Publications misrepresentation: evaluating honesty among Otolaryngology residency applicants in Canada.

L Sater MD, S Coupland MSc, X Zhang PhD, and Lily HP Nguyen MD, MSc, FRCSC

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I do not have an affiliation (financial or otherwise) with a pharmaceutical, medical device or communications organization.

Je n’ai aucune affiliation (financière ou autre) avec une entreprise pharmaceutique, un fabricant d’appareils médicaux ou un cabinet de communication.
Introduction

Early unprofessional behavior

Later disciplinary actions*

Objectives

1) To assess the prevalence of publication misrepresentation amongst applicants to OTL-HNS residency programs in Canada

2) To describe the attributes of those applicants with publication misrepresentations
Methods

• Ethics and Confidentiality
  – McGill REB
  – CaRMS ethics

- Data Licensing Agreement
- Confidentiality Agreement

➢ Review by 3rd party (SC)
➢ Access to publication section
➢ Age group (5yrs intervals)
➢ Coded data
Methods

• **Study design**
  – Retrospective descriptive study
  – 2006-2008 (min 48 mo f/u)
Methods

• Intervention

CVs of CaRMS applicants to OTL

Verification of publications

- Publications
- Age range
- Gender
- Medical school
- Academic degrees

- Published
- Accepted for publication
- In press
Methods

• Intervention

1st Round
- MedLine, PubMed, Google Scholar
- Electronic journals

2nd Round
- Professional Medical Librarian
  (PubMed Single Citation Matcher, Google Scholar, Google, Scopus databases)
Methods

• **Primary outcome**

  Rate of Publication Misrepresentation (MR):
  
  1) Non-authorship
  2) Non-existing article
  3) Authorship self promotion
Methods

• **Analysis**
  – Statistical Analysis System version 9.2
  – Descriptive *(independent t-test, chi-square test)*
  – Multivariate *(logistic regression model)*

<table>
<thead>
<tr>
<th>Age</th>
<th>Gender</th>
<th>Medical school</th>
<th>Rate of Misrepresentation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Canadian Medical Graduates (CMGs)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>International Medical Graduates (IMGs)</td>
<td></td>
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<tr>
<td>Degree</td>
<td>Total citations</td>
<td></td>
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</tbody>
</table>
Results

MR among applicants

- Total # applications: 182
- Applicants w/ no publications: 58/182 (32%)
- Applicants w/ ≥ 1 publications: 124/182 (68%)

- Applicants w/o misrepresentation: 95/124 (77%)
- Applicants w/ misrepresentation: 29/124 (23%)

70% M
30% F
72% CMGs
28% IMGs
Results

MR among publication citations

Total # publications
427

# verifiable publications
385 (90%)

Publications w/o misrepresentation
338/385 (88%)

Publications w/ misrepresentation
47/385 (12%)

# unverifiable publications
42 (10%)

From CMGs
4/269 (2%)

From IMGs
38/158 (24%)

269 CMGs
158 IMGs
Results

- Specific types of MR as per number of applicants and publications.

<table>
<thead>
<tr>
<th>Types of misrepresentation</th>
<th># Applicants who misrepresented n=29</th>
<th># Misrepresented publications n=47</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Non-existing article</td>
<td>21</td>
<td>38</td>
</tr>
<tr>
<td>2) Authorship self promotion</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>3) Non-authorship</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
Results

MR rates among CMGs & IMGs

- CMGs: 28% applicants who misrepresented publications, 16% % misrepresented publications
- IMGs: 11% applicants who misrepresented publications, 4% misrepresented publications

P = 0.04
Discussion

- 23% of CaRMS applicants to OTL-HNS programs misrepresent publications

- CMGs > IMGs

- No association with age / gender / number of citations / academic degree
Limitations

- Retrospective
- Could not contact applicants
- Unverifiable articles
  - inaccessible journals
  - foreign language
- 48-72 months f/u
Conclusion

– 1\textsuperscript{st} nation-wide study to demonstrate publication misrepresentation amongst OTL-HNS residency applicants over 3 years

– Guidelines
Thank you!
References


27. Wiggins MN. A meta-analysis of studies of publication misrepresentation by applicants to residency and fellowship programs. Acad Med. 2010 Sep; 85:1470-4.
Q&A

– What draws applicants to MR?
  – Competitive advantage
  – Material gain
  – Low probability of detection
  – Perception that “everyone does it”
  – Mental aberration
  – Carelessness or innocent misunderstanding
Q&A

– Could MR be due to careless errors or delay in publication?
  – Possibly
  – But
– What may explain the higher rate of MR among our OTL applicants?
  
  – Competitiveness of the program
  
  – Difference in methodology
    – Institutionally based
    – Prospective Study (contacting applicants)
    – Only including applicants already accepted for interview
    – Not accounting for claimed publications not published after a given period of time as being MR