A Comprehensive Analysis of Authorship in Radiology Journals

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Objective:
The purpose of our study was to investigate trend in authorship rates in radiology journals, and whether ICMJE recommendations have had an impact on these trends.

Methods:
A retrospective, bibliometric analysis of 49 clinical radiology journals published from 1946-2013 was conducted. The following data for each article: number of authors, origin of publication, language and publication type, was exported and analyzed.

Results:
216,271 articles from 1946-2013 were included and a linear relationship between time and authorship rate was determined. The rate of authorship in 1946 (1.42 authors/article) increased consistently by 0.07 in authors/article per year ($R^2 = 0.9728$, $P<0.0001$) to 5.79 authors/article in 2013. ICMJE guideline dissemination did not have an impact on the authorship rate. There was considerable variability in mean authors per article and rate of change over time between journals, country of origin, language of publication and article type.

Conclusion:
The overall rate of authorship for 49 radiology journals across 68 years has increased markedly with no demonstrated impact from ICMJE guidelines. A higher rate of authorship was seen in articles from: higher impact journals, European and Asian countries, original research type, and those journals who explicitly endorse the ICMJE guidelines.