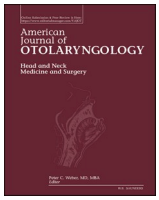
American Journal of Otolaryngology–Head and Neck Medicine and Surgery 45 (2024) 104501

Contents lists available at ScienceDirect

American Journal of Otolaryngology–Head and Neck Medicine and Surgery

journal homepage: www.elsevier.com/locate/amjoto



Evaluating industry payments to editorial board members of otolaryngology journals

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ARTICLE INFO

Keywords:
Industry payments
Financial conflict of interest
Editorial board
Open payments database

ABSTRACT

Objective: To evaluate the extent of payments from medical device and pharmaceutical companies to editorial board members of leading otolaryngology journals.
Methods: Editorial board members of the top 10 otolaryngology journals from Google Scholar rankings were identified in this cross-sectional study.
Payments between 2017 and 2022 were identified via the Open Payments Database from the Centers for Medicare and Medicaid Services. All payment data was adjusted for inflation in 2022 US dollars. Descriptive analyses were performed and journal websites were evaluated for individual editor disclosures.
Results: Out of 581 board members, 306 (53 %) received industry payments between 2017 and 2022, median journal percentage 55 % (interquartile range: 26.5 %–73.5 %). A sum of $45.8 million was paid out between 2017 and 2022, comprising $32.0 million in associated research funding, $1.2 million in research payments, $1.4 million in ownership and investment interests, and $11.2 million in general payments. The largest general payments were made out for "services other than consulting and speaking" ($3.9 million), "consulting" ($3.8 million), "travel and lodging" ($0.99 million), "education" ($0.87 million), "royalty or license" ($0.56 million), and "food and beverage" ($0.55 million). Individual editor disclosures were only available for International Forum of Allergy and Rhinology (9 % of all included editors).
Conclusions: Industry payments to editors of otolaryngology journals are not uncommon. We highlight the need for improved reporting of individual editor disclosures for transparency to journal readers and for minimizing biased editorial decisions.

1. Introduction

Payments from the medical industry to physicians are linked with improvements in patient outcomes and innovation in research [1,2]. However, these associations can be viewed as a source for financial conflict of interests (COIs) [1,2]. Financial COIs can have an impact on making medical decisions, research findings, and the public image of science [3,4]. The Physician Payment Sunshine Act, under the Affordable Care Act of 2010, resulted in the creation of the Open Payments Database (OPD). The OPD is maintained by the Centers for Medicare and Medicaid Services, and lists individual payment data from medical device and pharmaceutical companies to physicians, to offer insight into the relationship between industry and the medical field [5,6].

Scientific publications are recognized as reliable and objective sources of information. Within the scientific process, journal editors play a crucial role in maintaining integrity in research. Editors of medical journals are important gatekeepers of peer review, inviting peer reviewers and selecting what scientific articles are added to the literature [7,8]. Herein, it is not surprising that making editorial decisions can be prone to errors and biased decisions. For example, the outcome of peer review may be influenced by editorial COIs [9]. It is therefore important that editors disclose their COIs for transparency [9]. Medical industry payments to otolaryngologists [10–17] and authors of otolaryngology clinical practice guidelines [18] have been extensively evaluated in previous work. However, the extent of payments to otolaryngology editors remains unclear. The primary aim of this study was to evaluate the proportion of payments from medical device and pharmaceutical companies to editorial board members of leading otolaryngology journals. In addition, we evaluated journal websites for the presence of individual editor disclosures of financial COI.

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https://doi.org/10.1016/j.amjoto.2024.104501
Received 15 May 2024;
Available online 16 August 2024

Abbreviations

COI	conflict of interest
OPD	Open Payments Database

2. Methods

2.1. Data selection

This cross-sectional study was conducted following the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines for cross-sectional studies [19]. Institutional review board approval was not applicable to our study as we used publicly available data from the OPD and journal websites.

