

Queue Management, Service Quality and Patient Satisfaction in Hospital Services: A Systematic Literature Review and Bibliometric Analysis

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Abstract: This study aims to analyze the development of research related to patient satisfaction in the context of queue management, service quality, and hospital services through a Systematic Literature Review (SLR) and bibliometric analysis approach. The study utilized the Scopus database with the keywords waiting time, service quality, patient satisfaction, and hospital. In this study, the concept of queue management was represented through the variable waiting time because the term is more widely used in healthcare service research to describe the effectiveness of queue systems and the efficiency of patient flow. The initial search process identified 1,023 articles, which were subsequently screened using the PRISMA framework, resulting in 105 relevant articles for further analysis. Bibliometric analysis was conducted using VOSviewer software to map keyword relationships, publication distribution, collaboration patterns, and research trends. The findings indicate that research on waiting time, service quality, and patient satisfaction has continued to develop significantly and remains highly relevant in healthcare service research. The results also reveal that waiting time has a strong relationship with patient satisfaction and service quality, indicating that effective queue management plays an important role in improving patient experience and hospital service efficiency. In addition, service quality dimensions such as healthcare communication, service responsiveness, empathy, and hospital facilities were identified as dominant factors influencing patient satisfaction. The bibliometric analysis further demonstrates that research on this topic has developed globally, with major publication contributions from China, the United Kingdom, the United States, India, and Indonesia. This study also found that the integration of healthcare technologies such as Queue Management Systems (QMS), Artificial Intelligence (AI), telemedicine, and smart healthcare systems still offers substantial opportunities for future development in improving hospital service quality and patient experience.

Keywords: Waiting Time, Queue Management, Service Quality, Patient Satisfaction, Hospital, Bibliometric Analysis

INTRODUCTION

Hospital services and patient satisfaction have become major concerns in the healthcare sector due to the increasing demand for high-quality, patient-centered healthcare services. Patient satisfaction is considered one of the most important indicators in evaluating hospital

service quality because it reflects the extent to which healthcare services meet patient expectations and needs (Utomo et al., 2023). Previous studies have shown that several factors significantly influence patient satisfaction, including service quality, healthcare staff behavior, communication, accessibility, waiting time, and hospital facilities (Abbasi et al., 2021; Rahmatia et al., 2025). The SERVQUAL dimensions, namely tangibility, reliability, responsiveness, assurance, and empathy, are widely recognized as essential determinants of patient satisfaction, with empathy and assurance often having the strongest impact on patient perceptions (Rahmatia et al., 2025). In addition, delays in healthcare services and long waiting times are frequently associated with negative patient experiences and lower satisfaction levels, even when the quality of medical treatment is considered adequate (Kamble & Parlikar, 2026). The hospital environment, including cleanliness, comfort, and supporting facilities, also plays an important role in shaping patient perceptions of healthcare quality (Bradács et al., 2025). Furthermore, effective communication and respectful interactions between healthcare providers and patients significantly contribute to positive healthcare experiences and patient loyalty (Manzoor et al., 2019). Therefore, improving hospital services and patient satisfaction requires a comprehensive approach that integrates service quality improvement, effective queue management, patient-centered communication, and continuous healthcare system evaluation to enhance overall hospital performance and patient outcomes (Divya et al., 2025; Lim et al., 2018).

Conducting a *Systematic Literature Review* (SLR) on hospital management, hospital services, queue management, and patient satisfaction is essential to provide a comprehensive understanding of the challenges and developments in healthcare service systems. Hospital management plays a significant role in improving operational efficiency, healthcare quality, and patient outcomes through the implementation of effective management models such as Lean Management, Six Sigma, and Total Quality Management (TQM) (Avila & Gil, 2025; Lsloum et al., 2024). In addition, queue management has become one of the critical issues in hospital operations because long waiting times and inefficient patient flow can negatively affect service quality and patient satisfaction (Gualandi et al., 2020; Mandizvida et al., 2024). Previous studies have also highlighted that the application of Lean Healthcare and predictive modeling can significantly reduce waiting times, improve patient flow, and enhance healthcare efficiency (Saraçoğlu, 2026; Tlapa et al., 2020).

Furthermore, patient satisfaction is recognized as one of the primary indicators of healthcare quality because it reflects patients' perceptions of communication, responsiveness, service quality, and overall healthcare experiences (Davidson et al., 2017; Ferreira et al., 2023). Several studies have shown that factors such as service delays, inadequate communication, and limited healthcare facilities are among the most common causes of patient dissatisfaction (Abbasi et al., 2021; Eshetie et al., 2020). Therefore, conducting an SLR is important to systematically identify research trends, dominant themes, and research gaps related to hospital management and patient satisfaction. Moreover, SLR findings can support hospital administrators and policymakers in making evidence-based decisions regarding resource allocation, process improvement, service quality enhancement, and the implementation of healthcare technologies such as Hospital Management Information Systems (HMIS) (Rifial et al., 2025). Through a systematic synthesis of previous studies, this research can contribute to improving healthcare service quality and supporting the continuous development of hospital management practices.

