

ISLAMIC ECONOMIC PRINCIPLES IN HEALTHCARE: ANALYZING THE IMPACT ON ISLAMIC HOSPITALS THROUGH BIBLIOMETRICS

Muhamad Subhi Aprianthoro¹, Muhammad Fahmi Saifullah²

¹Universitas Muhammadiyah Surakarta

²Universitas Muhammadiyah Surakarta

¹ORCID: <https://orcid.org/0000-0001-9059-9034>

²ORCID: <https://orcid.org/0009-0006-3415-1669>

Abstract: This study explores the application of Islamic economic principles in healthcare, specifically through Islamic hospitals. Employing bibliometric analysis and network visualization techniques, data from the Scopus database revealed 722 articles published between 1973 and 2024 were analyzed. Tools such as Microsoft Excel, R/RStudio, and VOSviewer were used to analyze these documents and visualize a network of keywords that highlight the economic aspects of Islamic hospitals. The findings indicate a steady growth in publications at a rate of 7.03% annually, with 2019 marking the highest number. Iran has emerged as a significant contributor to this body of research, particularly through the Tehran University of Medical Sciences, while the Eastern Mediterranean Health Journal has served as the primary publication outlet. Keyword network analysis uncovered four main clusters: financing models, cost-effectiveness, resource allocation, and ethical considerations in healthcare. This study sheds light on the integration of Islamic economic principles in healthcare settings and lays the groundwork for future research on optimizing economic practices in Islamic hospitals.

Keywords: *ethical healthcare practices; hospital sustainability; islamic compliance; islamic healthcare; publication trends*

Abstrak: Penelitian ini bertujuan untuk mengeksplorasi penerapan prinsip-prinsip ekonomi Islam dalam bidang kesehatan, khususnya melalui kacamata rumah sakit Islam. Dengan menggunakan analisis bibliometrik dan teknik visualisasi jaringan, data dari database Scopus menunjukkan 722 artikel yang dipublikasikan antara tahun 1973 dan 2024. Alat-alat seperti Microsoft Excel, R/RStudio, dan VOSviewer digunakan untuk menganalisis dokumen-dokumen tersebut dan memvisualisasikan jaringan kata kunci yang menyoroti aspek-aspek ekonomi dalam fungsi rumah sakit Islam. Hasil penelitian menunjukkan pertumbuhan publikasi yang stabil dengan tingkat 7,03% per tahun, dan tahun 2019 tercatat sebagai tahun dengan jumlah publikasi tertinggi. Iran merupakan negara sebagai kontributor paling produktif dalam penelitian ini, khususnya Universitas Ilmu Kedokteran Tehran, sementara Eastern Mediterranean Health Journal menjadi publisher terbanyak di bidang ini. Analisis jaringan kata kunci mengungkapkan empat klaster: model pembiayaan, efisiensi biaya, alokasi sumber daya, dan pertimbangan etis dalam bidang kesehatan. Penelitian ini memberikan Gambaran tentang integrasi prinsip-prinsip ekonomi Islam dalam pengaturan kesehatan dan menjadi landasan bagi penelitian masa depan dalam mengoptimalkan praktik-praktik ekonomi di rumah sakit Islam.

Kata kunci: *keberlanjutan rumah sakit; kepatuhan islam; perawatan kesehatan islam; praktik kesehatan etis; tren publikasi*

DOI: 10.21154/invest.v5i1.10245



To cite this article: Aprianthoro, M. S., & Saifullah, M. F. (2025). Islamic Economic Principles in Healthcare: Analyzing the Impact on Islamic Hospitals through Bibliometrics. *Invest Journal of Sharia & Economic Law*, 5(1), 44-89.
<https://doi.org/10.21154/invest.v5i1.10245>.

* Corresponding author(s): msa617@ums.ac.id.

INTRODUCTION

Islam is one of the largest religions today, with its followers spread all over the world and continuing to grow over time.¹ In modern times, the concept of Islamic hospitals has grown rapidly, partly due to the increasing demand for healthcare services that are in line with Islamic principles to meet the needs of Muslim patients.² The demand for this kind of service is influenced by the increasing public awareness of the importance of halal practices, one of which is in the field of health services.³ This condition prompted the establishment of Islamic hospitals aimed at serving Muslim patients seeking health services that are in harmony with their religious beliefs.⁴

Islamic hospitals continue to play an important role in the global health system, especially in countries with significant Muslim populations.⁵ Not only providing halal medical services, this Islamic hospital ensures that its practices are by Islamic law, thus fostering trust and satisfaction among its patients.⁶ They also combine medical practice and hospital management with Islamic values by offering a holistic approach to patient care that includes both physical and spiritual aspects.⁷ So this has attracted the attention

¹ Moh Asvin Abdurrohman and Sungkono Sungkono, "Konsep Arti Islam Dalam Al-Qur'an," *AL-MIKRAJ: Jurnal Studi Islam Dan Humaniora* (E-ISSN: 2745-4584) 2, no. 2 (2022): 51-64, <https://doi.org/10.37680/almikraj.v2i2.1348>; Izza Annafisatud Daniah, "Handbook of Islamic Sects and Movements," *Islamic Studies Review* 1, no. 2 (2022): 238-40, <https://doi.org/10.56529/isr.v1i2.87>.

² Shariff Harun et al., "Healthcare Delivery and the Environment: Understanding Muslim Patients and Their Caregivers' Needs," *Proceedings of the 9th International Conference on Marketing and Retailing (INCOMaR 2023)*, March 1-2, 2023, Kota Kinabalu, Sabah, Malaysia 133 (2024): Shariff-604, <https://doi.org/10.15405/epsbs.2024.05.49>; Shariff Harun and Azhan Rashid Senawi, "The Determinants of Customer Satisfaction towards Muslim-Friendly Healthcare Service Deliveries: A Conceptual Model," *Information Management and Business Review* 15, no. 4(SIJI) (2023): 326-30, [https://doi.org/10.22610/imbr.v15i4\(siji\).3606](https://doi.org/10.22610/imbr.v15i4(siji).3606).

³ Hamidah Mat, Wan Mohd Al Faizee Wan Ab Rahaman, and Norazzila Shafie, "The Relationship Between Interpersonal and Intrapersonal Religious Commitment in Choosing Shariah Compliant Hospital in Malaysia," *UMRAN - International Journal of Islamic and Civilizational Studies* 10, no. 1 (February 28, 2023): 47-57, <https://doi.org/10.11113/umran2023.10n1.601>.

⁴ Nila Armelia Windasari, Ni Putu Desinthya Ayu Azhari, and Ilham Fauzan Putra, "Assessing Consumer Preferences on Halal Service: The Emergence of Sharia Hospitals for Muslim Consumer," *Journal of Islamic Marketing* 15, no. 1 (March 17, 2024): 22-41, <https://doi.org/10.1108/JIMA-07-2022-0192>.

⁵ Harun et al., "Healthcare Delivery and the Environment: Understanding Muslim Patients and Their Caregivers' Needs."

⁶ Alifah Ratnawati, Widiyanto bin Mislan Cokrohadisumarto, and Noor Kholis, "Improving the Satisfaction and Loyalty of BPJS Healthcare in Indonesia: A Sharia Perspective," *Journal of Islamic Marketing* 12, no. 7 (June 6, 2020): 1316-38, <https://doi.org/10.1108/JIMA-01-2020-0005>; Muhammad Alfarizi and Rafialdo Arifian, "Patient Satisfaction with Indonesian Sharia Hospital Services: Halal Healthcare Tool and Implications for Loyalty-WoM," *Asian Journal of Islamic Management (AJIM)*, June 16, 2023, 18-35, <https://doi.org/10.20885/ajim.vol5.iss1.art2>.

⁷ N. Mohd Yusof, "Islamic Medical Practice: A Holistic Approach to Patient Care in Sharia-Compliant Hospitals," *IJUM Medical Journal Malaysia* 22, no. 1 (January 1, 2023): 110-11, <https://doi.org/10.31436/imjm.v22i1.2306>; Shaharom Md Shariff and Abdul Rashid Abdul Rahman, "Shari'ah Compliant Hospital; from Concept to Reality: Amalaysian Experience," *Bangladesh Journal of Medical Science* 15, no. 1 (April 11, 2016): 1-4, <https://doi.org/10.3329/bjms.v15i1.27172>.

of researchers and practitioners to make it the focal point of research. Various studies have shown that adherence to sharia principles significantly affects Muslim patient satisfaction, especially in terms of trust and comfort in receiving health services.⁸ With these discoveries, the development of Islamic hospitals has become very crucial in increasing their credibility and attractiveness in the global healthcare competitive landscape.

The development of these Islamic hospitals not only increases credibility in global competition but also supports halal tourism and contributes to the wider halal industry.⁹ However, to maintain the quality of service and patient trust, standardized guidelines and regulations are needed to assess hospitals that offer Islamic medical practices to meet appropriate standards of compliance with Islamic principles in medical care.¹⁰ These standards cover a wide range of aspects, including Sharia-compliant prescriptions, Islamic infrastructure, Islamic work culture, Islamic environment, service competencies, and medical practices that align with Islamic ethics.¹¹ Efforts have been made in recent years to standardize Islamic hospitals, especially in Muslim-majority countries.¹² Despite regulatory and standardization efforts, the implementation of Sharia hospitals still faces various challenges such as in the field of data recording and human resource training.¹³

⁸ Eny Wahyuningsih, Tatik Mariyanti, and Zulhelmy M. Hatta, "Patient Satisfaction Mediates the Influence of Trust, Service Quality and Hospital Sharia Compliance on Patient Loyalty in Sharia Hospitals in Riau Province from an Islamic Perspective," *International Journal of Research in Business and Social Science* (2147- 4478) 12, no. 9 (December 18, 2023): 39–59, <https://doi.org/10.20525/ijrbs.v12i9.2988>; Muhammad Khalilur Rahman et al., "Halal Healthcare Services: Patients' Satisfaction and Word of Mouth Lesson from Islamic-Friendly Hospitals," *Sustainability (Switzerland)* 15, no. 2 (2023): 1493, <https://doi.org/10.3390/su15021493>.

⁹ Neni Sri Imaniyati et al., "Islamic Hospital: Maqasid al-Shariah, Islamic Tourism, and Halal Ecosystem Prospects," *Proceedings of The International Halal Science and Technology Conference* 15, no. 1 (2022): 81–89, <https://doi.org/10.31098/ihsatec.v15i1.598>.

¹⁰ Farrah Ilyani Che Jamaludin, Muhammad Ridhuan Tony Lim Abdullah, and Mohd Nuri Al-Amin Endut, "Establishing a Sustainable Shariah-Compliant Hospital in Malaysia: Exploring the Pertinent Concept," *KnE Social Sciences*, 2023, <https://doi.org/10.18502/kss.v8i20.14631>; Nila Armelia Windasari, Ni Putu Desintha Ayu Azhari, and Ilham Fauzan Putra, "Assessing Consumer Preferences on Halal Service: The Emergence of Sharia Hospitals for Muslim Consumer," *Journal of Islamic Marketing* 15, no. 1 (March 17, 2024): 22–41, <https://doi.org/10.1108/JIMA-07-2022-0192>.

¹¹ Harun et al., "Healthcare Delivery and the Environment: Understanding Muslim Patients and Their Caregivers' Needs."

¹² Farrah Ilyani Che Jamaludin, Muhammad Ridhuan Tony Lim Abdullah, and Mohd Nuri Al-Amin Endut, "Establishing a Sustainable Shariah-Compliant Hospital in Malaysia: Exploring the Pertinent Concept," *KnE Social Sciences*, 2023, <https://doi.org/10.18502/kss.v8i20.14631>; Moniq Yasmeenela, "Review of Sharia Economic Institution Products on Sharia Hospital," *JISIP (Jurnal Ilmu Sosial Dan Pendidikan)* 4, no. 2 (2020), <https://doi.org/10.58258/jisip.v4i2.1056>.

¹³ Muhammad Khalilur Rahman, Miraj Ahmed Bhuiyan, and Suhaiza Zailani, "Healthcare Services: Patient Satisfaction and Loyalty Lessons from Islamic Friendly Hospitals," *Patient Preference and Adherence* 15 (2021): 2633–46, <https://doi.org/10.2147/PPA.S333595>; Muhammad Maksum et al., "Sharia Service as An Added Value: Response to Sharia Standard in Hospital Service," *Samarah* 6, no. 1 (2022): 423–48, <https://doi.org/10.22373/sjhk.v6i1.13418>; Fitri Yuli Mardiyati and Dumilah Ayuningtyas, "Analysis of Implementation Standards of Sharia Minimum Services in the Hospital: Case Study at Sari Asih

Despite regulatory and standardization efforts, the implementation of Sharia hospitals still faces various challenges.¹⁴ Therefore, the successful implementation of Sharia-compliant hospitals requires a consistent commitment from all parties to ensure compliance with Sharia principles.¹⁵

To support the development of Islamic hospitals by Sharia principles, it is important to adopt a bibliometric approach. This approach allows us to systematically analyze the evolution of Islamic hospitals, current research trends, key topics, as well as the most impactful journals to direct future research focus to support the progress of sustainable and quality sharia hospitals.¹⁶ Bibliometric studies have recently been conducted on several topics related to halal hospitals,¹⁷ Islamic spiritual care,¹⁸ Sharia hospitals,¹⁹ and spiritual leadership.²⁰ However, there has not been a single study that specifically addresses Islamic hospitals in bibliometric analysis, which means that the potential growth and contribution of Islamic hospitals may not have been thoroughly identified. This study aims to fill this gap by presenting a comprehensive picture of the evolution of Islamic hospital-related studies. Thus, a thorough bibliometric study of Islamic hospital research is essential to develop previous research and make a significant contribution to the existing literature.

Sangiang Hospital 2018," *Journal of Indonesian Health Policy and Administration* 6, no. 1 (2021), <https://doi.org/10.7454/ihpa.v6i1.3145>.

¹⁴ Rahman, Bhuiyan, and Zailani, "Healthcare Services: Patient Satisfaction and Loyalty Lessons from Islamic Friendly Hospitals," 2021; Maksum et al., "Sharia Service as An Added Value: Response to Sharia Standard in Hospital Service."

¹⁵ Shariff Harun et al., "Developing Muslim-Friendly Hospital Practices: Understanding the Key Drivers," *Journal of Islamic Marketing*, 2024, <https://doi.org/10.1108/JIMA-03-2023-0094>.

¹⁶ Xiaomei Luo et al., "Bibliometric Analysis of Health Technology Research: 1990~2020," *International Journal of Environmental Research and Public Health* 19, no. 15 (2022): 9044, <https://doi.org/10.3390/ijerph19159044>; A. Velez-Estevéz et al., "Why Do Papers from International Collaborations Get More Citations? A Bibliometric Analysis of Library and Information Science Papers," *Scientometrics* 127, no. 12 (2022): 7517–55, <https://doi.org/10.1007/s11192-022-04486-4>; Naveen Donthu, Satish Kumar, and Debidutta Pattnaik, "Forty-Five Years of Journal of Business Research: A Bibliometric Analysis," *Journal of Business Research* 109 (2020): 1–14, <https://doi.org/10.1016/j.jbusres.2019.10.039>; Aldijana Bunjak, Matej Černe, and Emilie Lara Schölly, "Exploring the Past, Present, and Future of the Mindfulness Field: A Multitechnique Bibliometric Review," *Frontiers in Psychology* 13 (2022): 792599, <https://doi.org/10.3389/fpsyg.2022.792599>.

¹⁷ Aisyah As-Salafiyah, "Formulating Halal-Based Hospital Indicators," *Halal Tourism and Pilgrimage* 2, no. 1 (2022).

¹⁸ Zunaidah binti Mohd Marzuki et al., "Bibliometric Analysis on Islamic Spiritual Care with Special Reference to Prophetic Medicine or Al-Tibb al-Nabawī," *Intellectual Discourse* 32, no. 1 (2024): 81–114, <https://doi.org/10.31436/id.v32i1.2147>.

¹⁹ Faris Amrullah and Qurrotul Aini, "Analyzing Sharia Service Standards in Certified Hospitals for Optimal Healthcare Quality," *Journal of Angiotherapy* 8, no. 5 (2024): 1–8, <https://doi.org/10.25163/angiotherapy.859703>.

²⁰ Dienda Sesorita Assyakur and Elsy Maria Rosa, "Spiritual Leadership in Healthcare: A Bibliometric Analysis," *Jurnal Aisyah: Jurnal Ilmu Kesehatan* 7, no. 2 (2022): 355–62, <https://doi.org/10.30604/jika.v7i2.914>.

This study employs a quantitative research method, utilizing a bibliometric analysis approach to explore the development map and research trends in Islamic hospitals.²¹ The bibliometric method was chosen because of its ability to classify and map scientific literature quantitatively based on the topic of analysis and its development.²² Bibliometric analysis is also a rigorous method of exploring scientific databases that is useful for understanding the evolution and emerging topics within the field of Islamic hospitals.²³ Using bibliometric analysis, the study can help to identify emerging trends, new research topics, and potential collaborations to synthesize the vast majority of published literature across disciplines.²⁴

In this study, various software tools were employed to process the data and document content, including VOSviewer, R or RStudio, and Microsoft Excel.²⁵ VOSviewer was employed to visualize the co-occurrence network between keywords and research themes, R or RStudio was utilized for more complex bibliometric statistical analyses, and Microsoft Excel was used for basic data processing and graphing.²⁶ The data of this study was obtained from the Scopus database, as Scopus is one of the largest and highest-quality databases for scientific literature that includes more than 70 million source records, including journals, conference proceedings, and books.²⁷ This data was retrieved on the www.scopus.com website on August 16, 2024, with the scope of documents from 1973 to 2024.

Furthermore, there are three main stages carried out in completing this research. First, the researcher conducted a literature review by studying themes related to Islamic

²¹ Muhamad Subhi Apriantoro et al., "Sharia Financial Literacy: Research Trends and Directions for Future Inquiry," *Journal of Islamic Economic Laws* 6, no. 2 (2023): 19–40.

²² Muhamad Subhi Apriantoro et al., "Analyzing and Mapping Csr Impact and Trends: A Bibliometric Study on Community Empowerment," *Ekonomi Dan Bisnis: Berkala Publikasi Gagasan Konseptual, Hasil Penelitian, Kajian, Dan Terapan Teori* 27, no. 2 (2023): 118–32, <https://doi.org/10.24123/jeb.v27i2.5873>.

²³ Naveen Donthu et al., "How to Conduct a Bibliometric Analysis: An Overview and Guidelines," *Journal of Business Research* 133 (April 29, 2021): 285–96, <https://doi.org/10.1016/j.jbusres.2021.04.070>.

