

Analyzing Knowledge Networks in Health Care through Collaborative Research Exploration

by Diki Prayugo Wibowo, Ria Mariani, Novian Aldo, Sulistyo Andarmoyo

Submission date: 25-Mar-2024 11:49AM (UTC+0700)

Submission ID: 2330363559

File name: 7_Analyzing_Knowledge_Networks_in_Health_Care.pdf (732.45K)

Word count: 4737

Character count: 30122

Analyzing Knowledge Networks in Health Care through Collaborative Research Exploration

Diki Prayugo Wibowo¹, Ria Mariani², Novian Aldo³, Sulisty Andarmoyo⁴

¹ Sekolah Tinggi Farmasi Indonesia and diki1310@gmail.com

² Universitas Garut and riariono@gmail.com

³ Poltekkes Kemenkes Tanjungpinang and novian_aldotpi@yahoo.com

⁴ Universitas Muhammadiyah Ponorogo and sulistyandarmoyo@gmail.com

ABSTRACT

The exploration of collaborative research in healthcare is a dynamic and multifaceted endeavor, as evidenced by analysis of influential articles, citation patterns, and keyword frequencies. Davenport and Prusak's seminal work on knowledge management serves as a foundational foundation, emphasizing the critical role of effective knowledge utilization and sharing in collaborative healthcare research. This research explores linkages with other influential articles, including Scott's examination of social network analysis, Star and Griesemer's insights on institutional ecology, and Tranfield et al.'s methodology on evidence-based knowledge management. Further analysis extends to works on thematic analysis, inter-organizational collaboration, cancer genomics, and qualitative research methods, all of which contribute to a rich tapestry of collaborative healthcare research. Keyword analysis revealed thematic priorities, with a major focus on "Care" and "Experience", emphasizing the human dimension of healthcare. Challenges, technology and organizational aspects emerged as prominent themes, reflecting a holistic approach to collaborative exploration. The interplay between keywords such as "Dynamic", "Mechanisms", and "Performance" underscores the evolving nature of collaborative efforts and the need for strategic mechanisms to address challenges and improve performance. The analysis also highlights contemporary concerns, including the impact of the COVID-19 pandemic, barriers to collaboration, and the intersection of mental health and social media.

Keywords: Knowledge, Networks, Health Care, Bibliometric Analysis

1. INTRODUCTION

Collaborative research exploration in healthcare is a multifaceted concept that encompasses various aspects, including patient and family engagement, interdisciplinary collaboration, and the use of technology and artificial intelligence [1]–[3]. Patient and family engagement is a crucial aspect of collaborative research in healthcare. The Agency for Healthcare Research and Quality (AHRQ) defines family engagement as a set of behaviors by patients, family members, and health professionals, as well as organizational policies and procedures that foster the inclusion of patients and family members as active members of the healthcare team and collaborative partnerships with providers and provider organizations [4]. This engagement has been associated with improved health outcomes for both patients and their families. For instance, maternal engagement in the neonatal intensive care unit (NICU) has been linked to better infant outcomes, maternal health-behavior outcomes, maternal mental health outcomes, maternal-child bonding outcomes, and breastfeeding outcomes [4].

Interdisciplinary collaboration is another key aspect of collaborative research in healthcare [5]–[7]. It involves the meaningful engagement and reflection of program staff and collaborators in all aspects of program planning, implementation, reporting, and dissemination [8]. This approach has been shown to support translational processes and contribute to improved clinical outcomes [8]. Interdisciplinary collaboration also extends to the educational environment, where it can enhance patient care, education, and research [9].

The use of technology, particularly artificial intelligence (AI), is another significant aspect of collaborative research in healthcare. AI has the potential to bolster existing health information systems, notably electronic health records (EHRs), offering more customized and adaptable roles for patients [10]. AI can also aid in predictive analysis, clinical decision support systems, data visualization, natural language processing, patient monitoring, and mobile technology [10].

In conclusion, collaborative research exploration in healthcare is a dynamic and evolving field that leverages patient and family engagement, interdisciplinary collaboration, and the use of advanced technologies to improve health outcomes. However, it's important to note that the impact of these collaborative efforts can vary significantly across different contexts and settings, and further research is needed to understand the most effective strategies for fostering collaboration in healthcare [4], [8]–[10].

