Overview of the publications of rheumatologists after the millennium

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Abstract

Objective: Scientific progress can be directly measured by the growth of the scientific archive. To our knowledge, there has never been a systematic evaluation of the number and properties of the publications of rheumatologists. In this paper, we aimed to evaluate the properties of these papers.

Material and Methods: All papers that were published between 2000 and 2011 by at least one rheumatologist author and that were indexed in Science Citation Index Expanded were evaluated. For this purpose, we used the ISI web of knowledge web of science software.

Results: Original articles were the most common document type. Most of the papers were published in rheumatology journals. From the point of the number of published papers, the top 3 countries were United States, England, and Germany; the top 3 journals were Annals of Rheumatic Diseases, Rheumatology, and Arthritis and Rheumatism, and the top 3 institutes are Harvard University, Leiden University, and The Imperial College of Science, Technology. Moreover, the publications of rheumatologists increased annually between 2000 and 2011.

Conclusion: This paper is an overview of the publications of rheumatologists between 2000 and 2011. The results indicate an increasing trend of scientific productivity for rheumatologists. The outcomes about countries, institutions, and journals are in concordance with the general medical publication trends. More than half of the publications written by rheumatologist were published by rheumatology journals. We consider only quantitative data about publications; new research is required to qualitatively evaluate the data.

Keywords: Rheumatology, rheumatologist, publication, rheumatic diseases

Introduction

Scientific progress can be directly measured by the growth of the scientific archive, and science policy can be based upon the bibliometric analyses of the number of authors, citations, or research sites that clusters of papers have in common (1). To our knowledge, there has never been a systematic evaluation of the number, coverage, and source of the publications of rheumatologists.

In this paper, we aimed to provide an overall glance of the publications of rheumatologists after the millennium, especially with an emphasis on journal categories, countries, institutes, and publication year.

Material and Methods

All papers that were published in the journals that are indexed in Science Citation Index Expanded between 2000 and 2011 and that have at least one of the authors as a rheumatologist were evaluated. For this purpose, we used ISI web of knowledge web of science software to obtain the number and properties of the papers published by rheumatologists. For determining these publications, we used the search the term ‘rheum’ in the affiliation field. Also, the publication date was selected between 2000 and 2011. Moreover, Science Citation Index Expanded was selected in the citation databases field. Following that, all the retrieved papers from this search were individually evaluated according to the author affiliations, publication date, origin country, journal type, and document type. Also, improper papers with respect to our inclusion criteria were excluded after further evaluation. Statistical Package for Social Sciences (SPSS) version 17.0 (SPSS Inc., Chicago, IL, USA) was used for statistics. Only percentages were calculated. This study was approved by the regional research ethics committee.

Results

A total of 69551 papers fulfilled the inclusion criteria for further evaluation. Original articles were the most frequent document type comprising 59.0% of all papers. Other document types following original articles were meeting abstracts with 23.4% and reviews with 7.7%. Moreover, more than half of the papers (51.9% of all papers) were published in rheumatology journals. The top 10 journal categories in which these pa-
Research that can change the practice of a disease is usually published as original articles (2), and according to a study, 63% of the studies initially presented as meeting abstracts are published as full original papers (3). Herein, these two types of documents constitute 82.4% of all papers. Others are reviews, letters, or editorial materials. Therefore, most of the papers that were published by rheumatologists have the potential to bring innovation to the field of rheumatology. Furthermore, the high number of full original papers and meetings abstracts also indicates the increasing number of new fields for study.

More than half of the reviewed papers were published in rheumatology journals. It is understandable that rheumatologists publish their papers primarily in rheumatology journals. Moreover, the other two most frequent journal types are immunology and general internal medicine, which may be regarded as fields relevant to rheumatology. The remaining one third of the papers was published in other journal types, which may indicate the collaboration of rheumatologists with colleagues from other branches of medicine. This may also indicate the rheumatologist published scientific documents in issues of other medical branches beside rheumatology because of rheumatology's common relationship with other medical branches.

Like general medical publications, the top 3 countries where rheumatologists publish the highest number of papers are USA, England, and Germany. Between 2000 and 2010, these three countries were also in the top 3 for publishing the highest number of medical papers (4). Therefore, the data about the publications of rheumatologists are compatible with data for general medical publications.

Annals of Rheumatic Diseases, Rheumatology and Arthritis, and Rheumatism are the top 3 journals that publish rheumatology-related papers. All these 3 journals usually publish scientific documents related rheumatology.

Rheumatologists in Harvard University, Leiden University, and The Imperial College of Science, Technology and Medicine publish the highest number of papers compared with the number of papers by rheumatologists from other institutions.
other institutes. Moreover, 33 institutes from USA are in the top 100 list of the highest number of papers from rheumatologists. Similarly, 13 institutes from Germany, 11 from England, 8 from Holland, and 5 from Sweden, Italy, and Japan each are also in the top 100. The distribution of institutes is similar to the top 10 countries.

In this paper, we only considered the number and properties of publications. The quality of the papers was out of the scope of this study. The quality of papers becomes an important and attractive topic while evaluating the characteristics of publications (5-8). Further evaluations are required for assessing the quality of papers of rheumatologists. Likewise, the topics of publications may also be evaluated to understand the trending topics in rheumatology.

This paper is an overview of the publications of rheumatologists between 2000 and 2011 to assess the scientific productivity of the rheumatology society. In an effort to elucidate the properties of published papers, emphasis was put on journal categories, origin countries, institutes, and publication year. Consequently, these results only present the quantitative aspects and not the qualitative data about publications. New research is required to evaluate the qualitative status in order to further understand and augment the scientific contribution of the rheumatology society.

**Ethics Committee Approval:** Ethics Committee approval was received for this study from regional research ethics committee.

**Informed Consent:** N/A.

**Peer-review:** Externally peer-reviewed.

**Conflict of Interest:** No conflict of interest was declared by the author.

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