Correcting the published record

How authors react to editorial prompts about corrections to cited literature

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Declaration of activities and relations

- Funded by Croatian Science Foundation under Grant agreement No. IP-2019-04-4882 ('Professionalism in Health—Decision making in practice and research, ProDeM')
- Employed at the University of Split School of Medicine
- Co-chair of Croatian Reproducibility Network (volunteer position)
- Associate Editor of ST-OPEN (volunteer position)
- Freelance editor at Empirica – offers services to *Journal of Global Health*, among other clients

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Introduction

- Corrections of scholarly literature ensure its integrity
- The main mechanism include:
  - Errata/corrections (corrigenda) intended for minor errors;
  - Expressions of concern, for research that is possibly untrustworthy and is being investigated;
  - Retractions, intended for substantial errors or misconduct.

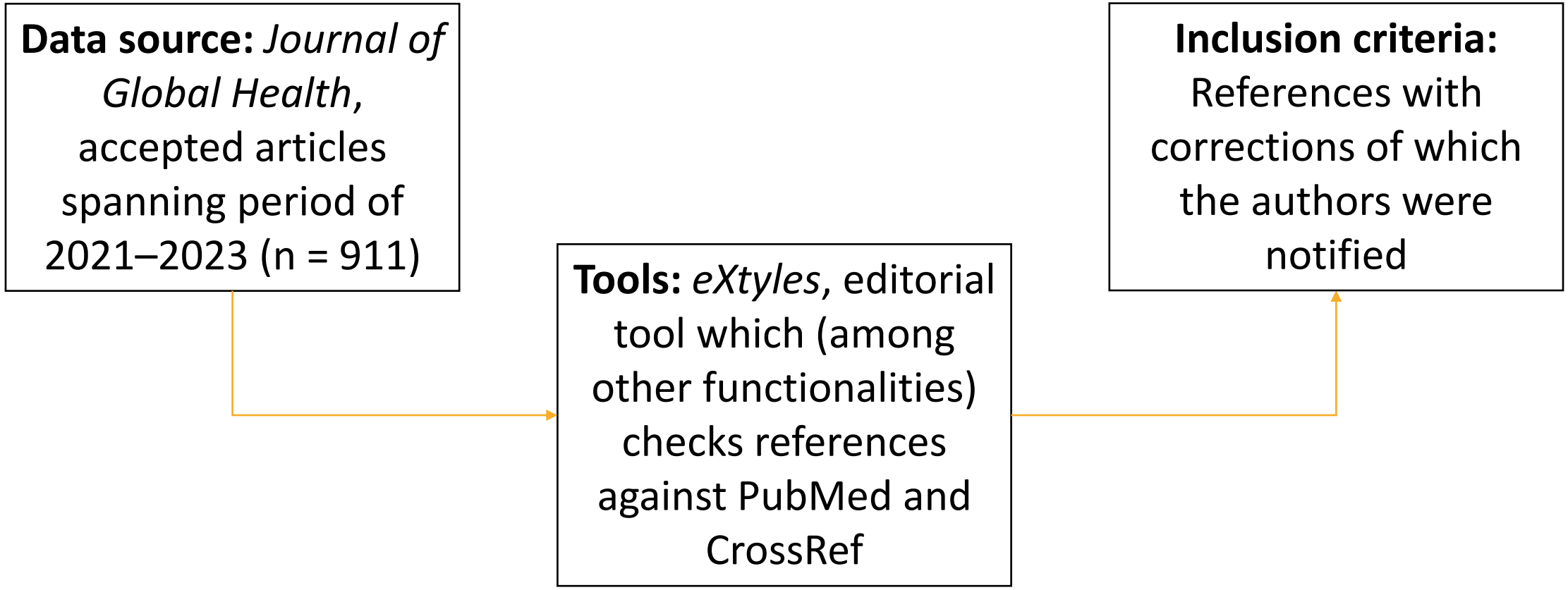
Introduction

- Current research has focussed mainly on retractions
- Few studies on corrections, with most exploring bibliometrics (citations, editorial practices, etc.)
- Several alternative, theoretical models for corrections (and retractions) have been proposed

Introduction

- One study of correction notices in psychology (three journals, 214 corrections) conducted in 2020 found most to be inconsequential, without clarification of who discovered the errors
- To our knowledge, there have been no studies on how authors react when informed about corrections to scientific literature cited in their manuscript during editorial process

Methods


Data source: *Journal of Global Health*, accepted articles spanning period of 2021–2023 (n = 911)
Tools: *eXtyles*, editorial tool which (among other functionalities) checks references against PubMed and CrossRef
Inclusion criteria: References with corrections of which the authors were notified

