BMJ Open Editors' and authors' individual conflicts of interest disclosure and journal transparency. A cross-sectional study of high-impact medical specialty journals

Rafael Dal-Ré,⁹ ¹ Arthur L Caplan,² Ana Marusic⁹

To cite: Dal-Ré R, Caplan AL, Marusic A. Editors' and authors' individual conflicts of interest disclosure and journal transparency. A cross-sectional study of high-impact medical specialty journals. *BMJ Open* 2019;9:e029796. doi:10.1136/ bmjopen-2019-029796

Prepublication history for this paper is available online. To view these files please visit the journal online (http://dx.doi. org/10.1136/bmjopen-2019-029796).

Received 12 February 2019 Revised 04 July 2019 Accepted 09 July 2019

Check for updates

© Author(s) (or their employer(s)) 2019. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

¹Epidemiology Unit, Health Research Institute-Fundación Jiménez Díaz University Hospital, Universidad Autónoma de Madrid, Madrid, Spain ²Division of Medical Ethics, School of Medicine, NYU Langone Medical Center, New York City, New York, USA ³Department of Research in Biomedicine and Health, University of Split School of Medicine, Split, Croatia

Correspondence to Dr Rafael Dal-Ré:

rafael.dalre@quironsalud.es

ABSTRACT

Objective To assess the fulfilment of authors' and editors' individual disclosure of potential conflicts of interest in a group of highly influential medicine journals across a variety of specialties.

Design Cross-sectional analysis.

Setting and participants Top-ranked five journals as per 2017 Journal Citation Report impact factor of 26 medical, surgery and imaging specialties.

Interventions Observational analysis.

Primary and secondary outcome measures Percentage of journals requiring disclosure of authors' and editors' individual potential conflicts of interest (Col). Journals that were listed as followers of the International Committee of Medical Journal Editors (ICMJE) Recommendations, members of the Committee on Publication Ethics (COPE) and linked to a third party (ie, college, professional association/society, public institution).

Results Although 99% (129/130) of journals required author's Col disclosure, only 12% (16/130) reported individual editors' potential Cols. Forty–five per cent (58/130) of journals were followers of the ICMJE Recommendations, and 73% (95/130) were COPE members. Most (69%; 90/130) were linked to a college, professional society/association or public institution. Only one journal did not have policies on individual authors' and editors' Col disclosure.

Conclusion Very few high-impact medical journals disclosed their editorial teams' individual potential Cols—conversely, almost all required disclosure of authors' individual Cols. Journal followers of the ICMJE Recommendations should regularly disclose the editors' individual Cols, as this is the only legitimate way to ask the same transparency of authors.

INTRODUCTION

Recent highly publicised cases^{1 2} illustrated what has been suspected for many years, that many researchers do not appropriately disclose their financial conflicts of interest (CoI), let alone disclose non-financial CoIs, about which there are differing opinions³ and lack of clear policies in most medical journals.⁴

Strengths and limitations of this study

- This is the first study comparing authors' and editors' individual disclosure of potential conflicts of interest in 130 leading journals from 26 medical specialties.
- A limitation is that we did not assess a representative sample of the whole population of medical journals. Also, we included only the information available in the public domain (journals' websites).
- The results obtained in this study may be an overestimation of how many journals require and comply with disclosure of authors' and editors' individual potential conflicts of interest.

The implementation of the Sunshine Act in the USA in 2013 reveals all industry payments received by all physicians practising in the USA through the Centers for Medicare & Medicaid Services Open Payments Database (OPD; https://www.cms.gov/openpayments/). A study showed that 32% of oncologists working in the USA and authors of clinical trial articles published in six highly influential journals (two general/internal medicine journals and four oncology or haematology journals) failed to completely disclose industry payments from the company that sponsored the trials.⁵

Although authors' failure to disclose potential CoI is of grave concern, matters are worse when it comes to disclosure by editors and editorial teams. The Committee on Publication Ethics (COPE)—a highly respected professional committee providing leadership to editors, publishers and individuals on ethical publishing practices—recommends that 'editorial CoI should be declared, ideally publicly.⁷⁶ The hugely influential International Committee of Medical Journal Editors (ICMJE) Recommendations for the Conduct,



