Introduction

• Publication of scientific research papers is important for professionals working in academic medical centres and is a key activity in academia.
• There appears to be increasing focus on quantitative output measures, where these output measures determine status and prestige and serve to rank universities as well as individuals.
• Overemphasis on Impact Factors and Hirsch indices could generate pressure that may adversely influence science quality and personal well-being of scientists [1-3].

This research aims to address the publication culture in the Netherlands and its consequences for science and personal well-being

Methods

We performed an online survey inviting all Dutch medical professors (n=1206) to complete 2 questionnaires:
• Publication Pressure Questionnaire (PPQ, 24 statements, 5 point Likert Scale)
  1. personally experienced publication pressure
  2. publication pressure in general terms as perceived by the respondent.
  3. publication pressure on scientist’s position/status
• Maslach Burnout Inventory

Results

<table>
<thead>
<tr>
<th>Key Statements</th>
<th>Agree on Likertscale</th>
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<tr>
<td>I suspect that in some colleagues publication pressure leads to (if not intentional) manipulation of data.</td>
<td>33.5%</td>
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<tr>
<td>Worldwide leads publication pressure to serious doubt on validity of research results.</td>
<td>38.1%</td>
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<tr>
<td>I think the pressure to publish has become too high.</td>
<td>53.8%</td>
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<tr>
<td>My colleagues mainly judge me on my publication record</td>
<td>21.6%</td>
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<tr>
<td>The urge to publish makes science ill</td>
<td>26.1%</td>
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- 24% of the professors has a burn out
- Higher scores on publication pressure correlates with higher scores on emotional exhaustion and depersonalisation (p < 0.001)
- Hirsch index (>38) is negatively correlated with burn out (p<0.01)

Conclusion

• A substantial proportion (>30%) of medical professors believes that publication pressure has become excessive, and are developing a cynical view on the validity of medical science.
• Perceived publication pressure can adversely affect validity and reliability of the medical literature.
• These perceptions are statistically correlated to emotional exhaustion and other burn out symptoms.
• H-index is negatively correlated with emotional exhaustion
• Further research should address the effects of publication pressure in more detail and identify alternative ways to stimulate quality of medical science.

References and contact information

Please contact j.tijdink@vumc.nl for further details on the study. Contact information is available.

Conflict of interest: the authors declare no conflict.

References: