

Medical Editors (WAME) and the European Association of Science Editors (EASE). Networking among local scientific editors is gradually increasing but there is still a lack of scientific and academic collaboration with colleagues from the mainstream science countries. More educational programs are needed for both novice and senior science editors.

I have been editing three indexed journals out of the 14 medical journals published in my country⁵, namely *Medicinski arhiv/Medical Archives* (founded in 1947), *Materia Socio Medica* (founded in 1978) and *Acta Informatica Medica* (founded in 1993). Based on my experience, an article quality evaluation scale was developed and this template is now available on the website of AvicenaPublisher. Reviewers of these three journals are asked to assess submissions using the scale which includes the following five components:

1. Scientific merit of a submission
2. International importance and potential impact
3. Originality of methodology and results
4. Technical quality
5. Quality of language

A major achievement was the adoption of an electronic editorial management system, which has been used to coordinate the submission, peer review and editing of these three journals. However, some other local journals still do not use such a system, putting the journal production at a disadvantage.

Unfortunately, most authors do not follow the instructions for authors and available guidelines, such as the recently published EASE guidelines for authors and translators⁶. As a result, nearly 40% of the submissions are rejected. The remaining 60% of the submissions are accepted. A large proportion of these (40%) undergo extensive technical and linguistic editing by the editor and a few of his associates.

I am confident that most of the problems mentioned can be overcome by devoted editorial work. Here I would like to remind the readers that we did not give up editing in Sarajevo even during the 1479 days of the siege in the 1990s. At that time, we were working in darkness, without electricity, water, gas or a food supply. Printing materials were scarce and expensive (A4 size paper package of 500 sheets was 25 Euros) but we managed to survive, to continue publishing *Medical Archives*, and even to launch *Acta Informatica Medica*, known as “the Sarajevo war miracles”. But more about that on some other occasion...

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Scientific medical journals in Turkey: current state and goals

Sezer Uysal

Department of Biochemistry, Medical Faculty, Dokuz Eylul University, Inciralti, Izmir, Turkey. sezer.uysal@deu.edu.tr

Canan Coker

Department of Biochemistry, Medical Faculty, Dokuz Eylul University, Izmir, Turkey

Abstract This article evaluates Turkish indexed journals and their impact factors, based on data from local and international databases. Fifty five medical journals are now indexed in Science Citation Index Expanded, with the highest 2-year Journal Impact Factor being 0.873. The medical journals with high impact factors are those published in English. Though the number of articles is increasing, the impact factors for most Turkish medical journals is still low, presumably mainly due to the language of publication. Increasing the number of articles published both in Turkish and English along with training of science editors and authors, and wider indexing of journals in international databases may improve the quality of Turkish journals.

Keywords Periodicals as topic; impact factors; biomedical journals; Turkey.

Proper medical writing is encouraged by academic societies in Turkey. As a result, the number of articles and scholarly journals in Turkey is increasing rapidly, e.g. from 500 articles in 2000 to nearly 30,000 in 2010.¹ Despite this impressive rise in productivity, Turkey's share of global research output is just 1.9%. The relative citation impact, compared to the global value, is 0.5, and there are only a few highly cited articles (0.37% according to output in all subject categories).

Approximately 300 medical scientific journals are currently published in Turkey, most belonging to universities, training hospitals and professional societies. A variety of national indexing databases have been launched to improve the visibility of local journals and evaluate their scientific impact. The Turkish Medical Index affiliated to the Turkish Academic Network and Information Center (ULAKBIM) and the Turkey Citation Index provide the most detailed information. ULAKBIM was launched in 1996 as an institute affiliated to the Scientific and Technological Research Council of Turkey (TUBITAK).² TUBITAK publishes 12 peer-reviewed scientific journals indexed by various international databases.

ULAKBIM Cahit Arf Knowledge Centre provides information on local scientists and builds databases of Turkish periodicals. It also offers counselling services to Web of Science candidate journals. Web of Science indexes journals covered by the ULAKBIM database, generally peer-reviewed, regularly published journals, adhering to the high standards of scholarly publications.