Research related to waiting time, service quality, hospital management, and patient satisfaction has grown significantly; however, several limitations and inconsistencies remain within previous studies. Some studies indicate that waiting time has a substantial influence on patient satisfaction, yet findings regarding its direct impact remain inconsistent, particularly between actual waiting time and patients' perceived waiting (Abbasi et al., 2021; Zhang et al., 2024). Previous studies also tend to focus on specific healthcare units, such as outpatient

departments or emergency services, without examining the broader integration of hospital service systems (Puri et al., 2012).

Furthermore, research on Queue Management Systems (QMS) in hospitals remains limited and is often restricted to pilot studies or basic case implementations, indicating that technologies such as mobile-augmented smart queue management systems, Artificial Intelligence (AI), and predictive analytics still require further investigation in improving healthcare quality and patient satisfaction (Soman et al., 2020). Moreover, most studies focus primarily on general patient satisfaction measurements and pay limited attention to emotional and psychological factors, patient loyalty, and revisit intentions toward hospital services (Amarantou et al., 2019; Dayan et al., 2022). Therefore, conducting a *Systematic Literature Review* (SLR) on patient satisfaction in the context of queue management and hospital services remains highly important to integrate fragmented findings, identify research trends, explore existing research gaps, and provide strategic recommendations for improving healthcare quality and hospital management systems in the future.

This study focuses on exploring the development of research related to patient satisfaction in the context of queue management and hospital services, as well as evaluating the relevance of this topic for future research. The study also examines the evolution of academic discourse concerning hospital service quality, patient waiting time, and healthcare service management to identify how existing studies contribute to improving healthcare quality and hospital management practices. The research questions proposed in this study are as follows: RQ1: Does research on patient satisfaction in the context of queue management and hospital services continue to hold significance for future scholarly inquiry? RQ2: What is the distribution of research related to waiting time, service quality, and patient satisfaction in hospital services? RQ3: What are the theoretical and practical implications of research on queue management and hospital services from the perspective of future research?. This study employs a *Systematic Literature Review* (SLR) and bibliometric analysis to answer the three research questions. The *systematic literature review* method is appropriate for synthesizing existing studies and identifying research gaps, trends, and future research directions through a systematic and evidence-based approach. In addition, this method provides more comprehensive and representative conclusions derived from previous studies. Bibliometric analysis is used to complement the review process by measuring the distribution and impact of publications related to patient satisfaction, queue management, and hospital services. Using VOSviewer and the Scopus database, this study analyzes publication trends, keyword relationships, and emerging research trends in the field of healthcare services and hospital management.

METHOD

This study employed a Systematic Literature Review (SLR) method combined with a bibliometric approach to identify, analyze, and evaluate the development of research related to patient satisfaction in the context of queue management and hospital services. This approach was used to provide a comprehensive overview of research trends, publication patterns, and major themes within the field. The PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) framework was applied to ensure that the literature review process was conducted systematically, transparently, and reproducibly.

The research data were collected from the Scopus database using the keywords “waiting time,” “service quality,” “patient satisfaction,” and “hospital” in the title, abstract, and keyword sections of the articles. In this study, the concept of queue management was represented through the use of the keyword *waiting time* because the term is more widely used in healthcare service research to describe queue performance and patient flow efficiency. In addition, the direct use of the keyword *queue management* produced a limited number of articles in the Scopus database, making it insufficient for conducting a comprehensive Systematic Literature

Review. Therefore, the use of the keyword *waiting time* was considered more representative in capturing studies related to queue management in hospital services. The initial search process using the combination of these keywords identified 1,023 articles in the Scopus database. Subsequently, the articles underwent several screening stages based on title relevance, abstracts, document types, language, and research topic suitability. After the selection and eligibility evaluation process was conducted according to the inclusion and exclusion criteria, a total of 105 articles met the criteria and were deemed eligible for analysis in this study.

Bibliometric analysis was conducted using VOSviewer software to visualize keyword relationships, research trends, and publication linkages. This analysis aimed to identify research development, collaboration patterns, and dominant themes in studies related to hospital services and patient satisfaction. The initial stage of the study began with identifying relevant keywords, followed by a comprehensive article search in the Scopus database. Subsequently, the articles were screened based on title relevance, abstracts, document types, and topic suitability. This process aimed to obtain highly relevant articles to provide a more accurate understanding of the development of research related to patient satisfaction in the context of queue management and hospital services.