Collaboration amongst experts from various fields, such as medicine, biology, informatics, and social sciences, is what defines the collaborative nature of healthcare research. This collaboration involves not just individual researchers but also institutions, physicians, legislators, and other relevant parties. The ensuing group initiatives seek to address difficult problems, close disciplinary divides, and promote creativity in order to advance healthcare as a whole. Healthcare research is becoming more and more complicated, and with it comes the need for methodical approaches to examine the collaborative networks that support this research. It is crucial to comprehend the intricacies of knowledge sharing, multidisciplinary linkages, and developing patterns in cooperative networks in order to fully realize the promise of teamwork in medical research.

2. LITERATURE REVIEW

Bibliometric analysis is a methodological approach that quantitatively and qualitatively analyzes the research performance of journals or subject fields, and it has attracted considerable attention among the scientific community [11]. It can be used to identify the most prolific and influential authors/countries, the most cited documents, and recognize the major research topics in a particular field [11].

In the context of health research, bibliometric analysis can be used to understand collaborative research in healthcare. For instance, it can help identify the most influential authors and countries in the field, the most cited documents, and the major research topics. This can provide insights into the current research trends and the areas where collaboration is most prevalent [11].

Collaborations in health research often involve multidisciplinary teams, which can include clinical researchers, engineers, data scientists, and other professionals [12], [13]. These collaborations can be challenging due to the diverse backgrounds and expertise of the team members, but they can also lead to innovative solutions to complex healthcare problems [12], [13]. For example, the Operations Research Interest Group (ORIG) within the Society of Medical Decision Making (SMDM) is a multidisciplinary interest group that specializes in taking an analytical approach to medical decision making and healthcare delivery. They leverage mathematical methods associated with the field of Operations Research (OR) to obtain data-driven solutions to complex healthcare problems and encourage collaborations across disciplines [13].

Moreover, advancements in data science have strengthened the research world's ability to use data captured from electronic health records (EHRs) to address pressing medical questions [14]. Data science can extract knowledge and insights from many structural and unstructured data, using

scientific methods, data mining techniques, machine-learning algorithms, and big data [15]. This can create a shift from conventional medical databases to a knowledge-rich, evidence-based healthcare environment [15].

3. METHODS

The first step in the study involved identifying and collecting scientific publications relevant to collaborative research in healthcare. The major databases Scopus, and Web of Science were systematically searched to obtain publications within a predetermined timeframe. After collecting relevant publications, a thorough data preprocessing phase was essential to ensure data quality. This involves removing duplicates, correcting errors, and standardizing metadata such as author names, affiliations, and keywords. The cleaned dataset will form the basis for subsequent bibliometric analysis. This process is aided by Publish or Perish (PoP) software accessed on August 06, 2023), table 1 explains how the research data metrics unfolded.

Table 1. Metrics Data research

| | |
|-------------------|-----------------------------------|
| Publication years | : 1974-2023 |
| Citation years | : 76 (1947-2023) |
| Paper | : 980 |
| Citations | : 679838 |
| Cites/year | : 8945.24 |
| Cites/paper | : 693.71 |
| Cites/author | : 341704.30 |
| Papers/author | : 394.04 |
| Author/paper | : 3.20 |
| h-index | : 282 |
| g-index | : 823 |
| hI,norm | : 241 |
| hI,annual | : 3.17 |
| hA-index | : 123 |
| Papers with ACC | : 1,2,5,10,20:951,906,747,542,384 |

Source: PoP (2023)

Bibliometric Analysis

Bibliometric analysis, the quantitative and qualitative assessment of scientific publications, is performed using VOSviewer [3], [16], [17]. This tool offers powerful capabilities for visualizing networks, detecting patterns, and extracting meaningful insights from bibliometric data. VOSviewer enables visualization of citation networks, which allows identification of highly cited publications, influential authors, and knowledge flows in collaborative networks. This analysis helps in assessing the impact and visibility of collaborative research efforts. VOSviewer's capabilities extend to keyword co-occurrence analysis. By identifying clusters of keywords, the tool will help uncover thematic trends and evolving research themes within the collaborative network over time.

