

Introduction

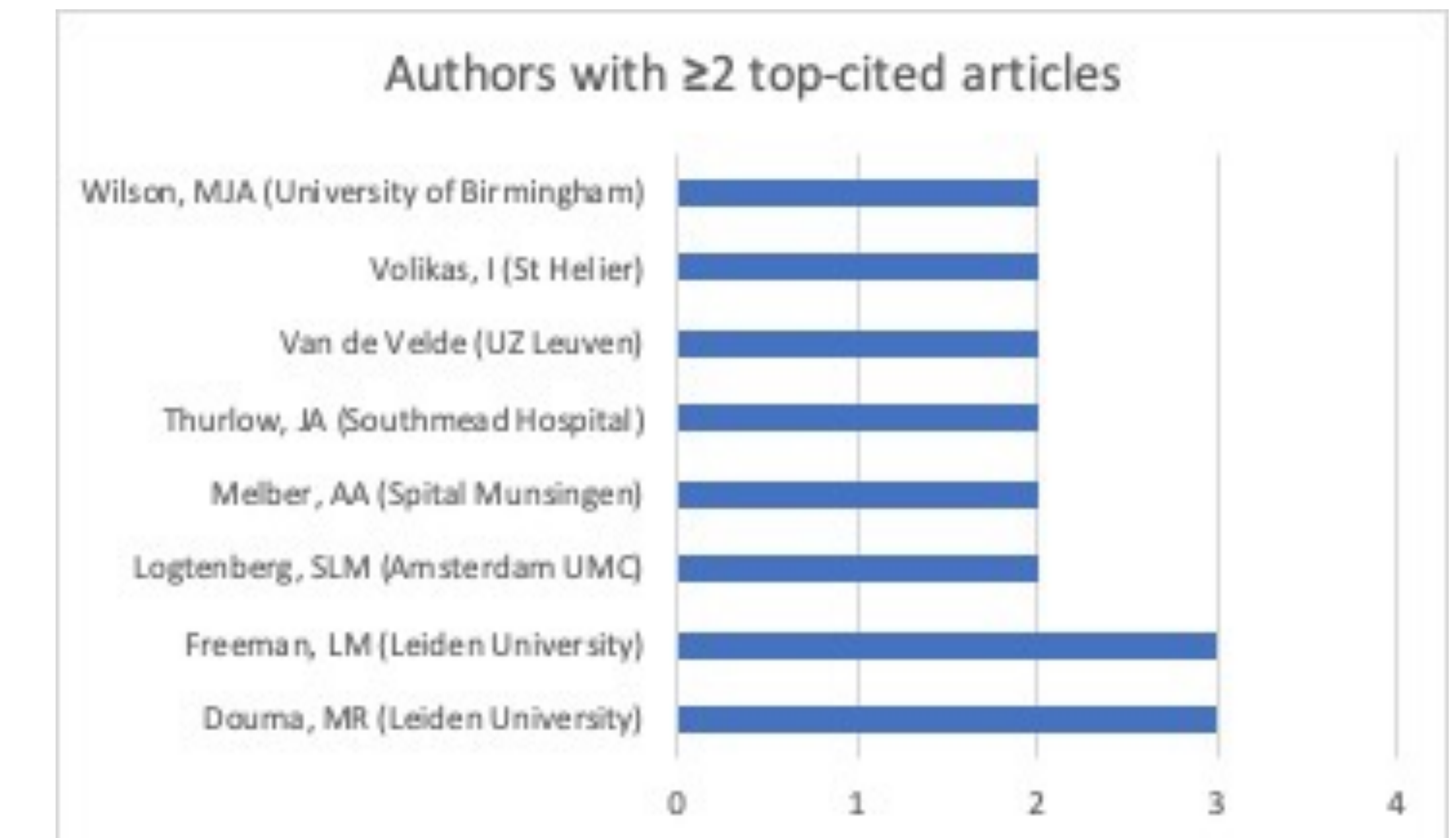
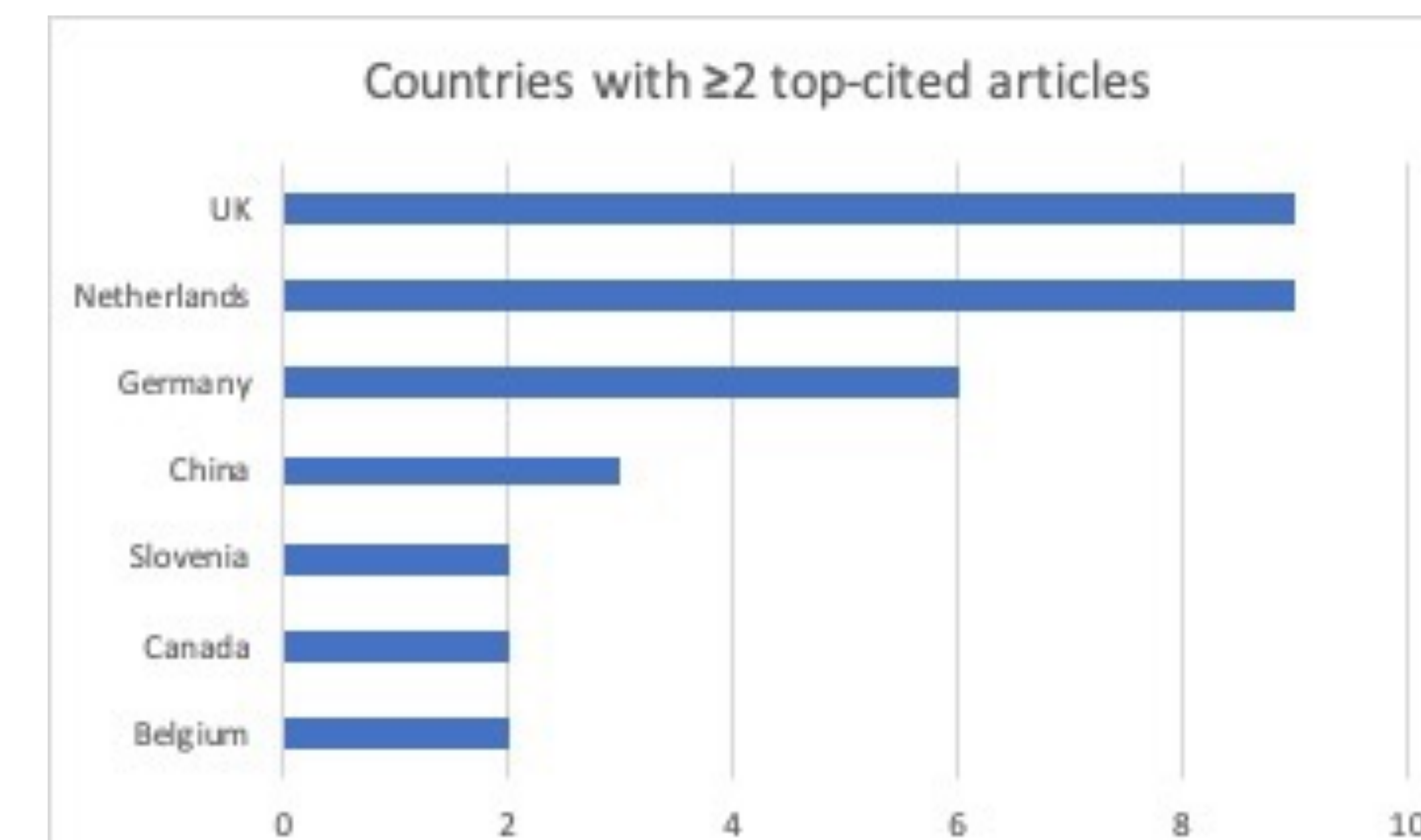
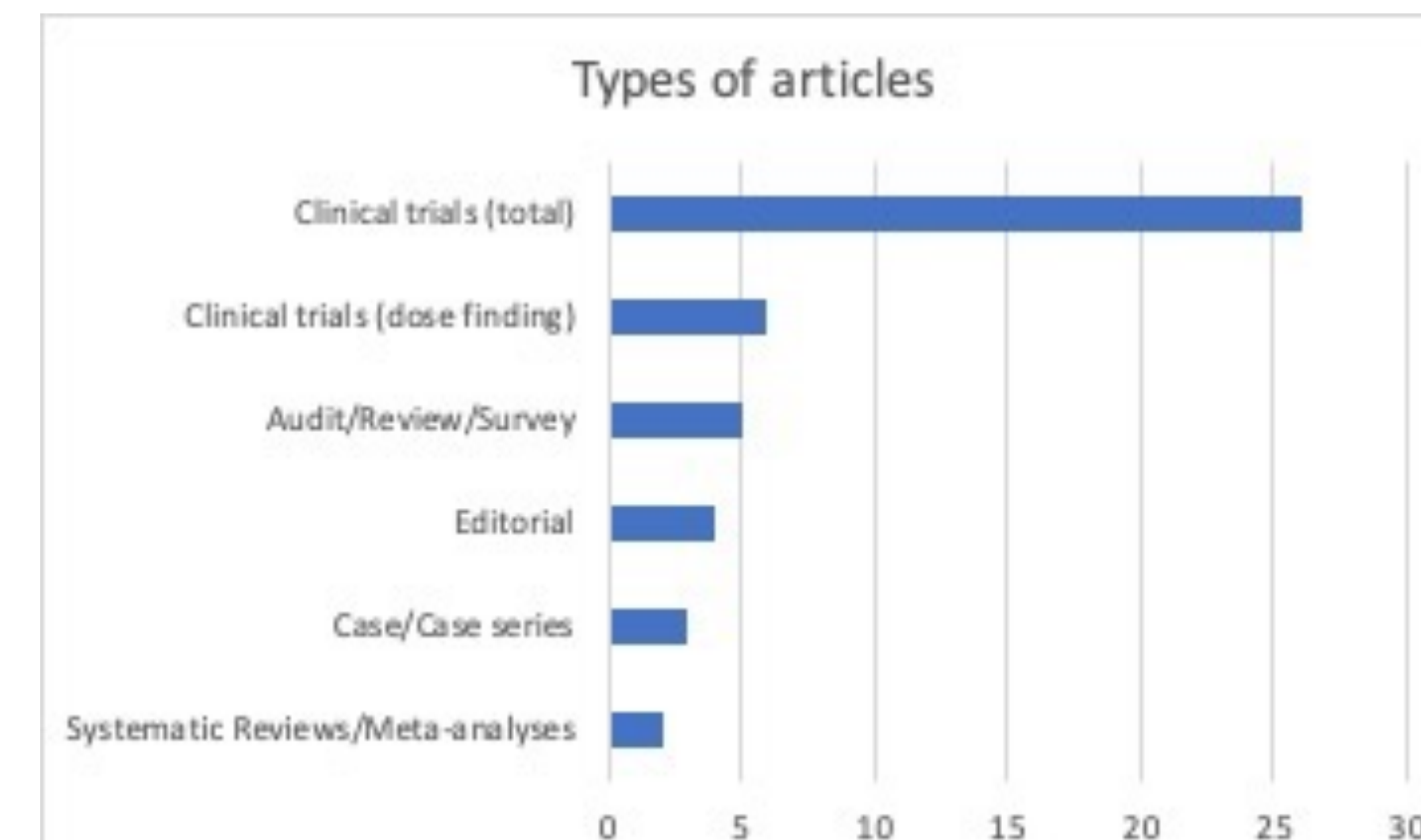
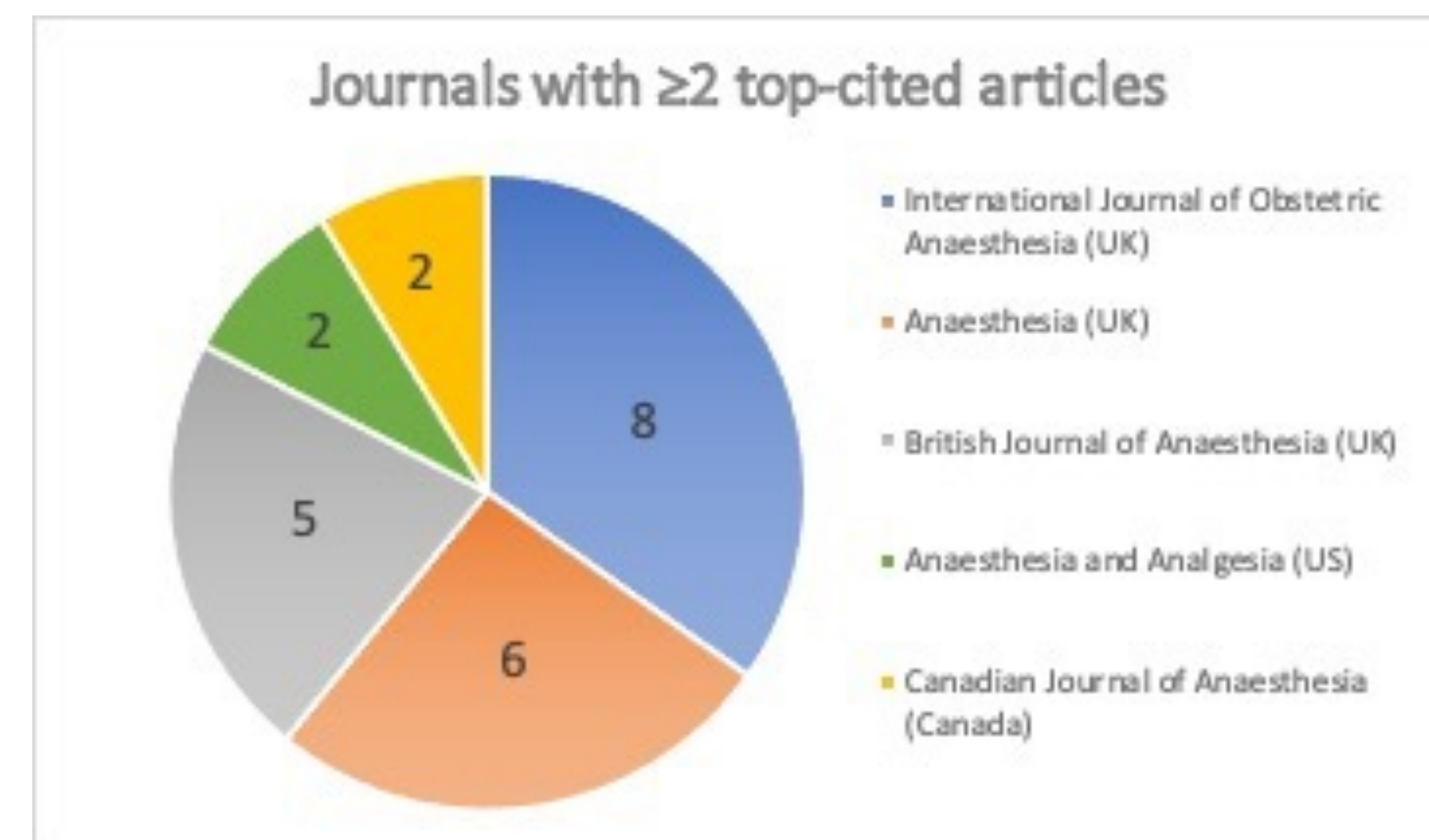
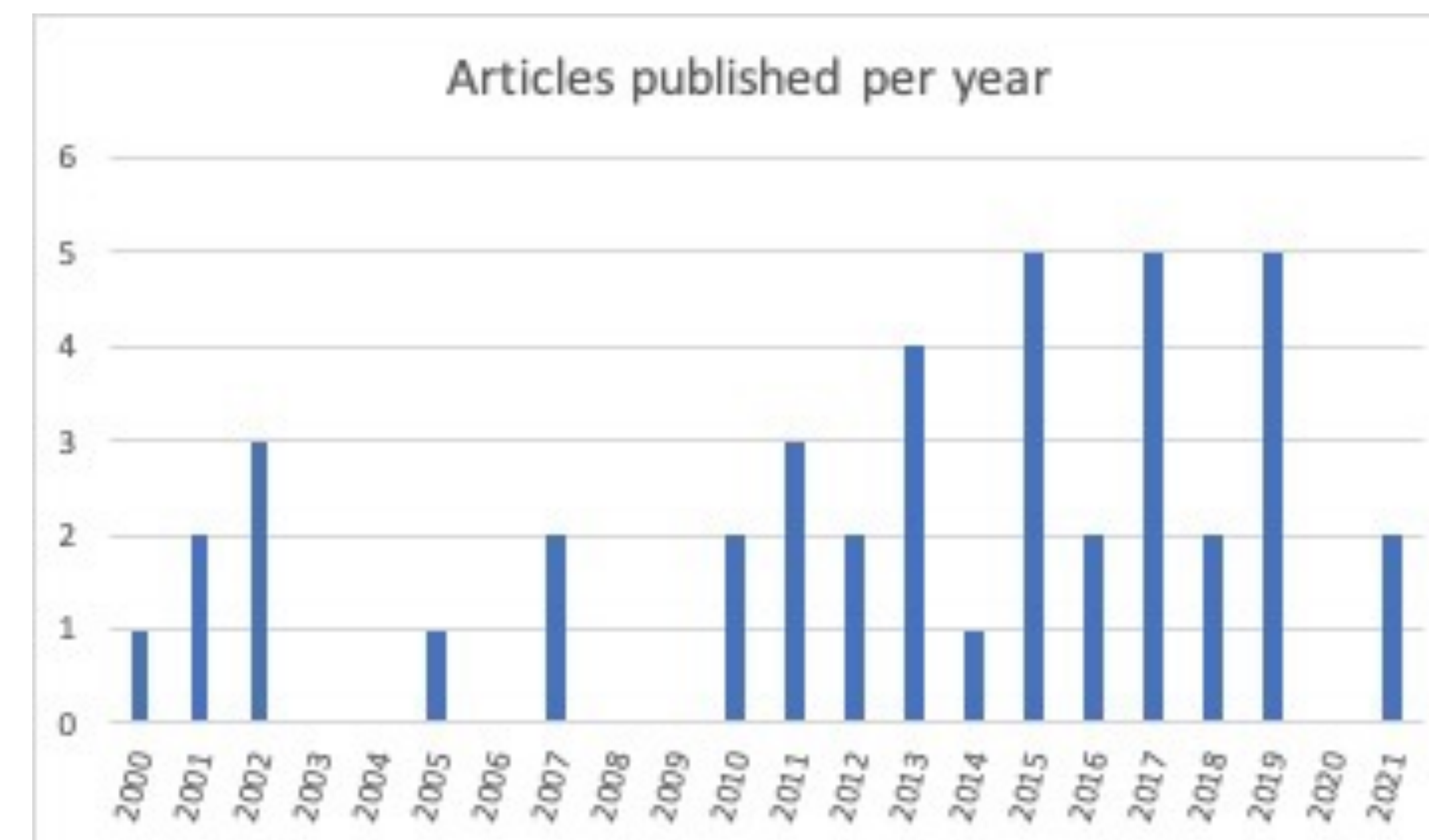
- Remifentanyl patient-controlled analgesia (PCA), an established tool for management of labour pain, remains relatively new and less-utilised when compared with more established techniques
- It is broadly understood that the influence of a scientific article can be gauged by how often it is referenced by peers
- The most-cited articles concerning remifentanyl PCA represent the evidence concerning the topic that is most influential on guiding practice
- While systematic reviews and meta-analyses have been undertaken^{1,2}, none to date have aimed to collate the articles concerning this topic with the most impact

