

A bibliometric analysis of personal protective equipment and COVID-19 researches

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Abstract

Background: COVID-19, which occurred at the end of December 2019, has evolved into a global public health threat. COVID-19's high infectivity and mortality prompt governments and scientific community to respond quickly to the outbreak of the pandemic. The application of personal protective equipment (PPE) is of great significance in overcoming the epidemic situation. Although there were many studies about PPE and COVID-19, there is no study about bibliometric analysis of these studies. This study aims to provide a general overview of studies on PPE and COVID-19. Methods: On October 07, 2021, the Web of Science (WOS) Core Collection database was used to identify documents on PPE and COVID-19. HistCite and VOSviewer softwares were used for citation analysis and visualization mapping. Results: A total of 1462 documents authored by 6993 authors and published in 750 journals were included in the final analysis. The most prolific author was Macintyre CR. The USA was the most productive country with 463 published documents. The leading journal was Plos One. Network visualization map showed that USA was the largest international collaboration network. The keyword "COVID-19" had the strongest total link strengths (TLS) and largest number of occurrences. The New England Journal of Medicine was the leading source with highest TLS. The University of Toronto had the highest number of links and the highest TLS. Conclusions: The bibliometric analysis of PPE and COVID-19 provides an overall perspective, and the appreciation and study of these influential publications are very useful for future research.

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CONFLICT OF INTEREST

The authors declare that no conflict of interest exists and the manuscript is approved by all authors for publication.

AUTHOR CONTRIBUTIONS

Yu Zhang, Man Hu : Protocol/project development, Data analysis, Manuscript writing

Junwu Wang, Pengzhi Shi, and Pingchuan Wang : Data collection or management, Data analysis

Wenjie Zhao, Xin Liu and Qing Peng: Assist in the literature searching based on WOS, Data analysis

Xinmin Feng, Yongxiang Wang, Liang Zhang : Protocol/project development, Data analysis, Manuscript editing

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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