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A scientometrics analysis and visualisation of diabetic foot research from 1955 to 2022

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Abstract

Diabetic foot (DF) has become a serious health problem in modern society, and it has been a hotspot of research for a long time. However, little scientometric analysis has been carried out on DF. In the present study, we analysed 8633 literature reports on DF in the Web of Science Core Collection from database inception until April 23, 2022. VOSviewer (Centre for Science and Technology Studies at Leiden University, Leiden, the Netherlands) and CiteSpace (College of Computing and Informatics, Drexel University, Philadelphia, United States) were employed to address high-impact countries and institutions, journals, references, research hotspots, and key research fields in DF research. Our analysis findings indicated that publications on DF have increased markedly since 2016 and were primarily published in the United States of America. The recent studies focus on the amniotic membrane, foot ulcers, osteomyelitis, and diabetic wound healing. The five keyword clusters, which included DF ulcer and wound healing therapies, management and guidelines, neuropathy and plantar pressure, amputation and ischemia, and DF infection and osteomyelitis, are helpful for enhancing prevention, standardising treatment, avoiding complications, and improving prognosis. These findings indicated a method for future therapies and research in DF.

KEYWORDS

CiteSpace, diabetic foot, scientometrics analysis, visualisation, VOSviewer

Key Messages

- this study is the first extensive scientometrics analysis of diabetic foot research
- this work provides insights into the evolution and trends in research on diabetic foot
- publication has increased remarkably since 2016, and papers are primarily from the United States of America
- the recent hotspots of diabetic foot are amniotic membrane, foot ulcer, osteomyelitis, and diabetic wound healing

Jin-Ming Shen and Jie Chen contributed equally to this work.