Editorial board members of the top 10 Otolaryngology journals with >25 % of editorial board members based in the United States were derived from Google Scholar. This ranking is based on the highest h5-index between 2018 and 2022 [20]. The following journals were included: JAMA Otolaryngology Head & Neck Surgery; International Forum of Allergy & Rhinology; Ear and Hearing; Otolaryngology–Head and Neck Surgery; Head and Neck; Hearing Research; The Laryngoscope; Otology & Neurotology; American Journal of Otolaryngology. European Archives of Oto-Rhino-Laryngology was excluded as <25 % of editors were based in the United States.

For all included journals, journal websites were accessed to identify all members listed on the editorial board. We excluded emeritus editors and administrative assistants. Individual payment data for each board member between 2017 and 2022 was obtained from the OPD [21]. Data were cross-referenced using full name, specialty, location demographics and information provided on journal and institutional websites. Individuals listed on more than one editorial board were only included once in the primary analysis.

Data on "ownership and investment interests", "research payments", "associated research funding" and "general payments" were extracted from the OPD for each individual. Associated research funding is directly paid out to the institution, whereas general payments and research payments are made out to the individual. Research payments can include payments "direct compensation to physicians, funding for research study coordination and implementation, or payments to study participants to cover expenses associated with the study." Further details are provided on the website op the OPD [22]. The category "general payments" was further categorized in "charitable contributions"; "current or prospective ownership"; "compensation for services other than consulting, including serving as faculty or as a speaker at an event other than a continuing education program"; "consulting"; "education"; "entertainment"; "food and beverage"; "gift"; "grant"; "honoraria"; "royalty or license"; and "travel and lodging" [22].

Journal impact factors of included journals were extracted from the Journal Citation Reports. In addition, we searched journal websites for the availability of individual editor disclosures.

2.2. Statistical analysis

Data analysis was conducted using R, version 4.1.3 (R Foundation for Statistical Computing, Vienna, Austria). Descriptive statistics were calculated, and all payment data was adjusted for inflation in 2022 US dollars using the US Consumer Price Index [23]. Continuous data were presented with median (interquartile range) and categorical data using frequency and percentages. Proportions were calculated for the number of editors receiving payments for the total group and for each included journal. Moreover, changes in total and median payments between 2017 and 2022 were calculated for each journal.

3. Results

3.1. Included journals

A total of 644 editorial board members were identified for the nine included journals, of which 63 members were listed on multiple editorial boards. Journal impact factors ranged from 2.1 (Otology & Neurotology) to 7.9 (JAMA Otolaryngology Head & Neck Surgery). The highest number of editorial board members were identified for Otology & Neurotology ($n = 170$), followed by Head & Neck ($n = 108$), and The Laryngoscope ($n = 94$), whereas the fewest members were listed for JAMA Otolaryngology Head & Neck Surgery ($n = 23$).

Out of 581 unique members, 306 (53 %) editorial board members received industry payments between 2017 and 2022. The percentage for each included journal ranged from 0 % (Ear and Hearing) to 78 % (International Forum of Allergy and Rhinology), median percentage 55 % (interquartile range: 26.5 %–73.5 %). An overview for each journal is shown in Table 1.

Individual editor disclosures on journal websites were only available for International Forum of Allergy and Rhinology, which listed 54 out of 72 editors (9 % of all included editors). The other journals had no individual editor COI available.

3.2. Total payments

A total sum of $45.8 million was paid out between 2017 and 2022, comprising $32.0 million (70 %) in associated research funding, $1.2 million (3 %) in research payments, $1.4 million (3 %) in ownership and investment interests, and $11.2 million (24 %) in general payments. Yearly research payments ranged between $24,778 and $758,588, yearly general payments between $780,820 and $4,540,170, and yearly associated research funding between $3,863,346 and $8,112,109. An overview of payment groups for each year is provided in Fig. 1 and Table 2.

The largest general payments were made out for "services other than consulting and speaking" ($3.9 million), "consulting" ($3.8 million), "travel and lodging" ($0.99 million), "education" ($0.87 million), "royalty or license" ($0.56 million), and "food and beverage" ($0.55 million). Fig. 2 displays the total amount of general payments between 2017 and 2022 by category, and by year in Table 3. Yearly payments for other services ranged between $98,891 and $2,985,779, for consulting between $399,770 and $997,375, and travel and lodging between $43,281 and $261,668. A breakdown of median general payments by year is provided in Appendix A, Table A.2.

