Supplementary material

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Appendix

A1. Search strategy, study inclusion, and eligibility criteria

Potential empirical studies on non-financial conflicts of interest were initially identified from two scoping reviews and one narrative review.[1–3] We then applied backward and forward citation searching using Google Scholar (in September-October 2025), and consulted our personal libraries to identify additional relevant studies.

The identified records were subsequently assessed for eligibility by one of us (HVBK), and final inclusion based on full-text records was done using consensus by two of us (AL and HVBK).

We included empirical studies published in peer-reviewed journals that reported relevant data on medical journal policies, the prevalence or the impact of non-financial conflicts of interest in medicine, including their specific types, separately from data on financial conflicts of interest. Rather than offering an exhaustive review, this review highlights key studies, and we acknowledge that the study selection process may therefore be subject to selection bias. Table 2 in the main manuscript includes relevant empirical studies investigating prevalence and impact of non-financial conflicts of interests in medicine. Moreover, as we have identified various empirical studies on journal policies addressing non-financial conflicts of interest, we have included the relevant studies in Table A in the Appendix to illustrate how such conflicts of interest are conceptualised in practice.

A2. Table A. Empirical studies investigating medical journal policies, prevalence and impact of non-financial conflicts of interests in medicine

Types of interest	Context	Main findings
Journal policies		
Professional	173 public health journals[4]	Twenty (12%) journals required authors' disclosure of professional interests.
	72 health policy and services journals[5]	Fifteen (20%) journals required authors' disclosure of professional interests, and one (1%) governmental interests.
	250 medical journals[6]	Thirty-two (7%) journals required editors' disclosure off professional and specialist interests, 30 (12%) unpaid board position, 27 (11%) journal affiliation when submitting as author to own journal, and 22 (9%) serving as unpaid expert witness. Nine (4%) journals required peer reviewers' disclosure of professional and specialist interests, and two (1%) serving as unpaid expert witness.
	117 clinical journals[7]	Five (4%) journals required authors' disclosure of professional interests.
Intellectual	173 public health journals[4]	Sixteen (10%) journals required authors' disclosure of academic interests, 13 (8%) intellectual interests, and 7 (4%) intellectual passion.
	186 surgery journals[8]	Six (3%) journals required authors' disclosure of intellectual passion, five (3%) academic interests, and five (3%) intellectual interests.
	131 oncology journals[9]	Ten (8%) journals required authors' disclosure of intellectual passion.
	72 health policy and services journals[5]	Nine (13%) journals required authors' disclosure of academic interests, nine (13%) intellectual passion, and seven (10%) intellectual interests.
	20 psychiatry journals and 20 general medicine journals[10]	No psychiatric journals and two (10%) general medicine journals required authors' disclosure of intellectual passion.
	250 medical journals[6]	Forty-four (18%) journals required editors' disclosure of intellectual interests, and 22 (9%) unpaid educational and research activities. Fifty-three (21%) journals required peer reviewers' disclosure of intellectual interests, and two (1%) unpaid educational and research activities.
	63 bioethics journals[11]	Five (8%) journals required authors' disclosure of intellectual interests and theoretical bias, three (5%) peer reviewers', and two (3%) editors'.

	117 clinical journals[7]	Two (3%) journals required authors' disclosure of intellectual interests, two (2%) membership of a guideline panel, and one (2%) authorship of primary research studies on the same topic.
	248 medical and health sector journals[12]	Four (2%) journals required authors' disclosure of intellectual interests.
Ideological	173 public health journals[4]	Twenty-one (12%) journals required authors' disclosure of political interests, 11 (6%) ideological interests, 11 (6%) religious views, and seven (4%) personal opinions or beliefs.
	186 surgery journals[8]	Twenty (11%) journals required authors' disclosure of personal opinions, 16 (9%) political interests, nine (5%) religious beliefs, three (2%) ideological interests, and one (1%) being member of pressure group.
	72 health policy and services journals[5]	Ten (14%) journals required authors' disclosure of personal opinions, eight (11%) religious views, eight (11%) political interests, seven (10%) ideological interests, and five (7%) advocacy groups.
	248 medical and health sector journals[12]	One (1%) journal required authors' disclosure of beliefs, and two (1%) political views.
	250 medical journals[6]	Forty-five (18%) journals required editors' disclosure of political views or affiliations, 45 (18%) religious views, 18 (7%) ideological interests, and 10 (4%) collaborations with advocacy groups. Forty-two (17%) journals required peer reviewers' disclosure of political views or affiliations, 40 (16%) religious views, and eight (3%) ideological interests.
	63 bioethics journals[11]	Seven (11%) journals required authors' disclosure of moral, ideological and political positions, two (3%) peer reviewers', and two (3%) editors'.
Personal	173 public health journals[4]	Fifty-four (31%) journals required authors' disclosure of personal relationship, 33 (19%) personal interests, and 22 (13%) academic competition.
	186 surgery journals[8]	Fifty-nine (32%) journals required authors' disclosure of personal relationships, 28 (16%) professional relationships, 19 (10%) personal interests, nine (5%) academic competition, and one (1%) legal relationships.
	131 oncology journals[9]	Thirty-eight (29%) journals required authors' disclosure of personal ties, and 12 (10%) academic competition.
	72 health policy and services journals[5]	Twenty-nine (40%) journals required authors' disclosure of personal relationships, 12 (17%) academic competition, eight (11%) personal interests, and three (4%) legal relationships.