4. RESULTS AND DISCUSSION

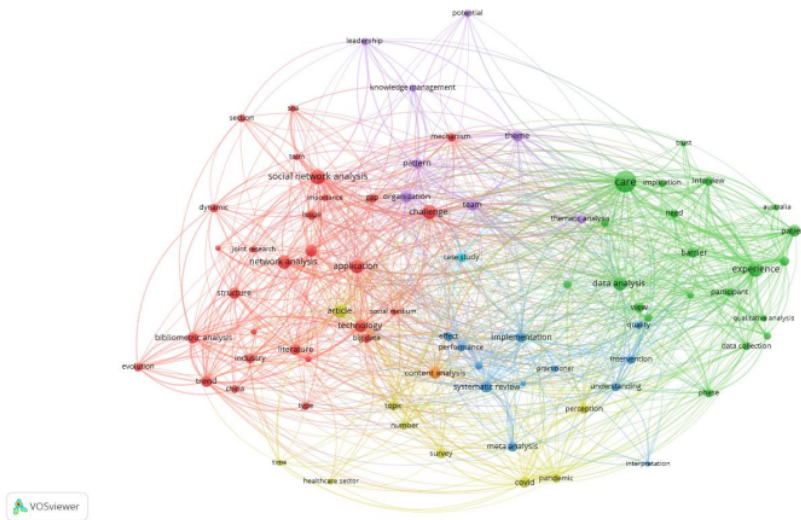


Figure 1. Mapping Results by Vosviewers

Figure 1 shows that the mapping analyzed through VOSviewer, offers a rich understanding of the knowledge networks in collaborative research in healthcare collectively contributing to a dynamic and evolving landscape.

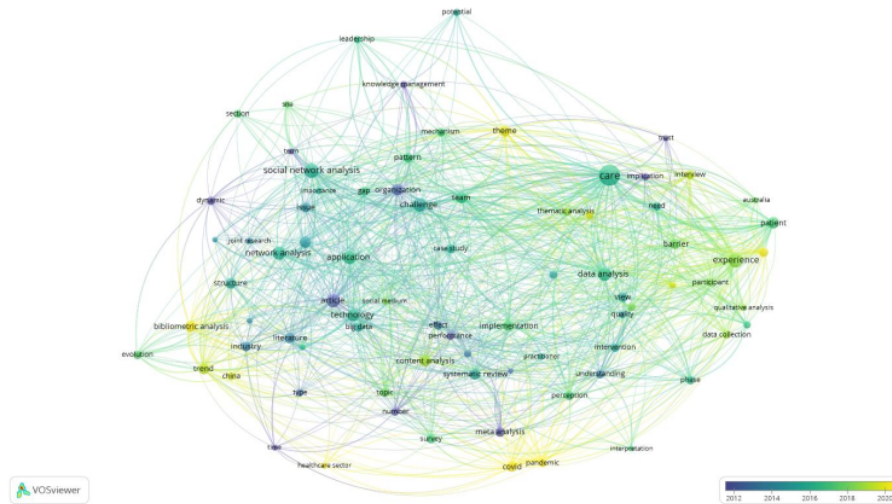


Figure 2. Trend Research

Analysis of research trends reveals a dynamic landscape of collaboration in health research. Noteworthy findings include the identification of prolific authors who are at the center of collaborative networks. Visualizations generated by VOSviewer highlight clusters of researchers, emphasizing the interconnectedness of their collaborative efforts. The prevalence of publications with multiple authors underscores the collaborative nature of contemporary healthcare research.