Table 1
Percentage of editors receiving payments by journal.

Journal	2022 Journal impact factor	Total amount of editorial board members	Amount of editorial board members receiving payments
JAMA Otolaryngology Head & Neck Surgery	7.8	23	16 (70 %)
International Forum of Allergy and Rhinology	6.4	72	56 (78 %)
Ear and Hearing	3.7	24	0 (0 %)
Otolaryngology-Head and Neck Surgery	3.4	61	30 (49 %)
Head & Neck	2.9	108	57 (53 %)
Hearing Research	2.8	45	2 (4 %)
The Laryngoscope	2.6	94	57 (61 %)
American Journal of Otolaryngology	2.5	47	36 (77 %)
Otology & Neurotology	2.1	170	94 (55 %)

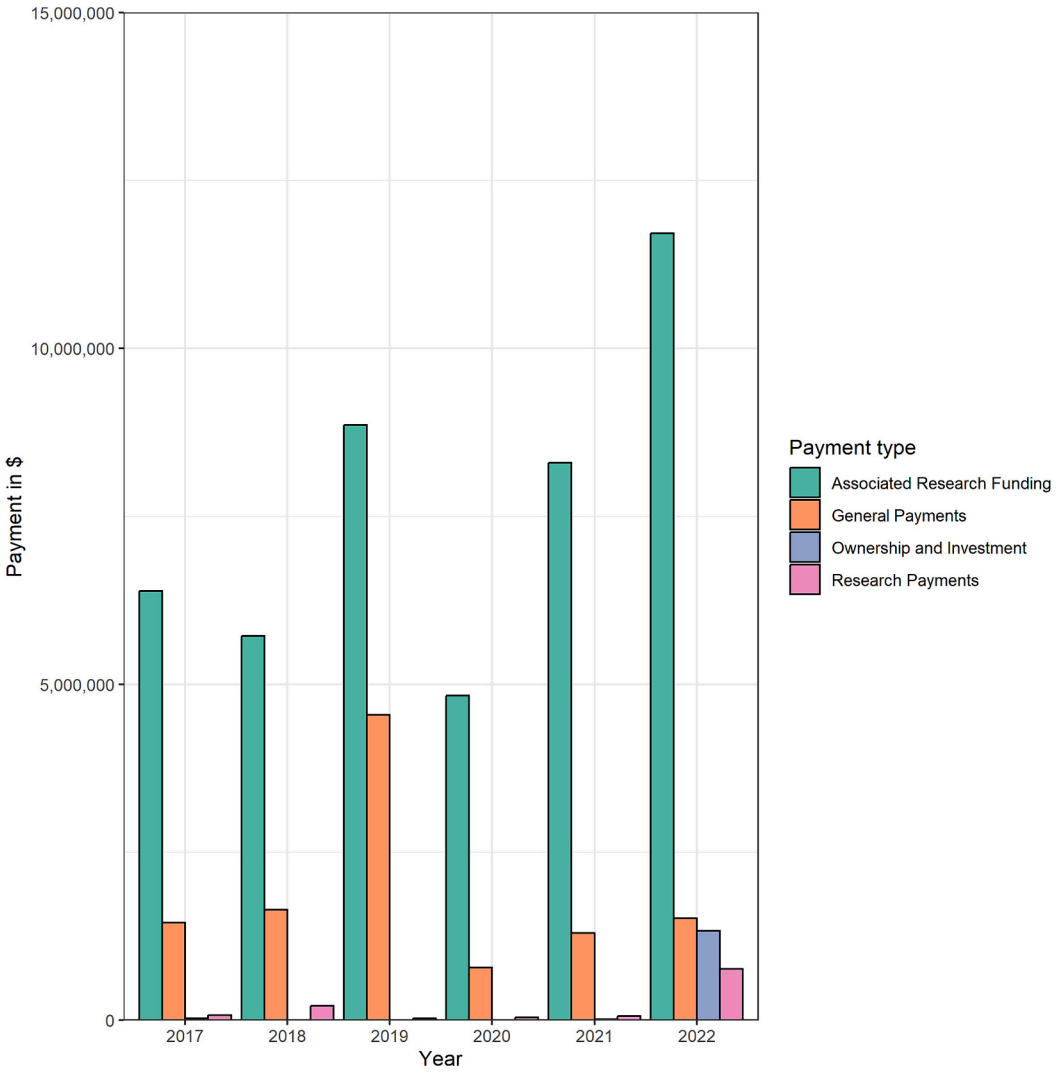

Fig. 1. Total payment by payment type 2017–2022.

