

Editorial Expressions of Concern Revisited*

Ivan Oransky¹, Alison Abrisit¹, Alison McCook¹,
Miguel Roig²

¹ Retraction Watch, NYC, USA ² St. John's University, NY, USA

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*Some of the slides in this presentation have been previously disseminated

What factors determine whether an expression of concern should be issued?

- **From ICJME (2014):**

- “When scientific misconduct is alleged, or concerns are otherwise raised about the conduct or integrity of work described in submitted or published papers, the editor should initiate appropriate procedures detailed by such committees such as the Committee on Publication Ethics (COPE) and may choose to publish an expression of concern pending the outcomes of those procedures. If the procedures involve an investigation at the authors’ institution, the editor should seek to discover the outcome of that investigation, notify readers of the outcome if appropriate, and if the investigation proves scientific misconduct, publish a retraction of the article”.

What factors determine whether an expression of concern should be issued?

- **From Wager, 2014:**
 - “Expressions of concern may be used if the author's institution refuses to investigate the case, if the editor does not have confidence in the outcome of an investigation, or if an investigation is underway but will not report for some time. An expression of concern can alert readers to a potentially unreliable publication, but may later be converted into a retraction or correction, or itself retracted, depending on the outcome of the investigation.

Rationale for the study

- There is now literature on the various parameters of retraction notices and retracted papers ...
 - Structure of retraction notices can differ widely across journals (Bilbrey, et al 2014).
 - Most retractions are due to misconduct (Fang, et al 2012), yet some retraction notices are not specific as to the factors (often misconduct) that led to the retraction (Resnik & Dinse, 2013).
 - Some retractions can be difficult to find (Decullier, et al 2014).
 - Retractions lead to significant waste in funding (Stern, et al, 2014).

Rationale for the study

- Noonan & Parrish (2008). Identified 15 EoCs in medical journals (1 from an engineering journal) and discussed editors' positions on the subject.
- Grieneisen & Zhang (2012) in a paper on retractions also identified 58 papers with EoCs spanning 2000 to 2011. No description of parameters of EoCs

Rationale for parts I and II of the study

- Because papers that receive expressions of concern are sometimes later retracted and because there is no appreciable analogous literature on the characteristics of expressions of concern (EoCs), it was felt that exploring this form of scientific communication was a worthwhile pursuit.

Method (Part I)

- Entered the search term ‘expression of concern’ in the PubMed database (N = 275 hits as of May 10th, 2015) of which 123 were of some type of expression of concern.
- Only included ‘editorial’ EoCs, that is, only those entries with headings, such as ‘expression of concern’ and ‘statement of concern’ that were published by the journal’s editor (N = 95).

Results (pt. I)

- The 95 EoCs covered a total of 124 individual journal articles.
 - No. of words in EoCs:
 - Range = 42 to 2532 words
 - Average Length = 283.96 (Sd = 420.6)
 - Median = 154 words
 - Average time interval (in years) between publication of article and EoC:
 - Range = 0 – 21 years
 - Average length of time = 4.78
 - Median = 4.0
 - SD = 4.07

Results (pt. I)

Areas of concern:

- Methodology 6 (5%)
- Data analysis 3 (2%)
- Data samples, tissues 33 (27%)
- Conclusions/Interpretation 9 (8%)
- Plagiarism6 (5%)
- Self-plagiarism/duplication 19 (15%)
- Image manipulation/duplication/problems .. 32 (26%)

Part II

So, what happens to papers that receive an EoC?

Method (pt. II)

- A new search of the PubMed data base using the phrase ‘expression of concern’ was carried out during September, 2016 resulting in 146 papers that had been issued an EoC.
- To determine the fate of these papers we entered the title of each flagged paper in the search feature of PubMed and also that of the home page of the respective journal in which the flagged paper had been published and noted any communications that appeared in connection with each paper.

Results (pt. II)

- Of those papers for which an EoC had been issued and for which follow-up information had been found:
 - 10 (7%) resulted in corrections*.
 - 46 (32%) resulted in retraction.
 - 6 (4%) EOC retracted/matter resolved.

*Please note error in the printed abstract which indicated 6 articles with corrections.

Results (pt. II)

- 84 (58%) We could not find any follow-up information*.
 - Of these 84 papers:
 - 33 (39%) had EoCs issued within the last two years.
 - 27 (32%) had EoCs that were 4 years old or older.

*Please note error in the printed abstract which indicated 60% rather than 58%.

Results (pt. II)

- There was little uniformity in the extent to which papers were linked to EEOCs and to subsequent corrections and retractions in both PubMed and the journal in which the concerned paper had been published.
 - Some journals do not link to the EEOC.
 - Target papers were not linked to available follow-up notices in the journal nor marked in a way that indicated an editorial concern.
 - Similar patterns were observed in the indexing of target papers in PubMed.