Open access

Reporting, Editing, and Publication of Scholarly Work in Medical Journals—which are followed by thousands of scholarly journals—state that editors should publish 'regular disclosure statements' about their own potential CoIs and those of their staff, and that guest editors should follow the same standards.⁷ This policy, however, is almost never followed. A review of the information in English posted on the websites of the 14 journal members of the ICMJE showed that only two of them (*PLOS Medicine, The BMJ*) published individual declarations on editors' potential CoIs.⁸ A third ICMJE member journal (*Annals of Internal Medicine*) published its editorial team members' potential CoIs in online published original research articles, special articles and reviews as 'editors' disclosure' within the 'author, article and disclosure information.'

Practising physicians working as journal editors may receive industry payments and, hence, these financial CoIs should be disclosed to readers. Prior studies showed close to 50% of USA clinicians belonging to editorial teams in top-ranked medicine journals have received payments from industry.^{9–11}

The aim of this study was to assess the fulfilment of authors' and editors' individual disclosure of potential CoI in a group of highly influential medicine journals across a variety of specialties.

METHODS

In November 2018 we searched the websites of highly influential journals for the policies on authors' and individual editors' potential CoI. These were the five top-ranked journals according to their 2017 Journal Citation Report (JCR) impact factor, in each of 26 different JCR categories within medicine, surgery and imaging. The search was conducted by alphabetical order of the JCR categories. If a journal was included in one category and was found to be in the top five of a subsequent category, the next journal of the top list of the latter category was included to avoid duplication. This resulted in the inclusion of 130 different journals.

The following data were retrieved: journal name; 2017 impact factor; journal link to a third party, that is, college, professional association or society or linked to a public institution, since this indicated the responsibility of a non-commercial organisation for a journal; if the journal was included at the ICMJE website as a follower of the ICMJE Recommendations; and if the journal was included on the COPE website as a member. A quality check process is required for COPE membership, but not for ICMJE Recommendations listing. In addition, at each journal website we searched if there was information for author's individual CoI disclosure at the time of manuscript submission and whether the journal provided individual editorial CoI declarations. This included all usual editorial positions, such as editors in chief, executive editors, deputy editors and associate editors or their equivalent. We presumed that these job positions would be involved in the editorial decision-making process. Data

were retrieved by one of the authors, RDR; all the information from a random sample of 25% of the 130 journals was assessed by another author, AM, to check the consistency of the retrieved data.

PATIENT AND PUBLIC INVOLVEMENT

Neither patients nor any member of the public was involved in this study.

RESULTS

As shown in table 1, 99% (129/130) of journals required authors' CoI disclosure, but only 12% (16/130) reported individual editors' potential CoIs. There were 10 categories (out of the 26) with one journal reporting individual editors' potential CoIs, and three other categories (Gastroenterology and Hepatology, Oncology, and Respiratory Medicine) with two journals providing this information. Half of the categories (13/26) had no journal providing public disclosure of individual editors' CoIs. Only one journal (World Psychiatry) did not have policies on both authors' and editors' individual CoI disclosure. Out of 130 journals in the sample, 58 (45%) were listed on the ICMJE Recommendations subscription list, and 95 (73%) were COPE members. Thirty-eight (29%) were both ICMJE Recommendations subscribers and COPE members-four of them belonging to Anaesthesia. Six categories had no journals subscribed to both ICMJE Recommendations and COPE. Fifteen journals (11.5%)belonging to 11 categories-were neither followers of the ICMJE Recommendations nor COPE members. None of the five journals in the Immunology or Oncology categories were followers of the ICMJE Recommendations. None of the five Ophthalmology journals were COPE members.

A majority of journals in the sample (69%; 90/130) were linked to a college, professional society/association or public institution. Seven of the 26 categories had all five journals tied to a third party, whereas only one (Immunology) had five journals with no link to a third party. The two journals that were linked to a public institution were *Emerging Infectious Diseases* (from the USA Centers for Disease Control and Prevention, CDC) and *Eurosurveillance* (that belongs to the European Centre for Disease Prevention and Control, ECDC).