²⁴ Ye na Gan et al., "Practical Guidance on Bibliometric Analysis and Mapping Knowledge Domains Methodology – A Summary," *European Journal of Integrative Medicine* 56 (October 1, 2022): 102203, <https://doi.org/10.1016/j.eujim.2022.102203>; Azhar Alam et al., "History and Development of Takaful Research: A Bibliometric Review," *SAGE Open* 13, no. 3 (2023): 21582440231184852, <https://doi.org/10.1177/21582440231184852>.

²⁵ Muhamad Subhi Apriantoro, Dita Nurul Diniyah, and Rizki Dwi Putra Rosadi, "Riding the Tides of Change: A Bibliometric Expedition on Technology-Enabled Circular Economy," *Multidisciplinary Reviews* 7, no. 5 (2024): 2024089, <https://doi.org/10.31893/multirev.2024089>.

²⁶ Muhamad Subhi Apriantoro et al., "Quantifying Intellectual Terrain: Islamic Jurisprudence, Ethical Discourse, and Scholarly Impact," *Suhuf* 36, no. 1 (2024): 78–85.

²⁷ Brendalyn A. Manzano and Jessie S. Barrot, "Language Education Research in the Philippines: A Scoping of Literature," *Journal of Asia TEFL* 19, no. 2 (June 30, 2022): 664–72, <https://doi.org/10.18823/asiatefl.2022.19.2.19.664>; Jeroen Baas et al., "Scopus as a Curated, High-Quality Bibliometric Data Source for Academic Research in Quantitative Science Studies," *Quantitative Science Studies* 1, no. 1 (January 23, 2020): 377–86, https://doi.org/10.1162/qss_a_00019.

hospitals through national journals and international journals in the Google Scholar and Scopus databases. This literature review is useful to ensure the relevance of this research in using bibliometrics as a research method, as well as to make it easier to determine the appropriate keyword selection.²⁸

Second, we performed a search and analysis using the query TITLE-ABS-KEY (Islamic AND hospital) in the Scopus database, which yielded 956 documents without any filters. Bibliometrics is recommended to have a minimum of 200 documents to produce accurate representations;²⁹ therefore, this number of documents is eligible for the use of bibliometrics as a relevant research method. Next, document filtering is carried out using the Boolean operator TITLE-ABS-KEY (islamic AND hospital) AND (LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (SRCTYPE , "j")) by limiting the document type to only articles and the source type only to journals and only including documents that use English, the final filtering result produced is 722 documents to be analyzed.

Third, the research data collected were analyzed using Biblioshiny, which was executed using R or R Studio software. Subsequently, the data were analyzed by year, country, affiliation, author, and source using Microsoft Excel. Citation and author analyses were also conducted to identify the documents and authors with the greatest scientific impact. Additionally, to map the development of trends and emerging themes in the field of Islamic hospital research, network analysis was performed using VOSviewer based on co-occurrence analysis. The stages of the research process are depicted in Figure 1.

²⁸ Muhamad Apriantoro, Apriliya Suryaningsih, and Muthoifin Muthoifin, "Bibliometric Analysis of Research Development of Economic Dispute Settlement," in *Proceedings of the 5th International Graduate Conference in Islam and Interdisciplinary Studies, IGCIIS 2022, 19-20 October 2022, Mataram, Lombok, Indonesia, 2023*, <https://doi.org/10.4108/eai.19-10-2022.2329068>.

²⁹ Gordon Rogers, Martin Szomszor, and Jonathan Adams, "Sample Size in Bibliometric Analysis," *Scientometrics* 125, no. 1 (2020): 777–94, <https://doi.org/10.1007/s11192-020-03647-7>.

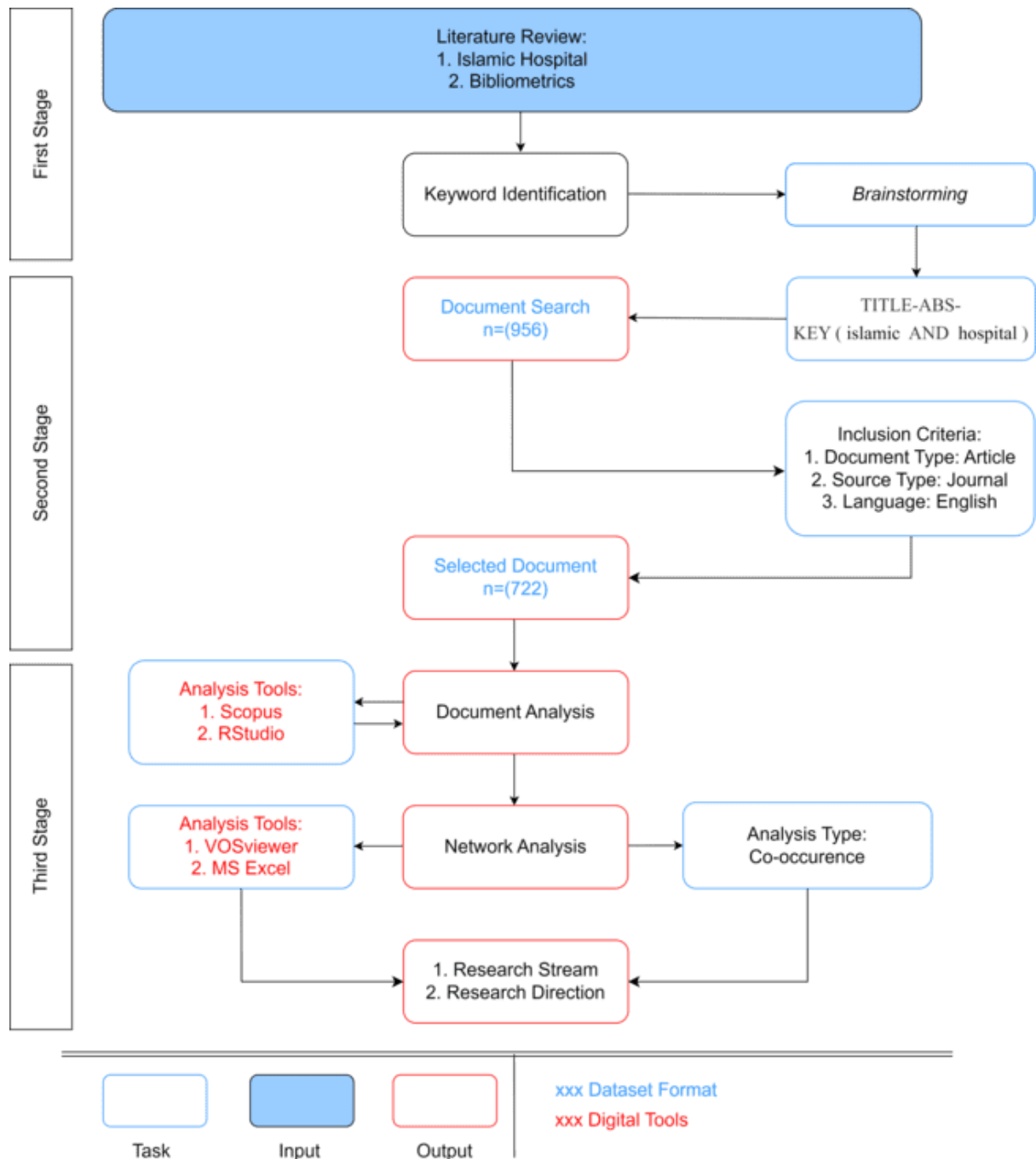


Figure 1 Research Stages

DISCUSSION

The data from this study was processed and analyzed on August 17, 2024. The results are shown in Table 1 which describes that there are 722 documents in a period of 51 years from 1973 to 2024. Of the total documents, there are 2641 authors consisting of 90 single authors and 16.07% international authorship collaboration. The number of references used in all these documents reached 20651, with an average citation per document of 11.09.

Table 1 Main Information About Data

Description	Results
Timespan	1973:2024
Sources (Journals, Books, etc)	414
Documents	722
Annual Growth Rate %	7,03
Document Average Age	9,21
Average citations per doc	11,09
References	20651
Document Contents	
Keywords Plus (ID)	4322
Author's Keywords (DE)	1899
Authors	
Authors	2641
Authors of single-authored docs	90
Authors Collaboration	
Single-authored docs	92
Co-Authors per Doc	4,13
International co-authorships %	16,07
Document Types	
Article	722

1.1 Publication Trends by Year

Figure 2 illustrates the progression of published documents from 1973 to 2024, revealing a significant increase over time. In the initial phase from 1973 to 2004, publication activity was minimal and inconsistent, with only one document published in 1973 and no significant improvement over the following three decades. The peak number of documents during this period was nine, which was reached in 2002. However, from 2005 to 2018, there was a marked and steady increase in the number of publications. The upward trend began in 2005 with 17 documents and publications, which increased to 30 by 2017, despite a dip in 2009. In 2019, there was a significant surge, reaching a peak of 67 publications, followed by 66 in 2020. However, this trend slightly declined in 2021, likely due to the COVID-19 pandemic, but the number of publications remained high compared to earlier periods. Gradually, the number of publications is rising again, indicating growing interest and attention to the topic of Islamic hospitals, with the potential for continued growth in the coming years. This is evidenced by the 32 documents already published in 2024, even though the year is only halfway over.

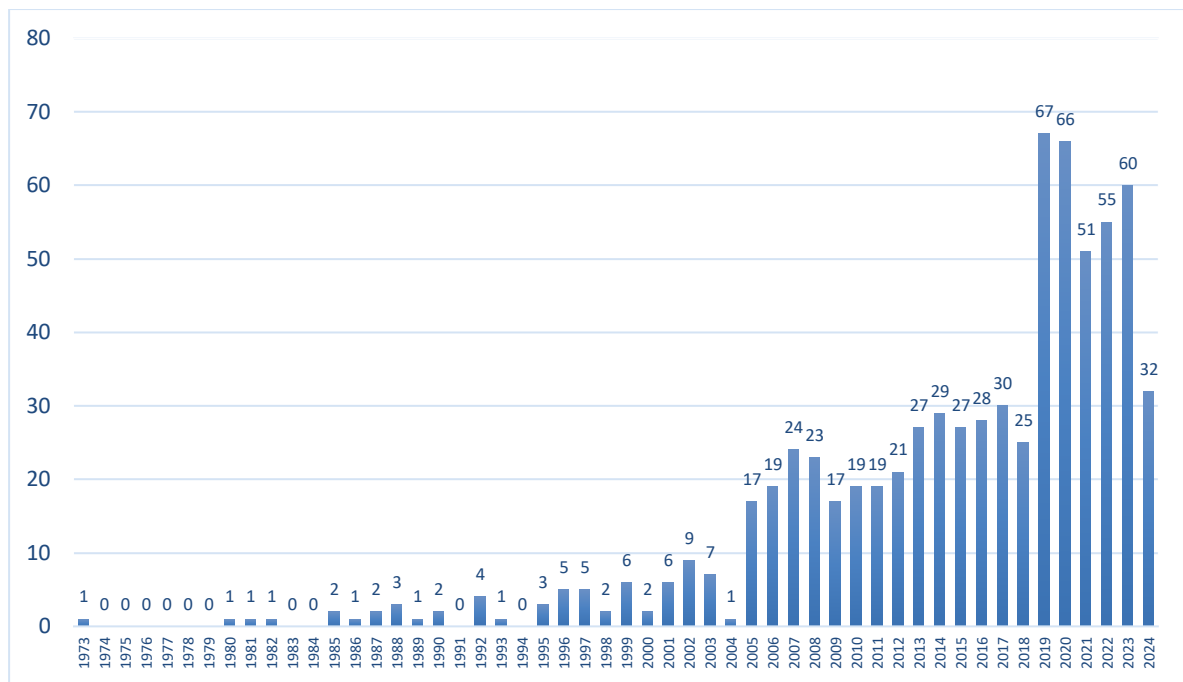


Figure 2 Publication Trends by Year

1.2 Geographical Distribution of Research: Country Analysis

Figure 3 shows that Iran contributed the most with 227 publications, followed by Indonesia (127), Pakistan (73), Saudi Arabia (58), and Malaysia and the United States (57 each). Muslim countries in Asia dominate the publications, with significant contributions from non-Muslim countries, demonstrating a broad interest in this topic. The contribution of non-Muslim countries to Islamic hospital research reflects the growing global interest in healthcare models that integrate cultural and religious principles. This stems from the globalization of healthcare research, Muslim diaspora communities, and increased interest in spirituality in healthcare. Researchers worldwide study Islamic hospitals to understand Muslim patients' needs and explore faith-based healthcare models. The rise of Muslim-friendly medical tourism has also increased the academic focus on Sharia-compliant healthcare services, contributing to the global recognition of Islamic hospital systems.

The prominence of research on Islamic hospitals is influenced not only by religious factors but also by academic support, government policies, and economic and cultural influences on the healthcare system. As noted by Rahman and Zailani, the growth of Muslim-friendly medical tourism in Malaysia and Saudi Arabia has spurred increased studies on Sharia-compliant healthcare services.³⁰ Additionally Jonas Preposi Cruz et al., highlight that integrating spirituality in healthcare practices has become a significant area

³⁰ Muhammad Khalilur Rahman and Suhaiza Zailani, "The Effectiveness and Outcomes of the Muslim-Friendly Medical Tourism Supply Chain," *Journal of Islamic Marketing* 8, no. 4 (September 20, 2017): 732-52, <https://doi.org/10.1108/JIMA-11-2015-0082>.

of interest, particularly in Saudi Arabia.³¹ The increasing global collaborations between researchers from Muslim and non-Muslim countries also contribute to the widespread academic discussions on Islamic healthcare models.³² These factors collectively shape the research landscape, reflecting a growing recognition of Islamic hospital systems in both Muslim-majority and non-Muslim countries.

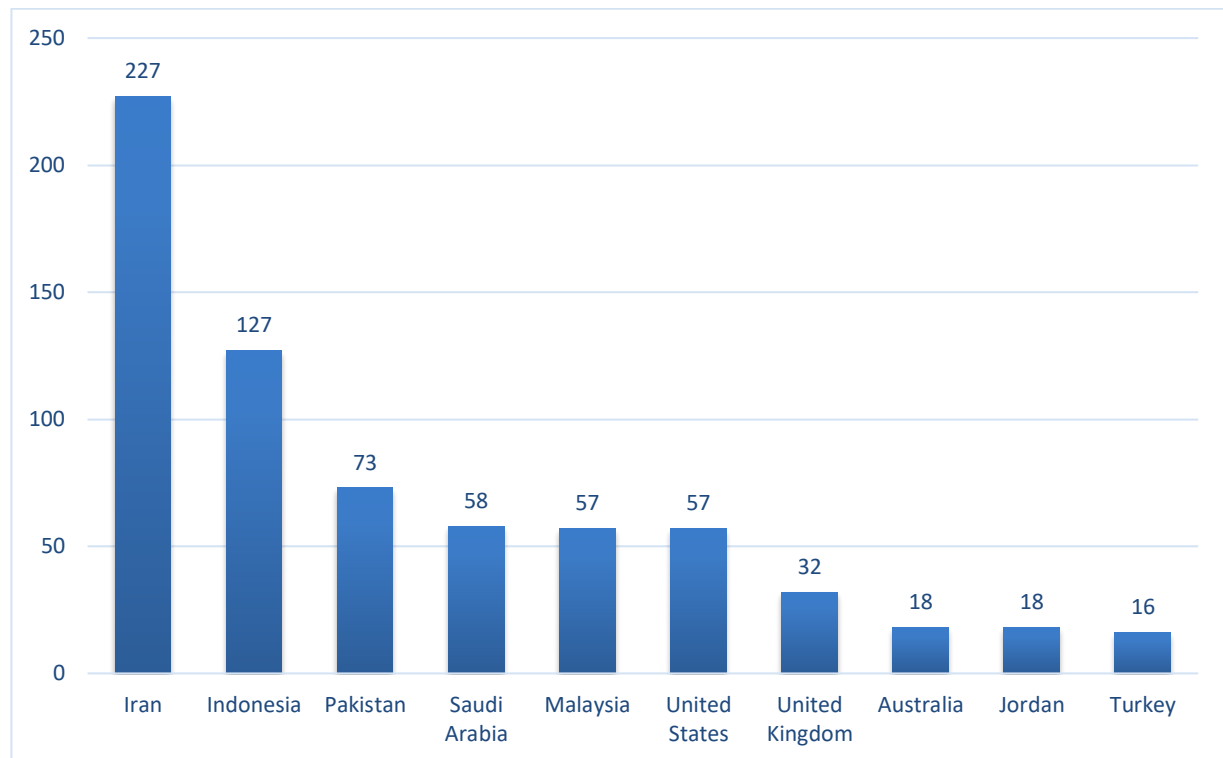


Figure 3 Geographical Distribution of Research: Country Analysis

1.3 Institutional Contributions: Affiliation Analysis

Figure 4 presents the ten leading institutions in publications related to Islamic hospital research. The Tehran University of Medical Sciences in Iran leads with 60 publications, significantly surpassing other institutions, highlighting its active role in this field of research. Shahid Baheshti University of Medical Sciences, also from Iran, holds the second position with 36 publications, further underscoring Iran's substantial contribution to this field through its two main universities. Universitas Airlangga, Indonesia, ranked third with 28 publications. Additionally, Shiraz University of Medical Sciences and Nahdhlatul Ulama University Surabaya made notable contributions, with 24 and 22 publications, respectively. Overall, these data indicate that the most significant

³¹ Jonas Preposi Cruz et al., "Influence of Religiosity and Spiritual Coping on Health-Related Quality of Life in Saudi Haemodialysis Patients," *Hemodialysis International* 21, no. 1 (2017): 125-32, <https://doi.org/10.1111/hdi.12441>.

³² Hanan A. Ezzat Alkorashy, "Factors Shaping Patient Safety Management in the Middle East Hospitals from Nursing Perspective: A Focus Group Study," *Middle East Journal of Scientific Research* 15, no. 10 (2013): 1375-84, <https://doi.org/10.5829/idosi.mejsr.2013.15.10.75112>.

contributions to this study came from Iranian institutions, followed by those from Indonesia and Malaysia.