Enter Vaught et al., (2017)

- Vaught, M., Jordan, D.C., Bastian, H. (2017). Concern noted: A descriptive study of editorial expressions of concern in PubMed and PubMed Central. *Research Integrity and Peer Review* 2:10.
- First published in bioRxiv on February 27th, 2017.

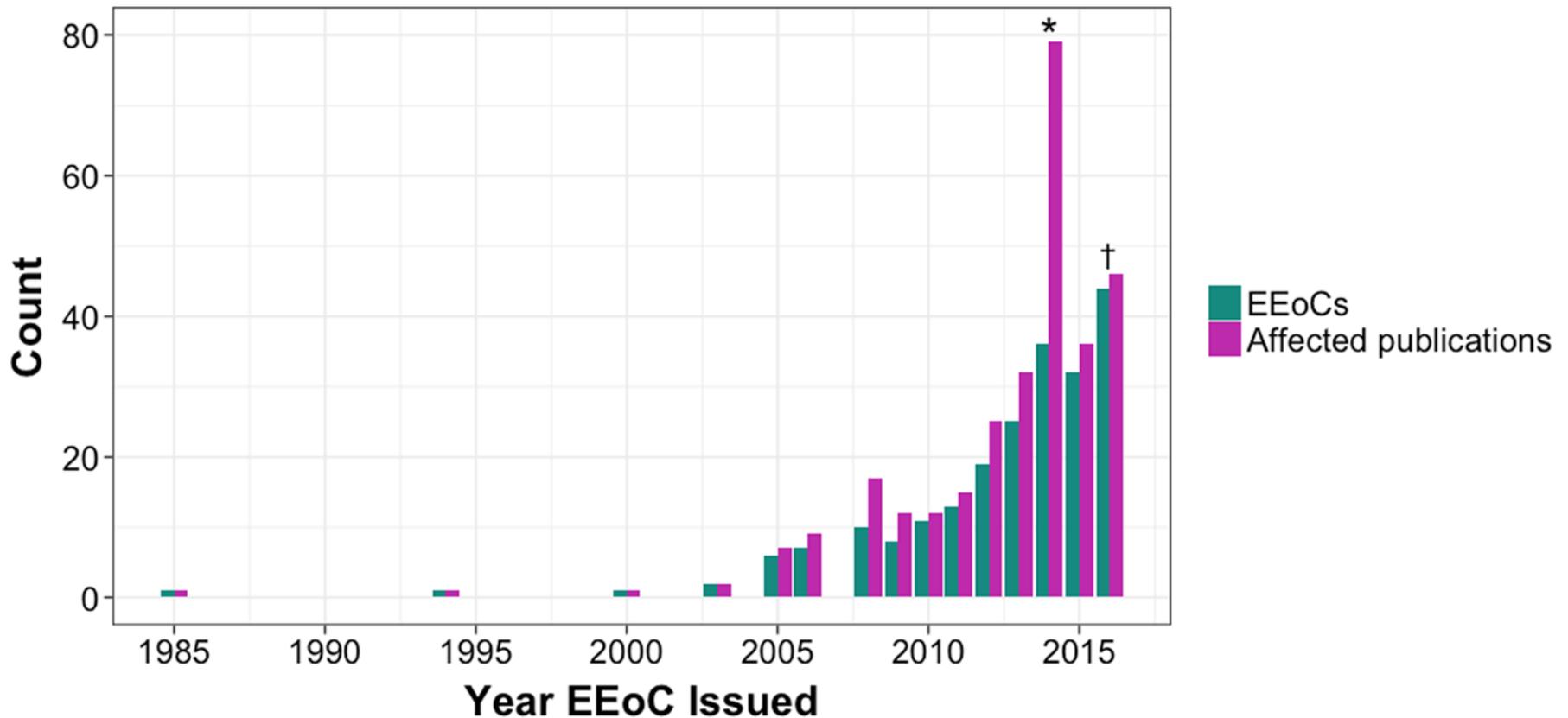
Available at:

<https://researchintegrityjournal.biomedcentral.com/articles/10.1186/s41073-017-0030-2>

Results Vaught et al., (2017)

- Methods: We searched PubMed, PubMed Central (PMC), and Google Scholar to identify EoCs issued for publications in PubMed and PMC up to 22 August 2016. We also searched the archives of the Retraction Watch blog, some journal and publisher websites.
 - 247 EEOCs that affect 320 publications indexed in PubMed, the earliest issued in 1985. Half of the primary EoCs were issued between 2014 and 2016 (52%).
 - A minority of publications affected by EoCs had been retracted by early December 2016 (25%).
 - The majority of EoCs were issued because of concerns with validity of data, methods, or interpretation of the publication (68%), and 31% of cases remained open.