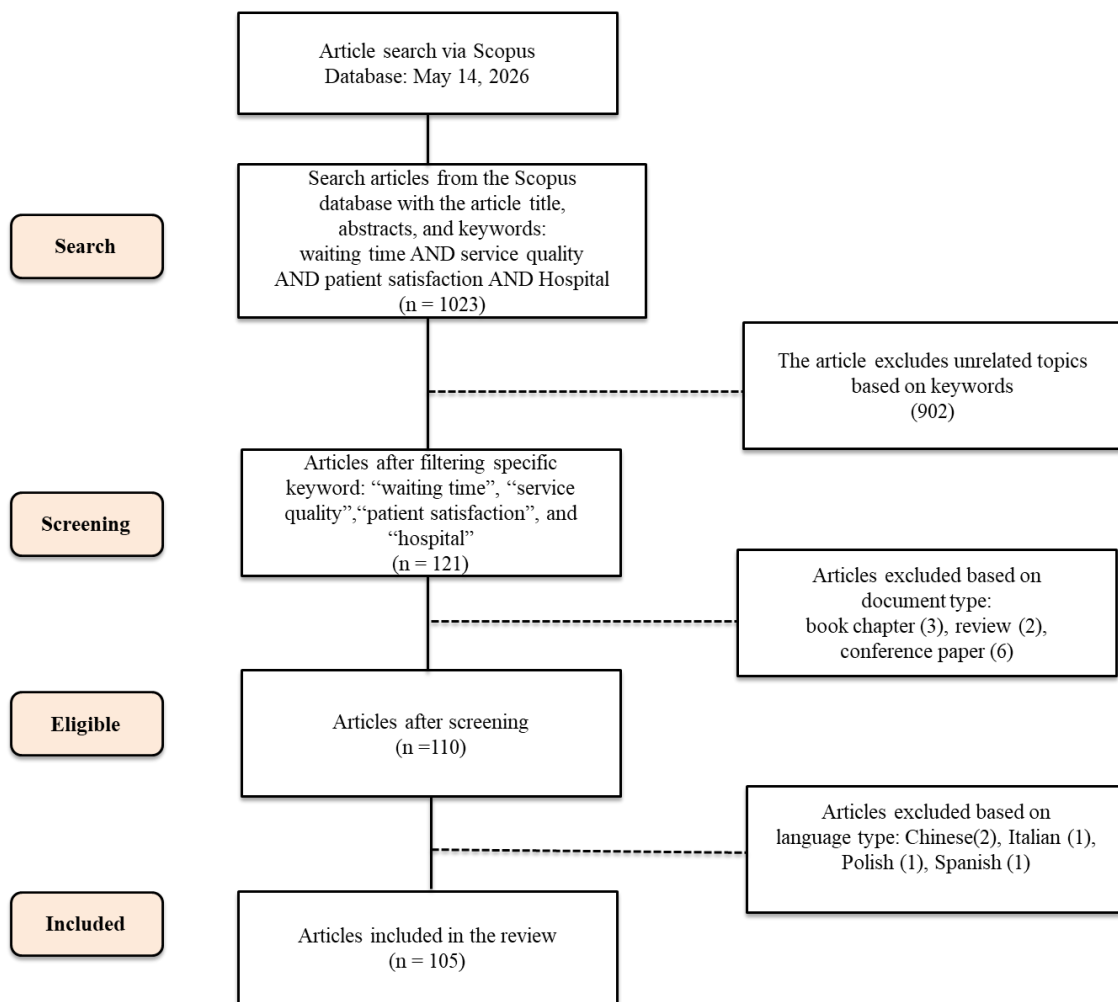


Figure 1. PRISMA Flow Diagram

RESULT AND DISCUSSION

The analysis results indicate that 105 articles specifically discussing waiting time, service quality, and patient satisfaction in hospital services were identified through the screening process using the Systematic Literature Review (SLR) method. The research data were

obtained based on the number of article publications, publication trends over time, and relevant journal sources. In addition, this study also highlights the distribution of research based on authors, institutional affiliations, and countries involved in the development of studies related to hospital services, healthcare service quality, and patient satisfaction.

RQ1: Does research on patient satisfaction in the context of queue management and hospital services continue to hold significance for future scholarly inquiry?

Based on data obtained from the Scopus database using the keywords “waiting time AND service quality AND patient satisfaction AND hospital,” a total of 1,023 articles were identified during the initial search stage. After the screening process using the Systematic Literature Review (SLR) method, 105 articles were found to be relevant to the research topic. These findings indicate that research related to waiting time, service quality, and patient satisfaction remains a growing topic and continues to receive considerable attention in the fields of hospital management and healthcare services. Based on the annual publication analysis (*documents by year*), the first article relevant to this research topic was identified in 1993 through a study conducted (Mowen et al., 1993). During that period, the number of publications was still very limited, with only one article discussing the relationship between hospital services and patient satisfaction.