Table 2
Total payments by payment type and year.

Year	Total payments	Associated research funding	Research payments	Ownership and investment interests	General payments
2022	$11,713,533	$8,112,109	$758,588	$1,330,609	$1,512,227
2021	$8,295,991	$6,936,680	$55,186	$10,783	$1,293,342
2020	$4,828,947	$4,008,609	$39,518	$0	$780,820
2019	$8,859,036	$4,294,089	$24,778	$0	$4,540,170
2018	$5,719,003	$3,863,346	$211,986	$0	$1,643,671
2017	$6,385,754	$4,840,164	$70,828	$23,880	$1,450,882

3.3. Payment change between 2017 and 2022

Changes in total payments and total general payments between 2017 and 2022 for each included journal is provided in Table 4. The majority of journals had decreases in total general payments between 2017 and 2022, which included Otology & Neurotology (−16 %), Head & Neck (−28 %), The Laryngoscope (−30 %), Otolaryngology Head and Neck (−48 %), American Journal of Otolaryngology (−60 %), and Hearing Research (−100 %).

The highest positive change in total payments ($567,975 in 2017 to $1,982,135 in 2022; 249 %) and general payments ($304,004 in 2017 to $689,986 in 2022; 127 %) was for International Forum of Allergy and Rhinology. Total payments increased for five out of nine journals (Otology & Neurotology; American Journal of Otolaryngology; Head & Neck; International Forum of Allergy and Rhinology; and Otolaryngology Head and Neck). Changes in median total payments and median general payments are provided in Appendix A, Table A.2.

4. Discussion

In the current study, we aimed to quantify the extent of medical industry payments to otolaryngology editors. We found that approximately 53 % of otolaryngology editors have received payments from medical device and pharmaceutical companies between 2017 and 2022. The total amount paid out was $45.8 million, the majority in associated research funding ($32.0 million), followed by general payments ($11.2 million), and to a lesser extent research payments and ownership and investment interests. The top three general payments categories included “services other than consulting and speaking” ($3.9 million), “consulting” ($3.8 million), and “travel and lodging” ($0.99 million). Comparing these results to general payments made out to all otolaryngologists from previous studies, between 2014 and 2015, the majority of general payments were attributable to “services other than consulting and speaking”, “consulting fees”, and “food and beverage” [14]. For 2017, the largest general payment categories across all otolaryngologists

