an increased number of universities and research centres have positively influenced academic performance, and scientific journals have expanded in Turkey. *Balkan Medical Journal* with qualities such as an extensive editorial board and international experience, being indexed in important databases, oriented to the Balkan region, and published in English, has started to show itself in the world literature. In this paper, we summarize the *Balkan Medical Journal's* history and development.

Keywords Balkan Medical Journal, history, medical publishing

The Balkans is the name given to the geographical region, a peninsula, stretching from South-Eastern Europe to the Black Sea area via the Adriatic Sea. The name comes from the mountain range in the region. The word itself means challenging, steep and forested mountain. The region is home to approximately 50 million people (Figure 1).¹ Sharing a part of the territory and as the nearest neighbour as well as having historical connections, Turkey is an indispensable element of Balkan history.



Figure 1. Balkans: The south-eastern part of Europe below the line between Trieste and Odessa¹

The residents of the region have always struggled with wars and challenges, however, they are friendly, hospitable and tolerant people. Ongoing conflict that has lasted many centuries has affected the generation of scientific knowledge in the region. Researchers are forced to work with limited resources, struggling to make the best of what little opportunities they attain. Aiming to propagate medical

knowledge from the Balkans to the whole world, the primary objective of the *Balkan Medical Journal* is to provide clinically relevant knowledge in an ethical way. Moreover, it may reflect the light of the people in this region, having a well-founded cultural heritage, and to help strengthen this light.

The *Balkan Medical Journal* is the official journal of Trakya University, School of Medicine, Turkey, which has funded it since the beginning. It was first published in 1979, when its name reflected its patron, “Trakya Üniversitesi Tıp Fakültesi Dergisi (*The Journal of Trakya University School of Medicine*)”. It was published in Turkish for three decades and, unfortunately, remained local. The journal itself expanded and developed in parallel with Turkey's growth and the increase in submissions by Turkish academics. That expansion can be explained in two ways. First, by the acceptance of the journal to the Web of Science in 2007, when the number of submitted manuscripts tripled. The number of published articles increased from 28 in 2006 to 77 in 2014. Second, by changes to our editorial policy in 2012, which led to the reconstruction of the editorial board to include distinguished colleagues from different medical specialisations and from different countries of the Balkans. In the past, there were no academics from any Balkan country other than Turkey. However, since 2012, 14 professors from different Balkan countries have joined the editorial board. The journal's goal evolved from local to global. For this reason, we decided to change the journal's name to the *Balkan Medical Journal* in 2011.² With this short and simple name, the journal became easily recognisable for researchers all over the world, while the word “Balkan” shows the orientation and target of the journal. The journal started publishing in English immediately after changing its name. Consequently, we began to receive submissions from many countries; however our primary aim is to publish high-quality scientific papers related to all fields of medicine from the Balkan countries. Furthermore, the journal started using online submission systems in 2005 and we are now using researcher-friendly ScholarOne Manuscripts™ online submission and peer review system.³

The *Balkan Medical Journal* is a general medicine journal and covers all areas relating to medicine, clinical or experimental. It now receives more than 1250 submissions per year. As a consequence, we have to evaluate more than 100 new papers monthly covering a wide range of topics,

which is a significant challenge and requires a broadly based editorial board and panel of reviewers. Our editorial board is adequate for this task; although they work hard, and all of them on a voluntary basis. We have a journal office in the Balkan Campus of the Trakya University. Members of the editorial board participate in interactive weekly journal meetings or send their opinions via email to the journal secretariat in order to evaluate the received manuscripts and exchange ideas to further their experiences.