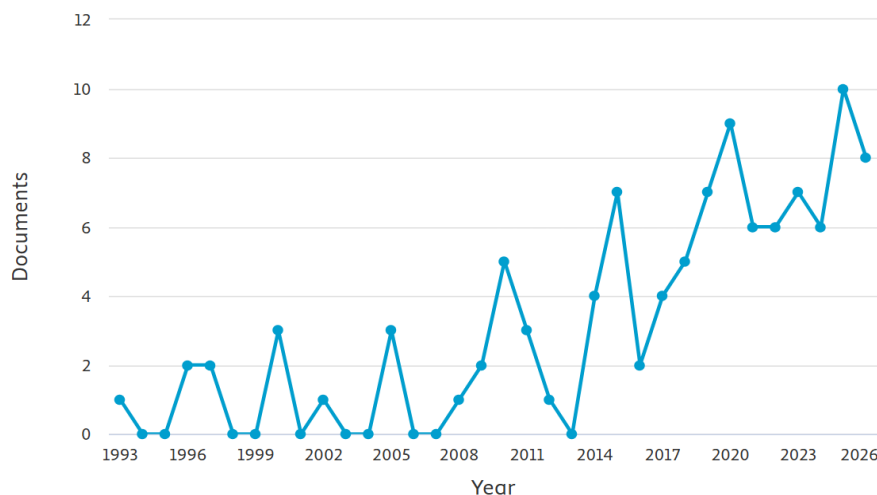


Figure 2. Research Publication Trends by Year of Publication

Along with the development of healthcare service systems and the increasing attention to hospital service quality, the number of studies related to waiting time, service quality, and patient satisfaction has continued to increase over the years. The growth in publications has become more significant in recent years, particularly following the emergence of the *patient-centered care* concept and digital transformation in healthcare services. Based on the analysis results, the highest number of publications was recorded in 2025, with a total of 10 articles. These findings indicate that issues related to waiting time, service quality, and patient satisfaction remain important focuses in healthcare service research because they are directly associated with hospital service quality, patient experience, hospital operational efficiency, and the development of patient-oriented healthcare systems. Furthermore, the advancement of healthcare technologies, the digitalization of hospital systems, the implementation of digital queue management systems, and the increasing public demand for fast and high-quality healthcare services have also contributed to the growing interest in this research topic. Therefore, research on waiting time, service quality, and patient satisfaction continues to hold high relevance and is expected to further develop within the fields of hospital management and healthcare services.

RQ2: What is the distribution of research related to waiting time, service quality, and patient satisfaction in hospital services?

The distribution analysis of research related to waiting time, service quality, and patient satisfaction in hospital services was conducted on 105 articles by categorizing them based on several classifications, including countries, regions, institutional affiliations, publication sources, and authors. This analysis aimed to understand research development, the contributions of countries and institutions, as well as publication patterns related to waiting time, service quality, and patient satisfaction in the fields of hospital management and healthcare services. The findings from this research distribution analysis are expected to provide an overview of global research development while also assisting academics and practitioners in determining future research directions and agendas.

First, the distribution of research based on country (*documents by country or territory*) indicates that China had the highest publication contribution in studies related to waiting time, service quality, and patient satisfaction in hospital services, with a total of 12 articles. The United Kingdom and the United States each contributed 11 articles. In addition, India and Indonesia each contributed 8 articles, followed by Ethiopia, Iran, and Ghana with 6 articles each. Meanwhile, Taiwan and Turkey each produced 5 articles related to this research topic.

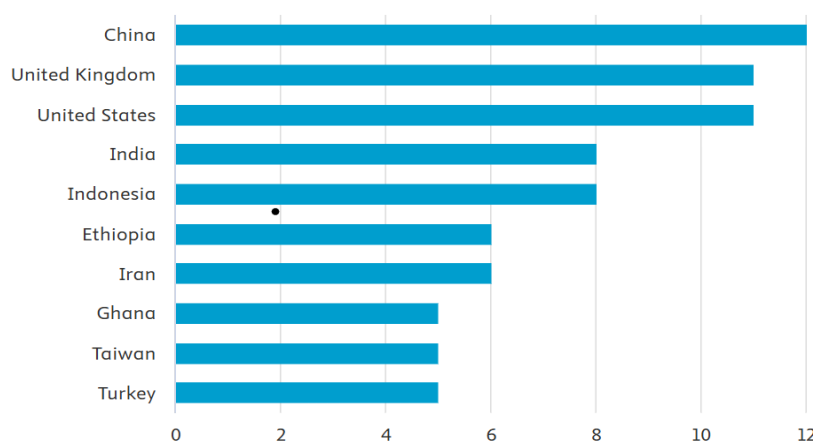


Figure 3. Distribution of Research Publications by Country (Top 10)

These findings indicate that research on waiting time, service quality, and patient satisfaction has not only developed in developed countries but has also received considerable attention in developing countries. The dominance of countries such as China, the United Kingdom, and the United States reflects the high level of concern regarding healthcare service quality improvement, hospital operational efficiency, and patient experience within modern healthcare systems. On the other hand, the contributions from developing countries such as Indonesia, India, Ethiopia, Ghana, and Iran demonstrate that issues related to patient satisfaction and hospital service quality are also significant challenges in the development of healthcare services in developing nations. This indicates that hospital service quality, waiting time management, and patient satisfaction have become global issues with high relevance in the fields of hospital management and healthcare services. Furthermore, the increasing research contributions from various countries reflect the growing attention of academics and practitioners toward the importance of effective, efficient, and patient-centered healthcare services.

