COMMENTARY

How American Is the American Journal of Neuroradiology?

The American Journal of Neuroradiology (AJNR) is the official journal of the American Society of Neuroradiology, which is a professional society of neuroradiologists practicing in the Western Hemisphere. Since the origin of AJNR, the United States has been the primary contributor of articles, but a significant fraction of the articles published in the journal have originated outside the Western Hemisphere. In light of recent global trends that reflect a leveling of the international economic competitive playing field, referred to by Thomas Friedman as “flattening of the world,” we thought that it would be of interest to assess the relative contributions of countries and continents to AJNR. We used PubMed searches to determine the relative contributions of countries and continents, as has previously been described. This method allowed us to evaluate the contributions to AJNR back to 1988, which is the earliest date for which data regarding country of origin are available on PubMed.

Our results show that since 1992, the proportion of articles originating from outside the Americas has been consistently increasing (Fig 1). Such a trend has also been reported for the medical literature as a whole. As a result of this trend, less than half of the articles published in AJNR after 2003 originate from the Western Hemisphere. Thus, less than half of the articles could be considered “American.”

Although its relative contribution has decreased significantly, the United States is still by far the greatest contributor to AJNR, accounting for 44.5% of the articles in 2006. It is also worth noting that the United States generated more than 90% of the contributions from the Western Hemisphere. In 2006, Canada contributed 3.3% of the articles, South America contributed 0.4%, and Central America contributed 0%.

Publications in the medical literature tend to come only from developed nations with a high level of medical care, including resources for research and teaching. This trend is probably even more dramatic in a technology-dependent field such as radiology. Most contributions to AJNR come from only a few nations. From Europe, the main contributors of articles to AJNR are Germany (6.8% of articles in 2006), the Netherlands (4.4%), France (3.5%), and the United Kingdom (2.6%). From Asia, the main contributors are Japan (8.1%), Korea (3.5%), and Turkey (3.3%).

The relative decline of the contributions from the United States is likely related to medical economic factors. American academic physicians are under increasing economic pressure to focus on clinical affairs at the expense of research and teaching. While American academic physicians are finding it more difficult to direct attention to research, physicians in other nations have been able to increase their publication productivity. There are probably many reasons for the increased publication productivity in other nations. Because English has become the world’s primary language of commerce, many of the newest generation of physicians throughout the world have a command of the English language, making it easier for them to publish their work in English-language journals. The internet has broken down many barriers that previously limited access to information and communication options for physicians in many parts of the world. Academic physicians in the United States are under less pressure from their chairmen to publish, whereas those in other nations are under requirements to publish articles to qualify for promotion. The relative contributions of these and other factors are difficult to ascertain.

Nations with expanding economies and rising standards of living will undoubtedly contribute more to the medical literature in the future. Overall, the People’s Republic of China, India, and the nations of Eastern Europe have contributed very few articles to AJNR since 1988. However, these nations are in the midst of economic revolutions, and contributions of these nations are increasing. From 1988 to 1998, no Chinese articles, 1 Eastern European article, and 10 Indian articles were published, whereas from 1999 to 2006, 19 Chinese articles, 9 Eastern European articles, and 30 Indian articles were published. As their economies expand and they become more integrated with the rest of the world through globalization, it is likely that China, India, and Eastern Europe will continue to contribute increasing numbers of articles to AJNR. This trend may further decrease the fraction of AJNR articles that are of “American” origin.

The percentage of contributions to AJNR from America is steadily decreasing as the research productivity of Asian and European nations increases. American research productivity is likely declining under economic pressures related to the clinical practice of medicine, which gives other nations a chance to catch up with regard to research productivity. As a result of these trends, more than half of the articles published annually in AJNR now originate from outside of America, making the journal remarkably less “American” than its name implies.

References


Harry J. Cloft
Kenneth J. Cloft