

REVIEW ARTICLE

A Review of Factors Influencing Patient Satisfaction in Nursing Care Services Using Bibliometric Analysis

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ABSTRACT

Nursing care services play a crucial role in determining patient satisfaction, directly influencing hospital performance. However, a persistent gap exists between hospitals' performance goals and patient dissatisfaction with nursing care. This study conducts a bibliometric analysis to identify factors affecting patient satisfaction in nursing care services and to explore future trends and challenges. A total of 289 articles were retrieved from the Web of Science (1992–2024) based on predefined search criteria. Using VOSviewer, CiteSpace, and Tableau, the analysis identified 13 influential factors, including communication, empathy, responsiveness, reliability, and trust in nurses. Additionally, 3 emerging trends were found: the shift toward patient-centred care, increased attention to specialised fields such as emergency and HIV care, and the integration of digital technologies like tele-nursing and AI. These findings provide valuable insights for enhancing nursing care services and guiding future research.

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INTRODUCTION

Numerous studies have established that nursing care services are the primary factor that influences patient satisfaction (1–3). Ndambuki J. suggested that nursing care services have a substantial impact on patient satisfaction (4). Higher patient satisfaction in nursing care directly contributes to improved hospital performance (5). However, a significant conflict exists between the hospital's need for high performance and patient dissatisfaction with nursing care services. Research in this area remains fragmented. Consequently, identifying the factors that influence patient satisfaction in nursing care services is valuable.

The objective of this study is to conduct a bibliometric analysis in solving the following research questions: (1)

What are the factors that influence patient satisfaction in nursing care services? and (2) What are the future trends in patient satisfaction related to nursing care services? A multitool technique is employed for performing the bibliometric analysis. Several common visualisation tools such as VOSviewer, CiteSpace, and Tableau are included in this multitool technique.

A total of 5 sections are discussed in this article. Section 2 briefly reports on research methods and data sources. Section 3 reports the results of the bibliometric analysis in detail. Section 4 contains the discussion. Finally, the conclusions of this study are presented.

METHODS AND DATA SOURCES

This study uses bibliometric analysis through VOSviewer, CiteSpace, and Tableau to identify key factors and future trends related to patient satisfaction in nursing care services. In recent years, bibliometric studies using multitools (6–8) such as VOSviewer and CiteSpace (9), VOSviewer and Tableau (10), CiteSpace and Tableau (11), and CiteSpace, VOSviewer, and Tableau (12) have

gained popularity. The use of multiple tools addresses the limitations inherent in single-method bibliometric analysis. Bibliometric analysis reveals trends, key contributions, and gaps in nursing care satisfaction research.

This study searched for articles on the topics “nursing care,” “service*,” and “patient* satisfaction” in the Web of Science. The search was limited to publications from 1992 to 2024, English language, and focused on article document types, excluding data papers, proceedings papers, and retracted publications. A total of 289 articles that met the selection criteria were used in the bibliometric analysis. CiteSpace was used to resolve data deduplication, as demonstrated in other studies (13,14). No duplicate data was discovered in the original dataset.

RESULTS

Trends in Publication

The trends of publications that employ Tableau Desktop 2024 are illustrated in Fig. 1. Fig. 1 (a) illustrates the number of publications that were published between 1992 and 2024. Publications have been distributed

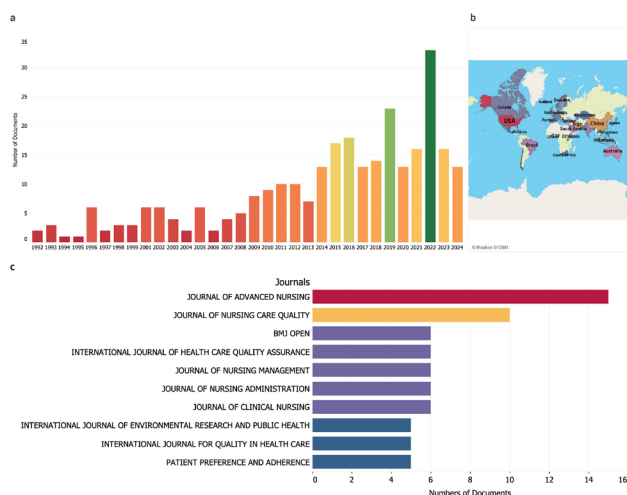


Figure 1: Trends in publications using Tableau. (a) Number of publications between 1992 and 2024; and (b) publication countries

