



ORIGINAL ARTICLE / *Health policy and practice*

Women authorship in radiology research in France: An analysis of the last three decades

N. Pyatigorskaya^{a,*}, L. Di Marco^b

^a *Neuroradiology Department, Hôpital Salpêtrière, AP – HP, 47-83, boulevard de l'Hôpital, 75651 Paris, France*

^b *Department of Radiology, Centre Hospitalo-Universitaire, Dijon, France*

KEYWORDS

Medical writing;
Academic;
Scientific publication;
Women authorship

Abstract

Purpose: The aim of this study was to evaluate the evolution of women authorship in France and to analyze the recent trends of the evolution of gender differences in French academic radiology.

Materials and methods: A retrospective bibliometric analysis was performed by searching for articles published in *Diagnostic and Interventional Imaging* (Diagn Interv Imaging) and in *Journal de Radiologie* (J Radiol) in Pubmed over the last three decades. For each of these articles, we determined the gender of the first and last author. The specific radiological field of each article was also determined.

Results: The proportion of women authors has significantly increased from 12% in 1984 to 34% in 2014 ($P < 0.0001$) for the first authors and from 11% (11/96) in 1984 to 20% (38/193) in 2014 for last authors ($P = 0.03$).

Conclusion: Women authorship in *Diagnostic and Interventional Imaging* has increased over the last years together with the proportion of women first authors. However, the fraction of women last authors is still underrepresented. More women need to become leaders in radiological research to contribute to stimulate women authorship.

© 2017 Editions françaises de radiologie. Published by Elsevier Masson SAS. All rights reserved.

* Corresponding author.

E-mail address: nadya.pyatigorskaya@gmail.com (N. Pyatigorskaya).

<http://dx.doi.org/10.1016/j.diii.2017.07.001>

2211-5684/© 2017 Editions françaises de radiologie. Published by Elsevier Masson SAS. All rights reserved.

There has been a constant increase in the number of women in medical professions worldwide over the past 50 years in most countries [1,2]. There was a dramatic increase in the percentage of women in medicine over the last decades in France. The percentage of women in medicine has increased from 24.5% in 1984 to 43.5% in 2014 [3,4]. The percentage of the women in radiology has also increased, but at a slower rate, with the total percentage of women reaching only 31% in 2014 [4].

However, while the overall increase is constant, with 50% of current French radiology residents being women nowadays [4], men and women have different career paths and aspirations [5]. Fewer women work in private radiology practices (27%) and choose academic careers [3,6].

Since publications in peer-reviewed journals are essential to advancement in academic careers, the trends in authorship may indirectly reflect the evolution of the percentage of women in the academic medical careers [7,8]. While the number of women in medicine increases, many medical journals have found that women authorship is less common than men authorship in several medical specialties [9–11]. Recent publications, which have analyzed the evolution of authorship in some of the major American radiology journals, such as *Radiology*, and the *American Journal of Radiology* (AJR), have found a strong increase in women authorship as first authors over the last decades, rising from 20.4% in 1991 to 34.4% in 2013. This trend was similar for most countries submitting to these two journals and namely for France, there was an increase from 21.1% to 36.2% for the same period for female first and corresponding authors [12]. Another study has also shown a significant increase in the percentage of women first authors from 8.33% in 1978 to 32.35% in 2013 and as senior last authors in the team list from 6.75% to 21.90 for the same years in *Radiology*, *AJR* and *Academic Radiology* [13].

Diagnostic and Interventional Imaging (Diagn Interv Imaging) that continued *Journal de Radiologie* (J Radiol)) is the main national radiology journal in France and women authorship in this journal should reflect the contribution of women in academic radiology publications in France.

The aim of the study was to evaluate the evolution of women authorship in France and to analyze the recent trends of the evolution of gender differences in French academic radiology.

Materials and methods

Literature search and data analysis

We have performed a retrospective bibliometric analysis by searching for articles published in *Diagn Interv Imaging* and in *J Radiol* in Pubmed over the last three decades in 1984, 1994, 2004 and 2014. For each of these articles, we determined the gender of the first and last author. We determined the gender by analysis of each author's first name. When the first name was not available or could be attributed to either men or women, we performed a google search and/or consulted the authors' institutions. For articles written by a single author, the author was considered to be the first author. We have also determined the specific radiological field of each article. The radiologic subspecialty field of

each article was assigned to one of the following categories: abdominal, chest, cardiovascular, interventional, musculoskeletal, neuroradiology and head and neck, pediatric, urinary, women (breast and gynecology) and miscellaneous when the article did not correspond to other categories such as whole-body imaging, physics, basic science, contrast media, management or radiation protection.

The number of women and men as first and last authors in this journal was evaluated for each year. The study has adopted a descriptive research approach by means of bibliometric analysis. The primary outcomes were the gender distributions of the first and last authors. We also calculated the proportions of female authors for each journal during each study period by radiologic subspecialty. For the subspecialty analysis, due to a lower number of articles in the years 1984 and 1994, these years were pooled together. In addition, we examined the association between the gender of the first and last authors.

Statistical analysis

All statistical analyses were performed using JMP8 (SAS) software. Categorical variables were expressed as raw numbers and proportion (%). The chi-square test was used to search for significant increase in women first authorship and association between first author gender and last author gender. A P value < 0.05 was considered to be statistically significant.

Results

Overall, 664 articles were retrieved (125 in 1984, 108 in 1994, 224 in 2004 and 207 in 2014). Out of a total of 1251 first and last authors, the gender of 1189 authors was identified (95%) with 624 first authors and 565 last authors. The remaining 62 authors for whom gender was not identified were excluded from the analysis. For the subspecialty analysis, we have pooled together data from 1984 and 1994 due to a lower number of articles as compared to 2004 and 2014. For the articles that have both first and last authors (615), we have analyzed the relation between the first and last author gender to see if women last authors tended to publish with women first authors.

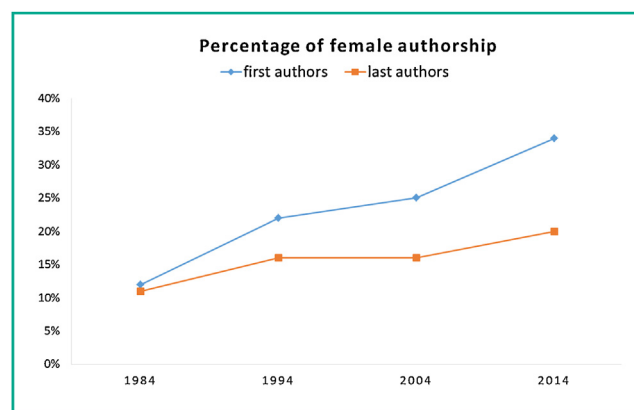


Figure 1. Percentage of female and male authorship from 1984 to 2014 in Diagnostic and Interventional Imaging.

Download English Version:

<https://daneshyari.com/en/article/8606460>

Download Persian Version:

<https://daneshyari.com/article/8606460>

[Daneshyari.com](https://daneshyari.com)