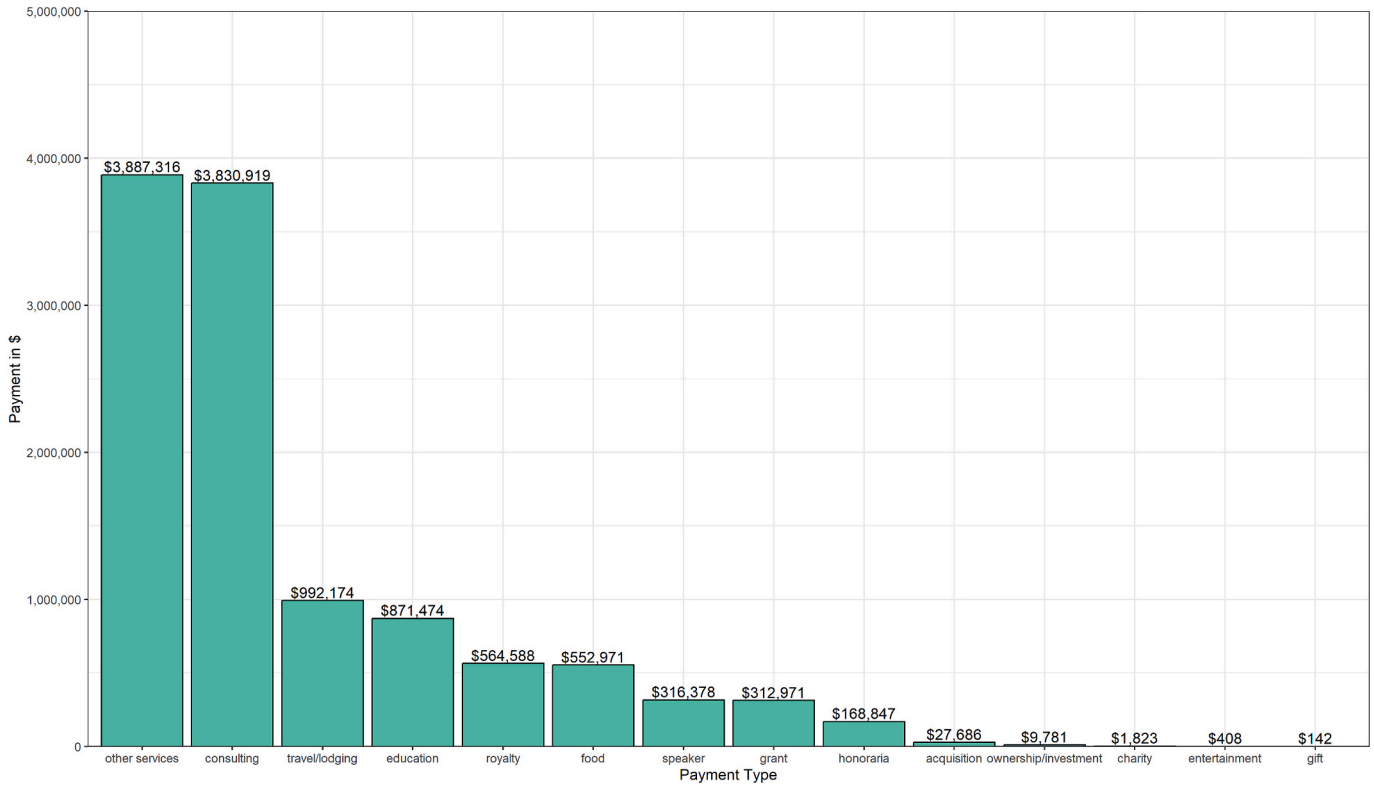

Fig. 2. Total general payment categories 2017–2022.

Table 3
Breakdown of general payments for each year.

Year	2022	2021	2020	2019	2018	2017
Acquisition	$2295	$25,391	$0	$0	$0	$0
Charity	$0	$0	$0	$0	$1823	$0
Consulting	$603,115	$637,804	$399,770	$997,375	$526,425	$666,430
Education	$107,375	$199,919	$45,450	$67,305	$384,827	$66,598
Entertainment	$0	$0	$408	$0	$0	$0
Food and Beverage	$98,086	$47,403	$32,974	$127,004	$122,044	$125,460
Gift	$0	$0	$19	$74	$49	$0
Grant	$34,409	$28,080	$131,965	$35,194	$15,617	$67,706
Honoraria	$17,950	$37,303	$6675	$39,508	$1166	$66,245
Other services	$306,146	$166,431	$98,891	$2,985,779	$130,337	$199,732
Ownership	$0	$0	$0	$0	$0	$9781
Royalty	$154,861	$100,339	$21,384	$35,691	$199,713	$52,600
Speaker Fees	$2500	$2916	$17,531	$272,844	$12,826	$7761
Travel and Lodging	$187,986	$50,671	$43,281	$252,239	$261,668	$196,329

Table 4
Total payment change between 2017 and 2022.

Journal	General payments 2017	General payments 2022	% change	Total payments 2017	Total payments 2022	% change
JAMA Otolaryngology Head & Neck Surgery	$33,922	$42,572	25 %	$406,316	$237,185	−42 %
International Forum of Allergy and Rhinology	$304,004	$689,986	127 %	$567,975	$1,982,135	249 %
Ear and Hearing	$0	$0	0 %	$0	$0	0 %
Otolaryngology-Head and Neck Surgery	$57,677	$29,955	−48 %	$111,432	$1,744,069	1465 %
Head & Neck	$199,552	$143,289	−28 %	$1,907,361	$5,084,151	167 %
Hearing Research	$701	$0	−100 %	$701	$0	−100 %
The Laryngoscope	$206,715	$144,447	−30 %	$462,139	$414,682	−10 %
American Journal of Otolaryngology	$133,293	$53,347	−60 %	$201,159	$537,929	167 %
Otology & Neurotology	$703,603	$591,915	−16 %	$3,281,048	$4,075,614	24 %

were “speaker fees”, “consulting fees”, and “food and beverage” [15].