Methods – extraction process

Collection of articles with corrections to cited references:

- Collection through three years of editorial work (post-acceptance, production phase) – AM, LU, SLJM, and JoGH post-production editorial team
- Both the versions sent to authors and (in most cases) versions with authors' responses

Extraction of corrections:

- Extraction sheet (piloted and re-designed)
- One researcher (NV) with full check from second researcher (LU)

Extraction of responses:

- Verbatim responses which were categorised (anonymity of authors)
- Missing responses (mostly from 2021) were addressed by checking version sent to authors against published record

Variables extracted for corrections

- Bibliometrics: PubMed number, DOI to both original reference and correction
- Type of authorship (regular, regular and group, group only), number of authors, number of affiliations, author countries and continents
- Date of article publication, date of correction publication
- Content of correction (full), who made the error, and who warned the journal about the error
- Publisher
- Correction description

Variables extracted for corrections

- Funding – omission of grant number, incomplete reporting of funding
- CoI error – error in reporting of the authors' conflicts of interest
- Authors' byline – names, affiliations, omitted authors
- Article errors – errors in article text, including mislabelled tables/figures or typographical errors
- Metadata errors – published under wrong license, DOI error, etc.

- Significant changes to results that did not change inferences
- Significant changes to results that did affect inferences
- Misconduct
- Other

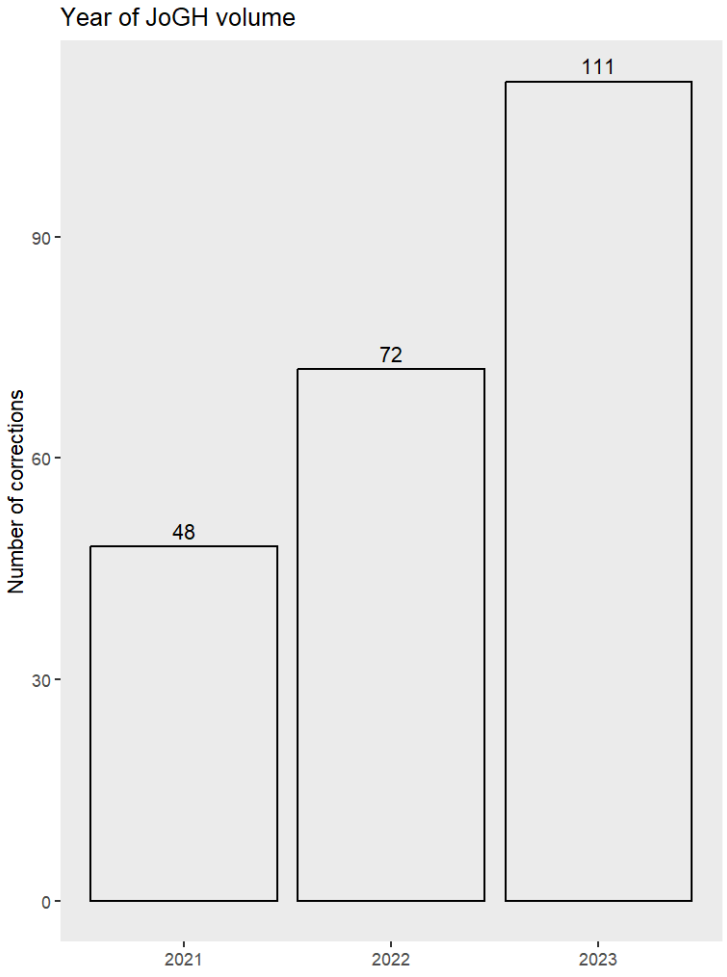
Variables extracted for authors' responses

- Authors' response (verbatim);
- Authors' decision on correction versus researchers' decision about correction
  - Based on verbatim response and check against published record
- Our own decision on correction
  - Check of statements in article against correction

1. Irrelevant/no change to manuscript
2. Correct or change the reference
3. Correct or change the manuscript's text
4. Significant change to findings
5. Other