The researchers also analyzed the relationships among countries involved in studies related to waiting time, service quality, and patient satisfaction using VOSviewer software. This analysis was conducted to identify patterns of linkage and research collaboration among countries in the fields of healthcare services and hospital management. This stage is important

for understanding the development of global research while also formulating more systematic research agendas for future studies.

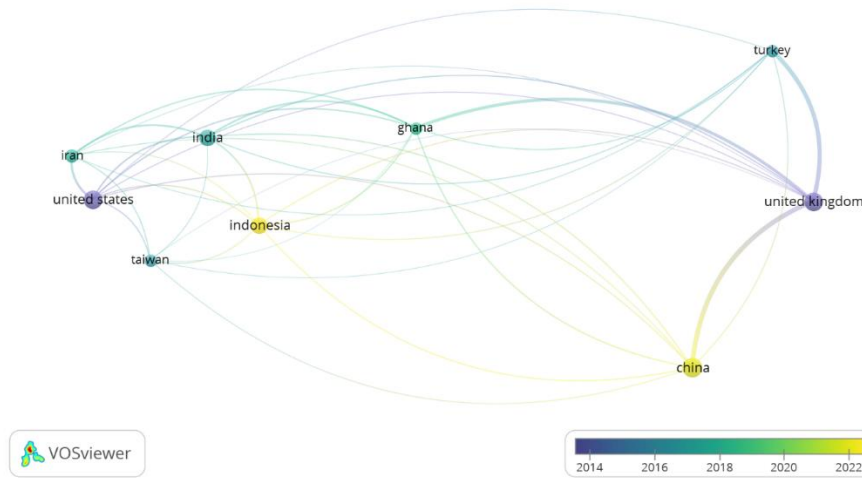


Figure 4. Overlay Visualization of Bibliometric Analysis by Country

The results of the analysis using VOSviewer indicate the existence of inter-country linkages in the development of research related to hospital services, healthcare service quality, and patient satisfaction. Several countries demonstrated relatively strong research connections, particularly those with high publication contributions such as China, the United Kingdom, and the United States. In addition, the involvement of developing countries such as Indonesia, India, Ethiopia, Ghana, and Iran indicates that research on hospital service quality and patient satisfaction has expanded widely across various regions of the world. These findings reflect that healthcare service issues are not only a local concern but have also evolved into a global research focus characterized by multidisciplinary, collaborative, and sustainable approaches.

Second, the distribution of research based on institutional affiliation (*documents by affiliation*) shows that Shahid Beheshti University of Medical Sciences had the highest publication contribution in studies related to waiting time, service quality, and patient satisfaction, with a total of 4 articles. This was followed by Sichuan University with 3 articles. In addition, several other institutions, including Guangzhou Medical University, the University of the Witwatersrand, the University of Ghana, the University of Birmingham, Iran University of Medical Sciences, Utkal University, Virginia Polytechnic Institute and State University, and Democritus University of Thrace, each contributed 2 articles related to this research topic.

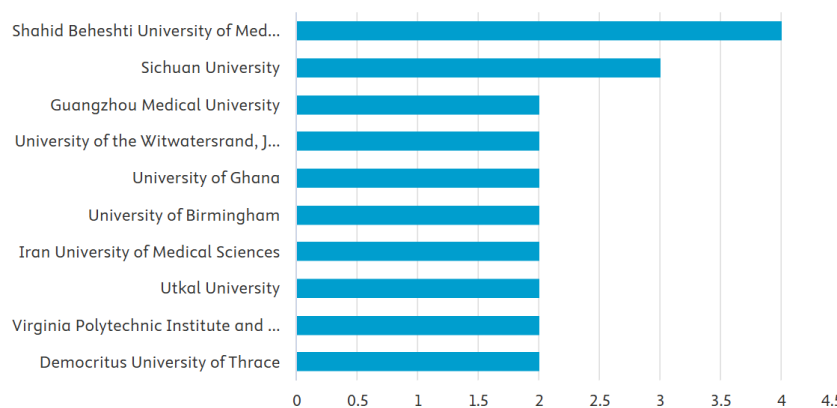


Figure 5. Distribution of Research Publications by Institutional Affiliation (Top 10)

These findings indicate that research on waiting time, service quality, and patient satisfaction has developed across various higher education institutions and healthcare

institutions from different countries. The dominance of institutions such as Shahid Beheshti University of Medical Sciences and Sichuan University demonstrates that academic institutions play an important role in the development of research related to hospital service quality and patient satisfaction. Furthermore, the involvement of universities from Asia, Europe, Africa, and America indicates that issues related to healthcare services and patient experience have become a global concern in the fields of hospital management and healthcare services. Research conducted by these institutions also reflects the increasing attention toward hospital service efficiency, waiting time management, and the development of patient-centered healthcare services.