With regard to individual editors' CoI declarations, journal members of COPE and/or of the ICMJE Recommendations subscribers were not better in disclosures than other journals. Among those 16 journals that declared individual editors' CoIs, 10 were both followers of the ICMJE Recommendations and COPE members; the *Journal of Clinical Oncology* was neither a follower of the ICMJE Recommendations nor was a member of COPE.

None of the 22 journals listed in table 1 belonging to the *Lancet*, *JAMA* or *Nature Reviews* journal groups reported individual editors' potential CoI. Two journals belonging to the same group (*Journal of the American College*)

Table 1 Authors' requirements and provision of editors' individual conflicts of interest (Col) disclosures in the websites of the five top-ranked journals of 26 categories	as per 2017 JCR impact factor (IF) and their link to a third party. Inclusion of journals in the ICMJE Recommendations list of followers and as COPE members (as of 14	November 2018)
---	--	----------------

November 2018)							
JCR category	Journal	2017 IF	Linked* to a college, professional association/society or public institution	ICMJE Recommendations follower†	COPE member†	Author's Col individual disclosure required	Editor's Col individual declaration provided
Allergy	Journal of Clinical Allergy and Clinical Immunology	13.3	Yes	Yes	Yes	Yes	No
	Journal of Clinical Allergy and Clinical Immunology in Practice	7.0	Yes	No	Yes	Yes	No
	Clinical Reviews in Allergy & Immunology	6.1	No	No	Yes	Yes	No
	Allergy	6.0	Yes	No	Yes	Yes	No
	World Allergy Organization Journal	5.7	Yes	No	Yes	Yes‡	No
Anaesthesiology	Anesthesiology	6.5	Yes	No	Yes	Yes	Yes
	British Journal of Anaesthesia	6.5	Yes	Yes	Yes	Yes	No
	Pain	5.6	Yes	Yes	Yes	Yes	No
	Anaesthesia	5.4	Yes	Yes	Yes	Yes	No
	Regional Anesthesia and Pain Medicine	4.7	Yes	Yes	Yes	Yes§	No
Cardiology and	European Heart Journal	23.4	Yes	Yes	Yes	Yes	No
cardiovascular	Circulation	18.9	Yes	Yes	No	Yes	No
SUBJECT	Journal of the American College of Cardiology	16.8	Yes	Yes	Yes	Yes	Yes¶
	Circulation Research	15.2	Yes	No	Yes	Yes	No
	Nature Reviews Cardiology	15.2	No	No	Yes	Yes	No
Clinical neurology	Lancet Neurology	27.1	No	No	Yes	Yes	No
	Nature Reviews Neurology	19.8	No	No	Yes	Yes	No
	Acta Neuropathologica	15.9	No	No	No	Yes	No
	Alzheimer's & Dementia	12.8	Yes	No	Yes	Yes	No
	JAMA Neurology	11.5	Yes	Yes	No	Yes	No
							Continued

Table 1 Continued							
JCR category	Journal	2017 IF	Linked* to a college, professional association/society or public institution	ICMJE Recommendations follower†	COPE member†	Author's Col individual disclosure required	Editor's Col individual declaration provided
Critical care	Lancet Respiratory Medicine	21.5	No	No	Yes	Yes	No
medicine	American Journal of Respiratory and Critical Care Medicine	15.2	No	Yes	Yes	Yes	Yes
	Intensive Care Medicine	15.0	Yes	No	Yes	Yes	No
	Chest	7.7	Yes	Yes	Yes	Yes	No
	Critical Care Medicine	6.6	Yes	No	Yes	Yes	No
Dermatology	JAMA Dermatology	8.1	Yes	Yes	No	Yes	No
	Journal of the American Academy of Dermatology	6.9	Yes	Yes	Yes	Yes	No
	Journal of Investigative Dermatology	6.4	Yes	No	Yes	Yes	No
	British Journal of Dermatology	6.1	Yes	No	Yes	Yes	No
	Pigment Cell & Melanoma Research	6.1	Yes	No	Yes	Yes	No
Endocrine and	Cell Metabolism	20.6	No	No	Yes	Yes	No
metabolism	Nature Reviews Endocrinology	20.3	No	No	Yes	Yes	No
	Lancet Diabetes & Endocrinology	19.3	No	No	Yes	Yes	No
	Endocrine Reviews	15.6	Yes	No	Yes	Yes‡	No
	Diabetes Care	13.4	Yes	Yes	Yes	Yes	No
Gastroenterology	Gastroenterology	20.8	Yes	Yes	Yes	Yes	Yes
and hepatology	Nature Reviews Gastroenterology & Hepatology	17.3	No	No	Yes	Yes	No
	Gut	17.0	No	Yes	Yes	Yes	Yes**
	Journal of Hepatology	15.0	Yes	Yes	Yes	Yes	No
	Hepatology	14.1	Yes	No	No	Yes	No
Haematology	Blood††	15.1	Yes	Yes	Yes	Yes	Yes
	Lancet Haematology	10.7	No	No	No	Yes	No
	Leukemia	10.0	No	No	Yes	Yes	No
	Haematologica	9.1	Yes	Yes	No	Yes	No
	Journal of Hematology & Oncology	7.3	Yes	No	Yes	Yes‡	No
							Continued