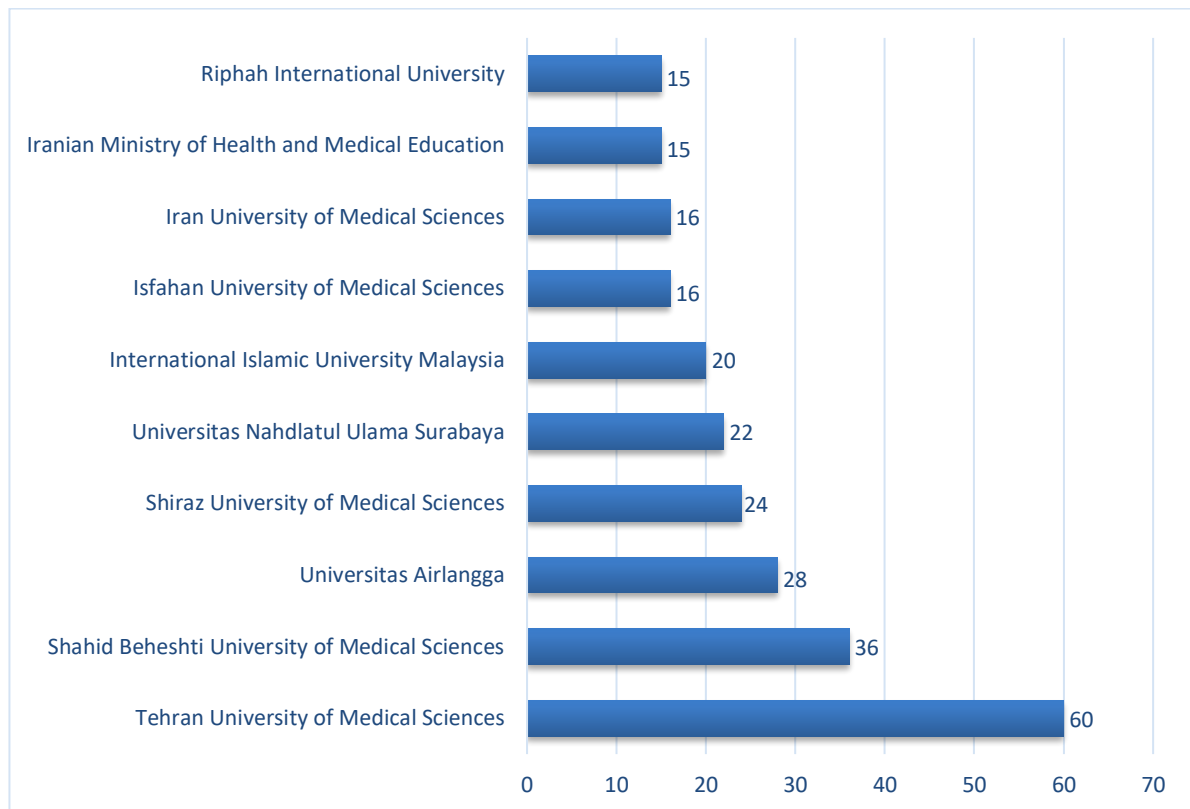


Figure 4 Institutional Contributions: Affiliation Analysis

1.4 Key Contributors: Author Analysis

Figure 5 presents the ten authors who have made the most significant contributions to publications concerning Islamic hospitals. Muhammad Afzal and Amena Rahim led the list, each with nine publications. As the most prolific authors in this field, they play a crucial role in advancing literacy related to Islamic hospitals and healthcare. The second place was taken by Suhaiza Zailani, with six publications. Following closely are Siti Nur Hasina, Tariq A Madani, and Budhi Setianto, each with five papers. Additionally, Samir Al Adawi, Tarik A. Alazraqi, Ali M. Albarrak, and Mohammad A. Alhazmi have each contributed four publications. Overall, this data highlights the substantial individual contributions to the topic of Islamic hospitals, with Muhammad Afzal and Amena Rahim being the primary contributors.

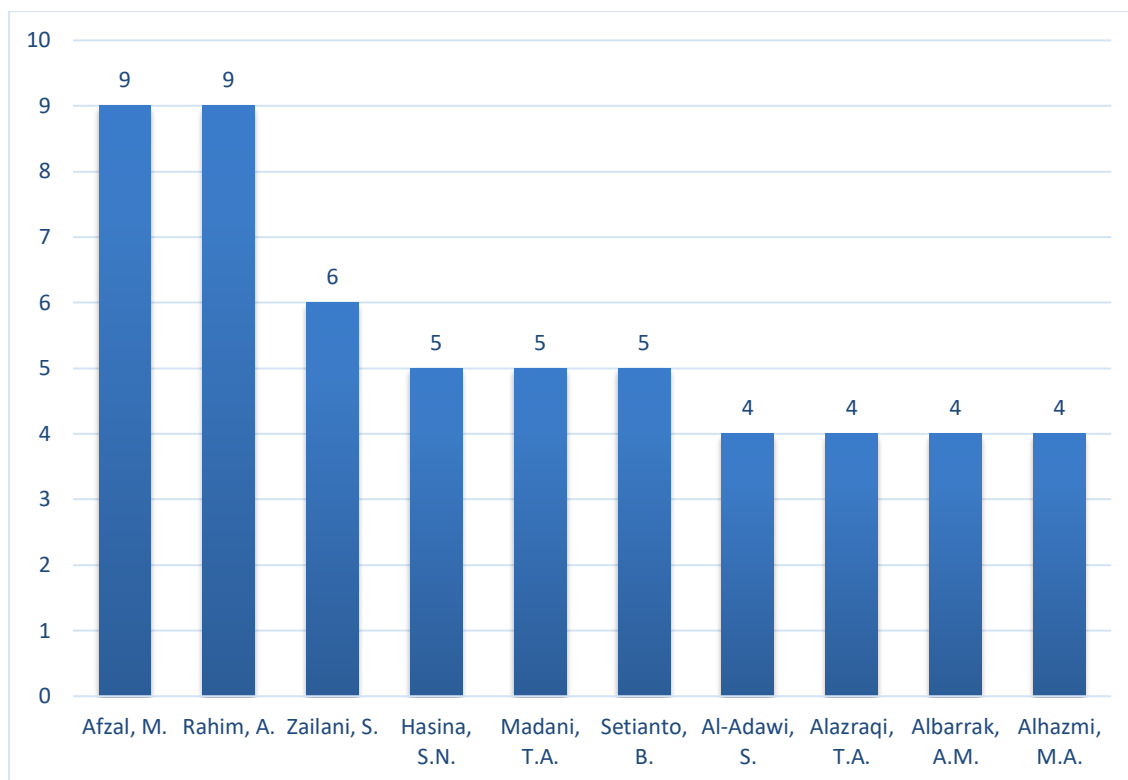


Figure 5 Key Contributors: Author Analysis

1.5 Top Journals: Source Analysis

Figure 6 illustrates the ten most prevalent sources. The Eastern Mediterranean Health Journal leads the list, significantly outpacing all other sources, with 110 documents. In second place is the Indian Journal of Public Health Research and Development, with 11 documents. Third, both the Bali Medical Journal and the Journal of The Pakistan Medical Association share the same number of documents, each contributing 10. Meanwhile, the Bulletin of The World Health Organization ranked last, with only six documents.

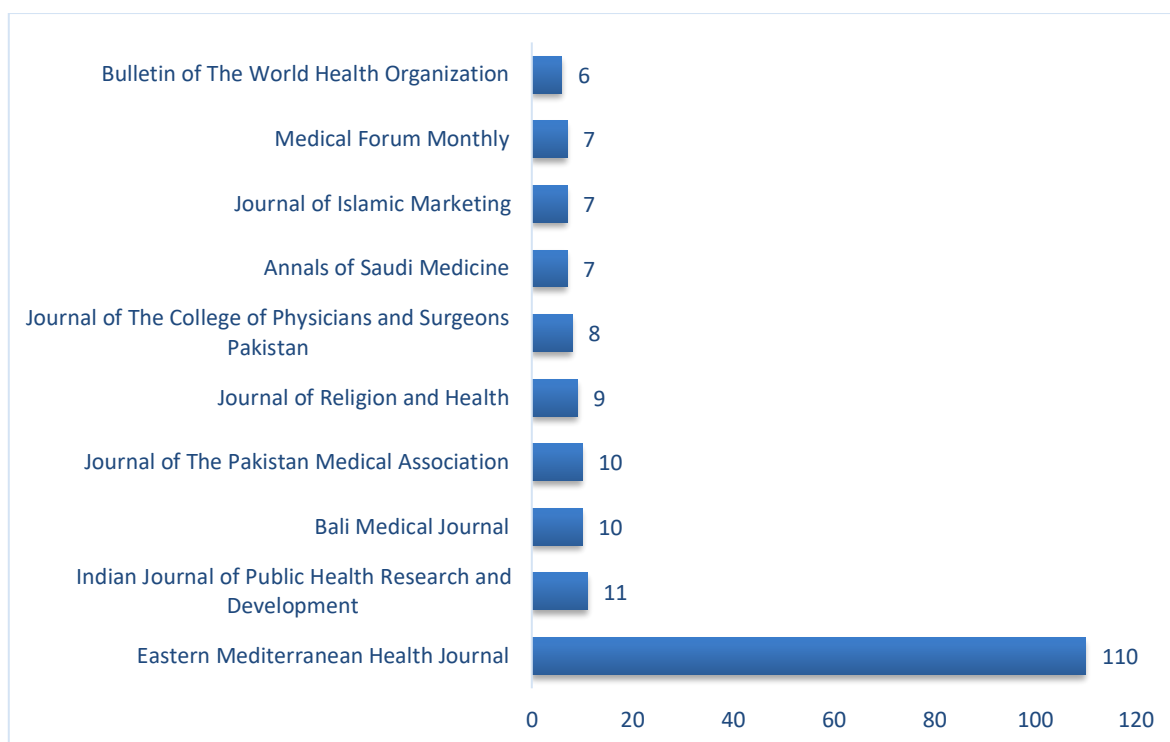


Figure 6 Top Journals: Source Analysis

1.6 Corresponding Author's Country Contributions

Figure 7 presents the top 15 countries corresponding to the authors. The data include single country publications (SCP), shown in blue, representing publications with authors from the same country. In contrast, multiple country publications (MCP), displayed in red, indicate publications involving international collaboration among authors from different countries. Iran leads with the highest number of publications, dominated by 166 SCPs and only 19 MCPs. However, this figure still surpasses the MCPs of other countries. Indonesia also made a significant contribution, with 89 SCPs and 15 MCPs. Additionally, Saudi Arabia has 41 SCPs and 6 MCPs, followed by Pakistan with 41 SCPs and only 3 MCPs, and Malaysia with 23 SCPs and 8 MCPs. In Australia and Jordan, there was a balance between SCPs and MCPs, each having five. In Canada and China, MCPs outnumbered SCPs. Conversely, Thailand, at the bottom, has only SCPs, indicating independent research efforts. Overall, the graph highlights that collaborations are predominantly domestic with limited international partnerships. The top five countries are predominantly Muslim in Asia.

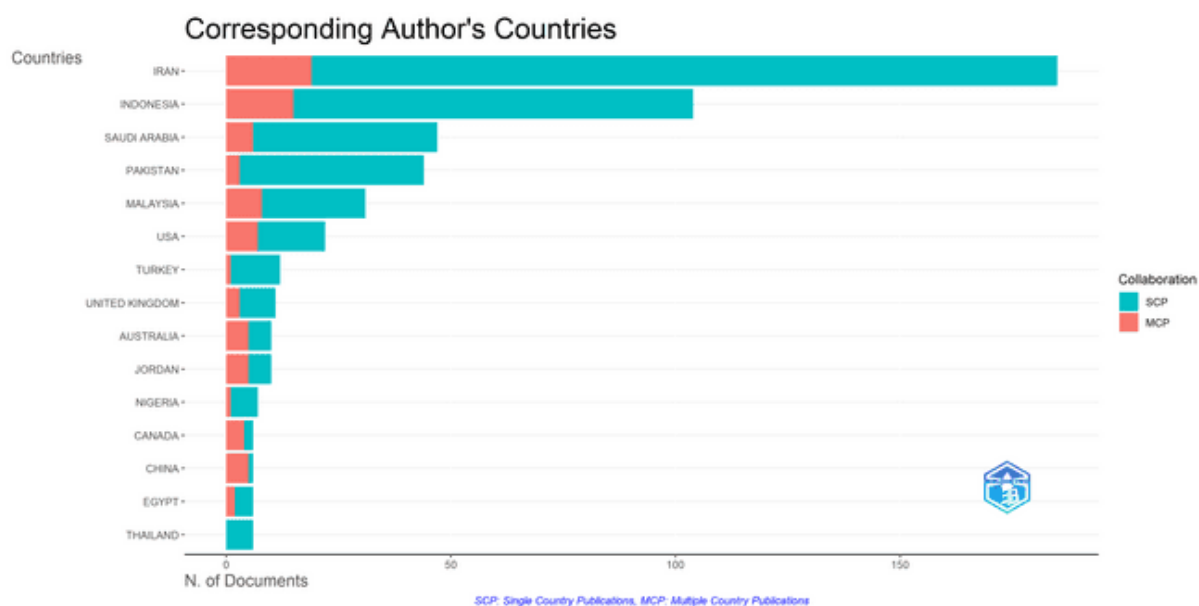


Figure 7 Corresponding Author's Country Contributions

1.7 Core Journals Identified by Bradford's Law

Figure 8 shows the order of journal rankings based on Bradford's law. Bradford's law serves to analyze the distribution of articles across journals in a particular field,³³ so that Bradford's law here can determine the main and core journals that have the best productivity.³⁴ Based on the image presented, the first ranking based on Bradford's law is the Eastern Mediterranean Health Journal, followed by the Indian Journal of Public Health Research and Development. In third place are the Bali Medical Journal and the Journal of The Pakistan Medical Association in fourth place. Furthermore, fifth place is occupied by the Journal of Religion and Health, sixth place in the Journal of The College of Physicians and Surgeons Pakistan, seventh place by Annals of Saudi Medicine, eighth place in the Journal of Islamic Marketing, ninth place in Medical Forum Monthly, and tenth place in Bulletin of The World Health Organization.

³³ B. C. Brookes, "'Sources of Information on Specific Subjects' by S.C. Bradford," *Journal of Information Science* 10, no. 4 (1985): 173-75, <https://doi.org/10.1177/016555158501000406>.

³⁴ Andrew K. Shenton and Naomi V. Hay-Gibson, "Bradford's Law and Its Relevance to Researchers," *Education for Information* 27, no. 4 (2009): 217-30, <https://doi.org/10.3233/EFI-2009-0882>; Liwen Qiu, "An Empirical Examination of the Existing Models for Bradford's Law," *Information Processing and Management* 26, no. 5 (1990): 655-72, [https://doi.org/10.1016/0306-4573\(90\)90108-E](https://doi.org/10.1016/0306-4573(90)90108-E).

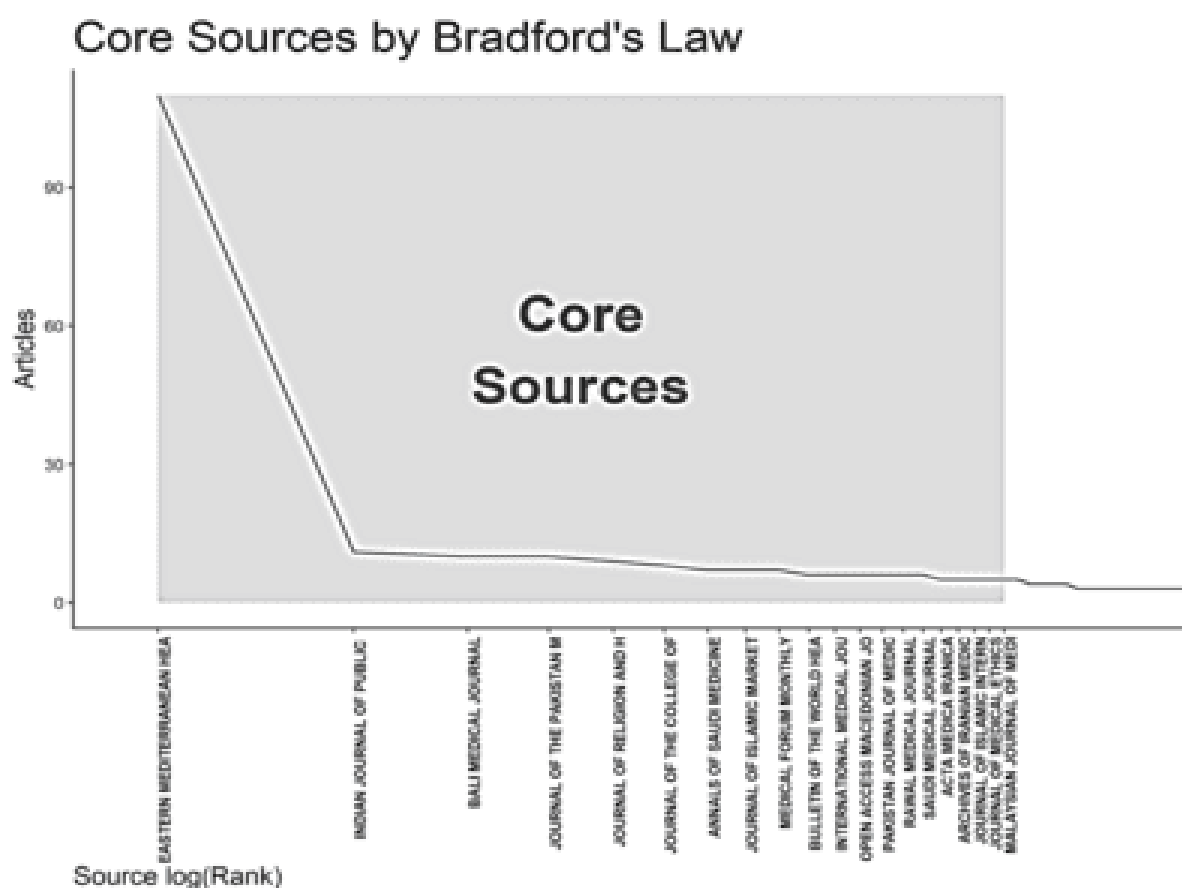


Figure 8 Core Journals Identified by Bradford's Law

1.8 Most Globally Cited Documents

Table 2 contains the top ten articles related to the topic of Islamic hospitals that have the most citations based on the total citations and the number of citations per year on a global scale. The article with the most citations was written by Fleischmann et al.³⁵ with 356 citations. This was followed by an article by Moghadamnia and Abdollahi³⁶ with 121 citations. When viewed from the TC per year, the article by Fleischmann et al. occupies the first place with 20.94 TC per year.³⁷ Followed by Salehi et al.³⁸ with 14.17 TC per year which was previously ranked second last when viewed from the total citation. In third

³⁵ Alexandra Fleischmann et al., "Effectiveness of Brief Intervention and Contact for Suicide Attempters: A Randomized Controlled Trial in Five Countries," *Bulletin of the World Health Organization* 86, no. 9 (2008): 703–9, <https://doi.org/10.2471/BLT.07.046995>.