Third, the distribution of research based on publication sources (*documents by source*) indicates that the *International Journal of Health Care Quality Assurance* had the highest publication contribution in studies related to waiting time, service quality, and patient satisfaction, with a total of 9 articles. This was followed by *BMC Health Services Research* with 8 articles. In addition, the *International Journal of Environmental Research and Public Health* published 4 articles, followed by the *International Journal of Pharmaceutical and Healthcare Marketing* with 3 articles, and *Boletin Medico Del Hospital Infantil De Mexico* with 2 articles related to this research topic.

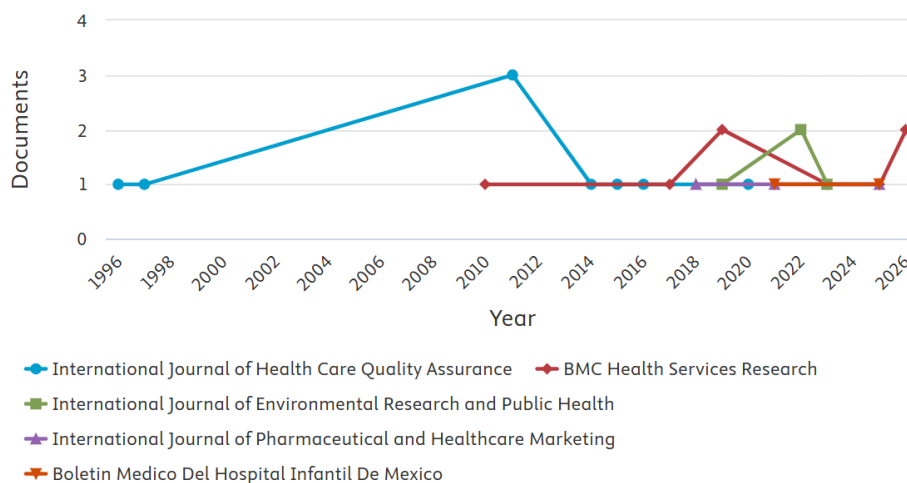


Figure 6. Distribution of Research Publications by Journal Source

These findings indicate that studies related to waiting time, service quality, and patient satisfaction are widely published in journals focusing on healthcare service quality, hospital management, public health, and healthcare system development. The dominance of the *International Journal of Health Care Quality Assurance* and *BMC Health Services Research* demonstrates that issues related to hospital service quality, healthcare efficiency, and patient experience have become major concerns in modern healthcare research. Furthermore, the involvement of journals focusing on public health and healthcare service marketing indicates that research on patient satisfaction is not only associated with clinical aspects but also encompasses service management, healthcare service strategies, and overall patient experience.

Fourth, the distribution of research based on authors (*documents by author*) shows that E. Zarei had the highest publication contribution in studies related to waiting time, service quality, and patient satisfaction, with a total of 3 articles. Several other authors, including V. Amarantou, H. Chahal, D. Chatzoudes, N. C. Kar, N. Kumari, M. Roland, and S. Swain, each contributed 2 articles related to this research topic. In addition, K. Abayneh also contributed to the development of research on hospital services and patient satisfaction.

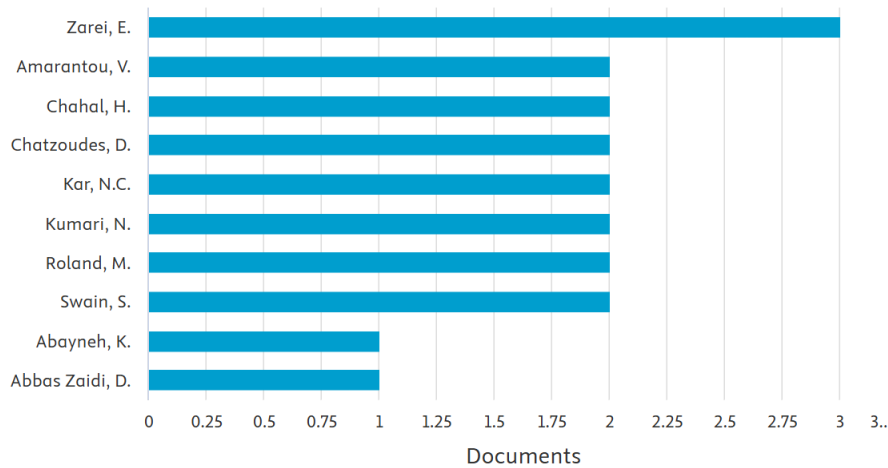


Figure 7. Top 10 Authors with the Highest Publication Contributions

The findings indicate that research on waiting time, service quality, and patient satisfaction involves scholars from diverse disciplinary backgrounds, particularly in the fields of hospital management, healthcare services, service quality, and patient experience. The dominance of certain authors suggests a sustained scholarly interest in the development of research related to hospital service quality and healthcare service efficiency. In addition, the relatively dispersed distribution of publications indicates that this topic continues to evolve and has attracted broad attention in global healthcare service research. The involvement of researchers from various countries and institutions also reflects the growing academic concern regarding the importance of managing waiting times, improving service quality, and developing patient-centered healthcare services.

RQ3: What are the theoretical and practical implications of research on queue management and hospital services from a future research perspective?

