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Background:

Publication of scientific research papers is important for professionals working in academic medical centres. Quantitative measures of scientific output determine status and prestige, and serve to rank universities as well as individuals. The pressure to generate maximum scientific output is high, and quantitative aspects may tend to dominate over qualitative ones. How this pressure influences professionals' perception of science and their personal well-being is unknown.

Methods and Findings

We performed an online survey inviting all medical professors (n=1206) of the 8 academic medical centres in The Netherlands to participate. They were asked to fill out 2 questionnaires; a validated Publication Pressure Questionnaire and the Maslach Burnout Inventory.

In total, 437 professors completed the questionnaires. among them, 54% judge that publication pressure 'has become excessive', 39% believe that publication pressure 'affects the credibility of medical research' and 26% judge that publication pressure has a 'sickening effect on medical science'. The burn out questionnaire indicates that 24% of medical professors has signs of burn out. The number of years of professorship was significantly related with experiencing less publication pressure. Significant and strong associations between burn out symptoms and the level of perceived publication pressure were found. The main limitation is the possibility of response bias.

Conclusion

A substantial proportion of medical professors believe that publication pressure has become excessive, and have a cynical view on the validity of medical science. These perceptions are statistically correlated to burn out symptoms. Further research should address the effects of publication pressure in more detail and identify alternative ways to stimulate the quality of medical science