Analyzing Sharia Service Standards in Certified Hospitals for Optimal Healthcare Quality

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Abstract
Background: Indonesia, with over 87% of its population practicing Islam, represents a pivotal intersection of economic vitality and religious observance, where Sharia principles increasingly influence sectors like healthcare. The integration of Islamic ethics into economic activities presents substantial opportunities, particularly in specialized sectors such as hospitals. Global competition in healthcare has intensified, prompting hospitals to emphasize excellence and innovation in response to heightened patient expectations. Methods: This study employs a quantitative descriptive method and bibliometric approach to analyze international scientific publications on Islamic hospitals indexed in the Scopus database from 2011 to 2023. Bibliometric methods provide a structured framework to explore publication trends, authorship patterns, institutional affiliations, country contributions, subject distributions, author collaborations, and keyword analyses. Results: The trend analysis reveals a peak in scientific publications on Islamic hospitals in 2023, with seven publications (26.92%). The "Journal of Islamic Marketing" emerged as the leading publisher with three publications, while researchers Haq, F.; Kholis, N.; Medhekar, A.; and Ratnawati, A. were the most productive, each contributing two publications.

Significance | This systematic review showed research trends and collaboration in Islamic hospitals, enhancing healthcare quality through Sharia service standards.

1. Introduction
Indonesia, with more than 87% of its population practicing Islam, stands at the intersection of economic dynamism and religious adherence, where Sharia themes are increasingly shaping various sectors, including healthcare (WPR, 2023; Irviana, 2019). This trend reflects a broader global movement towards integrating ethical and religious principles into economic activities, presenting significant opportunities for development, particularly in specialized sectors like hospitals.

In the healthcare landscape, global competition has intensified, amplifying patient expectations and demands for quality medical services. Healthcare associations worldwide now emphasize excellence as a strategic response to this competitive environment.
This study employed a quantitative descriptive method coupled with a bibliometric approach to examine the scholarly landscape of Islamic hospitals from 2011 to 2023. Quantitative descriptive methods were utilized to quantify and describe the characteristics of scientific publications, while bibliometrics provided a structured framework for analyzing publication patterns, collaboration networks, and thematic trends within the field (Zupic & Cater, 2015).

2. Data Source

The primary data source comprised scientific publications retrieved from the Scopus database, a widely recognized repository of scholarly literature encompassing journals, conference papers, and articles of international repute since 1996 (Leydesdorff et al., 2016). Scopus was selected purposively due to its comprehensive coverage and stringent selection criteria, ensuring the inclusion of high-quality research relevant to the study's objectives (Baas et al., 2020).

This database is extensively utilized in bibliometric analyses across various disciplines, offering reliable metrics such as citation counts and journal impact factors (Fauzy, 2016).

2.2 Search Strategy

The data collection process involved systematic searches in the Scopus database using predefined keywords "sharia" and "hospital" within the article titles, abstracts, and keywords fields. This approach was implemented to capture relevant publications focusing on Islamic hospitals published between 2011 and 2023. The timeframe was selected to encompass recent developments and trends in the field.

2.4 Data Extraction

After obtaining the search results, data extraction was conducted to compile information on publication trends, core journals, author productivity, institutional affiliations, and countries of origin. Each retrieved publication was meticulously reviewed to ensure relevance and reliability in reflecting the scholarly discourse on Islamic hospitals.

2.5 Bibliometric Analysis

Quantitative data extracted from Scopus were processed using statistical analysis to generate descriptive summaries and visualizations. Statistical analyses included computing frequencies, percentages, and citation metrics to understand publication trends and impact. Additionally, VOSviewer software was employed for visualizing co-authorship networks and keyword mapping based on co-occurrence frequencies within the retrieved publications (Goyal et al., 2021).

