Redundant publications in scientific ophthalmologic journals: the tip of the iceberg?

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OBJECTIVE: The number of scientific publications is often used to measure scientific achievement. This practice can motivate unethical conduct, such as redundant or duplicate publications, defined as publication of the same scientific contents in more than 1 journal. The aim of this study was to estimate the amount of redundant publications in ophthalmologic journals.

DESIGN: Retrospective analysis of published literature. METHODS: We developed an electronic search engine for redundancies to estimate the amount of duplicate publications in scientific journals. When redundancies reached a given degree (matching score), the articles were screened manually based on authors, titles, and abstracts. We applied this method to the 22,433 articles that were published between 1997 and 2000 in 70 ophthalmologic journals indexed by MEDLINE. MAIN OUTCOME MEASURES: The number of duplicate publications with a matching score of 0.6 or more, the number of involved journals, and the number of authors. RESULTS: Redundancies reached a matching score of 0.6 or more in 13,967 pairs of articles. Out of them, a sample of 2,210 was reviewed manually. We found 60 redundant articles and estimated that 1.39% of the publications were redundant. Thirty-two journals and an estimate of 1,092 authors were involved. In 5% of cases, the scientific conclusions were modified. CONCLUSIONS: Because of the restrictive selection process, the impracticability of detecting all redundant publications, and the estimated amount of duplicates increases with lower matching scores, we regard our estimate to be the tip of the iceberg. Duplicate publications have several negative impacts, but neither peer reviewers nor editors can protect their journal from them completely. Several deterrents for duplicate publications are possible, but as long as publications remain the central requirement for academic advancement, a solution seems unlikely. Nevertheless, it is the responsibility of all those who care about objective research and evidence-based medicine to address this problem—not only in ophthalmology.