Payments from the medical industry to otolaryngologists have been extensively analyzed between 2013 and 2017. In 2013, approximately 48 % out of 9338 otolaryngologists received industry payments, for which otolaryngology was also found to be the second lowest specialty paid among the surgical specialties [11].

Morse et al. [15] found that total general payments to otolaryngologists increased for the years 2014 to 2016, which decreased in 2017

($11.2 million) due to lower consulting fees (a decrease of $1 million compared to 2016) and ownership fees (a decrease of $1.2 million compared to 2016). Increases over time may be attributable to enhanced reporting, more robust industry-otolaryngologist relationships, but also normal yearly variation [14].

When comparing research payments to otolaryngologists to payments from other surgical specialties, otolaryngologists were the second lowest paid specialty, for which $43 million in research payments were paid out between 2014 and 2017, with substantial geographical variation [17].

This second to last ranking was also observed for non-research payments [11].

When stratifying total payments by otolaryngology subspecialty, another study found that rhinology and general otolaryngology received higher amounts of total payments compared to otology, facial plastics, and surgical devices between 2014 and 2016 [17].

Payments to rhinologists were found to have the highest increase between 2014 and 2016 [17]. Specifically for neurotologists and otologists, in 2015, $1.9 million was paid out to 188 out of 561 specialists. Of the total amount of payments, 68 % were research payments, 23 % general payments, and 9 % were ownership and investment interests [13]. The lack of more recent data from the OPD for otolaryngology, limits the comparison of trends for payments to otolaryngology editors within the same time-frame.

Our study results show that the field of otolaryngology is no exception with regards to industry payments to journal editors. Previous publications have also evaluated industry payments to editors of other fields, including pathology, general surgery, neurosurgery, medical imaging, and emergency medicine [24–28]. In these studies the percentages of editorial board members receiving industry funding ranged from 30 to 70 % [24–28]. These findings in our study are not unexpected as editorial board members may be individuals who are leaders in the field or actively involved in research [24]. For example, receiving industry funding >$1000 was associated with a higher h-index for academic otolaryngologists, indicating an association between external research funding and scholarly productivity [12].

Merely 9 % of all included editorial board members in our study had individual disclosures available. In general, less attention has been given to editor's COI compared to author's COI [29]. A previous study of high impact medical journals found that 99 % of included journals (129 of 130) required the disclosure of author's COIs, which was much lower for journal editors at 12 % (16 of 130). Transparency and annual reporting of COI for editors is important to prevent biased and impartial editorial decisions. The low percentage of individual disclosures highlights the need for improved reporting for otolaryngology journals. If an editor is receiving funding from a certain company, it is possible that results of subsidizing companies have a higher likelihood of publication, whether conscious or unconscious. Hence, disclosures on websites on how editor's COIs are handled may also increase transparency, for example, that editorial board members who have a potential COI are rescued from editorial decision making. However, recusal may prove difficult in cases where the editorial board member is the only one most qualified and knowledgeable to evaluate the manuscript and provide feedback.

Another important aspect to consider with regards to financial COI, is financial COI of authors. Authors are required to disclose their financial COI with regards to the submitted work. Previous work has however shown that discrepancies can be present between authors' reported financial COI and industry payments as reported in the OPD. For otolaryngology, a small study across specialties found that the discrepancy for author reported financial COI was 44 %, which was lowest compared to other surgical specialties [30].

While our study is the first to evaluate industry payments to otolaryngology editors to our best knowledge, the limitations should be mentioned. A limitation of this study is that the OPD only has data available for authors based in the US. Second, another limitation is that our study was not able to evaluate how editorial decision making was affected in the presence of financial COI. It would be of interest to see how the acceptance and rejection rates are influenced by editorial decision making involving individuals with financial COI. This has never been performed to the best of our knowledge, as such a study would require individual data on editorial decisions on (unpublished) manuscripts. Finally, misclassification may be present for individuals listed in the OPD [13]. However, we tried to limit this by cross-referencing all included individuals.