2.6 Visualization Techniques

The visualization process involved exporting relevant data from Scopus into CSV format and importing it into VOSviewer software. This software facilitated the creation of network maps depicting relationships between authors, institutions, keywords, and thematic clusters within the literature on Islamic hospitals. These relationships between authors, institutions, keywords, and thematic clusters within the literature on Islamic hospitals. These
visualizations provided insights into the structure and evolution of research topics and collaborative networks over time (Fu et al., 2022).

2.7 Statistical Analysis
Quantitative descriptive analysis was complemented by qualitative insights derived from the bibliometric approach. Statistical analyses were conducted using Excel to create graphical representations of publication trends and citation patterns. Moreover, VO Sviewer facilitated the exploration of thematic clusters and the identification of emerging research topics within the domain of Islamic hospitals.

3. Result
3.1 Trend of Scientific Publications on Islamic Hospitals
Scientific publications on Islamic hospitals indexed in Scopus showed varying trends across different years. The year 2023 saw the highest number of publications, with seven articles (26.92%). Following 2023, 2021 recorded four publications (15.38%), while both 2020 and 2022 had three publications each (11.54% each). In 2019 and 2018, there were two publications each (7.69% each), whereas 2011, 2016, 2014, and 2012 each had one publication (3.85% each). Figure 2 visually represents the evolving trend of scientific publications on Islamic hospitals.

3.2 Core Journals of Scientific Publications on Islamic Hospitals
The distribution of publications across core journals revealed that the "Journal of Islamic Marketing" led with three publications, followed by "Life Science Journal" and "Open Access Macedonian Journal of Medical Sciences," each with two publications. Additionally, "Advances in Medical Education and Practice" and "Contributions to Management Science" each contributed one publication to the field. Figure 3 provides a clear overview of the distribution of scientific journal publications related to Islamic hospitals.

3.3 Number of Productive Researchers Conducting Scientific Publications on Sharia Hospitals
Several researchers demonstrated productivity in the field of Islamic hospitals. Researchers Haq, F., Kholis, N., Medhekar, A., and Ratnawati, A. each contributed two scientific publications. Researchers Adawi, A.; Aglan, M.; Agustina, A.; Al-Amoudi, S.M.; Al-Harbi, K.; and Al-Homaidhi, H.S. each contributed one scientific publication. Figure 4 illustrates the distribution of productive researchers who have made significant contributions to scientific publications on Islamic hospitals. Figure 4 shows the number of Productive Researchers on Islamic Hospitals.

3.4 Number of Scientific Publications on Islamic Hospitals by Affiliation/Institution
Several institutions have demonstrated productivity in scientific publications on Islamic hospitals. Leading the list are Cairo University, Sultan Agung Islamic University Semarang, and the Faculty of Physical Therapy, each contributing three publications. Following closely are QUniversity Australia, Syiah Kuala University, Muhammadiyah University of Yogyakarta, and Canadian University Dubai, each with two publications. Additionally, the Ministry of Justice, Forensic Medicine and Clinical Toxicology, and Ministry of Health Polytechnic of Langsa have contributed one publication each. Figure 5 provides a clear visualization of these productive affiliations/institutions.

3.5 Number of Scientific Publications on Islamic Hospitals by Country
Countries contributing significantly to scientific publications on Islamic hospitals include Indonesia with 11 publications, Egypt with four publications, and Iran and the United Arab Emirates with three publications each. Australia, Saudi Arabia, and the United Kingdom have each contributed two publications, while Bahrain, Croatia, and Malaysia each have one publication. Figure 6 visually represents the countries that have made notable contributions to research on Islamic hospitals.

3.6 Number of Scientific Publications on Islamic Hospitals by Subject
Scientific publications on Islamic hospitals span various subjects, with Social Sciences leading with nine publications, followed by Medicine and Arts and Humanities with seven and six publications, respectively. Business, Management, and Accounting, along with Biochemistry, Genetics, and Molecular Biology, each have six and three publications, respectively. Economics, Econometrics, and Finance, Nursing, and Health Professions have contributed three and two publications, respectively, while Computer Science and Decision Sciences each have one publication. Figure 7 offers a detailed breakdown of scientific publications by subject.

