

Sunlight is the best disinfectant: retractions and the role of open access

Retractions can be considered as part of the “self-purification” of science: If a journal article contains serious errors or violations of good scientific practices the publication should be retracted. Depending on the type of defectiveness, notices about problematic journal articles can be published as “correction” (for minor flaws), “expression of concern” (for initial suspicion raised by the editorial board) or proper “retraction” (for misconduct) (Sox & Drummond, doi: 10.7326/0003-4819-144-8-200604180-00123).

Especially in medicine and other health sciences the detection of problematic publications and their retraction is essential in order to protect patients and public health.

Studies show that there is a rise in the number of retractions (e.g. Li et al., doi: 10.2147/JMDH.S151745). Reasons might be an increase of awareness of editorial boards taking action much faster (Steen et al., doi: 10.1371/journal.pone.0068397) also shown in the fact that more and more journals give themselves a “retraction policy” (Resnik et al. doi: 10.3163/1536-5050.103.3.006).

Open access as an essential part of open science movement is intended to raise the transparency of science as such. The overall question therefore is: Which role does open access play with regard to retractions?

The poster will present results from an initial – kind of proof of concept – analysis of retractions collected from the “Retraction Watch Database” (<http://retractiondatabase.org>) for articles from the health sciences published in 2019. With the help of the SHERPA/RoMEO database (<http://sherpa.ac.uk/romeo/index.php>) journals are assigned to the categories open access or hybrid. There will be a check on article level for publications from hybrid journals to see if they are published via an open access option. The analysis will focus on the questions: What is the share of open access among retracted articles? Is there a difference in the justification for retractions between open access and paywall articles and in the time lag from publication to retraction? For those publications behind a paywall there will be checks in Unpaywall (<https://unpaywall.org/>) and Open Access Button (<https://openaccessbutton.org/>) to identify open access versions to include this aspect into the analysis as well. The results will serve as a basis for a discussion whether “openness” on the level of publication has an effect on the self-purification process of science.