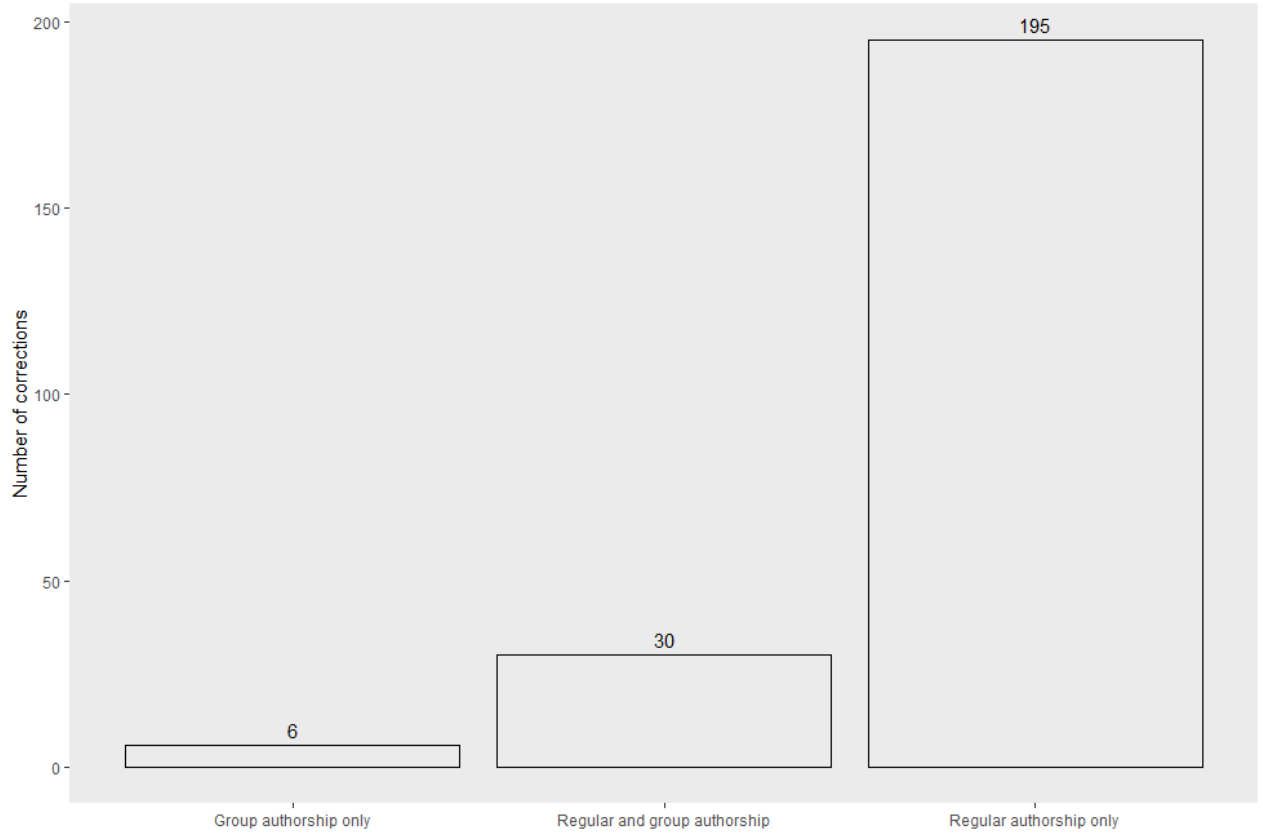
Current status

- A total of 265 corrections spanning three years and 919 articles, of which 154 had corrections to references
- 34 articles removed that had been returned as ‘errata or similar correction,’ but were in fact updated/non-updated versions of systematic reviews (n=25), previous versions of articles (n=8), or protocols (n=1)
- 219 unique corrections (same references cited in different articles), but analysis will be conducted for all 232 corrections (separate responses)



Current status

- Median of 8 authors per correction (IQR=5-16.5)
- Median of 5 affiliations per correction (IQR=3-9)
- Corrections primarily from articles with ‘regular authorship’



Current status

- 25 corrections initiated by authors; six by external entities/individuals; 200 unclear
- 50 errors made by authors; 21 by publishers; 157 unclear; 3 not applicable (updates of licenses/open data status)
- Median of 94 days between publication and correction (IQR = 38.5-258.5, n=231)
- Most corrections by PLOS (n=39), followed by Elsevier (n=37) and Springer Nature (n=32)

Current status

- 48 corrections and authors' responses analysed (all of 2021)
- Most corrections were to the authors' byline (n=18), followed by general article errors (n=17)
- Four 'significant' errors within results/findings
- For both authors and researchers, 47 corrections had no influence on the statements/claims/findings within the manuscript
- One correction necessitated a change to the reference

Future steps and implications

- We assume that most corrections will not have an influence on the authors' statements (by the authors and our own estimation)
- However, full dataset will be analysed in the coming months
- Some thoughts/questions on findings:
  - Is there a need to differently tag/denote 'lesser' corrections (i.e., authors' byline, metadata, etc.)?
  - How do corrections affect editorial/authoring processes?
  - Is there a need to clarify who 'committed' the error and who spotted it?

Thank you for your time!

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