This study examined 105 articles retrieved from the Scopus database. Subsequently, VOSviewer software was used to visualize the research findings in order to provide both theoretical and practical implications for the future development of studies related to waiting time, service quality, and patient satisfaction in hospital services. To address RQ3, the analysis was conducted based on co-occurrence and the representation of key terms to identify relationships among keywords, dominant research themes, and emerging trends in the field of hospital service management and healthcare services. Through network visualization, this study illustrates the interconnections among research topics, patterns of relationships among variables, and the most frequently studied focal areas in research related to patient satisfaction and hospital service quality.

Table 1. Results of Keyword Co-occurrence Analysis Using VOSviewer

Keyword	Occurrences	Total link strength
patient satisfaction	33	28
service quality	26	27
waiting time	8	8
servqual	5	7
healthcare	5	5
quality improvement	5	4
satisfaction	9	4
waiting times	5	3

The analysis indicates that waiting time, service quality, and patient satisfaction are strongly interconnected in the development of patient-centered hospital services. The VOSviewer visualization shows that keywords such as *patient satisfaction*, *service quality*,

hospital service, healthcare quality, and waiting time are highly interconnected within the network and form several major research clusters. This suggests that research on patient satisfaction is not only focused on the quality of clinical services but also encompasses hospital operational efficiency, patient experience, healthcare communication, and the overall management of hospital service systems. Previous studies also indicate that long waiting times are often one of the main factors contributing to lower patient satisfaction levels, even when the quality of medical care provided is relatively high. In addition, service quality comprising responsiveness of healthcare staff, communication, empathy, and hospital facilities serves as a dominant factor influencing patients' perceptions of healthcare services.

From a practical perspective, these findings provide important implications for hospital management in improving service quality and healthcare system efficiency. Hospitals need to develop strategies for managing waiting times through the optimization of queue systems, healthcare service digitalization, the implementation of queue management systems, and improved coordination across hospital departments. Moreover, a patient-centered care approach should be strengthened by enhancing healthcare providers' communication quality, improving hospital facility comfort, and increasing service responsiveness. The implementation of healthcare technologies such as digital queuing systems, telemedicine, and hospital information systems also represents an important opportunity to improve hospital service efficiency and patient satisfaction in the future.

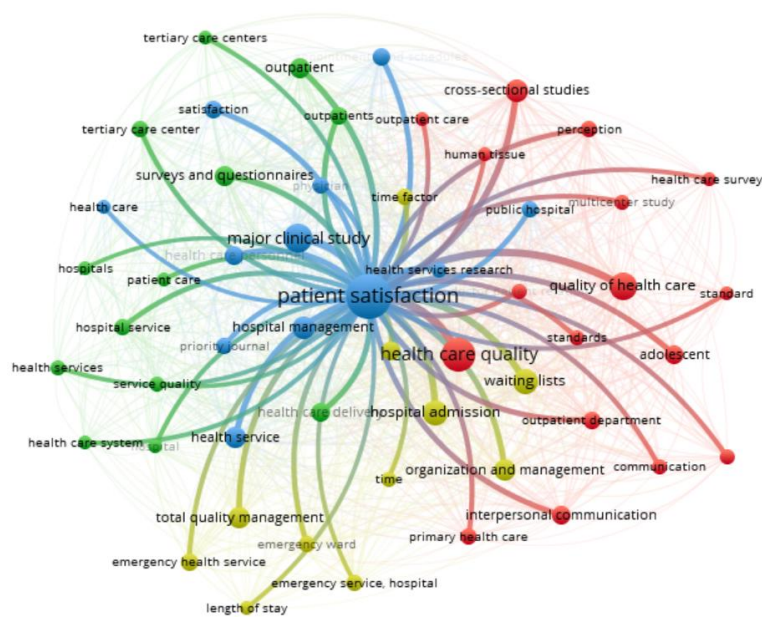


Figure 8. Keyword Co-occurrence Overlay Visualization Using VOSviewer

From a theoretical perspective, the findings of this study indicate that research on waiting time, service quality, and patient satisfaction still offers broad opportunities for further development. The VOSviewer visualization reveals an emerging research trend that increasingly shifts toward the integration of healthcare service technology, patient experience, and hospital operational efficiency. Future studies may further explore the integration of hospital operational management, healthcare technology, and patient experience in a more comprehensive manner. In addition, technological advancements such as Artificial Intelligence (AI), predictive analytics, smart healthcare systems, and healthcare digitalization also open new research opportunities for developing more efficient, responsive, and sustainable healthcare services. Thus, research on hospital services and patient satisfaction is expected to continue evolving in line with the growing demand for high-quality, patient-centered healthcare services.

The results of this study show that research on waiting time, service quality, queue management, and patient satisfaction in hospital services has experienced significant development within the fields of hospital management and healthcare services. The increasing number of publications from 1993 to 2025 indicates that patient satisfaction has become one of the key indicators for evaluating healthcare service quality and hospital performance. This upward research trend reflects the growing global attention to healthcare systems that are more efficient, responsive, and patient-centered. Furthermore, the bibliometric analysis shows that current healthcare service research is not only focused on clinical aspects but is also increasingly integrated with hospital operational efficiency and patient experience during healthcare delivery.