JCR category	Journal	2017 IF	Linked* to a college, professional association/society or public institution	ICMJE Recommendations follower†	COPE member†	Author's Col individual disclosure required	Editor's Col individual declaration provided
Immunology	Nature Reviews Immunology	42.0	No	No	Yes	Yes	No
	Annual Review of Immunology	22.7	No	No	No	Yes‡	No
	Nature Immunology	21.8	No	No	Yes	Yes‡	No
	Immunity	19.7	No	No	Yes	Yes	No
	Trends in Immunology	14.2	No	No	No	Yes	No
Infectious diseases	Lancet Infectious Diseases	25.1	No	No	Yes	Yes	No
	Lancet HIV	11.4	No	No	No	Yes	No
	Clinical Infectious Diseases	9.1	Yes	Yes	Yes	Yes	No
	Emerging Infectious Diseases	7.4	Yes	Yes	No	Yes	No
	Eurosurveillance	7.1	Yes	Yes	No	Yes	No
Medicine general	New England Journal of Medicine	79.3	Yes	Yes‡‡	Yes	Yes	No
and internal	Lancet	53.3	No	Yes‡‡	Yes	Yes	No
	JAMA	47.7	Yes	Yes‡‡	No	Yes	No
	BMJ	23.6	Yes	Yes‡‡	Yes	Yes	Yes
	JAMA Internal Medicine	20.0	No	Yes	No	Yes	No
Obstetrics and	Human Reproduction Update	11.9	Yes	No	Yes	Yes	No
gynaecology	American Journal of Obstetrics and Gynecology	5.7	Yes	Yes	Yes	Yes	No
	Ultrasound in <i>Obstetrics &</i> Gynecology	5.7	Yes	No	Yes	Yes	No
	Human Reproduction	5.0	Yes	No	Yes	Yes	No
	Obstetrics and Gynecology	5.0	Yes	No	Yes	Yes	No
Oncology	CA-A Cancer Journal for Clinicians	244.6	Yes	No	Yes	Yes	Yes
	Nature Reviews Cancer	42.8	No	No	Yes	Yes	No
	Lancet Oncology	36.4	No	No	Yes	Yes	No
	Journal of Clinical Oncology	26.4	Yes	No	No	Yes	Yes
	Nature Reviews Clinical Oncology	24.7	No	No	Yes	Yes	No