5. Conclusion

Industry payments to editors of leading otolaryngology journals are common, with the majority of payments attributed to associated research funding, followed by general payments. Our results provide insight into the industry-editor relationship for the field of otolaryngology and we identified the journal specific changes in payments over time. We highlight the need for improved reporting of individual editor disclosures for transparency to journal readers and for minimizing biased editorial decisions.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

CRediT authorship contribution statement

Zaneta N. Harlianto: Writing – review & editing, Writing – original draft, Visualization, Methodology, Investigation, Formal analysis, Data curation. **Netanja I. Harlianto:** Writing – review & editing, Writing – original draft, Visualization, Methodology, Investigation, Formal analysis, Data curation.

Declaration of competing interest

The authors of the manuscript have no competing interests to declare.

Data availability

Available upon reasonable request from the corresponding author.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.amjoto.2024.104501.

References

[1] White AP, Vaccaro AR, Zdeblick T. Counterpoint: physician-industry relationships can be ethically established, and conflicts of interest can be ethically managed. Spine 2007;32(11 Suppl):S53–7. https://doi.org/10.1097/BRS.0b013e318053d54f.
[2] Nakayama DK. In defense of industry-physician relationships. Am Surg 2010;76(9):987–94.
[3] Nejstgaard CH, Bero L, Hróbjartsson A, Jørgensen AW, Jørgensen KJ, Le M, et al. Association between conflicts of interest and favourable recommendations in clinical guidelines, advisory committee reports, opinion pieces, and narrative reviews: systematic review. BMJ 2020;371:m4234. . Published 2020 Dec 9, https://doi.org/10.1136/bmj.m4234.
[4] Bekelman JE, Li Y, Gross CP. Scope and impact of financial conflicts of interest in biomedical research: a systematic review. JAMA 2003;289(4):454–65. https://doi.org/10.1001/jama.289.4.454.
[5] Agrawal S, Brown D. The physician payments sunshine act–two years of the open payments program. N Engl J Med 2016;374(10):906–9. https://doi.org/10.1056/NEJMp1509103.
[6] Kirschner NM, Sulmasy LS, Kesselheim AS. Health policy basics: the physician payment sunshine act and the open payments program. Ann Intern Med 2014;161(7):519–21. https://doi.org/10.7326/M14-1303.