³⁶ A. A. Moghadamnia and M. Abdollahi, "An Epidemiological Study of Poisoning in Northern Islamic Republic of Iran," *Eastern Mediterranean Health Journal* 8, no. 1 (2002): 88–94, <https://doi.org/10.26719/2002.8.1.88>.

³⁷ Fleischmann et al., "Effectiveness of Brief Intervention and Contact for Suicide Attempters: A Randomized Controlled Trial in Five Countries."

³⁸ Faraz Salehi, Masoud Mahootchi, and Seyed Mohammad Moattar Husseini, "Developing a Robust Stochastic Model for Designing a Blood Supply Chain Network in a Crisis: A Possible Earthquake in Tehran," *Annals of Operations Research* 283, no. 1–2 (2019): 679–703, <https://doi.org/10.1007/s10479-017-2533-0>.

place is Kushner et al.³⁹ with 11.60 TC per year. This shows that there is a relationship between total citations and TC per year, where articles with high total citations tend to have high TC per year, although not always linear. The TC per year is calculated by dividing the total citations by the number of years since the article was published. So newer articles may have a higher TC per year even though the total citations are not too much than other articles as happened in Salehi et al.⁴⁰ In addition, the year of publication also does not have a great influence on the total number of citations. Because newer articles if the topic is very relevant and has a big impact can get a lot of citations in a shorter time, such as the article belonging to Fleischmann et al.⁴¹ which has a higher citation than Moghadamnia & Abdollahi.⁴²

Table 2 Most Globally Cited Documents

Paper	Total Citations	TC Per Year
Fleischmann et al., ⁴³ Bull Who	356	20,94
Kushner et al., ⁴⁴ Arch Surg	174	11,60
Moghadamnia & Abdollahi, ⁴⁵ East Mediterr Health J	121	5,26
Bertolote et al., ⁴⁶ Crisis	104	6,93
Madani et al., ⁴⁷ Ann Saudi Med	98	5,16
Green et al. ⁴⁸ Psychol Health Med	95	5,00
Halligan, ⁴⁹ J Clin Nurs	89	4,68

³⁹ Adam L. Kushner et al., "Addressing the Millennium Development Goals: From a Surgical Perspective Essential Surgery and Anesthesia in 8 Low- and Middle-Income Countries," *Archives of Surgery* 145, no. 2 (2010): 154–59, <https://doi.org/10.1001/archsurg.2009.263>.

⁴⁰ Salehi, Mahootchi, and Hussein, "Developing a Robust Stochastic Model for Designing a Blood Supply Chain Network in a Crisis: A Possible Earthquake in Tehran."

⁴¹ Fleischmann et al., "Effectiveness of Brief Intervention and Contact for Suicide Attempters: A Randomized Controlled Trial in Five Countries."

⁴² Moghadamnia and Abdollahi, "An Epidemiological Study of Poisoning in Northern Islamic Republic of Iran."

⁴³ Fleischmann et al., "Effectiveness of Brief Intervention and Contact for Suicide Attempters: A Randomized Controlled Trial in Five Countries."

⁴⁴ Kushner et al., "Addressing the Millennium Development Goals: From a Surgical Perspective Essential Surgery and Anesthesia in 8 Low- and Middle-Income Countries."

⁴⁵ Moghadamnia and Abdollahi, "An Epidemiological Study of Poisoning in Northern Islamic Republic of Iran."

⁴⁶ José M. Bertolote et al., "Repetition of Suicide Attempts Data from Emergency Care Settings in Five Culturally Different Low- and Middle-Income Countries Participating in the WHO SUPRE-MISS Study," *Crisis* 31, no. 4 (2010): 194–201, <https://doi.org/10.1027/0227-5910/a000052>.

⁴⁷ Tariq A. Madani et al., "Causes of Hospitalization of Pilgrims during the Hajj Period of the Islamic Year 1423 (2003)," *Annals of Saudi Medicine* 26, no. 5 (2006): 346–51, <https://doi.org/10.5144/0256-4947.2006.346>.

⁴⁸ Katherine Green, Hazel Broome, and James Mirabella, "Postnatal Depression among Mothers in the United Arab Emirates: Socio-Cultural and Physical Factors," *Psychology, Health and Medicine* 11, no. 4 (2006): 425–31, <https://doi.org/10.1080/13548500600678164>.

⁴⁹ Phil Halligan, "Caring for Patients of Islamic Denomination: Critical Care Nurses' Experiences in Saudi Arabia," *Journal of Clinical Nursing* 15, no. 12 (2006): 1565–73, <https://doi.org/10.1111/j.1365-2702.2005.01525.x>.

Paper	Total Citations	TC Per Year
Gangata et al., ⁵⁰ 2010, Anat Sci Educ	85	5,67
Salehi et al., ⁵¹ Ann Oper Res	85	14,17
Ahmad-Nia et al., ⁵² East Mediterr Health J	80	5,00

1.9 Most Locally Cited Documents

Table 3 shows the order of articles on Islamic hospitals with the largest local citations, along with their global citations and LC/GC ratios. The most cited article was written by Zailani et al.,⁵³ with a total of 8 local citations and 56 global citations. Followed by an article owned by Halligan⁵⁴ with 6 local citations and 89 global citations. The third, fourth, and fifth positions are occupied by articles by Rahman MK, which were published in 2018, 2017, and 2021 with 4 local citations, 30 global citations, 3 local citations, 37 global citations, 3 local citations, and 16 global citations, respectively. When viewed from the relationship between local citations and global citations, there is no correlation between the two. For example, an article by Madani et al.⁵⁵ has the most global citations but is in the last two articles based on local citations. Rahman et al.⁵⁶ with the highest LC/GC ratio also does not affect the number of local citations and global citations.

Table 3 Most Locally Cited Documents

Document	Local Citations	Global Citations	LC/GC Ratio (%)
Zailani et al. ⁵⁷ Tour Manage	8	56	14,29
Halligan, ⁵⁸ J Clin Nurs	6	89	6,74
Rahman et al., ⁵⁹ J Islam Mark	4	30	13,33

⁵⁰ Hope Gangata et al., "The Reliance on Unclaimed Cadavers for Anatomical Teaching by Medical Schools in Africa," *Anatomical Sciences Education* 3, no. 4 (2010): 174–83, <https://doi.org/10.1002/ase.157>.

⁵¹ Salehi, Mahootchi, and Hussein, "Developing a Robust Stochastic Model for Designing a Blood Supply Chain Network in a Crisis: A Possible Earthquake in Tehran."

⁵² S. Ahmad-Nia et al., "Caesarean Section in the Islamic Republic of Iran: Prevalence and Some Sociodemographic Correlates," *Eastern Mediterranean Health Journal* 15, no. 6 (2009): 1389–98.

⁵³ Suhaiza Zailani et al., "Predicting Muslim Medical Tourists' Satisfaction with Malaysian Islamic Friendly Hospitals," *Tourism Management* 57 (2016): 159–67, <https://doi.org/10.1016/j.tourman.2016.05.009>.

⁵⁴ Halligan, "Caring for Patients of Islamic Denomination: Critical Care Nurses' Experiences in Saudi Arabia."

⁵⁵ Madani et al., "Causes of Hospitalization of Pilgrims during the Hajj Period of the Islamic Year 1423 (2003)."

⁵⁶ Rahman, Bhuiyan, and Zailani, "Healthcare Services: Patient Satisfaction and Loyalty Lessons from Islamic Friendly Hospitals," 2021.

⁵⁷ Zailani et al., "Predicting Muslim Medical Tourists' Satisfaction with Malaysian Islamic Friendly Hospitals."

⁵⁸ Halligan, "Caring for Patients of Islamic Denomination: Critical Care Nurses' Experiences in Saudi Arabia."

⁵⁹ Muhammad Khalilur Rahman, Suhaiza Zailani, and Ghazali Musa, "The Perceived Role of Islamic Medical Care Practice in Hospital: The Medical Doctor's Perspective," *Journal of Islamic Marketing* 9, no. 1 (2018): 2–18, <https://doi.org/10.1108/JIMA-01-2016-0006>.

Document	Local Citations	Global Citations	LC/GC Ratio (%)
Rahman & Zailani, ⁶⁰ J Islam Mark	3	37	8,11
Rahman et al., ⁶¹ Patient Preference Adherence	3	16	18,75
Rashidi & Rajaram, ⁶² Holistic Nurs Pract	2	26	7,69
Madani et al., ⁶³ Ann Saudi Med	2	98	2,04
Madani et al., ⁶⁴ Ann Saudi Med	2	57	3,51
Gooya et al., ⁶⁵ Arch Iran Med	2	40	5,00
Abu-Ras & Laird, ⁶⁶ J Relig Health	2	55	3,64

1.10 Authors' Local Impact and Influence

Table 4 provides the ten most influential authors based on the H-index, G Index, M Index, total citations, and number of author publications. The highest-ranked author is Zailani S with an H Index and G Index of 6 each, which indicates that there are at least 6 publications cited 6 times, with 193 total citations and 0.667 M Index. The M Index number indicates that Zailani S has been relatively quick in achieving the H Index since its first publication in 2016. Furthermore, Madani TA is ranked second with an H Index and a G Index of 5, which means that 5 of its publications are cited at least 5 times. The total number of citations is 213 with an M Index of 0.263, which indicates that its development is slower than that of Zailani S because of its first publication in 2006. In third place is occupied by Al-Adawi S with an H Index of 4, G Index of 5, and M Index of 0.174. The difference between the H Index and the higher G Index shows that although there are at least 4 publications cited 4 times, there is one or more of its publications that receive more citations. On the other hand, in the last position is Rahman MK who has an H Index and G Index of 4, with 90 citations from 4 works since 2017. An M Index of 0.5

⁶⁰ Muhammad Khalilur Rahman and Suhaiza Zailani, "The Effectiveness and Outcomes of the Muslim-Friendly Medical Tourism Supply Chain," *Journal of Islamic Marketing* 8, no. 4 (2017): 732-52, <https://doi.org/10.1108/JIMA-11-2015-0082>.

⁶¹ Rahman, Bhuiyan, and Zailani, "Healthcare Services: Patient Satisfaction and Loyalty Lessons from Islamic Friendly Hospitals," 2021.

⁶² Anahita Rashidi and Shireen S. Rajaram, "Culture Care Conflicts among Asian-Islamic Immigrant Women in US Hospitals," *Holistic Nursing Practice* 16, no. 1 (2001): 55-64, <https://doi.org/10.1097/00004650-200110000-00010>.

⁶³ Madani et al., "Causes of Hospitalization of Pilgrims during the Hajj Period of the Islamic Year 1423 (2003)."

⁶⁴ Tariq Ahmed Madani et al., "Causes of Admission to Intensive Care Units in the Hajj Period of the Islamic Year 1424 (2004)," *Annals of Saudi Medicine* 27, no. 2 (2007): 101-5, <https://doi.org/10.5144/0256-4947.2007.101>.

⁶⁵ Mohammad Mehdi Gooya et al., "Influenza a (H1N1) Pandemic in Iran: Report of First Confirmed Cases from June to November 2009," *Archives of Iranian Medicine* 13, no. 2 (2010): 91-98.

⁶⁶ Wahiba Abu-Ras and Lance Laird, "How Muslim and Non-Muslim Chaplains Serve Muslim Patients? Does the Interfaith Chaplaincy Model Have Room for Muslims' Experiences?," *Journal of Religion and Health* 50, no. 1 (2011): 46-61, <https://doi.org/10.1007/s10943-010-9357-4>.

indicates fairly high productivity in a short period, but this is still not comparable to other writers.

Table 4 Authors' Local Impact

Author	H Index	G Index	M Index	TC	NP	PY Start
Zailani S.	6	6	0,667	193	6	2016
Madani T. A.	5	5	0,263	213	5	2006
Al-Adawi S.	4	5	0,174	120	5	2002
Alazraqi T. A.	4	4	0,211	186	4	2006
Albarrak A. M.	4	4	0,211	186	4	2006
Alhazmi M. A.	4	4	0,211	186	4	2006
Askarian M.	4	4	0,174	45	4	2002
Ghabrah T. M.	4	4	0,211	203	4	2006
Ishaq A. H.	4	4	0,211	186	4	2006
Rahman M. K.	4	4	0,5	90	4	2017

Information:

H Index: The number H means that the researcher has H publications with each of them cited at least H times.

G Index: The largest number by which the top G articles have at least G^2 citations in total.

M Index: H Index divided by the number of years since the first publication.

TC: Total Citation

NP: Number of Publications

PY Start: Publication Year Start

1.11 Sources' Local Impact and Relevance

Table 5 lists the top ten journal sources with the greatest impact. The journal with the highest ranking is the Eastern Mediterranean Health Journal with an H Index of 21, G Index of 32, M Index of 0.75, and a total of 1532 citations from 110 articles. The G Index which is higher than the H Index shows that this journal has at least 21 articles that have been cited 21 times with some of the articles getting more citations. In second place is the Annals of Saudi Medicine which has an H Index of 6, G Index of 7, M Index of 0.162, and 210 citations from 7 articles. The lowest M Index of other journals indicates a slow growth of realistic scientific impact. Then, the Bulletin of The World Health Organization ranks third with an H Index and G Index of 6, respectively, an M Index of 0.231, and 622 citations from 6 articles. The same number of H Index and G Index shows that the distribution of citations is quite even. In the last ranking, the Archives of Iranian Medicine has an H Index of 3, G Index of 5, M Index of 0.176, and a total of 78 citations from 5 articles published since 2008.

Table 5 Sources' Local Impact

Source	H Index	G Index	M Index	TC	NP	PY Start
Eastern Mediterranean Health Journal	21	32	0,75	1532	110	1997
Annals of Saudi Medicine	6	7	0,162	210	7	1988
Bulletin of The World Health Organization	6	6	0,231	622	6	1999

Source	H Index	G Index	M Index	TC	NP	PY Start
Journal of Religion and Health	6	9	0,429	135	9	2011
Journal of Islamic Marketing	5	7	0,625	104	7	2017
Saudi Medical Journal	5	6	0,179	94	6	1997
Journal of The Pakistan Medical Association	4	7	0,2	60	10	2005
Pakistan Journal of Medical Sciences	4	5	0,2	34	6	2005
Acta Medica Iranica	3	5	0,176	36	5	2008
Archives of Iranian Medicine	3	5	0,176	78	5	2008

1.12 Keyword Co-Occurrence Analysis: Mapping Research Themes

Figure 9 presents the results of data processing concerning Islamic hospitals, utilizing VOSviewer software for the network analysis. The type of analysis used is co-occurrence with an analysis unit of all keywords and a full counting method. The researcher set a minimum number of occurrences of a keyword in 17 of the 5698 keywords, 101 meet the threshold to be analyzed. The researchers also verified irrelevant keywords such as article, clinical article, and priority journal, and discarded one of two keywords that had the same meaning, namely humans, hospitals, cross-sectional studies, case-control studies, developing countries, retrospective studies, risk factors, nurses, and questionnaires. The minimum number of cluster sizes set is 1 so 4 clusters are found. As shown in the image, cluster 1 is depicted in red with a total of 35 items. Cluster 2 is depicted in green with a total of 21 items. Cluster 3 is depicted in blue with a total of 17 items. Cluster 4 is depicted in yellow with a total of 16 items. In cluster 1, the dominating keywords are human, middle-aged, and religion. Cluster 2 keywords that dominate are the keywords Iran, adolescent, and child. Cluster 3 was dominated by the keyword's male, major clinical study, and aged. Cluster 4 was dominated by the keyword's female, adult, and controlled study.

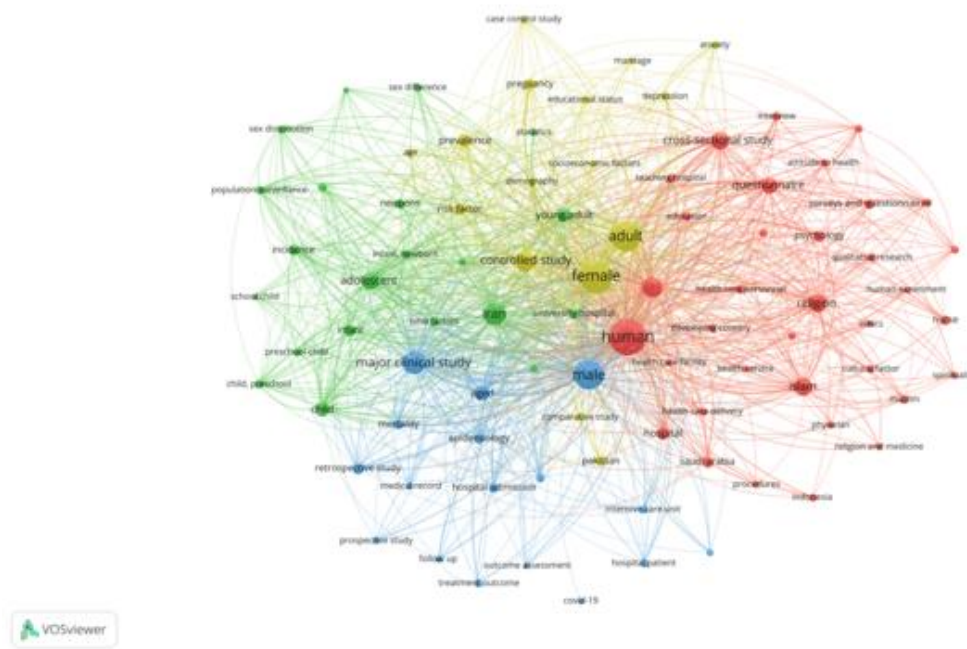


Figure 9 Network Visualization

Figure 10 shows the analysis of the co-occurrence network based on overlays. Based on the image, the color that is skewed with blue shows that the keyword is quite past its use in 2016 and below. It can be seen that the keywords that have been relatively long ago are socioeconomic factors, psychological aspect, developing country, time factors, and population surveillance. Meanwhile, colors that are skewed with yellow are keywords used in the last few years around 2018 and above. It can be seen that the keywords that have emerged recently are COVID-19, qualitative research, procedures, human experiment, and Indonesia.