Figure 2. Cover of the Balkan Medical Journal

In line with its current vision and mission, the editorial board of *Balkan Medical Journal* comprises productive and open-minded researchers from the Balkans. Thanks to the effective communications established by these outstanding individuals, through contacting prospective authors and peer reviewers in person or by written correspondence, we strive to appraise the valuable scientific work of the researchers in the region. It is our aim to furnish the pages of this journal with scientific work contributing to science and unlocking new horizons in the medical field, without compromising ethical values. The editorial staff, referees, authors, administrators and publishers who work overtime to achieve this objective, have been struggling to climb up the challenging steps of the publication world for more than 30 years. Today, we have achieved a journal that is included in significant important indices, respects ethical values, and presents quality articles. During this long and arduous process, the greatest effort was, undoubtedly, made by the researchers of the Balkan Region, who have sought to produce scientific knowledge in challenging conditions. After the renewal of the editorial board in 2012, the journal began to engage in intensive training and communication activities in order to ensure that our scientists produce more efficient papers offering more to science and inspiring our readers.

The number of articles originating from Turkey has increased significantly in this millennium. In 2000, the ISI-Web of Science index included 6985 articles, a number that soared to 31457 in 2012.⁴ In parallel with Turkey's economic

growth in the last 10 years, numerous developments in the academic field have positively affected the *Balkan Medical Journal*, which have been supported by Turkish academics and financed by the Turkish academic system. A most important advance has been the training of editors, referees and authors. For this purpose, numerous workshops, seminars, summer schools and training activities have been organized by the editorial board.^{5,6}

In 2014, four promising young researchers were invited to the journal meetings as an investment in the future. They observed experienced editors assessing and managing an essay, thus improving their knowledge of the publishing process and preparing themselves as future editors. Furthermore, our editors and publishers convene annually to exchange information and opinions, expanding our vision. As a special activity in 2015, two workshops have been planned for the training of editors and referees. Prominent persons from the Balkans and Europe have been invited to these activities.

The journal's biggest problem is finding reviewers for the peer review process. For most papers, we aim to assign at least one international reviewer. However, finding the most appropriate reviewer, inviting him/her and assigning the task takes time. Inviting more than seven or eight reviewers to obtain one review of a single paper is not rare nowadays.

With the growing number of publications from Turkey in journals published in English, and the requirement for new academics to publish articles in journals indexed in Web of Science, many authors have had language problems. Authorship and citation training is not adequate, particularly for new researchers. These circumstances have led to an increase in publication misconduct. Baždarić et al⁷ assessed plagiarism in submissions to the *Croatian Medical Journal* and found that most of the plagiarized submissions were from China, Croatia and Turkey.⁷ The lack of consensus in the definition of plagiarism or universal guidance means that authors from developing countries and for whom English is not their mother tongue might be at high risk of plagiarism through the use of material that does not contain data or intellectual property, as reported by Miguel Roig.⁸ Several measures have been taken by the scientific community in Turkey to mitigate publication misconduct, although the problem remains. The *Balkan Medical Journal* aims to be an exemplary journal that is sensitive to publication ethics, not only for Turkey but also for the Balkan countries. For that reason, in addition to our educational activities⁶, we have joined several important organizations such as COPE, WAME, EASE, ICMJE, CSE and are following their instructions.⁹

One of the most significant problems in the past has been the duplication of previously published papers.¹⁰ We have managed such issues by acting objectively and defending ethics in science, in line with the COPE guidelines. We have been able to prevent incidents by warning authors prior to printing, and a message of sensitivity was sent to all stakeholders when retracting an essay. We always strive to exercise care with regard to the matter of plagiarism. The manuscripts sent to the journal are filtered at least twice using commercial software and the resulting data are sent to the authors.

Another important challenge was receiving fewer essays from Balkan authors than expected and convincing the referees in the region to evaluate the articles. We strive to overcome such challenges through training and promotional activities in the Balkans. With the development of economic and social welfare in the coming years, we believe the potential in the Balkans will continue to grow and time will be to our advantage.

Conclusion

The most fundamental element of the vision and tradition of the *Balkan Medical Journal* is to cope with the challenges within ethical limits. For this purpose, we continue to observe and implement the current publication principles in compliance with ethical rules. Our objective is to become a global journal based in the Balkans. We shall be empowered by the people of the Balkans who are familiar with achievement in challenging life conditions.