	20 psychiatry journals and 20 general medicine journals[10]	No psychiatric journals and three (15 %) general medicine journals required authors' disclosure of personal relationships, and no psychiatric journals and three (15 %) general medicine journals academic competition. .
	250 medical journals[6]	Thirty-five (14%) journals required editors' disclosure of collaboration with manuscript authors, 32 (13%) being from the same institution as manuscript authors, 27 (10%) mentoring of manuscript authors, 18 (7%) personal and professional relationships, 17 (7%) academic competition or rivalry with manuscript authors, and 10 (4%) involvement in legal action related to the work. Fifty-two (20%) journals required peer reviewers' disclosure of collaboration with manuscript authors, 34 (14%) being from the same institution as manuscript authors, 12 (5%) mentoring of manuscript authors, 32 (13%) personal and professional relationships, and nine (4%) academic competition or rivalry with manuscript authors.
	63 bioethics journals[11]	One (2%) journal required authors' disclosure of professional rivalry, 15 (24%) professional relations, and 16 (25%) personal relations. One (2%) journal required peer reviewers' disclosure of professional rivalry, three (5%) professional relations, and five (8%) personal relations. Two (3%) journals required editors' disclosure of professional relations, and two (3%) personal relations.
	117 clinical journals[7]	Thirteen (11%) journals required authors' disclosure of personal relationship, and nine (8%) academic associations.
	Questionnaire of 221 senior editors from 221 medical journals[13]	One hundred thirty-seven (62%) editors agreed that journals should address peer reviewers' personal relationships with authors.
	248 medical and health sector journals[12]	Seven journals (3 %) required authors' disclosure of personal relationships, and five (2 %) academic competition
Prevalence		
Professional	176 WHO clinical guidelines[14]	Twenty-nine (16%) guidelines disclosed authors' professional interests.
	95 systematic reviews of psychological therapies[15]	One (1%) review disclosed authors' professional interests due to serving as a trainer for a psychological therapy.
	200 Cochrane Reviews and other systematic reviews[16]	Nine (5%) reviews disclosed authors' intellectual interests due to authorship of studies included in the review, 19 (10%) due to authorship of studies not included in the review, and one (1%) due to participation in a previous guideline panel on the topic.

Intellectual	155 systematic reviews of surgical interventions and devices[17]	Six (4%) reviews disclosed authors' intellectual beliefs.
	176 WHO clinical guidelines[14]	Thirty-five (20%) guidelines disclosed authors' intellectual interests due to participation in related research studies or presentations on related topics.
	95 systematic reviews of psychological therapies[15]	Two (2%) reviews disclosed authors' intellectual interests due to authorship of studies included in the review, two (2%) due to research activities in relation to specific psychological therapy, and one (1%) due to serving as speaker on congresses.
	200 systematic reviews in health policy and systems research[18]	Five (3%) reviews disclosed authors' intellectual interests due to authorship of studies included in the review.
	200 randomised clinical trials[19]	Three (2%) trials disclosed authors´ intellectual interests due to authorship of other primary research studies on the topic.
Ideological	200 Cochrane Reviews and other systematic reviews[16]	Seven (4%) reviews disclosed authors' ideological interests due to advocatory positions.
Personal	200 systematic reviews within health policy and systems[18]	One (1%) review disclosed a review author's collaboration with an author of one of the trials included in the review.
	155 systematic reviews of surgical interventions and devices[17]	Three (2%) reviews disclosed authors' personal experience with the review topic.
Impact		
Professional	12 clinical guidelines on mammography[20]	It was uncertain whether guidelines co-authored by radiologists were more likely to recommend routine screening (RR: 6.05, 95% CI: 0.57 to ∞). Guidelines co-authored by primary care physicians were more likely to recommend against routine screening (OR: 1.64, 95% CI: 1.03 to 5.18 for every 10% increase in the proportion of primary care physicians in guideline author group).
	4460 publications in 20 journals from five medical subspecialties[21]	There was an excess of publications from the journal's own editorial board in 14 of the 20 journals ($P < 0.05$).
	143 research publications on mammography screening[22]	Overdiagnosis was more often downplayed or rejected in publications by authors working with mammography screening (40%), compared with authors unrelated with screening (7%) ($P = 0.03$).
	12 clinical guidelines on mammography screening[20]	Number of publications on breast disease by the guideline lead author was associated with recommending routine

		screening (OR: 2.32, 95% CI: 1.05 to ∞ for each additional publication on breast disease).
Intellectual	Questionnaire of 16 primary study authors and 20 methodologists on the interpretation of a meta-analysis on IGF-1 and prostate cancer[23]	Authors who had published more IGF-1-related studies or studies with statistically significant results interpreted the meta-analysis more favourably than methodologists.
	67 peer review reports on fictive abstracts in psychology[24]	Peer reviewers were strongly biased towards manuscripts with results contrary to their theoretical perspective.
	95 systematic reviews of psychological therapies[15]	It was uncertain whether spin in conclusions was associated with inclusion of review authors' own primary studies in the review (OR: 2.08, CI: 0.83 to 5.18), and researcher allegiance* (OR: 2.63, 95% CI: 0.84 to 8.16).
Ideological	20 meta-analysis of homeopathy[25]	More favourable effects of homeopathy in 13 meta-analyses with conflicts of interest due to homeopathy (OR: 0.60, 95% CI: 0.50 to 0.70) compared with 7 meta-analyses without conflicts of interest (OR: 0.96, 95% CI: 0.75 to 1.23) (P = 0.002 for subgroup differences).
Personal	Peer review reports of 7981 neuroscience manuscripts[26]	Peer reviewers who were close in the manuscript authors' co-authorship network provided more favourable review scores compared with reviewers with more distant relationships.

CI: confidence interval; IGF-1: Insulin-like Growth Factor 1; OR: odds ratio; P: P-value; RR: relative risk

* Allegiance covers the belief of a researcher in the superiority of a treatment (i.e. school of thought).

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