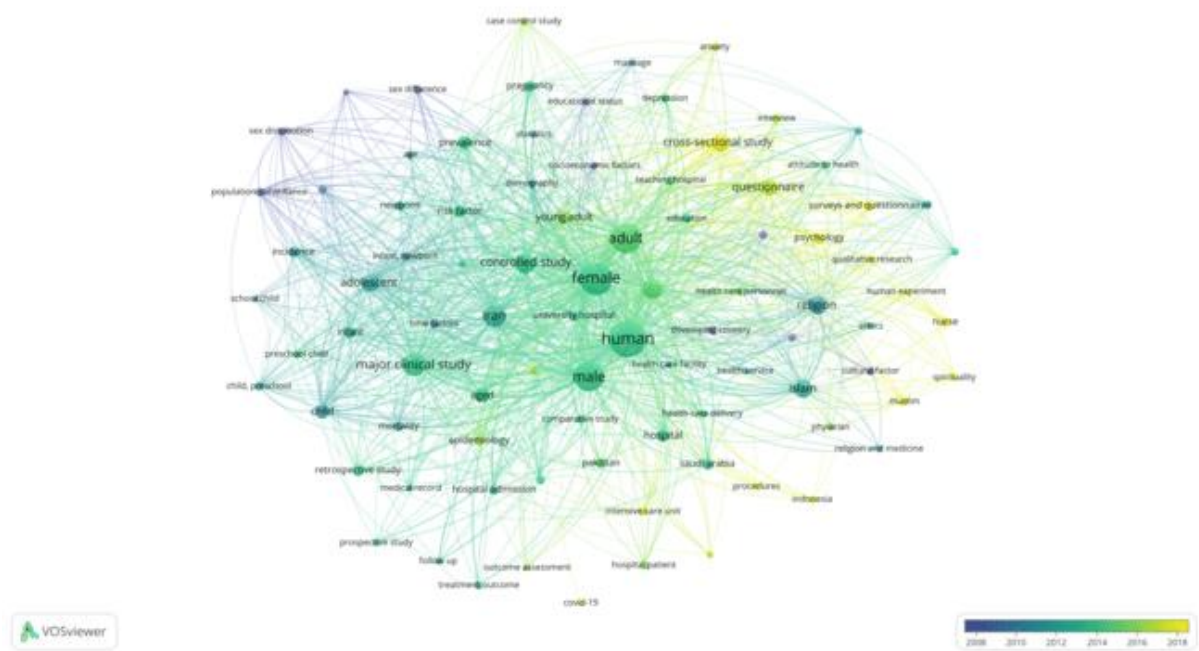


Figure 10 Overlay Visualization

Figure 11 shows the visualization of density analysis or keyword density, which shows the frequency of keyword use in the study. Areas of bright yellow color with high density indicate keywords that are often used in various studies. Meanwhile, blurred yellow areas with low density indicate keywords that are rarely researched. Keywords with high density are located in the keywords human, female, male, adult, and middle-aged. This shows that research related to Islamic hospitals often deals with patient populations either by gender or age. Meanwhile, keywords with low density are keywords such as COVID-19, health services, health care facilities, outcome assessment, and human experiments. This shows that these keywords are still not explored to be researched.

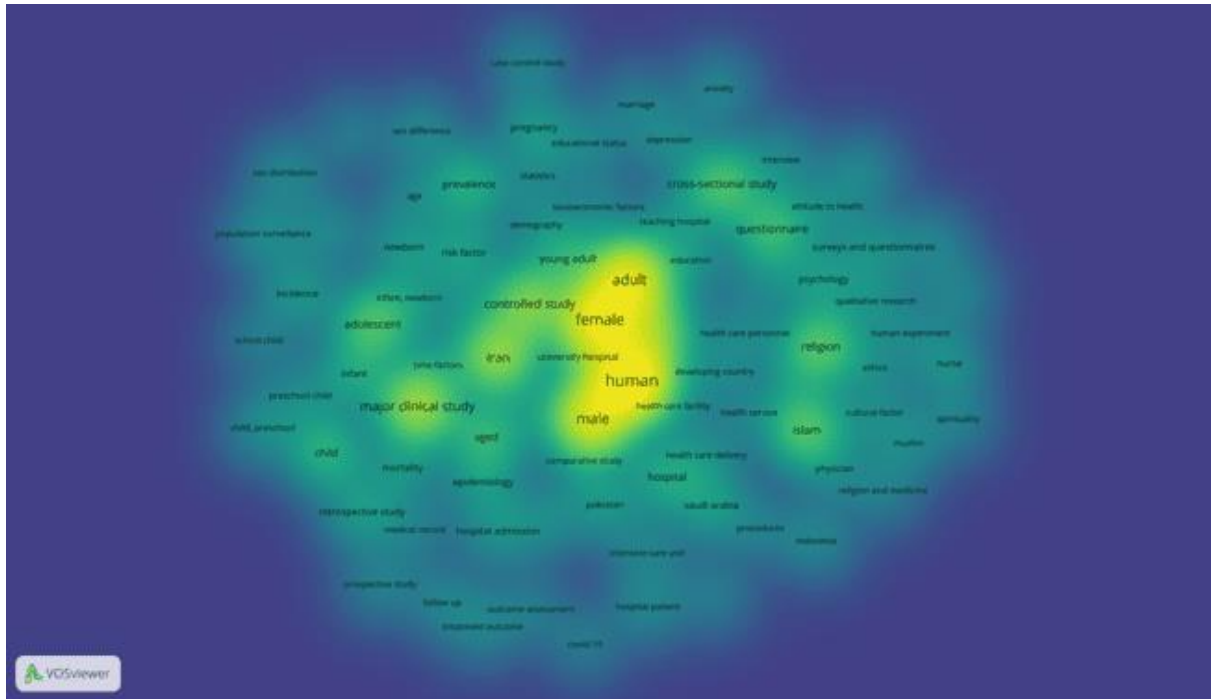


Figure 11 Density Visualization

Table 6 presents a list of keywords related to Islamic hospitals along with the total number of link strengths and occurrences or frequency of occurrence based on each cluster. The keywords are then grouped into relevant themes. Cluster 1 is grouped into religious themes. The research on this theme focuses on religious and spiritual aspects related to health. Some studies on this theme also discuss how aspects of spirituality such as Islam can affect a person's health and psychological behavior. Cluster 2 is grouped into child health themes. In this theme, studies discuss the health of children from newborns to adolescents. This includes aspects of physical and mental development and things that affect the health of children in various age groups. Iran is one of the countries most active in researching this issue.

Furthermore, cluster 3 falls into the clinical studies theme, which focuses on clinical and medical studies. This theme covers aspects such as epidemiology, facilities, and medical services that are important for patient well-being. Finally, cluster 4 was included in the demographic theme because it learned about demographic factors such as age, gender, social status, and mental health of the community. These studies also often identify how risk factors and socioeconomic impacts on health. The keyword analysis indicates that the discussion on Islamic hospitals primarily revolves around religious, clinical, child health, and demographic aspects, with little emphasis on economic principles. While themes like spirituality and demography align with Islamic values of social welfare and equity, the absence of terms related to zakat, waqf, or Islamic financing models suggests that the economic dimension of Islamic hospitals remains underexplored. Despite these categorizations, aspects related to economic principles, such as cost-effectiveness, financing models, and resource allocation, appear to be

underrepresented in the clustering results. This indicates that financial aspects of Islamic hospitals remain an underexplored area in bibliometric research. Future studies could address this gap by analyzing how Islamic economic principles, such as zakat-based funding, waqf, and sharia-compliant financing, contribute to the development and sustainability of Islamic hospitals.

The keyword analysis indicates that the discussion on Islamic hospitals primarily revolves around religious, clinical, child health, and demographic aspects, with little emphasis on economic principles.⁶⁷ While themes like spirituality and demography align with Islamic values of social welfare and equity, the absence of terms related to zakat, waqf, or Islamic financing models suggests that the economic dimension of Islamic hospitals remains underexplored.⁶⁸ Despite these categorizations, aspects related to economic principles, such as cost-effectiveness, financing models, and resource allocation, appear to be underrepresented in the clustering results.⁶⁹ This indicates that financial aspects of Islamic hospitals remain an underexplored area in bibliometric research. Future studies could address this gap by analyzing how Islamic economic principles, such as zakat-based funding, waqf, and sharia-compliant financing, contribute to the development and sustainability of Islamic hospitals.⁷⁰

Based on the keyword analysis related to Islamic hospitals, policymakers should consider several strategic policies to enhance healthcare services in these institutions. First, integrating spirituality into healthcare by developing national guidelines and

⁶⁷ M K Rahman et al., "Halal Healthcare Services: Patients' Satisfaction and Word of Mouth Lesson from Islamic-Friendly Hospitals," *Sustainability (Switzerland)* 15, no. 2 (2023), <https://doi.org/10.3390/su15021493>; H M Aji and I Muslichah, "Is Halal Universal? The Impact of Self-Expressive Value on Halal Brand Personality, Brand Tribalism, and Loyalty: Case of Islamic Hospitals," *Journal of Islamic Marketing* 14, no. 4 (2023): 1146–65, <https://doi.org/10.1108/JIMA-10-2021-0327>.

⁶⁸ R Ismal, "Constructing Sukuk-Linked Awqaf (Endowment) Model," *International Journal of Islamic and Middle Eastern Finance and Management* 17, no. 5 (2024): 871–82, <https://doi.org/10.1108/IMEFM-04-2024-0198>; M Masudur Rahman and M Thowhidul Islam, "Impact of Waqf Property on Islamic Educational Institutions in Bangladesh," *Islamic Quarterly* 68, no. 1 (2024): 41–57, <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85196377162&partnerID=40&md5=48a962c5ff3de6a9e741ca2c97fe8d42>.

⁶⁹ I Ardian, N N Haiya, and I R Azizah, "Investigating the Complex Relationships between Nurses' Work Factors, Sharia-Based Nursing Care, and Patient Satisfaction in an Islamic Hospital: A PLS-SEM Approach," *Belitung Nursing Journal* 9, no. 6 (2023): 530–38, <https://doi.org/10.33546/bnj.2865>; N Ngatindriatun, M Alfarizi, and T Widiastuti, "Impact of Sharia Hospital Service Standards and Religiosity Commitment on Patient Satisfaction and Loyalty: Insights from Certified Sharia Hospital in Indonesia," *Journal of Islamic Accounting and Business Research*, 2024, <https://doi.org/10.1108/JIABR-12-2022-0344>.

⁷⁰ R Awaad and M Nursoy-Demir, *Maristāns and Islāmīc Psychology: A Historical Model for Modern Implementation*, *Maristans and Islamic Psychology: A Historical Model for Modern Implementation* (Taylor and Francis, 2024), <https://doi.org/10.4324/9781003329589>; A Wira, "The Transformation of Waqf in Turkey from the Ottoman to the Contemporary Period," *International Journal of Islamic Thought* 24, no. 1 (2023): 25–30, <https://doi.org/10.24035/ijit.24.2023.267>.

training healthcare providers on holistic patient care can improve patient well-being.⁷¹ Second, strengthening maternal and child healthcare services by optimizing neonatal and pediatric care, subsidizing healthcare for mothers and newborns through zakat and waqf-based programs, and promoting health education for pregnant women is crucial.⁷² Third, enhancing hospital management and infrastructure by establishing national standards, adopting digital health record systems, and fostering research collaborations with universities can improve service quality.⁷³ Fourth, addressing mental health and risk management by providing Islamic-based mental health services, implementing early interventions for high-risk patients, and conducting epidemiological studies on mental health trends can help formulate effective preventive policies.⁷⁴ Lastly, improving healthcare accessibility by expanding Islamic hospital services in underserved areas, developing Islamic financial models such as waqf hospitals, and integrating Islamic hospitals into national healthcare systems can ensure broader access to quality medical services.⁷⁵ These policy recommendations aim to strengthen the role of Islamic hospitals in providing inclusive, high-quality, and faith-based healthcare services.

Table 6 Cluster Classification by Theme

Cluster	Keyword	Total Link Strength	Occurrences	Theme
1	Human	5197	462	Religious
	Islam	1118	114	
	Religion	1238	115	
	Questionnaire	1190	90	
	Cross-Sectional Study	1370	79	

⁷¹ S Harun et al., "Developing Muslim-Friendly Hospital Practices: Understanding the Key Drivers," *Journal of Islamic Marketing* 15, no. 11 (2024): 3137–55, <https://doi.org/10.1108/JIMA-03-2023-0094>; U Abdulbaseer et al., "Muslim Patients' Religious & Spiritual Resource Needs in US Hospitals: Findings from a National Survey," *Journal of General Internal Medicine*, 2024, <https://doi.org/10.1007/s11606-024-08960-y>.

⁷² L Suryani et al., "Application of Sharia Childbirth Innovation Model in Indonesia: Perspective of Midwives and Staff of the Islamic Service Unit," *Journal of Family and Community Medicine* 30, no. 3 (2023): 204–10, https://doi.org/10.4103/jfcm.jfcm_37_23; M Roudbari, M Yaghmaei, and M Soheili, "Prevalence and Risk Factors of Low-Birth-Weight Infants in Zahedan, Islamic Republic of Iran," *Eastern Mediterranean Health Journal* 13, no. 4 (2007): 838–45, <https://www.scopus.com/inward/record.uri?eid=2-s2.0-34848913421&partnerID=40&md5=543df5f6852a199c888dffa684b35551>.

⁷³ Ardian, Haiya, and Azizah, "Investigating the Complex Relationships between Nurses' Work Factors, Sharia-Based Nursing Care, and Patient Satisfaction in an Islamic Hospital: A PLS-SEM Approach"; F I Che Jamaludin et al., "Developing a Shariah-Compliant Medical Services Framework in Malaysia: An Expert System Approach Using Fuzzy Delphi Method and Interpretive Structural Modelling," *BMJ Open* 15, no. 1 (2025), <https://doi.org/10.1136/bmjopen-2023-082263>.

⁷⁴ N Alomair et al., "Muslim Women's Views and Experiences of Family Planning in Saudi Arabia: A Qualitative Study," *BMC Women's Health* 23, no. 1 (2023), <https://doi.org/10.1186/s12905-023-02786-2>; S Shoukat et al., "Salivary Galectin 3 Levels in Schizophrenia Patients," *Journal of the College of Physicians and Surgeons Pakistan* 34, no. 2 (2024): 202–5, <https://doi.org/10.29271/jcpsp.2024.02.202>.

⁷⁵ Ismal, "Constructing Sukuk-Linked Awqaf (Endowment) Model"; Rahman et al., "Halal Healthcare Services: Patients' Satisfaction and Word of Mouth Lesson from Islamic-Friendly Hospitals," 2023.

Cluster	Keyword	Total Link Strength	Occurrences	Theme
	Middle Aged	1947	134	
	Psychology	621	43	
	Hospital	482	58	
	Muslim	312	27	
	Spirituality	223	20	
2	Iran	2088	173	Child Health
	Adolescent	1608	107	
	Child	1088	75	
	Incidence	597	39	
	Infant	726	51	
	Newborn	522	35	
	Young Adult	957	63	
	University Hospital	433	33	
	Population Surveillance	502	29	
	School Child	280	17	
3	Male	3689	290	Clinical Studies
	Major Clinical Study	2398	189	
	Aged	1136	79	
	Mortality	539	35	
	Epidemiology	503	36	
	Hospitalization	413	28	
	Hospital Admission	403	32	
	Hospital patient	266	24	
	Intensive Care Unit	295	22	
	Medical Record	242	19	
4	Female	4515	362	Demographic Factors
	Adult	3979	315	
	Controlled Study	1803	148	
	Risk Factor	706	48	
	Depression	328	27	
	Demography	307	20	
	Educational Status	341	23	
	Prevalence	919	68	
	Pregnancy	575	40	
	Anxiety	258	24	

Table 6 shows that the bibliometric analysis identified key clusters related to religious themes, children's health, clinical studies, and demographic factors. It is essential to explicitly integrate Islamic economic principles into the interpretation of these findings. Islamic economics offers a unique framework that can significantly enhance the sustainability and operational efficiency of Islamic hospitals. Specifically, principles such as waqf-based financing, zakat allocations, and risk-sharing mechanisms (e.g., takaful,

mudharabah, and musharakah) can provide a robust financial foundation for these institutions.

The bibliometric analysis revealed that the dominant themes in Islamic hospital research are religious themes, child health, clinical studies, and demographic factors. This indicates that discussions surrounding Islamic hospitals primarily focus on spiritual, ethical, and healthcare-related aspects, rather than economic sustainability and financial models. The prominence of religious themes aligns with the fundamental role of Islamic hospitals in integrating Shariah principles into healthcare services. Many studies emphasize that these hospitals uphold halal healthcare practices, spiritual care, and religiously compliant medical treatments, which significantly influence patient satisfaction and trust.⁷⁶ Similarly, the child health theme is dominant due to the strong emphasis in Islamic medical ethics on protecting vulnerable groups, particularly mothers and children. Research highlights that Islamic hospitals prioritize maternal and pediatric healthcare services, often supported by zakat and waqf-based programs.⁷⁷ Meanwhile, the clinical studies theme emerges due to the increasing focus on medical research in Islamic healthcare, particularly in disease prevention, epidemiology, and treatment approaches that align with Shariah principles.⁷⁸ The importance of Islamic medical ethics and compliance with Shariah regulations has led to extensive studies on how Islamic hospitals maintain ethical integrity while ensuring clinical effectiveness.⁷⁹

Despite the significance of financial sustainability in Islamic hospitals, the economic dimension remains underexplored in bibliometric findings. One possible reason is the historical reliance on government funding, waqf endowments, and charitable contributions, which has reduced the urgency to explore alternative financing models.⁸⁰ Additionally, existing literature tends to focus more on the ethical and operational aspects of healthcare, rather than financial sustainability frameworks.⁸¹ While there is growing attention to cost-effectiveness and resource allocation, studies discussing Islamic economic instruments such as zakat, waqf, and takaful for healthcare

⁷⁶ Aji and Muslichah, "Is Halal Universal? The Impact of Self-Expressive Value on Halal Brand Personality, Brand Tribalism, and Loyalty: Case of Islamic Hospitals," 2023.

⁷⁷ Abdulbaseer et al., "Muslim Patients' Religious & Spiritual Resource Needs in US Hospitals: Findings from a National Survey"; Harun et al., "Developing Muslim-Friendly Hospital Practices: Understanding the Key Drivers," 2024.

⁷⁸ Ardian, Haiya, and Azizah, "Investigating the Complex Relationships between Nurses' Work Factors, Sharia-Based Nursing Care, and Patient Satisfaction in an Islamic Hospital: A PLS-SEM Approach."

⁷⁹ Ngatindriatun, Alfarizi, and Widiastuti, "Impact of Sharia Hospital Service Standards and Religiosity Commitment on Patient Satisfaction and Loyalty: Insights from Certified Sharia Hospital in Indonesia," 2024.

⁸⁰ Masudur Rahman and Thowhidul Islam, "Impact of Waqf Property on Islamic Educational Institutions in Bangladesh," 2024.