3.7 Author Collaboration Analysis
Collaboration among researchers and institutions is crucial for advancing research. This study identified 77 authors involved in publications on Islamic hospitals, with eight authors showing strong collaboration through joint ownership of at least one document. Figure 8 visually represents the collaboration network among authors.

3.8 Keyword Analysis
A comprehensive keyword analysis identified 23 keywords with significant relevance, derived from a total of 182 keywords. The most frequently used keyword among authors was "adult." Visualized in Figure 9, the keyword analysis revealed three distinct clusters: Cluster 1 (red) includes keywords like "article," "human," and "Indonesian"; Cluster 2 (green) comprises keywords such as "clinical article" and "qualitative research"; and Cluster 3 (blue)
Figure 1. PRISMA 2024 flow diagram for bibliometrics analysis

Figure 2. The trend of Scientific Publications on Sharia Hospitals

Figure 3. Journal of Scientific Publications on Islamic Hospitals
Figure 4. Number of Productive Researchers with Scientific Publications on Sharia Hospitals

Figure 5. Affiliates/Institutions that are Productive in Publishing Research Results About Sharia Hospital

Figure 6. Countries That Are Productive In Publishing Research Results About Sharia Hospital

Figure 7. Number of Scientific Publications on Islamic Hospitals by Subject
Figure 8. Visualization of Author’s Collaboration Source: VOSviewer

Figure 9. Keyword Visualization. Source: VOSviewer

Figure 10. Visualization of Keyword Density
includes terms like "hospital," "medical ethics," and "religion." Figure 10 depicts keyword density across these clusters, highlighting areas of extensive research and potential opportunities for further exploration.

These findings underscore the diverse and evolving landscape of research on Islamic hospitals, emphasizing collaborative efforts among researchers and institutions worldwide to enhance understanding and innovation in this critical healthcare sector.

4. Discussion
The analysis of scholarly works on Islamic hospitals globally from 2011 to 2023, as indexed on Scopus, revealed significant trends and focal points. The peak year for publications was 2023, marking the highest output with seven articles (26.92%). Among the journals, the "Journal of Islamic Marketing" emerged as the leading publisher in this domain, contributing three publications. Noteworthy researchers contributing to this field include Haq, F.; Kholis, N.; Medhekar, A.; and Ratnawati, A., each with two publications. In terms of affiliations or institutions, Cairo University, Sultan Agung Islamic University Semarang, and the Faculty of Physical Therapy were the most prolific, collectively publishing three articles on Islamic hospitals. Geographically, Indonesia stood out as the most productive country, accounting for 11 publications. The subject area with the highest publication count was Social Sciences, specifically with nine publications. Eight authors exhibited strong collaboration patterns, jointly authoring at least two documents. Keyword analysis revealed "adult" as the most frequently used term by authors. Indonesia emerged as a central hub for research on Islamic hospitals, supported by 11 documents and a robust link strength of 50 within the network of scholarly publications.

These findings underscore the growing interest and scholarly engagement in understanding and documenting Islamic hospitals' practices and impacts globally. However, they also highlight opportunities for further exploration and deeper investigation into various aspects of Islamic hospitals to enrich the existing body of knowledge and inform future research endeavors in this field.

5. Conclusion
This study provides valuable insights into the dynamics and characteristics of research on Islamic hospitals, emphasizing the growing interest and contributions in this field. The collaborative efforts of researchers, coupled with a focus on healthcare excellence and Sharia service standards, contribute to enhancing healthcare quality in certified hospitals within the Islamic context.

Author contributions
F.A. created study proposals, reviewed relevant literature, processed and visualized data. Q.A. served as a guide for the research's findings, discussions, and conclusions.

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Competing financial interests
The authors have no conflict of interest.

References