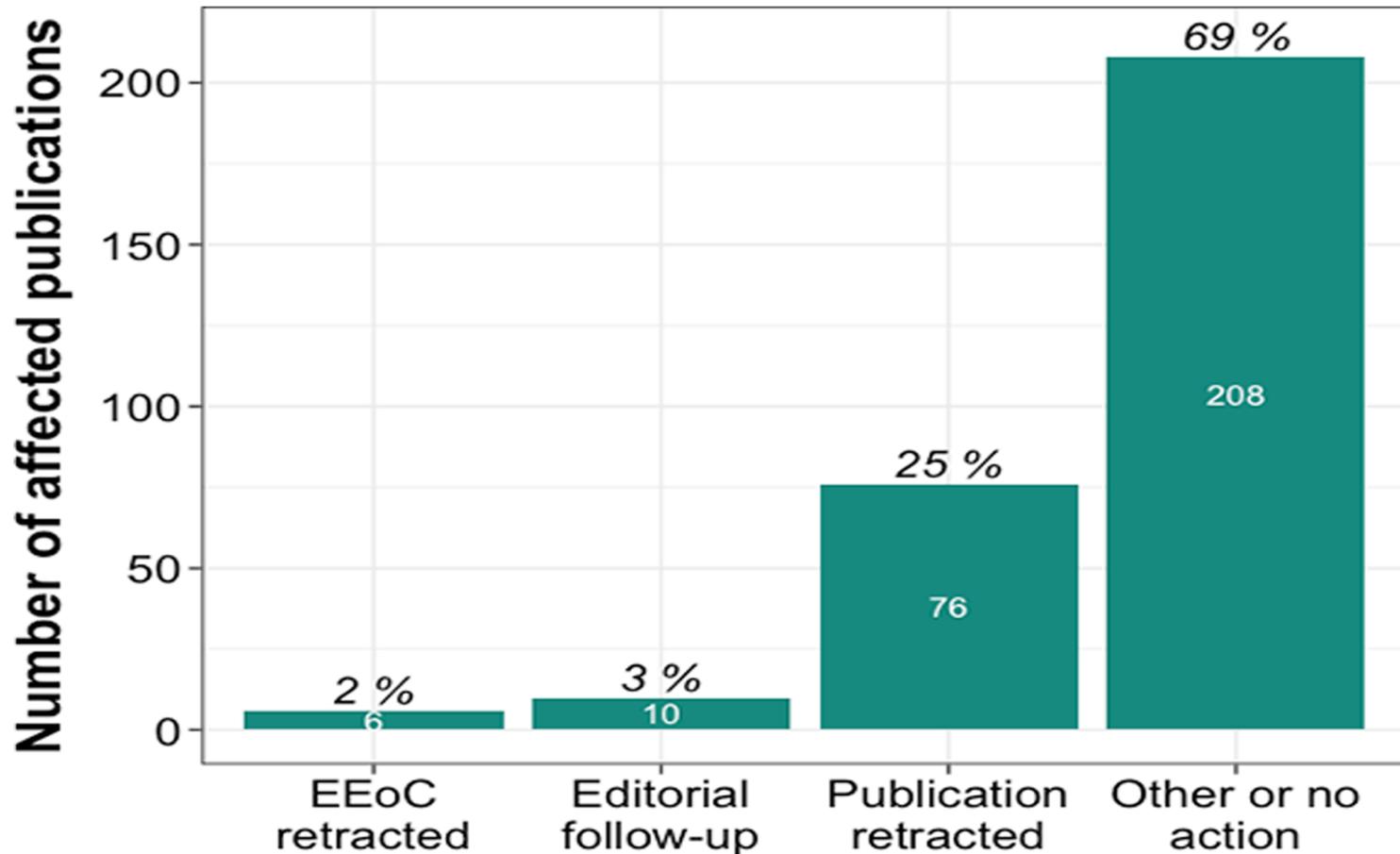
Results Vaught et al., (2017)



Results Vaught et al., (2017)

