LETTER TO THE EDITOR

Long list of conflicts of interest in industry-funded drug trials are counterproductive and opaque for readers

1. Introduction

Conflict of interest (COI) has been widely accepted as a mandatory item of reporting [1]. The optimal method for declaring COI remains unclear and varies from brief statements to extensive lists [2,3]. We hypothesize that exhaustive lists, encompassing all financial relationships with drug companies spanning many years (whether related to the study drug or not), are counterproductive and opaque. The objective was to determine whether the use of lengthy lists of COIs creates difficulties for readers in identifying the most relevant COIs in dermatological industry-funded randomized controlled trials of drug treatments.

2. Methods

A recruited panel of typical dermatology journal readers (UK dermatology clinicians and researchers) completed an online cross-sectional survey about COIs in a purposive sample of four randomized controlled trials published in leading journals. Each paper had a long list of COIs, covering more than a third of a page, on the topic of a commercial drug for a single skin condition. The primary outcome was the percentage of readers correctly identifying the company that developed the drug with authors who had a direct conflict with that company for the four papers included, assessed independently by three authors who acted as a reference standard.

3. Results

A total of 23 readers completed the survey (response rate 44%). Six (26%) were exclusively clinicians and 17 (74%) were research-active (Table 1). No readers correctly identified direct COIs of authors to the experimental drugs (Fig).

All 23 readers correctly identified the companies producing these drugs. Median time per paper taken to try and identify the authors with direct COI was 6 minutes (4-8). Readers reported a median score of 3 (2−4) for confidence in their COI conclusions, indicating moderate confidence (6-point Likert scale; 1: no confidence to 6: complete confidence). Scores obtained by readers with an exclusive clinical activity were lower than the scores obtained by researchers. Free comments highlighted challenges in discerning relevant COIs.

4. Discussion

Identifying authors with relevant COIs from long lists of COIs is counterproductive. According to our readers' comments and previous literature [4], several modifiable factors could have contributed to challenges in accurately identifying relevant COIs, such as dense paragraphs, small font, initialed names rather than full names, information split across different pages, and declaration of COIs in an appendix. In some senses, such COIs have become the

Table 1
General readers' characteristics

Characteristics	N = 23
Gender, n (%)	
Female	14 (60.9)
Male	9 (39.1)
Age (y)	34 [31−44.5]
Number of scientific articles read by month	5 [4.0−10.0]
Professional role, n (%)	
Clinician	6 (26.1)
Researcher	7 (30.4)
Both clinician and researcher	10 (43.5)
Work setting for clinicians, n (%)[a]	
Public practice (National Health Service)[b]	16 (100)
Private practice[b]	2 (11.1)
Number of years within dermatology specialty (first year of residency)[a]	7 [3.0−15.25]

Data are expressed as median [IQR] or number (%).
[a] Not applicable for seven readers with an exclusive research activity.
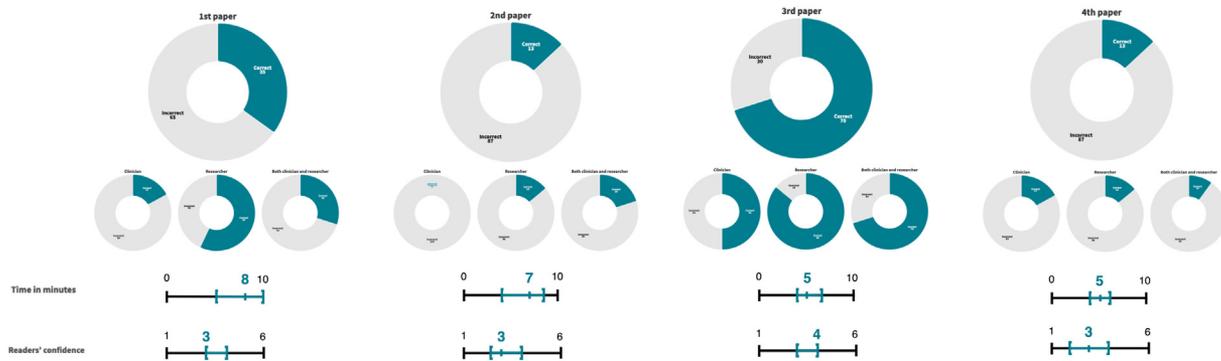[b] A reader can have multiple activities.

Figure. Outcomes stratified by paper and readers' characteristics. Primary outcome (percentage of readers who correctly both identified the company that developed the drug and whether any [and which] of the authors has a direct conflict with that company for the four papers included) stratified by paper and readers' characteristics (created with flourish.studio: https://flourish.studio). (For interpretation of the references to color in this figure legend, the reader is referred to the Web version of this article.)