evenly over the past decade except for 2019 and 2022. The countries where patient satisfaction publications of nursing care services research are illustrated in Fig. 1 (b). The United States has the highest number of articles, with a total of 50. The next nation is China, which comprises 36 articles (28 articles from mainland China and 8 articles from Taiwan, China). Iran is the third country with 31 articles. Fig. 1 (c) shows the top 10 journals in nursing care services research regarding patient satisfaction. Lippincott Williams & Wilkins is the most significant beneficiary publisher among the top 10 journals. Only 3 of the top 10 journals (BMJ Open, International Journal of Environmental Research and Public Health, and Patient Preference and Adherence) are open access. On March 20, 2023, an

article published in the MDPI’s ‘International Journal of Environmental Research and Public Health’, an open access journal, was retracted. Given the numerous instances of academic misconduct within many open-access journals in recent years, scholars should prioritise the reputation of journals when publishing results on patient satisfaction with nursing care services research.

Distribution of Co-Authorship

The results of co-authorship for patient satisfaction in nursing care services research are illustrated in Fig. 2. This information was obtained using VOSviewer. The co-authorship network is illustrated in Fig. 2 (a). Currently, no representative research has been conducted. In other words, representative institutions have yet to be established. Fortunately, the analysis revealed that academics may be drawn to the 3 universities highlighted in this study: Tehran University of Medical Sciences, Fudan University and the University of Pennsylvania.

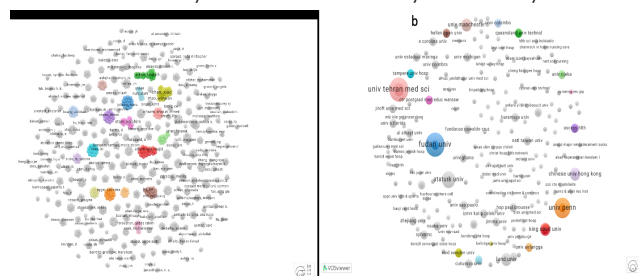


Figure 2: Results of co-authorship via VOSviewer. (a) Co-authorship network; and (b) co-institutions network.

Distribution of Keyword Co-Occurrence

Fig. 3 shows the results of keyword co-occurrence using VOSviewer. Figures. 3 (a) and (b) show the network of keyword co-occurrence and keyword overlay. According to these findings, an average of 7 out of 666 keywords will occur in 2024. The 7 keyword clusters indicate that recent studies have focused on nursing care within specialised medical fields, such as dentistry. Fig. 4 shows the word cloud map. A total of 13 keywords (“medical care”, “nursing care”, “nurse-patient communication”, “nurse-patient relationship”, “convenience”, “cleanliness”, “responsiveness”, “reliability”, “assurance”, “tangibles/ infrastructure”, “empathy”, “patient feedback”, and “trust in nurses”) are highlighted in this word cloud map.

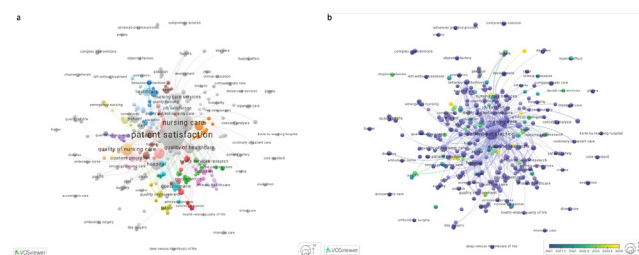


Figure 3: Results of keyword co-occurrence via VOSviewer. (a) Keyword co-occurrence network; and (b) keyword overlay network.

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