⁸¹ Ismal, "Constructing Sukuk-Linked Awqaf (Endowment) Model."

funding remain limited.⁸² This gap suggests that research on Islamic hospitals needs to expand beyond ethical and clinical aspects by incorporating financial sustainability mechanisms based on Islamic economic principles.

To ensure long-term financial sustainability, future research should explore integrating Islamic economic principles into hospital management. This includes developing waqf-based financing models to support hospital operations sustainably.⁸³ Additionally, utilizing zakat allocations to provide subsidized healthcare for underprivileged communities is crucial.⁸⁴ Moreover, implementing risk-sharing mechanisms such as takaful, mudarabah, and musharakah can establish financially stable and Shariah-compliant healthcare institutions.⁸⁵ By addressing these gaps, Islamic hospitals can achieve both ethical obligations and financial sustainability, strengthening their role in the global healthcare landscape and ensuring their ability to provide high-quality, Shariah-compliant medical services in the long run.

1.13 Research Streams and Future Research Direction

While the bibliometric analysis has identified key clusters related to ethical considerations, child health, clinical studies, and demographic factors, it is essential to explicitly integrate Islamic economic principles into the interpretation of these findings.⁸⁶ Islamic economics offers a unique framework that can significantly enhance the sustainability and operational efficiency of Islamic hospitals.⁸⁷ Specifically, principles

⁸² Rahman et al., "Halal Healthcare Services: Patients' Satisfaction and Word of Mouth Lesson from Islamic-Friendly Hospitals," 2023; M K Rahman, M A Bhuiyan, and S Zailani, "Healthcare Services: Patient Satisfaction and Loyalty Lessons from Islamic Friendly Hospitals," *Patient Preference and Adherence* 15 (2021): 2633–46, <https://doi.org/10.2147/PPA.S333595>; M Abdurrouf, I Ardian, and I R Azizah, "Exploring to Improve Patient Satisfaction through Organizational Factors Consolidation of Sharia-Based Nursing Care," *Healthcare in Low-Resource Settings* 12, no. s2 (2024), <https://doi.org/10.4081/hls.2024.12359>.

⁸³ Wira, "The Transformation of Waqf in Turkey from the Ottoman to the Contemporary Period"; M A K Wirajing, A Haruna, and T N Nchofoung, "Financial Inclusion and Healthcare in Africa: Examining the Moderating Role of Education," *Review of Development Economics* 28, no. 1 (2024): 97–127, <https://doi.org/10.1111/rode.13043>.

⁸⁴ Rahman, Bhuiyan, and Zailani, "Healthcare Services: Patient Satisfaction and Loyalty Lessons from Islamic Friendly Hospitals," 2021.

⁸⁵ Che Jamaludin et al., "Developing a Shariah-Compliant Medical Services Framework in Malaysia: An Expert System Approach Using Fuzzy Delphi Method and Interpretive Structural Modelling," 2025.

⁸⁶ Aji and Muslichah, "Is Halal Universal? The Impact of Self-Expressive Value on Halal Brand Personality, Brand Tribalism, and Loyalty: Case of Islamic Hospitals," 2023; Rahman et al., "Halal Healthcare Services: Patients' Satisfaction and Word of Mouth Lesson from Islamic-Friendly Hospitals," 2023.

⁸⁷ Ardian, Haiya, and Azizah, "Investigating the Complex Relationships between Nurses' Work Factors, Sharia-Based Nursing Care, and Patient Satisfaction in an Islamic Hospital: A PLS-SEM Approach"; Ngatindriatun, Alfarizi, and Widiastuti, "Impact of Sharia Hospital Service Standards and Religiosity Commitment on Patient Satisfaction and Loyalty: Insights from Certified Sharia Hospital in Indonesia," 2024.

such as waqf-based financing, zakat allocations, and risk-sharing mechanisms (e.g., takaful, mudarabah, and musharakah) can provide a robust financial foundation for these institutions.⁸⁸ By conducting a cross-analysis of these clusters with economic themes, we can better understand how Islamic economic principles can be applied to enhance the operational and financial sustainability of Islamic hospitals.⁸⁹

1.14 Waqf-Based Financing and Resource Allocation

Waqf, or Islamic endowments, has historically played a crucial role in funding healthcare institutions in Muslim-majority societies.⁹⁰ The establishment of waqf-based hospitals can ensure a sustainable source of funding, reducing dependency on government or private sector financing.⁹¹ In the context of the bibliometric clusters, waqf can be linked to the resource allocation theme, as it provides a mechanism for long-term financial stability. For instance, waqf funds can be allocated to build and maintain hospital infrastructure, purchase medical equipment, and support research initiatives.⁹² This aligns with the keyword cluster on clinical studies, where funding is critical for advancing medical research and improving healthcare services.⁹³ Additionally, waqf can be integrated into the ethical considerations cluster, as it embodies the Islamic values of social responsibility and community welfare, ensuring that hospitals operate for the public good.⁹⁴

1.15 Zakat as a Tool for Equitable Healthcare Access

Zakat, one of the five pillars of Islam, is a form of obligatory charity that can be strategically utilized to support healthcare access for underprivileged communities.⁹⁵ In

⁸⁸ Awaad and Nursoy-Demir, *Maristāns and Islāmic Psychology: A Historical Model for Modern Implementation*, 2024; Masudur Rahman and Thowhidul Islam, "Impact of Waqf Property on Islamic Educational Institutions in Bangladesh," 2024.

⁸⁹ Ismal, "Constructing Sukuk-Linked Awqaf (Endowment) Model"; Y J Amuda and S Hassan, "Qualitative Perspectives of Middle and High Skilled Workers on Humanitarian Crowdfunding for Poverty Reduction in Selected Organization of Islamic Cooperation," *Journal of Infrastructure, Policy and Development* 8, no. 1 (2024), <https://doi.org/10.24294/jipd.v8i1.2912>.

⁹⁰ Wira, "The Transformation of Waqf in Turkey from the Ottoman to the Contemporary Period."

⁹¹ Ismal, "Constructing Sukuk-Linked Awqaf (Endowment) Model"; R Dashti, "Investigating the State of Medicine and Hospitals in the Islamic Maghreb from the Arrival of Islam to the End of the 4th Century Hijri," *Journal of Research on History of Medicine* 13, no. 3 (2024): 153–66, <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85201372371&partnerID=40&md5=1e4c1542780046d0411d005ca1bffa8a>.

⁹² Masudur Rahman and Thowhidul Islam, "Impact of Waqf Property on Islamic Educational Institutions in Bangladesh," 2024.

⁹³ Ardian, Haiya, and Azizah, "Investigating the Complex Relationships between Nurses' Work Factors, Sharia-Based Nursing Care, and Patient Satisfaction in an Islamic Hospital: A PLS-SEM Approach."

⁹⁴ Rahman et al., "Halal Healthcare Services: Patients' Satisfaction and Word of Mouth Lesson from Islamic-Friendly Hospitals," 2023.

⁹⁵ Ardian, Haiya, and Azizah, "Investigating the Complex Relationships between Nurses' Work Factors, Sharia-Based Nursing Care, and Patient Satisfaction in an Islamic Hospital: A PLS-SEM Approach."

the context of the demographic factors cluster, zakat can address socioeconomic disparities by subsidizing healthcare costs for low-income patients.⁹⁶ This principle can be integrated into the interpretation of keywords such as "prevalence," "risk factors," and "educational status," as zakat-based programs can help mitigate health inequalities and improve access to quality care. Furthermore, zakat funds can be used to support maternal and child health programs, which are prominent in the child health cluster, ensuring that vulnerable populations receive adequate medical attention.⁹⁷ By linking zakat to these clusters, Islamic hospitals can promote equitable healthcare access while adhering to Islamic principles of social justice.

1.16 Risk-Sharing Mechanisms: Takaful, Mudarabah, and Musharakah

Islamic risk-sharing models like takaful (insurance) and mudarabah (profit-sharing) offer alternatives to conventional financing, aligning with the emerging financing models cluster.⁹⁸ For instance, takaful schemes in Saudi Arabia and Malaysia have expanded affordable healthcare coverage while adhering to Sharia principles.⁹⁹ Similarly, musharakah (joint ventures) could fund hospital expansions, as seen in case studies from Islamic hospitals in Indonesia.¹⁰⁰ These mechanisms not only enhance financial inclusivity but also support clinical research through ethical resource allocation.¹⁰¹

⁹⁶ Suryani et al., "Application of Sharia Childbirth Innovation Model in Indonesia: Perspective of Midwives and Staff of the Islamic Service Unit"; Alomair et al., "Muslim Women's Views and Experiences of Family Planning in Saudi Arabia: A Qualitative Study."

⁹⁷ Harun et al., "Developing Muslim-Friendly Hospital Practices: Understanding the Key Drivers," 2024; Abdulbaseer et al., "Muslim Patients' Religious & Spiritual Resource Needs in US Hospitals: Findings from a National Survey."

⁹⁸ Ismal, "Constructing Sukuk-Linked Awqaf (Endowment) Model"; Rahman et al., "Halal Healthcare Services: Patients' Satisfaction and Word of Mouth Lesson from Islamic-Friendly Hospitals," 2023.

⁹⁹ Ngatindriatun Ngatindriatun, Muhammad Alfarizi, and Tika Widiastuti, "Impact of Sharia Hospital Service Standards and Religiosity Commitment on Patient Satisfaction and Loyalty: Insights from Certified Sharia Hospital in Indonesia," *Journal of Islamic Accounting and Business Research*, 2024, <https://doi.org/10.1108/JIABR-12-2022-0344>; F I Che Jamaludin et al., "Developing a Shariah-Compliant Medical Services Framework in Malaysia: An Expert System Approach Using Fuzzy Delphi Method and Interpretive Structural Modelling," *BMJ Open* 15, no. 1 (2025), <https://doi.org/10.1136/bmjopen-2023-082263>.

¹⁰⁰ Iwan Ardian et al., "Investigating the Complex Relationships between Nurses' Work Factors, Sharia-Based Nursing Care, and Patient Satisfaction in an Islamic Hospital: A PLS-SEM Approach," *Belitung Nursing Journal* 9, no. 6 (2023): 530–38, <https://doi.org/10.33546/bnj.2865>; I H Susanti, T Sumarni, and I N Alifiya, "Case Study: Review of Nursing Management and It's Implementation in the Ar-Rahman Room Islamic Hospital Purwokerto," in *BIO Web of Conferences*, ed. Tayeb B. et al., vol. 152 (Faculty of Health, Universitas Harapan Bangsa, Indonesia: EDP Sciences, 2025), <https://doi.org/10.1051/bioconf/202515201026>.

¹⁰¹ Saba Shoukat et al., "Salivary Galectin 3 Levels in Schizophrenia Patients," *Journal of the College of Physicians and Surgeons Pakistan* 34, no. 2 (2024): 202–5, <https://doi.org/10.29271/jcpsp.2024.02.202>; Muhammad Asim et al., "Abusive Supervision and Helping Behavior among Nursing Staff: A Moderated Mediation Model," *Journal of Health Organization and Management* 38, no. 5 (2024): 724–40, <https://doi.org/10.1108/JHOM-12-2023-0372>.

1.17 Ethical Considerations and Economic Equity

The ethical considerations cluster emphasizes aligning healthcare with Islamic values like transparency and fairness – principles inherently tied to waqf and zakat.¹⁰² For example, waqf's focus on public good ensures hospitals avoid exploitative practices, while zakat redistributes resources to marginalized groups.¹⁰³ This integration is critical for addressing demographic disparities, such as those observed in maternal health programs in Uganda and Jordan.¹⁰⁴

1.18 Child Health and Cost-Effectiveness

Investing in child health through preventive care (e.g., vaccinations) is both ethically mandated and cost-effective, as shown in studies on stunting and neonatal care in Indonesia and Ghana.¹⁰⁵ Islamic hospitals can leverage zakat to fund these initiatives, as demonstrated in programs at Sultan Agung Islamic Hospital.¹⁰⁶ Additionally, takaful models could reduce out-of-pocket expenses for families, aligning with cost-effectiveness analyses in low-resource settings.¹⁰⁷

¹⁰² Muhammad Khalilur Rahman et al., "Halal Healthcare Services: Patients' Satisfaction and Word of Mouth Lesson from Islamic-Friendly Hospitals," *Sustainability (Switzerland)* 15, no. 2 (2023): 1493, <https://doi.org/10.3390/su15021493>; R Awaad and M Nursoy-Demir, *Maristāns and Islāmic Psychology: A Historical Model for Modern Implementation*, Maristans and Islamic Psychology: A Historical Model for Modern Implementation (Stanford University, School of Medicine, United States: Taylor and Francis, 2024), <https://doi.org/10.4324/9781003329589>.

¹⁰³ Md Masudur Rahman and Md Thowhidul Islam, "Impact of Waqf Property on Islamic Educational Institutions in Bangladesh," *Islamic Quarterly* 68, no. 1 (2024): 41–57, <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85196377162&partnerID=40&md5=48a962c5ff3de6a9e741ca2c97fe8d42>; A Bakar et al., "During the COVID-19 Pandemic, the Impact of Religious Caring Behavior Increases the Immunity of Medical-Surgical Nurses," *Gaceta Medica de Caracas* 132 (2024): s171–78, <https://doi.org/10.47307/GMC.2024.132.s2.2>.

¹⁰⁴ S Atuhairwe et al., "Second Trimester Post-Abortion Family Planning Uptake and Associated Factors in 14 Public Health Facilities in Central Uganda: A Cross-Sectional Study," *Contraception and Reproductive Medicine* 8, no. 1 (2023), <https://doi.org/10.1186/s40834-022-00199-4>; Omar A. Azzam et al., "Obstetric Violence among Pregnant Jordanian Women: An Observational Study between the Private and Public Hospitals in Jordan," *Healthcare (Switzerland)* 11, no. 5 (2023), <https://doi.org/10.3390/healthcare11050654>.

¹⁰⁵ Sri Priyantini et al., "Stunting and Head Circumference Growth in The First 3 Years of Life," *Kemas* 19, no. 3 (2024): 341–49, <https://doi.org/10.15294/kemas.v19i3.40698>; J Pellegrino et al., "Prevalence and Risk Factors for Postpartum Depression and Stress among Mothers of Preterm and Low Birthweight Infants Admitted to a Neonatal Intensive Care Unit in Accra, Ghana," *International Journal of Gynecology and Obstetrics*, 2024, <https://doi.org/10.1002/ijgo.15998>.

¹⁰⁶ H A Nurrahma et al., "The Effect of Maternal Age, Hemoglobin, Platelet, and Blood Leukocyte Levels in Pregnant Women on the Incidence of Low Birth Weight (LBW) (Analytical Observational Study at Sultan Agung Islamic Hospital)," *Media Publikasi Promosi Kesehatan Indonesia* 6, no. 4 (2023): 632–39, <https://doi.org/10.56338/mparki.v6i4.3009>.

¹⁰⁷ Rahman et al., "Halal Healthcare Services: Patients' Satisfaction and Word of Mouth Lesson from Islamic-Friendly Hospitals," 2023; Azad Shokri et al., "Has Iran Achieved the Goal of Reducing the Prevalence of Households Faced with Catastrophic Health Expenditure to 1%? A National Survey," *Health Science Reports* 6, no. 4 (2023), <https://doi.org/10.1002/hsr2.1199>.

1.19 Integrating Economic Principles into Future Research

Future research should explore operationalizing waqf and zakat in healthcare, such as evaluating waqf's impact on hospital sustainability in Turkey or Malaysia.¹⁰⁸ Cross-disciplinary studies could also assess takaful's potential for universal health coverage in Pakistan or Egypt.¹⁰⁹ By embedding these principles into bibliometric clusters, researchers can bridge gaps between Islamic economics and healthcare delivery.¹¹⁰

CONCLUSION

This study has provided a comprehensive bibliometric analysis of research on Islamic hospitals, identifying key clusters such as ethical considerations, child health, clinical studies, and demographic factors. While these clusters offer valuable insights, the analysis reveals a significant gap in the exploration of Islamic finance mechanisms like waqf, zakat, takaful, mudarabah, and musharakah. These mechanisms remain underexplored despite their potential to enhance the financial sustainability and operational efficiency of Islamic hospitals. Future research should focus on integrating these principles into healthcare financing, particularly in areas such as cost-effectiveness, resource allocation, and equitable access. For instance, studies could investigate how waqf-based financing can support hospital infrastructure or how zakat can reduce healthcare disparities. Additionally, the role of takaful in providing affordable health coverage and the application of mudarabah and musharakah in funding hospital expansions should be explored. Addressing these gaps will provide a more holistic understanding of how Islamic economics can improve healthcare delivery.

The findings also carry important policy implications for hospital managers and regulators. Policymakers should develop frameworks to integrate Islamic finance mechanisms into healthcare systems, such as establishing national waqf funds or promoting takaful models for universal health coverage. Hospital managers, on the other hand, should explore partnerships with Islamic financial institutions to fund expansions

¹⁰⁸ Ahmad Wira, Meirison, and Elfia, "The Transformation of Waqf in Turkey from the Ottoman to the Contemporary Period," *International Journal of Islamic Thought* 24, no. 1 (2023): 25–30, <https://doi.org/10.24035/ijit.24.2023.267>; B Erten and Y C Yılmaz, "Hospital Supply and Infant Mortality: Evidence from Islamic Political Representation in Turkey," *Journal of Population Economics* 38, no. 1 (2025), <https://doi.org/10.1007/s00148-025-01063-w>.

¹⁰⁹ A U B Mirza, "Outcomes and Complications of Ahmed Glaucoma Valve Implantation in Neovascular versus Other Secondary Glaucoma: A One-Year Follow-up Study," *Pakistan Journal of Ophthalmology* 41, no. 1 (2025): 68–73, <https://doi.org/10.36351/pjo.v41i1.1989>; Amal M. Alkhotani and Hanadi Abualela, "Localization of Ictal Islamic Rituals: Study of Epilepsy Center in Makkah," *Epilepsy and Behavior* 139 (2023), <https://doi.org/10.1016/j.yebeh.2022.109067>.

¹¹⁰ Hendy Mustiko Aji and Istyakara Muslichah, "Is Halal Universal? The Impact of Self-Expressive Value on Halal Brand Personality, Brand Tribalism, and Loyalty: Case of Islamic Hospitals," *Journal of Islamic Marketing* 14, no. 4 (2023): 1146–65, <https://doi.org/10.1108/JIMA-10-2021-0327>; Rahman et al., "Halal Healthcare Services: Patients' Satisfaction and Word of Mouth Lesson from Islamic-Friendly Hospitals," 2023.

and improve service delivery through profit-sharing agreements like *mudarabah* and *musharakah*. Furthermore, cross-country collaborations should be encouraged to standardize the implementation of Islamic finance mechanisms in healthcare, ensuring that Islamic hospitals worldwide can adopt Sharia-compliant financing models effectively. By addressing these research gaps and policy recommendations, Islamic hospitals can achieve both financial sustainability and adherence to Islamic values, contributing to the broader goals of social justice and economic inclusivity in healthcare.