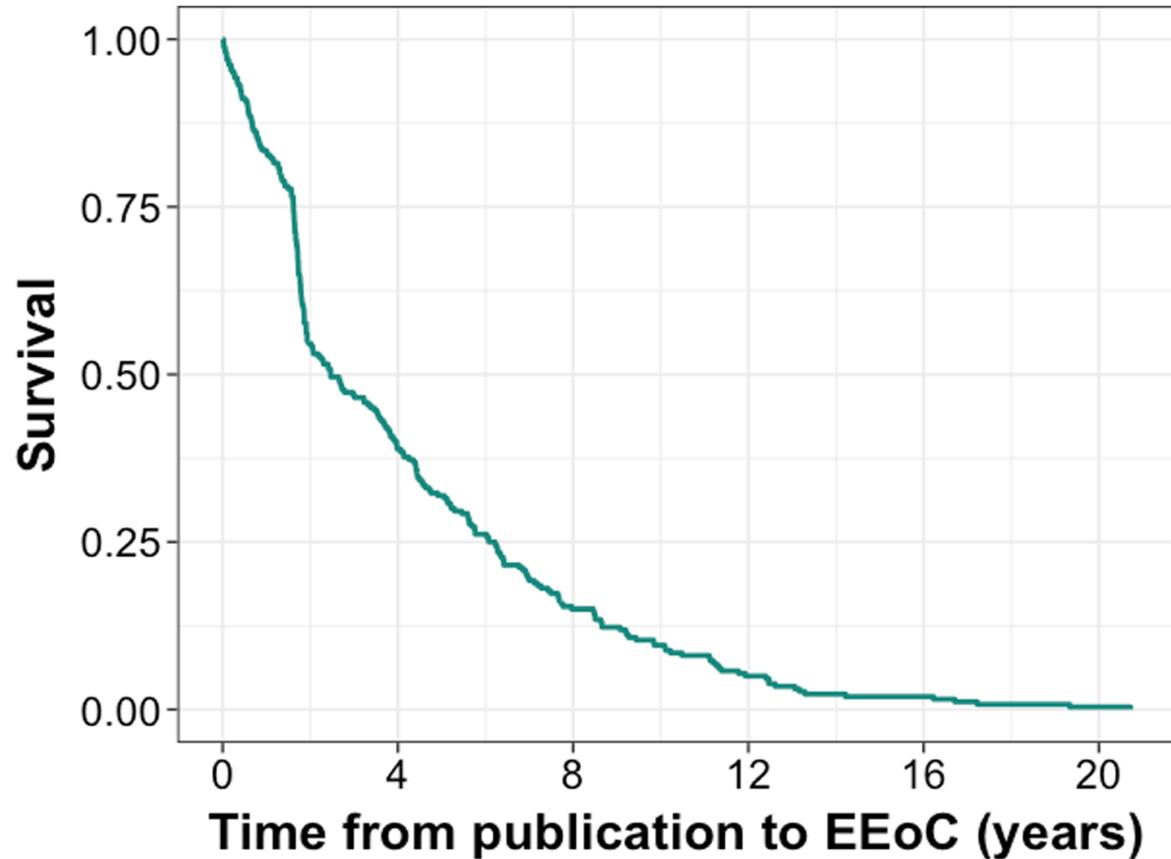
- **EoCs issued between 2014 and 2016: N = 97 (52%).**
 - **Validity of date, methods, interpretation 68%**
 - **Findings or allegations of misconduct..... 11%**
 - **Authorship disputes 8%**
 - **Overlapping or duplicate publication 7%**
 - **Unspecified 5%**
- **EoCs are often the endpoint.**

Results Vaught et al., (2017)



Results Vaught et al., (2017)

Fig. 4 Time from publication to EEOC in years (n = 260)



Recommendations for the publication of EoCs

**Based on a RW post “What should an ideal retraction
notice look like?”**

What information should EoCs contain?

- Specify the nature of the concern in clear, unambiguous language that differentiates possible misconduct from honest error.
- Indicate which aspects of the paper are problematic (i.e., which specific data or conclusions are invalid).
- Indicate what factors (feedback from readers, individuals, institutional officials, etc.) ultimately led to the publication of the EoC.

How EoCs should be represented in the literature?

- Be linked prominently and in both directions from all versions of the abstract (also full text and PDF as per ICMJE).
- Be included in the journal's table of contents with page number (see ICMJE).
- Be freely available (not paywalled).
- Be communicated swiftly to all indexes.

How EoCs should be represented in the literature?

- Indicate when journal was first alerted to potential problems and by whom (e.g., reader, co-author, institution).
- Indicate whether editor has alerted concerned parties (e.g., academic institution, hospital).
- In cases where more than one paper is issued an EoC, each paper should perhaps receive its own separate EoC entry (and doi?) rather than one EoC listing all papers with concerns (?).

Final recommendation for editors and publishers and the rest of the scientific community

“EoCs should be used
more often!”

Boris Barbour, May 29th, 2017

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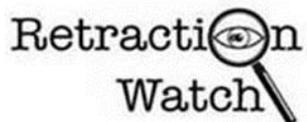
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