

The application of the retraction watch database in eye research-based studies

Dear Editor,

There has been a steady rise in the number of scientific journal article retractions.^[1] Previously, others have tried to understand the retraction of eye research-based studies through statistical analysis of data gathered from Medline and PubMed searches.^[2] We sought to assess why articles are retracted from the eye literature utilizing Retraction Watch, the most comprehensive searchable database of retracted papers.

A retrospective cross-sectional analysis of 121 retractions from 1983 to 2021 spanning various journals utilizing the Retraction Watch database was conducted with further subgroup analysis based on country of origin, subspecialty area, and article type.

A total of 121 papers, predominantly research articles (76%) were evaluated in this study. The majority of studies were basic science laboratory-based (46%) followed by clinical retina and neuro-ophthalmology (15% and 6%, respectively).

The median time from the original date of publication to retraction was 13 months (range: 0–175). Reasons for retraction were broad but the most common reason was “Investigation by Company/Institution/Journal/ORI/Publisher/Third Party” (28.1% of all studies), followed by “Duplication of Article/Image/Text” (24.0%), “Error in Data/Image/Methods/Results/Conclusions” (22.3%), and “Falsification/Fabrication of Data/Image/Results” (17.4%). Most of the included studies were conducted in the following countries: United States (31 studies), India (24), China (22), and South Korea (11).

The number of annual retractions has grown over the past decade with fraudulent behavior accounting for the majority of cases. Our study revealed that although numerous retractions were due to possible misconduct, many ocular article retraction notices did not mention fraud, highlighting that not all forms of retraction are due to scientific misdemeanor. While it is uncertain whether rising retractions correspond with increased falsification of studies or increased policing of falsification, accounting sources of increased retractions is valuable in monitoring trends and noting repeat offenders.^[3] Stronger adherence to both COPE and ICMJE guidelines, editorial oversight, and close, timely policing must be undertaken to preserve scientific integrity and reduce instances of retraction notices in the eye literature.

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Conflicts of interest

There are no conflicts of interest.

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