Scientific Publications on Medical Ethics in Thomson Reuters Database, 1990-2010

Dear Editor,

Medical ethics is an interdisciplinary concept, which deals with ethical issues in medical sciences. Medical ethics can be defined as "Respecting principles and values in medical decisions concerning public health".¹ Dramatic changes have been made in medical ethics after development in medicine, technology, and ethical issues. Currently, the evaluation of science production is very important because it can create a scientific competition in different fields at the international level. Scientometrics can present a clear image of growth and development in different sciences. Continuous evaluation of science production in medical ethics and utilizing the results, would ultimately lead to its improvement. Many studies have shown that despite the importance of medical ethics, the results obtained through scientometric studies have not been applied in this field.²⁻⁵ Therefore, the main objective of the present study was to evaluate the status of science production in the field of medical ethics.

Thomson Reuters database was searched to find any scientific product related to medical ethics published during 1990-2010. Various document types such as Articles, Editorials, Book Reviews, Proceeding papers, and Review Articles in which the subject of "medical ethics" was reflected in the title, abstract, or keywords were selected. The data were analyzed using HistCite software, version 12.03.17 (developed by Eugene Garfield at Thomson Reuters Institute, USA).

The most (6.95%) and the least (0.86%) number of articles in medical ethics was published in 2009 and 1992, respectively. The average growth rate of publications during 1990-2010 was 65.98%. Total Local Citation Score (TLCS) and Total Global Citation Score (TGCS) indicated that most of the documents were related to fields other than medical ethics. This means that journals related to medical ethics had fewer numbers of articles on medical ethics in comparison with other journals. McCullough was the top producer who had written 31 (1.02%) articles in medical ethics. Totally, researchers from 82 countries had published articles related to medical ethics. The United States, England, and Germany were ranked first to third. The United States and England had produced 51.3% of all publications. An evaluation of the publications showed that they were presented in 14 different types. Most of the publications were produced in Article format with high TGCS and TLCS rates. The Editorials and Book Reviews were ranked second and third. The publications were written in 15 languages. English, German, and French were ranked first to third, respectively. A comparison between TLCS and TGCS revealed that most of the citations were related to other fields. A few citations were devoted to medical ethics which was not unexpected because of the limited number of documents (3035 documents). The general impact factor illustrated that the articles of this field had a high average citation, which indicated that there was a close relationship between the articles related to this field and the other fields. The most productive authors had a high local impact factor and according to their records, their local impact factor was higher than total local impact factor. All of the documents were published in 901 journals among which "Journal of Medical Ethics" had published 290 articles (9.55%) and it was ranked first. The existence of different journals with different scopes indicates that medical ethics is an interdisciplinary subject and the researchers of other fields are interested in this specialized field.

Articles of this field have an increasing growth rate and the present study indicates greater participation of the science community in medical ethics publishing. However, the number of citations does not have a uniform growth rate. This could be due to the small size of this field and its association with other small fields. The global distribution of the papers and their language variations signify the global concerns for medical ethics. Moreover, linguistic, geographic, and publication type diversity of the published articles indicate a sustainable development in this field.

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