DISCLOSURE

Conflicts of Interest

The authors declare no conflict of interest.

Disclaimer Statement

This work is not part of a thesis submitted to any university for the award of a degree.

Declaration of Generative AI in Scientific Writing

The authors did not use generative AI or AI-assisted technologies in the writing process.

Funding Statement

This research received no external funding.

Authorship and Level of Contribution

Author 1: Conceptualization, methodology, data analysis, and writing (original draft preparation). Author 2: Validation, investigation, writing (review and editing), and supervision.

Supplementary Materials

Not applicable.

Author Bionote

Muhamad Subhi Apriantoro is an Assistant Professor/Lecturer at the Faculty of Islamic Religion, Department of Sharia Economics Law, Universitas Muhammadiyah Surakarta. He serves as the corresponding author for this study. His research interests include Islamic economic law, sharia finance, and related fields.

Muhammad Fahmi Saifullah is a researcher in the Faculty of Islamic Religion, Department of Sharia Economics Law, Universitas Muhammadiyah Surakarta. His academic focus includes sharia economic law and its applications in contemporary financial systems.

BIBLIOGRAPHY

- Abdulbaseer, U, N Piracha, M Hamouda, I Farajallah, S Abdul-Majid, S Abdelwahab, W K Teltser, and A I Padela. "Muslim Patients' Religious & Spiritual Resource Needs in US Hospitals: Findings from a National Survey." *Journal of General Internal Medicine*, 2024. <https://doi.org/10.1007/s11606-024-08960-y>.
- Abdurrohman, Moh Asvin, and Sungkono Sungkono. "Konsep Arti Islam Dalam Al-Qur'an." *AL-MIKRAJ: Jurnal Studi Islam Dan Humaniora* (E-ISSN: 2745-4584) 2, no. 2 (2022): 51-64. <https://doi.org/10.37680/almikraj.v2i2.1348>.
- Abdurrouf, M, I Ardian, and I R Azizah. "Exploring to Improve Patient Satisfaction through Organizational Factors Consolidation of Sharia-Based Nursing

- Care." *Healthcare in Low-Resource Settings* 12, no. s2 (2024). <https://doi.org/10.4081/hls.2024.12359>.
- Abu-Ras, Wahiba, and Lance Laird. "How Muslim and Non-Muslim Chaplains Serve Muslim Patients? Does the Interfaith Chaplaincy Model Have Room for Muslims' Experiences?" *Journal of Religion and Health* 50, no. 1 (2011): 46–61. <https://doi.org/10.1007/s10943-010-9357-4>.
- Ahmad-Nia, S., B. Delavar, H. Eini-Zinab, S. Kazemipour, A. H. Mehryar, and M. Naghavi. "Caesarean Section in the Islamic Republic of Iran: Prevalence and Some Sociodemographic Correlates." *Eastern Mediterranean Health Journal* 15, no. 6 (2009): 1389–98.
- Aji, H M, and I Muslichah. "Is Halal Universal? The Impact of Self-Expressive Value on Halal Brand Personality, Brand Tribalism, and Loyalty: Case of Islamic Hospitals." *Journal of Islamic Marketing* 14, no. 4 (2023): 1146–65. <https://doi.org/10.1108/JIMA-10-2021-0327>.
- Aji, Hendy Mustiko, and Istyakara Muslichah. "Is Halal Universal? The Impact of Self-Expressive Value on Halal Brand Personality, Brand Tribalism, and Loyalty: Case of Islamic Hospitals." *Journal of Islamic Marketing* 14, no. 4 (2023): 1146–65. <https://doi.org/10.1108/JIMA-10-2021-0327>.
- Alam, Azhar, Bayu Arie Fianto, Ririn Tri Ratnasari, Aidi Ahmi, and Fransiska Putri Handayani. "History and Development of Takaful Research: A Bibliometric Review." *SAGE Open* 13, no. 3 (2023): 21582440231184852. <https://doi.org/10.1177/21582440231184852>.
- Alfarizi, Muhammad, and Rafialdo Arifian. "Patient Satisfaction with Indonesian Sharia Hospital Services: Halal Healthcare Tool and Implications for Loyalty-WoM." *Asian Journal of Islamic Management (AJIM)*, June 16, 2023, 18–35. <https://doi.org/10.20885/ajim.vol5.iss1.art2>.
- Alkhotani, Amal M., and Hanadi Abualela. "Localization of Ictal Islamic Rituals: Study of Epilepsy Center in Makkah." *Epilepsy and Behavior* 139 (2023). <https://doi.org/10.1016/j.yebeh.2022.109067>.
- Alomair, N, S Alageel, N Davies, and J V Bailey. "Muslim Women's Views and Experiences of Family Planning in Saudi Arabia: A Qualitative Study." *BMC Women's Health* 23, no. 1 (2023). <https://doi.org/10.1186/s12905-023-02786-2>.
- Amrullah, Faris, and Qurrotul Aini. "Analyzing Sharia Service Standards in Certified Hospitals for Optimal Healthcare Quality." *Journal of Angiotherapy* 8, no. 5 (2024): 1–8. <https://doi.org/10.25163/angiotherapy.859703>.

- Amuda, Y J, and S Hassan. "Qualitative Perspectives of Middle and High Skilled Workers on Humanitarian Crowdfunding for Poverty Reduction in Selected Organization of Islamic Cooperation." *Journal of Infrastructure, Policy and Development* 8, no. 1 (2024). <https://doi.org/10.24294/jipd.v8i1.2912>.
- Aprianoro, Muhamad Subhi, Dita Nurul Diniyah, and Rizki Dwi Putra Rosadi. "Riding the Tides of Change: A Bibliometric Expedition on Technology-Enabled Circular Economy." *Multidisciplinary Reviews* 7, no. 5 (2024): 2024089. <https://doi.org/10.31893/multirev.2024089>.
- Aprianoro, Muhamad Subhi, Safina Faradilla, Afief El Ashfahany, Aminudin Maruf, and Nur Amalia Aziza. "Quantifying Intellectual Terrain: Islamic Jurisprudence, Ethical Discourse, and Scholarly Impact." *Suhuf* 36, no. 1 (2024): 78–85.
- Aprianoro, Muhamad Subhi, Jalesta Herviana, Yayuli Yayuli, and Suratno Suratno. "Sharia Financial Literacy: Research Trends and Directions for Future Inquiry." *Journal of Islamic Economic Laws* 6, no. 2 (2023): 19–40.
- Aprianoro, Muhamad Subhi, Yoga Ferdira Wishnu Pradana, Afief El Ashfahany, and Dadang Setiana. "Analyzing and Mapping Csr Impact and Trends: A Bibliometric Study on Community Empowerment." *Ekonomi Dan Bisnis: Berkala Publikasi Gagasan Konseptual, Hasil Penelitian, Kajian, Dan Terapan Teori* 27, no. 2 (2023): 118–32. <https://doi.org/10.24123/jeb.v27i2.5873>.
- Aprianoro, Muhamad, Apriliya Suryaningsih, and Muthoifin Muthoifin. "Bibliometric Analysis of Research Development of Economic Dispute Settlement." In *Proceedings of the 5th International Graduate Conference in Islam and Interdisciplinary Studies, IGCIIS 2022, 19-20 October 2022, Mataram, Lombok, Indonesia, 2023*. <https://doi.org/10.4108/eai.19-10-2022.2329068>.
- Ardian, I, N N Haiya, and I R Azizah. "Investigating the Complex Relationships between Nurses' Work Factors, Sharia-Based Nursing Care, and Patient Satisfaction in an Islamic Hospital: A PLS-SEM Approach." *Belitung Nursing Journal* 9, no. 6 (2023): 530–38. <https://doi.org/10.33546/bnj.2865>.
- Ardian, Iwan, Nursalam, Ahsan, Nutrisia Nu'im Haiya, and Intan Rismatul Azizah. "Investigating the Complex Relationships between Nurses' Work Factors, Sharia-Based Nursing Care, and Patient Satisfaction in an Islamic Hospital: A PLS-SEM Approach." *Belitung Nursing Journal* 9, no. 6 (2023): 530–38. <https://doi.org/10.33546/bnj.2865>.
- Asim, Muhammad, Liu Zhiying, Usman Ghani, Muhammad Athar Nadeem, and Xu Yi. "Abusive Supervision and Helping Behavior among Nursing Staff: A Moderated Mediation Model." *Journal of Health Organization and*

- Management 38, no. 5 (2024): 724–40. <https://doi.org/10.1108/JHOM-12-2023-0372>.
- As-Salafiyah, Aisyah. "Formulating Halal-Based Hospital Indicators." *Halal Tourism and Pilgrimage* 2, no. 1 (2022).
- Assyakur, Dienda Sesioria, and Elsy Maria Rosa. "Spiritual Leadership in Healthcare: A Bibliometric Analysis." *Jurnal Aisyah : Jurnal Ilmu Kesehatan* 7, no. 2 (2022): 355–62. <https://doi.org/10.30604/jika.v7i2.914>.
- Atuhairwe, S, C Hanson, N M Tumwesigye, K Gemzell-Danielsson, and J Byamugisha. "Second Trimester Post-Abortion Family Planning Uptake and Associated Factors in 14 Public Health Facilities in Central Uganda: A Cross-Sectional Study." *Contraception and Reproductive Medicine* 8, no. 1 (2023). <https://doi.org/10.1186/s40834-022-00199-4>.
- Awaad, R, and M Nursoy-Demir. *Maristāns and Islāmic Psychology: A Historical Model for Modern Implementation*. Maristans and Islamic Psychology: A Historical Model for Modern Implementation. Taylor and Francis, 2024. <https://doi.org/10.4324/9781003329589>.
- — —. *Maristāns and Islāmic Psychology: A Historical Model for Modern Implementation*. Maristans and Islamic Psychology: A Historical Model for Modern Implementation. Stanford University, School of Medicine, United States: Taylor and Francis, 2024. <https://doi.org/10.4324/9781003329589>.
- Azzam, Omar A., Amer Mahmoud Sindiani, Maysa M. Eyalsalman, Mira K. Odeh, Kenda Y. AbedAlkareem, Sara A. Albanna, Elaf M. Abdulrahman, et al. "Obstetric Violence among Pregnant Jordanian Women: An Observational Study between the Private and Public Hospitals in Jordan." *Healthcare (Switzerland)* 11, no. 5 (2023). <https://doi.org/10.3390/healthcare11050654>.
- Baas, Jeroen, Michiel Schotten, Andrew Plume, Grégoire Côté, and Reza Karimi. "Scopus as a Curated, High-Quality Bibliometric Data Source for Academic Research in Quantitative Science Studies." *Quantitative Science Studies* 1, no. 1 (January 23, 2020): 377–86. https://doi.org/10.1162/qss_a_00019.
- Bakar, A, L Hidayati, L Ni'mah, I N Pratiwi, and S N Qomariah. "During the COVID-19 Pandemic, the Impact of Religious Caring Behavior Increases the Immunity of Medical-Surgical Nurses." *Gaceta Medica de Caracas* 132 (2024): s171–78. <https://doi.org/10.47307/GMC.2024.132.s2.2>.
- Bertolote, José M., Alexandra Fleischmann, Diego De Leo, Michael R. Phillips, Neury J. Botega, Lakshmi Vijayakumar, Damani De Silva, et al. "Repetition of Suicide Attempts Data from Emergency Care Settings in Five Culturally Different Low- and Middle-Income Countries Participating in the WHO SUPRE-MISS

- Study." *Crisis* 31, no. 4 (2010): 194–201. <https://doi.org/10.1027/0227-5910/a000052>.
- Brookes, B. C. "'Sources of Information on Specific Subjects' by S.C. Bradford." *Journal of Information Science* 10, no. 4 (1985): 173–75. <https://doi.org/10.1177/016555158501000406>.
- Bunjak, Aldijana, Matej Černe, and Emilie Lara Schölly. "Exploring the Past, Present, and Future of the Mindfulness Field: A Multitechnique Bibliometric Review." *Frontiers in Psychology* 13 (2022): 792599. <https://doi.org/10.3389/fpsyg.2022.792599>.
- Che Jamaludin, F I, M.R.T.L. Abdullah, M.N.A.A. Endut, S M Saifuddeen, K A Hamimi, and S Harun. "Developing a Shariah-Compliant Medical Services Framework in Malaysia: An Expert System Approach Using Fuzzy Delphi Method and Interpretive Structural Modelling." *BMJ Open* 15, no. 1 (2025). <https://doi.org/10.1136/bmjopen-2023-082263>.
- — —. "Developing a Shariah-Compliant Medical Services Framework in Malaysia: An Expert System Approach Using Fuzzy Delphi Method and Interpretive Structural Modelling." *BMJ Open* 15, no. 1 (2025). <https://doi.org/10.1136/bmjopen-2023-082263>.
- Cruz, Jonas Preposi, Paolo C. Colet, Nahed Alquwez, Ergie P. Inocian, Raid Salman Al-Otaibi, and Sheikh Mohammed Shariful Islam. "Influence of Religiosity and Spiritual Coping on Health-Related Quality of Life in Saudi Haemodialysis Patients." *Hemodialysis International* 21, no. 1 (2017): 125–32. <https://doi.org/10.1111/hdi.12441>.
- Daniah, Izza Annafisatud. "Handbook of Islamic Sects and Movements." *Islamic Studies Review* 1, no. 2 (2022): 238–40. <https://doi.org/10.56529/isr.v1i2.87>.
- Dashti, R. "Investigating the State of Medicine and Hospitals in the Islamic Maghreb from the Arrival of Islam to the End of the 4th Century Hijri." *Journal of Research on History of Medicine* 13, no. 3 (2024): 153–66. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85201372371&partnerID=40&md5=1e4c1542780046d0411d005ca1bffa8a>.
- Donthu, Naveen, Satish Kumar, Debmalya Mukherjee, Nitesh Pandey, and Weng Marc Lim. "How to Conduct a Bibliometric Analysis: An Overview and Guidelines." *Journal of Business Research* 133 (April 29, 2021): 285–96. <https://doi.org/10.1016/j.jbusres.2021.04.070>.
- Donthu, Naveen, Satish Kumar, and Debidutta Pattnaik. "Forty-Five Years of Journal of Business Research: A Bibliometric Analysis." *Journal of Business Research* 109 (2020): 1–14. <https://doi.org/10.1016/j.jbusres.2019.10.039>.

- Eny Wahyuningsih, Tatik Mariyanti, and Zulhelmy M. Hatta. "Patient Satisfaction Mediates the Influence of Trust, Service Quality and Hospital Sharia Compliance on Patient Loyalty in Sharia Hospitals in Riau Province from an Islamic Perspective." *International Journal of Research in Business and Social Science* (2147- 4478) 12, no. 9 (December 18, 2023): 39–59. <https://doi.org/10.20525/ijrbs.v12i9.2988>.
- Erten, B, and Y C Yılmaz. "Hospital Supply and Infant Mortality: Evidence from Islamic Political Representation in Turkey." *Journal of Population Economics* 38, no. 1 (2025). <https://doi.org/10.1007/s00148-025-01063-w>.
- Ezzat Alkorashy, Hanan A. "Factors Shaping Patient Safety Management in the Middle East Hospitals from Nursing Perspective: A Focus Group Study." *Middle East Journal of Scientific Research* 15, no. 10 (2013): 1375–84. <https://doi.org/10.5829/idosi.mejsr.2013.15.10.75112>.
- Fleischmann, Alexandra, José M. Bertolote, Danuta Wasserman, Diego De Leo, Jafar Bolhari, Neury J. Botega, Damani De Silva, et al. "Effectiveness of Brief Intervention and Contact for Suicide Attempters: A Randomized Controlled Trial in Five Countries." *Bulletin of the World Health Organization* 86, no. 9 (2008): 703–9. <https://doi.org/10.2471/BLT.07.046995>.
- Gan, Ye na, Duo duo Li, Nicola Robinson, and Jian ping Liu. "Practical Guidance on Bibliometric Analysis and Mapping Knowledge Domains Methodology – A Summary." *European Journal of Integrative Medicine* 56 (October 1, 2022): 102203. <https://doi.org/10.1016/j.eujim.2022.102203>.
- Gangata, Hope, Phatheka Ntaba, Princess Akol, and Graham Louw. "The Reliance on Unclaimed Cadavers for Anatomical Teaching by Medical Schools in Africa." *Anatomical Sciences Education* 3, no. 4 (2010): 174–83. <https://doi.org/10.1002/ase.157>.
- Gooya, Mohammad Mehdi, Mahmoud Soroush, Talat Mokhtari-Azad, Ali Akbar Haghdoost, Peyman Hemati, Mohsen Moghadami, Behnam Sabayan, Seyyed Taghi Heydari, Seyyed Hasan Emami Razavi, and Kamran B. Lankarani. "Influenza a (H1N1) Pandemic in Iran: Report of First Confirmed Cases from June to November 2009." *Archives of Iranian Medicine* 13, no. 2 (2010): 91–98.
- Green, Katherine, Hazel Broome, and James Mirabella. "Postnatal Depression among Mothers in the United Arab Emirates: Socio-Cultural and Physical Factors." *Psychology, Health and Medicine* 11, no. 4 (2006): 425–31. <https://doi.org/10.1080/13548500600678164>.

