

SELF-EFFICACY TRENDS IN DIABETIC FOOT ULCERS USING BIBLIOMETRIC ANALYSIS

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Abstract

This study conducted a bibliometric analysis of Self Efficacy and Diabetic Foot Ulcer. This bibliometric research focuses on looking at research activities worldwide using publication data from the Scopus database. Bibliometric analysis uses a quantitative approach to analyze results and provide a representative picture. This research is recognized as a practical approach to assess the output of publications, organization, writing, and characteristics of research topics between 2002 and 2024. Efforts to raise awareness of the importance of preventing diabetic foot ulcers so that the number does not increase significantly. On the contrary, research on Self-Efficiency and Diabetic Foot Ulcers is growing.

Keywords: Bibibliométrie, auto-efficacité, ulcers du pied diabetes

Introduction

This study conducted a bibliometric analysis of the efficacy and self-care of diabetic foot ulcers, which is very important for human health and basic knowledge needs. Bibliometric research uses publication data from the Scopus database to examine research activities, especially in Indonesia. In this article, "bibliometric research" refers to a number of studies that utilize various analyses. Bibliometric indicators, such as publications with citations from year to year, are used in this work (Irawan, Akbar, Purnomo, & Nurmandi, 2021). In other words, bibliometric analysis is used in the research process. The contributions of authors and institutions are often reflected in published publications, and citations to these articles are often strong indicators of quality. Because it has an impact on the selection of research fields, bibliometric analysis is very important as a basis for investigation (Gümüş, Bellibaş, Gümüş, & Hallinger, 2020).

Diabetes mellitus is a non-communicable disease whose prevalence continues to increase worldwide. This chronic disease originates from high sugar levels, causing high blood pressure, kidney disease and heart failure (Alsayed et al., 2023). Diabetic foot ulcers (DFU) are one of the most devastating, but potentially avoidable, complications of diabetes. Diabetic foot ulcers are influenced by infection, ulceration or tissue damage of the feet of a person with currently or previously diagnosed diabetes mellitus, usually accompanied by neuropathy in the lower extremities (Carroll et al., 2022).

Self-efficacy is the belief that one can perform a task on one's own, either through personal experience or through having experiences that can increase effectiveness. Self-

efficacy can play an important role in social cognitive theory as the level of confidence that one needs to perform a particular behavior or skill effectively within one's capacity (Mohamed Mohamed Abu Negm, Abbas Hassan Elsayed, & Mohamed El-Sayed Ramadan, 2022). Diabetes can cause a myriad of complications affecting the heart, eyes, kidneys, nerves, and feet (Al-Busaidi, Abdulhadi, & Coppell, 2020). The main cause is severe infection or gangrene which can lead to lower limb amputation in diabetic patients. It is reported that people living with diabetes have a risk of up to 40% of undergoing lower limb amputation, while the lifetime risk of developing diabetic foot ulcer care is around 25%. Diabetic foot ulcer care is preventable, and the frequency of lower limb amputations can be reduced by 49–87% by preventing progression (Bekele, Kelifa, & Sefera, 2022).

Based on our research, diabetes mellitus remains the leading cause of death, with 1.55 million cases worldwide. This data clearly shows that self-efficacy or self-care needs to be further improved so that mortality can be reduced. There are 236,000 diabetes-related deaths in Indonesia.