One of the key findings of this study is that waiting time remains an important factor influencing patient satisfaction in hospital services. Previous studies have shown that long waiting times in registration, consultation, and pharmacy services have a negative relationship with patient satisfaction levels (Eshetie et al., 2020; Oubaid et al., 2025). In addition, Bidari et al., (2021) explain that patients' perceptions of waiting time are often more influential than actual waiting time, as subjective patient experiences can shape their evaluation of healthcare service quality. These findings are consistent with the VOSviewer analysis in this study, which shows that waiting time is strongly connected with patient satisfaction and service quality. This indicates that effective waiting time management is not only part of hospital operational efficiency but also a crucial strategy for improving patient experience and the overall quality of healthcare services..

In addition to waiting time, service quality is also a dominant factor in determining patient satisfaction. Many previous studies have applied the SERVQUAL model to measure service quality based on the dimensions of tangibility, reliability, responsiveness, assurance, and empathy (Swathi et al., 2019; Uprety et al., 2025). The findings indicate that healthcare staff empathy, service responsiveness, effective communication, and hospital facilities have a significant influence on patients' perceptions of healthcare services (Chen et al., 2024). Other studies also explain that interpersonal behaviors of healthcare providers, such as friendliness, attentiveness, and communication skills, are important factors in shaping positive patient experiences during healthcare delivery (Yaqoob et al., 2025). The findings of this study reinforce the existing literature by showing that service quality is closely related to patient satisfaction and healthcare service experience. Therefore, improving hospital service quality does not solely depend on the quality of medical procedures, but also on communication quality, service responsiveness, and a patient-centered care approach.

This study also shows that waiting time, which represents queue management, plays an important role in improving hospital service efficiency and patient satisfaction. In the healthcare context, waiting time is used as a key indicator to describe the effectiveness of queue systems and the efficiency of patient service flow in hospitals. Bidari et al. (2021) found that the implementation of a Queue Management System (QMS) can reduce both actual waiting time and patients' perceived waiting time, thereby significantly improving patient experience. In addition, Hasibuan (2025) explains that an effective queuing system, comfortable waiting areas, and clear communication regarding estimated service times have a positive impact on patient satisfaction. These findings are consistent with the bibliometric analysis results, which indicate a strong relationship between waiting time, queue management, and patient satisfaction. However, this study also reveals that the integration of queue management technology and hospital service quality remains relatively limited. This highlights future research opportunities, particularly regarding the implementation of digital queuing systems, smart healthcare systems, and digital health technologies to enhance hospital service efficiency and patient experience.

This study also shows that issues related to waiting time, service quality, and patient satisfaction have developed into a global concern involving both developed and developing

countries. Countries such as China, the United Kingdom, and the United States contribute a substantial number of publications in this field. However, developing countries such as Indonesia, India, Ethiopia, Ghana, and Iran also demonstrate significant research contributions.

The VOSviewer analysis indicates the existence of collaborative relationships among countries, institutions, and authors in the development of research on hospital services and patient satisfaction. These findings suggest that the improvement of hospital service quality and patient experience is not merely a local challenge but part of a global agenda aimed at developing more effective and sustainable healthcare systems.

From a theoretical perspective, this study indicates that research on waiting time as a representation of queue management, service quality, and patient satisfaction still offers broad opportunities for future development. Advances in healthcare technologies such as Artificial Intelligence (AI), telemedicine, predictive analytics, and smart healthcare systems are expected to play an important role in improving hospital operational efficiency and patient experience.

From a practical perspective, hospital management needs to focus on reducing waiting times, improving healthcare providers' communication quality, implementing digital queue systems, and strengthening patient-centered care approaches. Therefore, future research is expected to explore the integration of healthcare technology, hospital operational management, and patient experience in order to create more effective, responsive, and sustainable healthcare systems.

CONCLUSION

This study shows that the topics of waiting time, service quality, and patient satisfaction remain highly relevant in the development of hospital management and healthcare services. The results of the Systematic Literature Review (SLR) and bibliometric analysis of 105 articles indicate that waiting time, as a representation of queue management, has a strong relationship with service quality and patient satisfaction. This demonstrates that the effectiveness of queue management and service efficiency are important factors in improving patient experience in hospitals.

In addition, communication quality of healthcare providers, service responsiveness, empathy, and hospital facilities are also key factors influencing patient satisfaction. The bibliometric analysis further shows that research on these topics has developed globally, involving various countries, institutions, and authors in advancing healthcare service studies. From a practical perspective, hospitals need to focus on reducing waiting times through optimizing queue systems, digitalizing services, and improving patient-centered care quality. Future research is expected to explore the integration of technologies such as Artificial Intelligence (AI), smart healthcare systems, and digital queue systems to enhance hospital service efficiency and patient experience.

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