[7] Caelleigh AS. Role of the journal editor in sustaining integrity in research. Acad Med 1993;68(9 Suppl):S23–9. https://doi.org/10.1097/00001888-199309000-00030.
[8] Marusic A, Katavic V, Marusic M. Role of editors and journals in detecting and preventing scientific misconduct: strengths, weaknesses, opportunities, and threats. Med Law 2007;26(3):545–66.
[9] Teixeira da Silva JA, Dobránszki J, Bhar RH, Mehlman CT. Editors should declare conflicts of interest. J Bioeth Inq 2019;16(2):279–98. https://doi.org/10.1007/s11673-019-09908-2.
[10] Rathi VK, Abt NB, Kozin ED, Naunheim MR, Gray ST. Industry sponsorship of research in otolaryngology: an examination of the centers for Medicare & Medicaid Services Open Payments Database. JAMA Otolaryngol Head Neck Surg 2017;143(8):842–3. https://doi.org/10.1001/jamaoto.2017.0002.
[11] Rathi VK, Samuel AM, Mehra S. Industry ties in otolaryngology: initial insights from the physician payment sunshine act. Otolaryngol Head Neck Surg 2015;152(6):993–9. https://doi.org/10.1177/0194599815573718.
[12] Svider PF, Bobian M, Lin HS, Setzen M, Baredes S, Eloy JA, et al. Are industry financial ties associated with greater scholarly impact among academic otolaryngologists? Laryngoscope 2017;127(1):87–94. https://doi.org/10.1002/lary.26027.
[13] Ziai K, Sahyouni R, Moshtaghi O, Vu K, Goshtasbi K, Ghavami Y, et al. An analysis of the open payment database in Neurotology. Otolaryngol Head Neck Surg 2018;158(2):319–22. https://doi.org/10.1177/0194599817742357.
[14] Pathak N, Fujiwara RJT, Mehra S. Assessment of nonresearch industry payments to otolaryngologists in 2014 and 2015. Otolaryngol Head Neck Surg 2018;158(6):1028–34. https://doi.org/10.1177/0194599818758661.
[15] Morse E, Fujiwara RJT, Mehra S. Increasing industry involvement in otolaryngology: insights from 3 years of the open payments database. Otolaryngol Head Neck Surg 2018;159(3):501–7. https://doi.org/10.1177/0194599818778502.
[16] Morse E, Berson E, Mehra S. Industry involvement in otolaryngology: updates from the 2017 open payments database. Otolaryngol Head Neck Surg 2019;161(2):265–70. https://doi.org/10.1177/0194599819838268.
[17] Brauer PR, Morse E, Mehra S. Industry payments for otolaryngology research: a four-year analysis of the open payments database. Laryngoscope 2020;130(2):314–20. https://doi.org/10.1002/lary.27896.
[18] Horn J, Checketts JX, Jawhar O, Vassar M. Evaluation of industry relationships among authors of otolaryngology clinical practice guidelines. JAMA Otolaryngol Head Neck Surg 2018;144(3):194–201. https://doi.org/10.1001/jamaoto.2017.2741.
[19] von Elm E, Altman DG, Egger M, Pocock SJ, Gøtzsche PC, Vandenbroucke JP, et al. The strengthening the reporting of observational studies in epidemiology (STROBE) statement: guidelines for reporting observational studies. J Clin Epidemiol 2008;61(4):344–9. https://doi.org/10.1016/j.jclinepi.2007.11.008.
[20] Otolaryngology - Google Scholar Metrics. scholar.google.com. Accessed April 3, 2024. https://scholar.google.com/citations?view_op=top_venues&hl=en&vq=med_otolaryngology.
[21] Open Payments Data—CMS. openpaymentsdata.cms.gov. Accessed April 14, 2024. https://openpaymentsdata.cms.gov/.
[22] Open Payments Data - CMS. openpaymentsdata.cms.gov. Accessed March 28, 2024. https://openpaymentsdata.cms.gov/about/glossary.
[23] Consumer Price Index. U.S. Bureau of Labor Statistics. Accessed April 4, 2024. https://www.bls.gov/cpi/.
[24] Harlianto NI, Harlianto ZN. Health Care Industry Payments to Editorial Board Members of Major Neurosurgery Journals Between 2017 and 2022. Neurosurgery. 8, 2024. doi:https://doi.org/10.1227/neu.0000000000002934.
[25] Elsolh B, Brar A, Gyawali B, Patel SV. Reviewing the reviewers potential financial conflicts of interest in editorial boards of surgery journals. Ann Surg 2022;276(6):e1089–94. https://doi.org/10.1097/SLA.0000000000004929.
[26] Kwee RM, Kwee TC. Health care industry payments to editorial board members of imaging-related journals. Radiology 2022;303(2):399–403. https://doi.org/10.1148/radiol.212527.
[27] Niforatos JD, Narang J, Trueger NS. Financial conflicts of interest among emergency medicine Journals' editorial boards. Ann Emerg Med 2020;75(3):418–22. https://doi.org/10.1016/j.annemergmed.2019.02.020.
[28] Jacobs JW, Martin AA, Larson AR, Gehrie EA, Silver JK, Booth GS. Analysis of industry-related payments among physician editors of pathology journals. Am J Clin Pathol 2023;159(2):172–80. https://doi.org/10.1093/ajcp/aqac147.
[29] 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(7):e029796. https://doi.org/10.1136/bmjopen-2019-029796.
[30] Cherla DV, Olavarria OA, Holihan JL, Viso CP, Hannon C, Kao LS, et al. Discordance of conflict of interest self-disclosure and the centers of Medicare and Medicaid services. J Surg Res 2017;218:18–22. https://doi.org/10.1016/j.jss.2017.05.037.