Table 1 Continued							
JCR category	Journal	2017 IF	Linked* to a college, professional association/society or public institution	ICMJE Recommendations follower†	COPE member†	Author's Col individual disclosure required	Editor's Col individual declaration provided
Ophthalmology	Progress in Retinal and Eye Research	11.7	No	No	N	Yes	No
	Ophthalmology	7.5	Yes	Yes	No	Yes	No
	JAMA Ophthalmology	6.7	Yes	Yes	No	Yes	No
	Ocular Surface	5.5	No	No	No	Yes	No
	Annual Review of Vision Science	5.1	No	No	No	Yes‡	No
Orthopaedics	American Journal of Sports Medicine	6.1	Yes	No	Yes	Yes	No
	Osteoarthritis and Cartilage	5.5	Yes	Yes	Yes	Yes	No
	Journal of Bone and Joint Surgery- American Volume	4.6	No	No	Yes	Yes	Yes
	Journal of Physiotherapy	4.5	Yes	Yes	Yes	Yes	No
	Arthroscopy	4.3	Yes	No	No	Yes	No
Paediatrics	JAMA Pediatrics	10.8	Yes	Yes	No	Yes	No
	Journal of the American Academy of Child and Adolescent Psychiatry	6.2	Yes	Yes	Yes	Yes	No
	Pediatrics	5.5	Yes	Yes	Yes	Yes	No
	Pediatric Allergy and Immunology	4.1	Yes	No	Yes	Yes	No
	Journal of Adolescent Health	4.1	Yes	No	Yes	Yes	No
Peripheral vascular	Hypertension§§	6.8	Yes	Yes	Yes	Yes	No
diseases	Stroke	6.2	Yes	Yes	Yes	Yes	No
	Arteriosclerosis, Thrombosis, and Vascular Biology	6.1	Yes	No	Yes	Yes	No
	Thrombosis and Haemostasis	5.0	Yes	Yes	No	Yes	No
	Journal of Thrombosis and Haemostasis	4.9	Yes	Yes	Yes	Yes	No
							Continued

Table 1 Continued							
JCR category	Journal	2017 IF	Linked* to a college, professional association/society or public institution	ICMJE Recommendations follower†	COPE member†	Author's Col individual disclosure required	Editor's Col individual declaration provided
Primary healthcare	Annals of Family Medicine	4.5	Yes	Yes	No	Yes	No
	British Journal of General Practice	3.3	Yes	No	Yes	Yes	No
	Journal of the American Board of Family Medicine	2.5	Yes	Yes	No	Yes	No
	npj Primary Care Respiratory Medicine	2.5	Yes	No	Yes	Yes	No
	BMC Family Practice	2.0	No	No	Yes	Yes‡	No
Psychiatry	World Psychiatry	30.0	Yes	No	No	No	No
	JAMA Psychiatry	16.6	Yes	Yes	No	Yes	No
	Lancet Psychiatry	15.2	No	No	Yes	Yes	No
	American Journal of Psychiatry	13.4	Yes	Yes	No	Yes	No
	Psychotherapy and Psychosomatics	13.1	No	Yes	No	Yes	No
Public,	Lancet Global Health	18.7	No	No	Yes	Yes	No
environmental and occupational health	MMWR- Morbidity and Mortality Weekly Report	12.9	Yes	No	No	Yes	No
	Annual Review of Public Health	9.4	No	No	No	Yes‡	No
	Environmental Health Perspectives	8.4	Yes	No	Yes	Yes	No
	International Journal of Epidemiology	8.4	Yes	Yes	Yes	Yes	No
Radiology, nuclear	JACC-Cardiovascular Imaging	10.2	Yes	No	Yes	Yes	Yes¶
medicine and medical imaging	European Heat Journal- Cardiovascular Imaging	8.3	Yes	No	Yes	Yes	No
	European Journal of Nuclear Medicine and Molecular Imaging	7.7	Yes	No	Yes	Yes	No
	Radiology	7.5	Yes	Yes	No	Yes	No
	Journal of Nuclear Medicine	7.4	Yes	No	No	Yes	No
							Continued