Methods

- We identified and analysed the most-cited articles concerning remifentanyl PCA for labour analgesia
- The Web of Science index was used to determine the most frequently cited articles published after 1956 containing “remifentanyl”; “patient controlled analgesia” and “labour/labor” in the “title”
- Web of Science is an online subscription-based citation indexing service maintained by Thompson Reuters.
- Of the four major search engines (PubMed, Embase, Scopus, WofS), It provides the most comprehensive journal search of all databases and includes PubMed/MEDLINE
- We excluded meeting abstracts and letters
- Number of citations, year of publication, country of origin, institution, journal, authorship and study type were calculated for each article

Results

- 40 articles with one or more citations were returned
- The span of citations ranged from 121 to 1
- Publication years range from 2000 to 2021
- The articles were distributed across 21 journals
- IJOA was home to the highest number of publications (n=8), followed by Anaesthesia (n=6)
- The majority were clinical trials (n=26), of which 5 were dose-finding studies
- The UK and Netherlands shared the most articles (n=9 respectively), with Leiden University generating the most (n=5)
- 45% of articles had a first author with 2 or more publications (n=20)
- 63% of articles originated from the same 11 of 26 groups, all of which published two or more articles



Conclusions

- The most cited articles concerning remifentanyl PCA are disproportionately represented in British journals (n=19)
- The most cited articles are disproportionately generated by two countries (n=18) and eight authors (n=18)
- The most cited articles are disproportionately generated by eleven (out of 26) research groups who produced 63% of the articles
- The small number of cited articles (n=40) and high number of clinical trials and dose finding studies, combined with their limitation to one country's academic press indicate that this technique remains niche and that further research is necessary

References and Dataset