What is new?

Key findings

- Standard conflict of interest (COI) lists pose challenges for readers in identifying relevant COIs in dermatological industry-funded randomized controlled trials of drug treatments.

What this adds to what is known?

- Identifying authors with direct and relevant COIs from long lists of COIs is counterproductive.

What is the implication and what should change now?

- In addition to standard International Committee of Medical Journal Editors COIs, we suggest a simple "ACE" framework of Author, Conflict, and Experimental drug(s) at the end of an abstract to clearly indicate any direct financial conflict with the investigated product.

---

exhaustive "small print" for terms and conditions that few people read on many websites. There is a need for transparency to avoid analysis bias and facilitate interpretation of COIs [5]. We suggest that a clear and simple statement should indicate which authors have a direct financial conflict with the product. We advocate for more reader-friendly and clear COI disclosures, which could be facilitated using an "ACE" framework denoting the Author(s) who received financial support from Company X (…a subsidiary of Company Y) who developed/manufactured the Experimental treatment drug (name of drug) in this study.

Others have suggested a similar approach [4]. The standard full International Committee of Medical Journal Editors COI statement could remain at the end of the article for those who need the detail.

Ethics statement

Not applicable.

Transparency declaration

The lead author affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained.

Registration

This prospective observational study was registered on December 22, 2022 at the Center of Evidence Based Dermatology registration portal. The protocol can be accessed at https://www.nottingham.ac.uk/research/groups/cebd/documents/protocol-coi.pdf.

CRediT authorship contribution statement

Sophie Leducq: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Visualization, Writing − original draft. **Richard Barlow:** Methodology,

Validation, Writing − review & editing. **Arabella Baker:** Investigation, Methodology, Validation, Writing − review & editing. **Mikolaj Swiderski:** Investigation, Methodology, Writing − review & editing. **Hywel C. Williams:** Conceptualization, Methodology, Supervision, Writing − review & editing.

Data availability

Data will be made available on request.

Declaration of competing interest

The authors declare no competing interest.

Acknowledgments

Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jclinepi.2024.111491.

Sophie Leducq
Centre of Evidence Based Dermatology, School of Medicine, University of Nottingham, Nottingham, United Kingdom
University of Tours, University of Nantes, INSERM 1246-SPHERE, Tours, France
Department of Dermatology, CHRU Tours, Tours, France

Richard Barlow
Birmingham Children's Hospital, Birmingham, United Kingdom

Arabella Baker
Centre of Evidence Based Dermatology, School of Medicine, University of Nottingham, Nottingham, United Kingdom

Mikolaj Swiderski
Centre of Evidence Based Dermatology, School of Medicine, University of Nottingham, Nottingham, United Kingdom

Hywel C. Williams*
Centre of Evidence Based Dermatology, School of Medicine, University of Nottingham, Nottingham, United Kingdom
*Corresponding author. Centre of Evidence Based Dermatology, Faculty of Medicine & Health Sciences, Applied Health Research Building, University Park, Nottingham, NG7 2RD, United Kingdom.
E-mail address: Hywel.Williams@nottingham.ac.uk (H.C. Williams)

References

[1] International Committee of Medical Journal Editors. Author Responsibilities—Conflicts of Interest. Recommendations for the conduct, reporting, editing, and publication of scholarly work in medical journals. Available at: https://www.icmje.org/recommendations/browse/roles-and-responsibilities/author-responsibilities–conflicts-of-interest.html. Accessed February 26, 2024.
[2] Bauchner H, Fontanarosa PB, Flanagin A. Conflicts of interests, authors, and journals: new challenges for a persistent problem. JAMA 2018;320:2315−8.
[3] Grundy Q, Dunn AG, Bero L. Improving researchers' conflict of interest declarations. BMJ 2020;368:m422.
[4] Agrawal D, Haque W. Transparent disclosure of conflicts of interest. JAMA 2019;321:1728.
[5] Boutron I, Page MJ, Higgins JPT, Altman DG, Lundh A, Hróbjartsson A. Chapter 7: considering bias and conflicts of interest among the included studies. In: Higgins JPT, Thomas J, Chandler J, Cumpston M, Li T, Page MJ, et al, editors. Cochrane Handbook for Systematic Reviews of Interventions. Chichester: Cochrane; 2019. , version 6.0. .

https://doi.org/10.1016/j.jclinepi.2024.111491