Open access

Table 1 Continued							
JCR category	Journal	2017 IF	Linked* to a college, professional association/society or public institution	ICMJE Recommendations follower†	COPE member†	Author's Col individual disclosure required	Editor's Col individual declaration provided
Respiratory system	European Respiratory Journal¶¶	12.2	Yes	Yes	Yes	Yes	Yes
	Journal of Thoracic Oncology	10.3	Yes	No	Yes	Yes‡	No
	Thorax	9.7	Yes	Yes	Yes	Yes	Yes***
	Journal of Heart and Lung Transplantation	8.0	Yes	No	Yes	Yes	No
	Journal of Thoracic and Cardiovascular Surgery	4.9	Yes	Yes	Yes	Yes	No
Rheumatology	Nature Reviews Rheumatology	15.7	No	No	Yes	Yes	No
	Annals of the Rheumatic Diseases	12.4	Yes	Yes	Yes	Yes	Yes**
	Arthritis & Rheumatology	7.8	Yes	No	Yes	Yes	No
	Rheumatology†††	5.2	Yes	Yes	Yes	Yes	No
	Seminars in Arthritis and Rheumatism	4.4	No	No	Yes	Yes	No
Surgery	Annals of Surgery	9.2	Yes	Yes	Yes	Yes	No
	JAMA Surgery	8.5	Yes	Yes	No	Yes	No
	Journal of Neurology, Neurosurgery and Psychiatry‡‡‡	7.1	No	Yes	Yes	Yes	Yes**
	Endoscopy	6.6	No	Yes	No	Yes	No
	American Journal of Transplantation	6.5	Yes	Yes	Yes	Yes	No
Urology and	European Urology	17.6	Yes	Yes	Yes	Yes	Yes
nephrology	Nature Reviews Nephrology	14.1	No	No	Yes	Yes	No
	Journal of the American Society of Nephrology	8.7	Yes	Yes	Yes	Yes	No
	Kidney International	8.4	Yes	No	Yes	Yes	No
	Nature Reviews Urology	8.1	No	No	Yes	Yes	No
							Continued

Journal 2017 IF attend to or published by or on behalf of.	Linked* to a college, professional association/society or public institution centre; BMC editorial policie \$ 5000 or more).	ICMJE Recommendations follower† s; Endocrine society; Natu	COPE membert	Author's Col individual disclosure required	Editor's Col individual declaration provided
Journal 2017 IF 2017 IF	ed* to a college, ssional ciation/society or c institution e; BMC editorial policie o n more).	CMJE Recommendations ollower† s; Endocrine society; Natu	COPE member† ure authors and ec	Author's Col individual disclosure required	Editor's Col individual declaration provided
*Official journal, or affiliated to or published by or on behalf of.	e; BMC editorial policie) or more).	; Endocrine society; Natu	ure authors and ec	ditors policies).	
TWebsite Information.	e; BMC editorial policie) or more).	; Endocrine society; Natu	ire authors and ec	ditors policies).	
#Available through the editorial group websites (eg, Annual Review author resource centre; BMC editorial policies; Endocrine society; Nature authors and editors policies). SAvailable through the submission service site.) or more).				
Including amount of USA\$ (modest up to less than USA\$5000, or significant USA\$ 5000 or more). **Only that of the editor(s) but no information is provided recarding deputy editors and associate editors.	sociate editors				
11The jumal references of the contraction of the co	I Cardiovascular Syster	S.			
§Sournals ranked as No 1 and No 2 are Circulation and Circulation Research which are included in Cardiology and Cardiovascular Systems.	ncluded in Cardiology	nd Cardiovascular Syster	ns.		
11The journals ranked as No 1 and No 2 are Lancet Respiratory Medicine and American Journal of Respiratory and Critical Care Medicine, which are included in Critical Care Medicine.	Journal of Respiratory ¿	nd Critical Care Medicine	, which are includ	ded in Critical Care	Medicine.
111The journal ranked as No 4 is Osteoarthritis and Cartilage, which is included in Orthopaedics.	baedics.				
the ne journal ranked as No 3 is <i>Journal of near and Lung transplantation</i> which is included in respiratory system. COPE, Committee on Publication Ethics; Col, conflict of interest; ICMJE, International Committee of Medical Journal Editors; JCR, Journal Citation Report.	uded in Respiratory Sys mmittee of Medical Joi	ern. rnal Editors; JCR, Journa	l Citation Report.		

of Cardiology and JACC: Cardiovascular Imaging) were the only ones reporting the dollar amount received (modest or significant; threshold: \$5000) by each member of the editorial team. Finally, four journals belonging to the BMJ Group reported CoIs for one (Annals of the Rheumatic Diseases, Gut, and Journal of Neurology Neurosurgery) or three (Thorax) editors—but not all of them—whereas The BMJ reported individual potential CoIs for all members of its editorial team.

DISCUSSION

This study conducted on 130 high-impact medical journals from 26 medical JCR categories showed that although almost all (99%) required authors to disclose potential CoIs at the time of manuscript submission, only 12% reported individual editors' potential CoIs. Editors' disclosure rarely happened among journals that, in 88.5% of cases, were followers of the ICMJE Recommendations and/or COPE members, which recommend regular disclosure of editorial CoI.