References

- 1 Image from Google earth provided by US Dept. of State Geographer, 2014 Google, © 2014 Basarsoft, Image Landsat.
- 2 Öztürk L. The journal “*Trakya Üniversitesi Tıp Fakültesi Dergisi*” changes its title to “*Balkan Medical Journal*”. *Balkan Medical Journal* 2011;28(1).
- 3 Uzun C. Recent changes to the *Balkan Medical Journal*. *Balkan Medical Journal* 2013;30(2):133. DOI: 10.5152/balkanmedj.2013.008
- 4 Total number of ISI – Web of Science articles with an address from Turkey. TÜBİTAK ULAKBİM CABİM Cahit Arf knowledge center (updated October 2013). https://www.ulakbim.gov.tr/cabim/yayin/bilimsel_yayin/top_yayin_sayisi.uhtml
- 5 Koca C, İnan M, Uzun C. Enez experience on the education of biomedical project design and authorship; International Scientific Summer School, 2014. *Balkan Medical Journal* 2014;31(3):194-5. DOI: 10.5152/balkanmedj.2014.1404
- 6 İnan M. Educational perspective of the *Balkan Medical Journal*. *Balkan Medical Journal* 2013;30(3):261-2. DOI: 10.5152/balkanmedj.2013.010
- 7 Baždarić K, Bilić-Zulle L, Brumini G, Petrovečki M. Prevalence of plagiarism in recent submissions to the *Croatian Medical Journal*. *Science and Engineering Ethics* 2012;18(2):223-39. DOI: 10.1007/s11948-011-9347-2
- 8 Roig M. Journal editorials on plagiarism: what is the message? *European Science Editing* 2014;40(3):58-9.
- 9 Uzun C. *Balkan Medical Journal* is now a member of Committee on Publication Ethics. *Balkan Medical Journal* 2013;30(4):349. DOI: 10.5152/balkanmedj.2013.012
- 10 Uzun C. Multiple submission, duplicate submission and duplicate publication. *Balkan Medical Journal* 2013;30(1):1-2. DOI: 10.5152/balkanmedj.2013.001

Statistics and research integrity

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How does statistics fit into questions of research integrity? Traditionally we think of statistics as a check on rash hypothesizing. Or, to put it another way, the p -value is the strength of information against a null hypothesis. And, from this perspective, the role of statistics in research integrity is to protect the integrity of the p -value, by always supplying a standard error for every estimate and a p -value for every positive statement, reporting all analyses that are done, and correcting for sequential testing and multiple comparisons as necessary.

In recent years, however, it has become clear that this classical approach to statistical significance is not enough and that, instead, we must move from a passive to an active approach to ensure research integrity.

The problem is that the conventional system of science publishing is breaking down (or perhaps it was always broken and we did not realize it). I'm not speaking so much of outright fraud or junk journals that will publish anything if you give them the cash, but rather of mainstream researchers and journals, even top outlets such as *Science*, *Nature*, *Psychological Science*, or the *Proceedings of the National Academy of Sciences*.

The problem comes in two steps, which we can call the *statistical significance filter* and the *publication filter*. The statistical significance filter corresponds to the assumption that when an estimate reaches the “ $p < 0.05$ ” level, that it is treated as true. Or, to take a sampling perspective, that if a comparison in the observed data reaches the $p < 0.05$ level, that it corresponds to a true pattern in the population. Such an inference is often clearly inappropriate: nearly every data analysis ever published is performed contingent on the data (what is sometimes called “ p -hacking” and sometimes called “the garden of forking paths”¹) and so, even if there is nothing going on, a researcher can have a much greater than 5% chance of getting a “statistically significant, $p < 0.05$ ” result.

In short, statistical significance is not hard to come by, which is one reason why our science communication channels are polluted by published and publicised results such as a claim that female-named hurricanes are more deadly than male-named hurricanes (*Proceedings of the National Academy of Sciences*) or that women in different phases of their monthly cycle were 20 percentage points more likely to vote for Barack Obama for President (this one appeared in *Psychological Science*), not to mention the cancer cures and food scares that seem to appear in the newspaper on a regular basis, invariably backed up by publications in top journals.

The statistical significance filter is not just about the ease of obtaining statistical significance. It's also a bias: if an estimate is statistically significant and is measured in a