- Halligan, Phil. "Caring for Patients of Islamic Denomination: Critical Care Nurses' Experiences in Saudi Arabia." *Journal of Clinical Nursing* 15, no. 12 (2006): 1565–73. <https://doi.org/10.1111/j.1365-2702.2005.01525.x>.
- Harun, S, I Ahmad, S Shafie, S F F Choirisa, and N Rizkalla. "Developing Muslim-Friendly Hospital Practices: Understanding the Key Drivers." *Journal of Islamic Marketing* 15, no. 11 (2024): 3137–55. <https://doi.org/10.1108/JIMA-03-2023-0094>.
- Harun, Shariff, Ibrahim Ahmad, Shahrin Shafie, Septi Fahmi Fahmi Choirisa, and Nosica Rizkalla. "Developing Muslim-Friendly Hospital Practices: Understanding the Key Drivers." *Journal of Islamic Marketing*, 2024. <https://doi.org/10.1108/JIMA-03-2023-0094>.
- Harun, Shariff, and Azhan Rashid Senawi. "The Determinants of Customer Satisfaction towards Muslim-Friendly Healthcare Service Deliveries: A Conceptual Model." *Information Management and Business Review* 15, no. 4(SI)I (2023): 326–30. [https://doi.org/10.22610/imbr.v15i4\(si\)i.3606](https://doi.org/10.22610/imbr.v15i4(si)i.3606).
- Harun, Shariff, Azhan Rashid Senawi, Ibrahim Ahmad, and Aizat Khairi. "Healthcare Delivery and the Environment: Understanding Muslim Patients and Their Caregivers' Needs." *Proceedings of the 9th International Conference on Marketing and Retailing (INCOMaR 2023)*, March 1-2, 2023, Kota Kinabalu, Sabah, Malaysia 133 (2024): Shariff-604. <https://doi.org/10.15405/epsbs.2024.05.49>.
- Ilyani Che Jamaludin, Farrah, Muhammad Ridhuan Tony Lim Abdullah, and Mohd Nuri Al-Amin Endut. "Establishing a Sustainable Shariah-Compliant Hospital in Malaysia: Exploring the Pertinent Concept." *KnE Social Sciences*, 2023. <https://doi.org/10.18502/kss.v8i20.14631>.
- — —. "Establishing a Sustainable Shariah-Compliant Hospital in Malaysia: Exploring the Pertinent Concept." *KnE Social Sciences*, 2023. <https://doi.org/10.18502/kss.v8i20.14631>.
- Imaniyati, Neni Sri, Lina Jamilah, Titik Respati, and Indra Fajar Alamsyah. "Islamic Hospital: Maqasid al-Shariah, Islamic Tourism, and Halal Ecosystem Prospects." *Proceedings of The International Halal Science and Technology Conference* 15, no. 1 (2022): 81–89. <https://doi.org/10.31098/ihsatec.v15i1.598>.
- Ismal, R. "Constructing Sukuk-Linked Awqaf (Endowment) Model." *International Journal of Islamic and Middle Eastern Finance and Management* 17, no. 5 (2024): 871–82. <https://doi.org/10.1108/IMEFM-04-2024-0198>.

- Kushner, Adam L., Meena N. Cherian, Luc Noel, David A. Spiegel, Steffen Groth, and Carissa Etienne. "Addressing the Millennium Development Goals: From a Surgical Perspective Essential Surgery and Anesthesia in 8 Low- and Middle-Income Countries." *Archives of Surgery* 145, no. 2 (2010): 154–59. <https://doi.org/10.1001/archsurg.2009.263>.
- Luo, Xiaomei, Yuduo Wu, Lina Niu, and Lucheng Huang. "Bibliometric Analysis of Health Technology Research: 1990~2020." *International Journal of Environmental Research and Public Health* 19, no. 15 (2022): 9044. <https://doi.org/10.3390/ijerph19159044>.
- Madani, Tariq A., Tawfik M. Ghabrah, Mogbil A. Al-Hedaithy, Mohammad A. Alhazmi, Tarik A. Alazraqi, Ali M. Albarrak, and Abdulrahman H. Ishaq. "Causes of Hospitalization of Pilgrims during the Hajj Period of the Islamic Year 1423 (2003)." *Annals of Saudi Medicine* 26, no. 5 (2006): 346–51. <https://doi.org/10.5144/0256-4947.2006.346>.
- Madani, Tariq Ahmed, Tawfik M. Ghabrah, Ali M. Albarrak, Mohammad A. Alhazmi, Tarik A. Alazraqi, Abdulhakeem O. Althaqafi, and Abdulrahman H. Ishaq. "Causes of Admission to Intensive Care Units in the Hajj Period of the Islamic Year 1424 (2004)." *Annals of Saudi Medicine* 27, no. 2 (2007): 101–5. <https://doi.org/10.5144/0256-4947.2007.101>.
- Maksum, Muhammad, Afidah Wahyuni, Ade Rina Farida, Latifatul Hasanah, and Sahlul Fuad. "Sharia Service as An Added Value: Response to Sharia Standard in Hospital Service." *Samarah* 6, no. 1 (2022): 423–48. <https://doi.org/10.22373/sjhk.v6i1.13418>.
- Manzano, Brendalyn A., and Jessie S. Barrot. "Language Education Research in the Philippines: A Scoping of Literature." *Journal of Asia TEFL* 19, no. 2 (June 30, 2022): 664–72. <https://doi.org/10.18823/asiatefl.2022.19.2.19.664>.
- Mardiyati, Fitri Yuli, and Dumilah Ayuningtyas. "Analysis of Implementation Standards of Sharia Minimum Services in the Hospital: Case Study at Sari Asih Sangiang Hospital 2018." *Journal of Indonesian Health Policy and Administration* 6, no. 1 (2021). <https://doi.org/10.7454/ihpa.v6i1.3145>.
- Marzuki, Zunaidah binti Mohd, Nurulhaniy binti Ahmad Fuad, Jamilah Hanum binti Abdul Khaiyom, Normala binti Mohd Adnan, and Aida binti Mokhtar. "Bibliometric Analysis on Islamic Spiritual Care with Special Reference to Prophetic Medicine or Al-Tibb al-Nabawī." *Intellectual Discourse* 32, no. 1 (2024): 81–114. <https://doi.org/10.31436/id.v32i1.2147>.
- Masudur Rahman, M, and M Thowhidul Islam. "Impact of Waqf Property on Islamic Educational Institutions in Bangladesh." *Islamic Quarterly* 68, no. 1 (2024):

41-57. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85196377162&partnerID=40&md5=48a962c5ff3de6a9e741ca2c97fe8d42>.

Masudur Rahman, Md, and Md Thowhidul Islam. "Impact of Waqf Property on Islamic Educational Institutions in Bangladesh." *Islamic Quarterly* 68, no. 1 (2024): 41-57. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85196377162&partnerID=40&md5=48a962c5ff3de6a9e741ca2c97fe8d42>.

Mat, Hamidah, Wan Mohd Al Faizee Wan Ab Rahaman, and Norazzila Shafie. "The Relationship Between Interpersonal and Intrapersonal Religious Commitment in Choosing Shariah Compliant Hospital in Malaysia." *UMRAN - International Journal of Islamic and Civilizational Studies* 10, no. 1 (February 28, 2023): 47-57. <https://doi.org/10.11113/umran2023.10n1.601>.

Mirza, A U B. "Outcomes and Complications of Ahmed Glaucoma Valve Implantation in Neovascular versus Other Secondary Glaucoma: A One-Year Follow-up Study." *Pakistan Journal of Ophthalmology* 41, no. 1 (2025): 68-73. <https://doi.org/10.36351/pjo.v41i1.1989>.

Moghadamnia, A. A., and M. Abdollahi. "An Epidemiological Study of Poisoning in Northern Islamic Republic of Iran." *Eastern Mediterranean Health Journal* 8, no. 1 (2002): 88-94. <https://doi.org/10.26719/2002.8.1.88>.

Ngatindriatun, N, M Alfarizi, and T Widiastuti. "Impact of Sharia Hospital Service Standards and Religiosity Commitment on Patient Satisfaction and Loyalty: Insights from Certified Sharia Hospital in Indonesia." *Journal of Islamic Accounting and Business Research*, 2024. <https://doi.org/10.1108/JIABR-12-2022-0344>.

Ngatindriatun, Muhammad Alfarizi, and Tika Widiastuti. "Impact of Sharia Hospital Service Standards and Religiosity Commitment on Patient Satisfaction and Loyalty: Insights from Certified Sharia Hospital in Indonesia." *Journal of Islamic Accounting and Business Research*, 2024. <https://doi.org/10.1108/JIABR-12-2022-0344>.

Nurrahma, H A, Y S N Intan, A Meliala, and P Narwidina. "The Effect of Maternal Age, Hemoglobin, Platelet, and Blood Leukocyte Levels in Pregnant Women on the Incidence of Low Birth Weight (LBW) (Analytical Observational Study at Sultan Agung Islamic Hospital)." *Media Publikasi Promosi Kesehatan Indonesia* 6, no. 4 (2023): 632-39. <https://doi.org/10.56338/mppki.v6i4.3009>.

Pellegrino, J, P T Mundagowa, K S Sakyi, P Owusu, B Agbinko-Djobalar, L M Larson, and M Kanyangarara. "Prevalence and Risk Factors for Postpartum Depression and Stress among Mothers of Preterm and Low Birthweight

- Infants Admitted to a Neonatal Intensive Care Unit in Accra, Ghana." *International Journal of Gynecology and Obstetrics*, 2024. <https://doi.org/10.1002/ijgo.15998>.
- Priyantini, Sri, Mohamad Nuha, Perez Purnasari, and Masyhudi. "Stunting and Head Circumference Growth in The First 3 Years of Life." *Kemas* 19, no. 3 (2024): 341–49. <https://doi.org/10.15294/kemas.v19i3.40698>.
- Qiu, Liwen. "An Empirical Examination of the Existing Models for Bradford's Law." *Information Processing and Management* 26, no. 5 (1990): 655–72. [https://doi.org/10.1016/0306-4573\(90\)90108-E](https://doi.org/10.1016/0306-4573(90)90108-E).
- Rahman, M K, M A Bhuiyan, and S Zailani. "Healthcare Services: Patient Satisfaction and Loyalty Lessons from Islamic Friendly Hospitals." *Patient Preference and Adherence* 15 (2021): 2633–46. <https://doi.org/10.2147/PPA.S333595>.
- Rahman, M K, N R Zainol, N C Nawawi, A K Patwary, W F W Zulkifli, and M M Haque. "Halal Healthcare Services: Patients' Satisfaction and Word of Mouth Lesson from Islamic-Friendly Hospitals." *Sustainability (Switzerland)* 15, no. 2 (2023). <https://doi.org/10.3390/su15021493>.
- Rahman, Muhammad Khalilur, Miraj Ahmed Bhuiyan, and Suhaiza Zailani. "Healthcare Services: Patient Satisfaction and Loyalty Lessons from Islamic Friendly Hospitals." *Patient Preference and Adherence* 15 (2021): 2633–46. <https://doi.org/10.2147/PPA.S333595>.
- Rahman, Muhammad Khalilur, and Suhaiza Zailani. "The Effectiveness and Outcomes of the Muslim-Friendly Medical Tourism Supply Chain." *Journal of Islamic Marketing* 8, no. 4 (2017): 732–52. <https://doi.org/10.1108/JIMA-11-2015-0082>.
- — —. "The Effectiveness and Outcomes of the Muslim-Friendly Medical Tourism Supply Chain." *Journal of Islamic Marketing* 8, no. 4 (September 20, 2017): 732–52. <https://doi.org/10.1108/JIMA-11-2015-0082>.
- Rahman, Muhammad Khalilur, Suhaiza Zailani, and Ghazali Musa. "The Perceived Role of Islamic Medical Care Practice in Hospital: The Medical Doctor's Perspective." *Journal of Islamic Marketing* 9, no. 1 (2018): 2–18. <https://doi.org/10.1108/JIMA-01-2016-0006>.
- Rahman, Muhammad Khalilur, Noor Raihani Zainol, Noorshella Che Nawawi, Ataul Karim Patwary, Wan Farha Wan Zulkifli, and Md Mahmudul Haque. "Halal Healthcare Services: Patients' Satisfaction and Word of Mouth Lesson from Islamic-Friendly Hospitals." *Sustainability (Switzerland)* 15, no. 2 (2023): 1493. <https://doi.org/10.3390/su15021493>.

- — —. "Halal Healthcare Services: Patients' Satisfaction and Word of Mouth Lesson from Islamic-Friendly Hospitals." *Sustainability (Switzerland)* 15, no. 2 (2023): 1493. <https://doi.org/10.3390/su15021493>.
- Rashidi, Anahita, and Shireen S. Rajaram. "Culture Care Conflicts among Asian-Islamic Immigrant Women in US Hospitals." *Holistic Nursing Practice* 16, no. 1 (2001): 55–64. <https://doi.org/10.1097/00004650-200110000-00010>.
- Ratnawati, Alifah, Widiyanto bin Mislan Cokrohadisumarto, and Noor Kholis. "Improving the Satisfaction and Loyalty of BPJS Healthcare in Indonesia: A Sharia Perspective." *Journal of Islamic Marketing* 12, no. 7 (June 6, 2020): 1316–38. <https://doi.org/10.1108/JIMA-01-2020-0005>.
- Rogers, Gordon, Martin Szomszor, and Jonathan Adams. "Sample Size in Bibliometric Analysis." *Scientometrics* 125, no. 1 (2020): 777–94. <https://doi.org/10.1007/s11192-020-03647-7>.
- Roudbari, M, M Yaghmaei, and M Soheili. "Prevalence and Risk Factors of Low-Birth-Weight Infants in Zahedan, Islamic Republic of Iran." *Eastern Mediterranean Health Journal* 13, no. 4 (2007): 838–45. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-34848913421&partnerID=40&md5=543df5f6852a199c888dffa684b35551>.
- Salehi, Faraz, Masoud Mahootchi, and Seyed Mohammad Moattar Husseini. "Developing a Robust Stochastic Model for Designing a Blood Supply Chain Network in a Crisis: A Possible Earthquake in Tehran." *Annals of Operations Research* 283, no. 1–2 (2019): 679–703. <https://doi.org/10.1007/s10479-017-2533-0>.
- Shariff, Shaharom Md, and Abdul Rashid Abdul Rahman. "Shari'ah Compliant Hospital; from Concept to Reality: Amalaysian Experience." *Bangladesh Journal of Medical Science* 15, no. 1 (April 11, 2016): 1–4. <https://doi.org/10.3329/bjms.v15i1.27172>.
- Shenton, Andrew K., and Naomi V. Hay-Gibson. "Bradford's Law and Its Relevance to Researchers." *Education for Information* 27, no. 4 (2009): 217–30. <https://doi.org/10.3233/EFI-2009-0882>.
- Shokri, Azad, Amjad Mohamadi Bolbanabad, Satar Rezaei, Ghobad Moradi, and Bakhtiar Piroozi. "Has Iran Achieved the Goal of Reducing the Prevalence of Households Faced with Catastrophic Health Expenditure to 1%?: A National Survey." *Health Science Reports* 6, no. 4 (2023). <https://doi.org/10.1002/hsr2.1199>.
- Shoukat, S, H F Khan, M Kashif, S Ali, S N Qamar, and M Maqsood. "Salivary Galectin 3 Levels in Schizophrenia Patients." *Journal of the College of Physicians and*

Surgeons Pakistan 34, no. 2 (2024): 202–5.
<https://doi.org/10.29271/jcpsp.2024.02.202>.

Shoukat, Saba, Humaira Fayyaz Khan, Muhammad Kashif, Shazia Ali, Syeda Nayab Qamar, and Madeeha Maqsood. "Salivary Galectin 3 Levels in Schizophrenia Patients." *Journal of the College of Physicians and Surgeons Pakistan* 34, no. 2 (2024): 202–5. <https://doi.org/10.29271/jcpsp.2024.02.202>.

Suryani, L, H Kamil, H Hasanuddin, M Yahya, S Sulastri, A Agustina, S Hamzah, and N Ramadhan. "Application of Sharia Childbirth Innovation Model in Indonesia: Perspective of Midwives and Staff of the Islamic Service Unit." *Journal of Family and Community Medicine* 30, no. 3 (2023): 204–10. https://doi.org/10.4103/jfcm.jfcm_37_23.

Susanti, I H, T Sumarni, and I N Alifiya. "Case Study: Review of Nursing Management and It's Implementation in the Ar-Rahman Room Islamic Hospital Purwokerto." In *BIO Web of Conferences*, edited by Tayeb B., Bin Mohd Aboobaider B., Budi Prasetyo A., Asmaningrum N., Wantonoro null, Gusman T.A., and Muntiari N.R., Vol. 152. Faculty of Health, Universitas Harapan Bangsa, Indonesia: EDP Sciences, 2025. <https://doi.org/10.1051/bioconf/202515201026>.

Velez-Estevez, A., P. García-Sánchez, J. A. Moral-Munoz, and M. J. Cobo. "Why Do Papers from International Collaborations Get More Citations? A Bibliometric Analysis of Library and Information Science Papers." *Scientometrics* 127, no. 12 (2022): 7517–55. <https://doi.org/10.1007/s11192-022-04486-4>.

Windasari, Nila Armelia, Ni Putu Desintha Ayu Azhari, and Ilham Fauzan Putra. "Assessing Consumer Preferences on Halal Service: The Emergence of Sharia Hospitals for Muslim Consumer." *Journal of Islamic Marketing* 15, no. 1 (March 17, 2024): 22–41. <https://doi.org/10.1108/JIMA-07-2022-0192>.

— — —. "Assessing Consumer Preferences on Halal Service: The Emergence of Sharia Hospitals for Muslim Consumer." *Journal of Islamic Marketing* 15, no. 1 (March 17, 2024): 22–41. <https://doi.org/10.1108/JIMA-07-2022-0192>.

Wira, A. "The Transformation of Waqf in Turkey from the Ottoman to the Contemporary Period." *International Journal of Islamic Thought* 24, no. 1 (2023): 25–30. <https://doi.org/10.24035/ijit.24.2023.267>.

Wira, Ahmad, Meirison, and Elfia. "The Transformation of Waqf in Turkey from the Ottoman to the Contemporary Period." *International Journal of Islamic Thought* 24, no. 1 (2023): 25–30. <https://doi.org/10.24035/ijit.24.2023.267>.

Wirajing, M A K, A Haruna, and T N Nchofoung. "Financial Inclusion and Healthcare in Africa: Examining the Moderating Role of Education." *Review of*

Development Economics 28, no. 1 (2024): 97–127.
<https://doi.org/10.1111/rode.13043>.

Yasmeenela, Moniq. "Review of Sharia Economic Institution Products on Sharia Hospital." JISIP (Jurnal Ilmu Sosial Dan Pendidikan) 4, no. 2 (2020).
<https://doi.org/10.58258/jisip.v4i2.1056>.

Yusof, N. Mohd. "Islamic Medical Practice: A Holistic Approach to Patient Care in Sharia-Compliant Hospitals." IIUM Medical Journal Malaysia 22, no. 1 (January 1, 2023): 110–11. <https://doi.org/10.31436/imjm.v22i1.2306>.

Zailani, Suhaiza, Suhana Mohezar Ali, Mohammad Iranmanesh, Sedigheh Moghavvemi, and Ghazali Musa. "Predicting Muslim Medical Tourists' Satisfaction with Malaysian Islamic Friendly Hospitals." Tourism Management 57 (2016): 159–67. <https://doi.org/10.1016/j.tourman.2016.05.009>



© 2025 by the authors. Published as an open-access publication under the terms and conditions of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>).