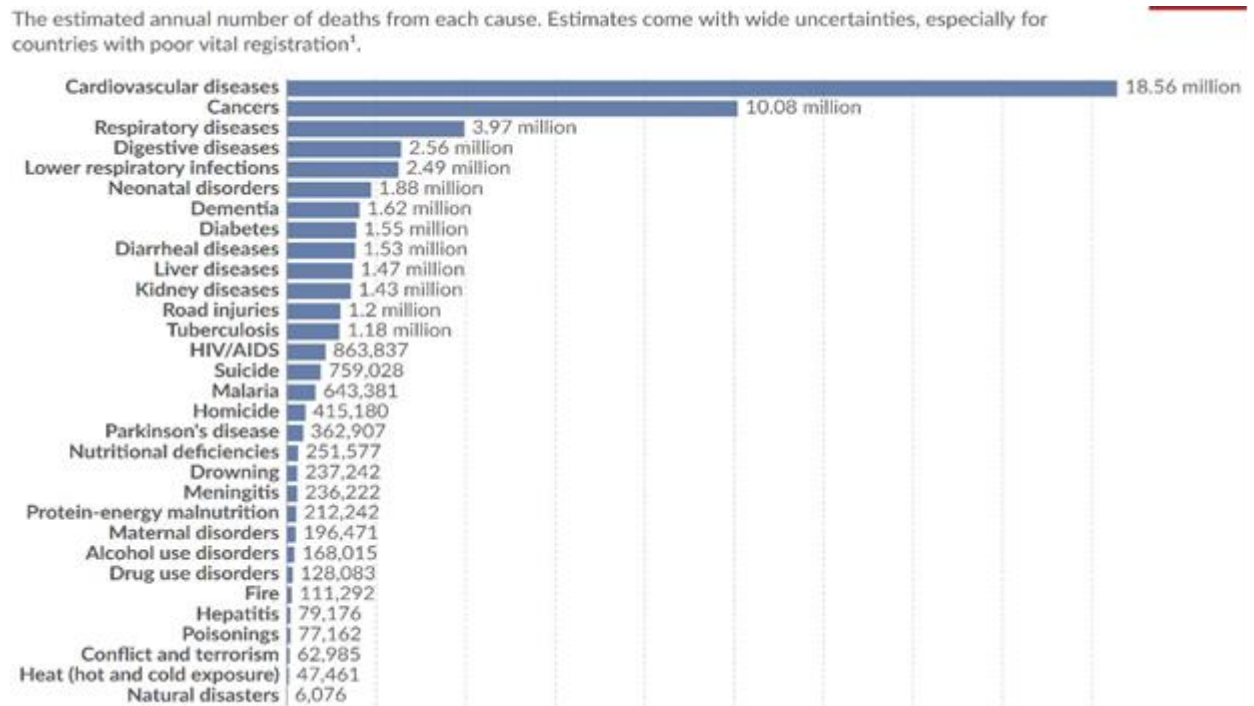


Figure 1 Causes of death in Indonesia, 2019

Source: (Our World in Data, 2019)



Stature. 2 Causes of death in Indonesia, 2019

Source: (Our World in Data, 2019)

In Indonesia, diabetes has contributed 106,333 cases among other chronic diseases. This shows that diabetes mellitus has a high mortality rate (Our World in Data, 2019).

This research strategy is based on quantitative techniques and systematic sampling of data sources. This means that when using a quantitative approach in calculations, the same numbers are always involved. A diagram showing the quantitative phase of a mixed methods study is presented visually in the follow-up interviews. The use of quantitative as a visual aid improves the quality of interview data because it provides participants with words and images to generate data dynamically during the interview (Wallwey & Kajfez, 2023). Quantitative research techniques can provide us with relevant data in this situation (Anczyk, Grzymała-Moszczyńska, Krzysztof-Świdorska, & Prusak, 2019).

Hypothesis is a summary of theoretical conclusions obtained from research from library surveys. The hypothesis in this study is Ha that there is a therapeutic effect of self-efficacy in patients with foot ulcers with diabetes mellitus in Indonesia; Ho does not have an effect of self-efficacy in patients with foot ulcers suffering from diabetes (Ramiasih & Mufidah, 2022), (Badriani, 2022) (S. Arikunto, 2013: Suiroaka, IP, Budiani, NN, & Sarihati, 2019).

Research Methods

Examining the body of recent scientific publications to find gaps in knowledge and identify potential research gaps is the main goal of bibliometric analysis. Bibliometric

analysis is recognized as a useful method for evaluating publication production, organization, authorship, and research subject features and uses a quantitative approach to analyze the results and present a representative picture (Li et al., 2020) . Using VosViewer software for analysis, researchers assessed a number of bibliometric metrics, such as number of publications, cumulative citations, citations per paper, influential journals, most important universities, and most significant countries, to measure the influence of books, authors, and journals.

Researchers used VosViewer software to analyze a number of bibliometric metrics, such as multiple publications, cumulative citations, citations per paper, influential journals, most important universities, and most significant countries, to measure the influence of books, authors, and journals. Data collection used the Scopus Database, on "Self Efficacy and Diabetic Foot Ulcer". Because it contains abstracts from various peer-reviewed publications, including books, scientific journals, literary articles, international proceedings, and conferences, the Scopus index is the most extensive database (Liao et al., 2019) . Although the number of articles in the database is very large, this study only looks at journals (Journal Articles, Conference Papers, Conference Reviews, and Review Articles) published and indexed in Scopus with the keywords "self efficacy" and "diabetic foot ulcer."

Results and Discussion

An in-depth examination of the Self-Efficacy and Diabetic Foot Ulcer procedure globally offers a methodical investigation to clarify this issue. A review of previous studies on self-efficacy and diabetic foot ulcers that included data from different publications was conducted. In this bibliometric, conference and workshop procedures have been used. Efforts to stimulate interest in the Self-Efficacy and Diabetic Foot Ulcer program grew between 2002 and 2024, although not significantly (Nekouei, Tehrani, Vasli, & Nasiri, 2024). However, academic research has been growing.

These findings suggest that the various methodologies and disciplines used and the most productive academics emphasize the importance of applying self-efficacy to diabetic foot ulcers (Mens et al., 2023). Finally, these findings lead to an interesting theory about new developments. Specifically, the study of sustainable self-efficacy will be further studied with new findings, including how to increase the effectiveness of self-efficacy in diabetic foot ulcers which may be influenced by other variables such as the therapeutic relationship (Yap et al., 2021). There was no correlation between the author's quote about the lack of supporting factors to increase self-efficacy and acceptance of diabetic foot ulcers so that it was more significant (Elkashif, Mahdy, & Elgazzar, 2021). New treatments for diabetic foot ulcers should incorporate both dimensions because they have the potential to have a significant impact and a potential role in the development of future treatments so that prevention can continue to spread (Goodall et al., 2020).

Conclusion

This discrepancy in findings is concerning considering that DFU management takes CAM into account. Stingless bee honey has the potential to treat DFU although research in this area is limited. Wound care nurses should initiate to increase research on

Stingless bee honey. Collaboration with other healthcare professionals such as surgeons, pharmacists, and dermatologists is also recommended. Further studies are needed to evaluate the use of stingless bee honey in all stages of DFU.

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