The situation in the rest of the thousands of journals that are included in the list of followers of the ICMJE Recommendations is even worse. We have shown previously that in a random sample of 350 journals only 1% (2/350) of the journal websites had declarations on individual editors' potential CoIs, whereas 82% (287/350) required disclosure of authors' CoIs.¹²

The USA OPD has shed light on editors' CoI by providing data on the payments by industry to journal editors also working as clinicians in the USA. In 2014, 51% and 20% of 713 of clinicians working as editors in 52 top medicine journals in 25 different specialties received general payments (eg, consultancy, honorariums, meals, travel) and research payments from industry, respectively.⁹ Although the monetary values varied substantially across specialties and journals, there were five editors that received general payments between US\$325000 and US\$11 million in 1 year.9 In 2015, 46% (320/703) of editors from 60 influential USA journals in six medical specialties received general payments from industry, of whom 48% (152/320) received payments of more than US\$5000-the threshold considered significant by the National Institutes of Health.¹⁰ In 2013–2016, 42% (141/333) of USA-based physician-editors working in 35 journals with the highest number of citations in 2015 in seven medical specialties received industry payments within any given year.¹¹ Median general payments to editors were mostly higher compared with all physicians within the same specialty.¹¹ Close to half of the editors of well-respected USA journals received industry payments, but very few disclosed them. However, the use of the USA OPD does not provide a complete picture since this database does not include payments to physician members of company corporate boards or payments from companies whose products have not been marketed.¹³

The situation in the European Union (EU) is unknown. France, Latvia and Portugal have regulations mandating the transparent reporting of payments by industry to healthcare professionals.¹⁴ In other EU countries, including Germany, Italy, Spain, Sweden, the Netherlands and the UK, industry self-regulations are in place.¹⁴

It has been observed that physicians accepting inexpensive meals from pharma companies prescribe more brand name medicines,¹⁵ and that greater payments were associated with greater proportion of branded prescriptions.¹⁶ What might be expected from editors who receive industry payments and could be involved in assessing manuscripts of industry-sponsored trials? The ICMJE Recommendations state that editors should recuse themselves from editorial decisions when they have potential CoIs.⁷ Thus, authors and readers have to presume that this happens if this is a journal's policy. Unfortunately, only 57% (34/60) of influential USA journals¹⁰ and 18% of journals listed as followers of the ICMJE Recommendations¹² have a publicly available editor's CoI policy. So, in the best-case scenario, where all journals with editors' CoI policy have a recusal statement that is always followed, there is still a risk that editors of many journals with industry ties could engage in editorial decisions with manuscripts for which they have a conflict.

While many journals have addressed the disclosure of authors' potential CoI disclosure, few have had a similar approach to editors' CoIs. The decision taken by the editors of 18 orthopaedic journals to agree to use the ICMJE form for disclosing authors' CoIs from 2011 onwards is laudable,¹⁷ but as of January 2019 there has not been any such an agreement regarding editors' individual potential CoI disclosure. Similarly, *Nature Research* journals¹⁸ and *JAMA Network* journals¹⁹ have recently readdressed their authors' potential CoI disclosure requirements but have not done the same regarding editors' individual disclosures.

The limitations of this study are that all information was retrieved from journals that lead their respective medical specialties and logically the number was relatively small. However, and as mentioned above with respect to the percentage of ICMJE Recommendations followers that declared the individual authors' and editors' CoI, we should foresee that among all medical journals the percentage that requires disclosure of these CoIs will be much smaller.

It is paradoxical that many journals ask for full authors' CoI disclosure, whereas almost all of them provide no publicly available information on their editors' potential CoIs. The 14 ICMJE member journals should lead the way in adhering to their own policies. Journals that belong to professional societies/associations should also disclose their editorial teams' individual potential CoI. Finally, all journals that are listed as followers of the ICMJE Recommendations should behave accordingly and report their editors' individual potential CoI.

The publication process—as a critical part of the scientific enterprise—should be based on the transparent behaviour of all agents involved. Journal editorial teams are a key player that should apply to themselves the transparency they demand from their authors, by at least regularly updating their individual CoI declarations in an easily accessible place at the journal's website.