Importantly, 108 local medical scientific journals are now indexed by Turkish Medical Index. *Turkiye Klinikleri (Turkish Clinics)* is a set of journals that has been published by Turkish medical doctors since 1980.³ Currently, it includes more

than 30 medical journals in various fields, special issues and translated journals. Turkey Citation Index is a large database built on *Türkiye Klinikleri* periodicals, designed to improve the quality and visibility of local publications. Since 2008, the archived issues of these periodicals feature 146 indexed medical journals.

Indicators such as “national impact factor” and “contribution value” are currently available. National impact factor reflects the impact factor in indexed journals. Contribution value evaluates citations of an indexed article to other indexed articles. To join the Turkey Citation Index, journals must be published regularly, i.e. at least twice a year. In addition, keywords and references must be formatted according to the standard regulations. Turkey Citation Index also conducts studies on standardisation; e.g., Turkey Scientific Terms aims to develop a nomenclature of keywords based on the Medical Subject Headings vocabulary of the US National Library of Medicine. Medical journals indexed by Turkey Citation Index each published, on average, 44 articles (range 5-350) in 2010. Nearly half of these were research articles (range 15-100%).

Hacettepe Bulletin of Social Sciences and Humanity was the first journal indexed by the Institute for Scientific Information back in 1970,⁴ but it lasted only two years. Twelve years later, the *Turkish Journal of Pediatrics* was accepted for indexing by SCI-E, and remained the only Turkish journal listed in SCI-E until 1994. From 2006 - 2009 the number of local medical journals indexed by this prestigious database rose from 8 to 69.

Currently, 75 Turkish journals are listed in Thomson Scientific databases,⁵ with *Energy Education Science and Technology* having the highest 2-year JIF (9.333). SCI-E lists 56 medical journals, of which 34 are published in English. Journal Citation Report (JCR®) 2010 listed 49 Turkish journals, of which 23 are medical journals, with *Experimental and Clinical Transplantation* having the highest 2-year JIF (0.873).

The SCOPUS database includes 27 Turkish publishers.⁶ The number of Turkish medical journals in SCImago Journal and Country Rank (SJR) database is 74⁷: the leading ones are shown in the Table. The majority of these journals are published in English.

English is the predominant language in scientific publishing.⁸ Current trends of publishing high-quality and well-edited articles in international journals may adversely affect the prestige and productivity of local journals. At the same time, publishing local journals in Turkish may decrease the chances of their being indexed in international databases and attracting citations. In order to increase a journal's quality, it is recommended to publish in English or in Turkish and English simultaneously. In any case, editors should encourage more submission of articles in either language to local journals.

Publication of articles in international journals is the prerequisite for academic promotion in Turkey unfortunately, it has a devastating impact on local publications. It is hoped that national indexing services will increase the visibility and prestige of Turkish journals. More extensive journal indexing in both national and international databases should be encouraged.

An important factor influencing the rank and quality of local journals is the credentials of the Editors, who are mainly from universities. Strengthening ties with international publishers and professional associations, as well as regularly organising training for editors, may become a powerful tool for improving a journal's quality.

To increase the number and quality of research articles, local learned societies and science editors should cooperate and adopt international standards of scientific writing. More incentives should be offered to Turkish researchers to publish their best articles in local journals. Editors and publishers should also arrange more training. Editors should improve the design and readability of journals. English language editing should be done by native English-speaking experts. Internationalisation of authors, reviewers and editors pool should also be encouraged.⁹ Finally, the criteria for academic promotion need to be revised to credit publications in local journals.

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Impact factors of the Web of Science-indexed Turkish medical journals

Journal title	2-year JIF	SJR	h-index	Language
Experimental and Clinical Transplantation	0.832	0.099	9	English
Diagnostic and Interventional Radiology	0.712	0.092	14	English
Journal of Sports Science and Medicine	0.676	0.058	16	English
Turkish Journal of Gastroenterology	0.642	0.070	12	English
Turkish Neurosurgery	0.473	0.051	5	English
Anadolu Kardiyoloji Dergisi	0.407	0.042	11	Turkish
Eklemler Hastalıkları ve Cerrahisi	0.404	0.028	3	Turkish
Mikrobiyoloji Bulteni	0.354	0.046	8	Turkish
Turkish Journal of Pediatrics	0.340	0.051	19	English
Anadolu Psikiyatri Dergisi	0.310	0.028	4	Turkish

SJR: SCImago Journal Rank. SJR and h-index values obtained from the SCImago Journal and Country Rank database