

# Conflict of Interest Policies and Disclosure Requirements in Neurosurgical Journals

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MADELEINE DE LOTBINIERE-BASSETT, MD

JAY RIVA-CAMBRIN, MD MSC FRCSC

PATRICK J. MCDONALD, MD MHSC FRCSC



**NEUROETHICS**  
**CANADA**

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BRAIN HEALTH HUMAN VALUES

# COI

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None to disclose

# Introduction

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We evaluated the prevalence and comprehensiveness of COI policies among the leading neurosurgical journals

These policies were compared to those of the International Committee of Medical Journal Editors (ICMJE) disclosure recommendations

# Methods

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The top 20 neurosurgical journals were defined by Google Scholar Metrics

- h5-index

We conducted a cross-sectional study of publicly available disclosure policies in July 2016 and defined two categories:

- **Comprehensive policies** → explicit definition with examples of potential COI
- **Simple policies** → vague or no definition of COI

We compared 'simple' versus 'comprehensive' policies to:

- h5-index
- 2015 impact factor

Policy type	Number
Comprehensive	10
Simple	9

Journal	h5-index	Impact Factor 2015	No. of COI types
Journal of Neurosurgery	60	3.443	9
Neurosurgery	57	3.78	6
Journal of Neurosurgery: Spine	46	2.126	9
Neurosurgical focus	37	2.546	9
World Neurosurgery	37	2.685	8
Acta Neurochirurgica	33	1.617	15
Journal of Neurosurgery: Pediatrics	31	1.757	9
Surgical Neurology International	26	N/A	4
British Journal of Neurosurgery	25	1.063	2
Neurosurgical review	24	2.166	15
Neurosurgery clinics of North America	23	1.624	2
Acta Neurochirurgica Supplement	23	N/A	15
Stereotactic and Functional Neurosurgery	21	1.691	0
Neurologic Medico-Chirurgica	19	0.612	9
Journal of Korean Neurosurgical Society	18	0.599	0
Journal of Neurological Surgery Part A: Central European Neurosurgery	16	0.723	2
Journal of Neurosurgical Sciences	15	1.651	2
Journal of Neurological Surgery Part B: Skull Base	14	N/A	2
Progress in Neurological Surgery	14	1.079	0

# Results: quality

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COI types in comprehensive policies included:

- patents, royalties, honoraria, consultation, grants, employment, management, investment, family involvement, personal belief/relationships

**18 (89.5%)** of the top neurosurgical journals had COI policies

Ten (52.6%) journals requested declaration of *non-financial conflicts*

Two (10.5%) journals defined a *time period of interest*

**Journals with more comprehensive COI policies were significantly more likely to have:**

- **Higher h5-indices (p=0.003)**
- **Higher impact factors (p=0.01)**

# Results: inclusiveness

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16 (84.2%) journals required declaration from *the corresponding author*

**13 (68.4%)** requested declaration from *all authors*

**Six (31.6%)** requested declaration from *reviewers*

**Five (26.3%)** requested declaration from *editors*

13 (68.4%) journals included a signed COI declaration form with the manuscript

- Six (31.6%) journals required that all authors sign
- Five (26.3%) journals only had the corresponding author sign
- Two (10.5%) journals had a form that did not include a COI statement

# Results: enforcement

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**No journals included a specific COI verification procedure**

**Five (26.3%) journals included policies regarding publication rejection or retraction in face of inaccurate COI declaration**

Four (21.1%) journals were included on the ICMJE list of publications that follow the Uniform Requirements for Manuscripts Submitted to Biomedical Journals

- None of these made reference to the ICMJE within their policies

Five (26.3%) journals made reference to the ICMJE

- None were found on the ICMJE list

# Discussion

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Journals with more comprehensive COI policies were associated with higher h5-index and impact factor rankings

Few neurosurgical journals had a formal COI verification policy

- Further examination of the COI enforcement process is warranted

The publication of industry-funded research is associated with an increase in article citations through media promotion, reprints and reviews.<sup>1</sup>

- 47% of neurosurgical journals requested disclosure by editors and/or reviewers

<sup>1</sup>Lundh A, Barbateskovic M, Hróbjartsson A, Gøtzsche PC. Conflicts of interest at medical journals: The influence of industry-supported Randomised trials on journal impact factors and revenue – cohort study. **PLoS Med** 7: 7, 2010

# Conclusions

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The majority of high-impact neurosurgical journals in 2016 had publicly available COI disclosure policies

**Policies varied substantially across journals**

**COI comprehensiveness was associated with both impact factor and h5-index**

More comprehensive and consistent COI policies will **facilitate increased transparency** in neurosurgical research

Neurosurgical journals should include a clear, consistent and comprehensive COI disclosure policy