Contributors RD-R conceived the idea and wrote the first draft of the manuscript. RD-R retrieved all the data. AM checked the consistency of all the information from a random sample of 25% of the 130 journals. ALC and AM provided comments and edits throughout the drafting process for important intellectual content. RD-R, ALC and AM approved the final version of the manuscript and are accountable for all aspects included in it. The authors assume full responsibility for the accuracy and completeness of the data and ideas presented.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests All authors declare neither financial nor non-financial interests that may be relevant to the submitted work. AM declares that she participated in the creation of the ICMJE Form for Disclosure of Potential Conflicts of Interest.

Patient consent for publication Not required.

Ethics approval Not required

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement All data relevant to this study are inlcuded in the article.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/.

REFERENCES

- Ornstein C, Thomas K. Top cancer researcher fails to disclose corporate financial ties in major research journals. New York times, September 8, 2018. Available: https://www.nytimes.com/2018/09/08/ health/jose-baselga-cancer-memorial-sloan-kettering.html?module= inline
- Ornstein C, Thomas K. Sloan Kettering researchers correct the record by revealing company ties. New York times, October 12, 2018. Available: https://www.nytimes.com/2018/10/12/health/ memorial-sloan-kettering-cancer-disclosure.html
- Wiersma M, Kerridge I, Lipworth W, et al. Should we try to manage non-financial interests? *BMJ* 2018;361:k1240.
- Shawwa K, Kallas R, Koujanian S, et al. Requirements of clinical journals for authors' disclosure of financial and non-financial conflicts of interest: a cross sectional study. *PLoS One* 2016;11:e0152301.
- 5. Wayant C, Turner E, Meyer C, *et al*. Financial conflicts of interest among oncologist authors of reports of clinical drug trials. *JAMA Oncol* 2018;4:1426–8.
- Kleinert S, Wager E, COPE. Responsible research publications: international standards for editors. A position statement developed at the 2nd world conference on research integrity, Singapore, July 22-24, 2010. Available: https://publicationethics.org/files/International% 20standard_editors_for%20website_11_Nov_2011.pdf
- ICMJE. International Committee on medicine journals editors. Recommendations for the conduct, reporting, editing, and publication of scholarly work in medical journals, December 2018. Available: http://www.icmje.org/icmje-recommendations.pdf
- Marušić A, Dal-Ré R. Getting more light into the dark room of editorial conflicts of interest. J Glob Health 2018;8:010101.
- Liu JJ, Bell CM, Matelski JJ, et al. Payments by US pharmaceutical and medical device manufacturers to US medical journal editors: retrospective observational study. BMJ 2017;359:j4619.
- Haque W, Minhajuddin A, Gupta A, et al. Conflicts of interest of editors of medical journals. PLoS One 2018;13:e0197141.
- 11. Wong VSS, Avalos LN, Callaham ML. Industry payments to physician Journal editors. *PLoS One* 2019;14:e0211495.
- Dal-Ré R, Marušić A. Are journals following the ICMJE recommendations complying with conflicts of interest disclosure policies. *Eur J Intern Med* 2018;57:e17–9.
- Agrawal S, Brennan N, Budetti P. The Sunshine Act--effects on physicians. N Engl J Med 2013;368:2054–7.

- Fabbri A, Santos Ala, Mezinska S, et al. Sunshine policies and murky shadows in Europe: disclosure of pharmaceutical industry payments to health professionals in nine European countries. Int J Health Policy Manag 2018;7:504–9.
- 15. DeJong C, Aguilar T, Tseng C-W, *et al*. Pharmaceutical industrysponsored meals and physician prescribing patterns for Medicare beneficiaries. *JAMA Intern Med* 2016;176:1114–22.
- Perlis RH, Perlis CS. Physician payments from industry are associated with greater Medicare Part D prescribing costs. *PLoS One* 2016;11:e0155474.
- 17. Disclosure of conflict of interest (edit). J Surg Orthop Adv 2011;20:151.
- 18. Outside interests (edit). Nature 2018;554:6.
- 19. Bauchner H, Fontanarosa PB, Flanagin A. Conflicts of interests, authors, and journals. *JAMA* 2018;320:2315–8.