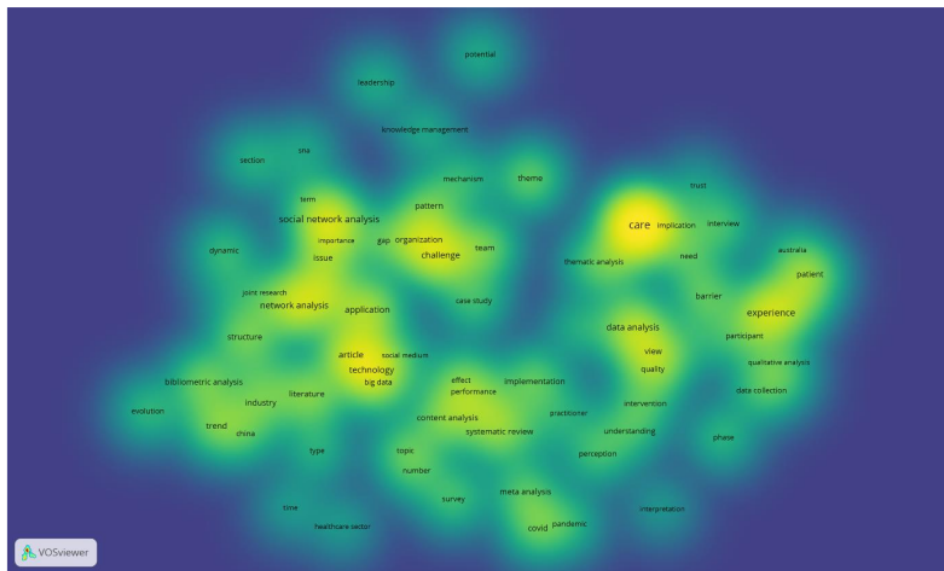


Figure 3. Cluster Identity

The clusters identified in the analysis represent distinct thematic areas within collaborative research in healthcare. The following discussion delves into each cluster, highlighting the total items, the most frequent keywords, and the overarching themes encapsulated by these keywords.

Table 2. Cluster Identifications

| Cluster | Total Items | Most frequent keywords (occurrences) | Keyword |
|---------|-------------|---|--|
| 1 | 10 | Big data (25), issue (20), technology (15) | Big data, challenge, dynamic, evolution, field, issue, mechanism, structure, technology, trend |
| 2 | 6 | Knowledge (20), Leadership (15), Potential (25) | Implication, knowledge management, leadership, organization, participant, potential |
| 3 | 6 | Care (20), Mental Health (25), Trust (15) | Care, experience, implementation, mental health, trust, woman |
| 4 | 5 | Healthcare sector (15), Industry (20) | Covid, healthcare sector, industry, pandemic, perception |

| | | | |
|---|---|---|--|
| 5 | 4 | Public Health (25), Social Medium (20) | Performance, public health, social medium, team |
| 6 | 1 | Barrier (15) | Barrier |

Cluster 1, with a total of 10 items, delves into the challenges associated with big data in healthcare, as evidenced by the most frequent keywords "big data" (25), "issue" (20), and "technology" (15). The prevalence of these keywords indicates a significant focus on the dynamic evolution and issues within the field, suggesting an exploration of mechanisms, structures, and trends in leveraging big data for healthcare research. Cluster 2, comprising 6 items, centers on leadership and knowledge management in collaborative healthcare research, with most frequent keywords being "knowledge" (20), "leadership" (15), and "potential" (25). The cluster likely explores the implications for organizations and participants, suggesting an examination of the role of leadership and knowledge management in optimizing collaborative potentials.

Cluster 3, totaling 6 items, revolves around the intersection of mental health and the experience of care, as indicated by the most frequent keywords "care" (20), "mental health" (25), and "trust" (15). This cluster may delve into the implementation of care strategies, experiences of individuals, and the role of trust in healthcare collaborations, particularly among women. Cluster 4, consisting of 5 items, appears to focus on the impact of COVID-19 on the healthcare sector and industry perceptions, with most frequent keywords being "healthcare sector" (15) and "industry" (20). The exploration of pandemic-related challenges and the perception of the healthcare industry during these unprecedented times is suggested by keywords such as "Covid."

Cluster 5, encompassing 4 items, highlights the intersection of performance, public health, and social media, with most frequent keywords including "public health" (25), "social medium" (20), and "performance." This suggests an exploration of team dynamics and the impact of social media in the context of public health initiatives. Cluster 6, with only 1 item, appears as an outlier, focusing solely on the concept of barriers in collaborative research. The most frequent keyword "barrier" (15) suggests a deep dive into identifying and understanding obstacles that may impede collaboration in the healthcare research domain.

Table 3. Citations Analys

| Citations | Authors and year | Title |
|-----------|------------------|---|
| 30273 | [18] | Working knowledge: How organizations manage what they know |
| 19596 | [19] | What is social network analysis? |
| 14849 | [20] | Institutional ecology, translations' and boundary objects: Amateurs and professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39 |
| 13987 | [21] | Towards a methodology for developing evidence-informed management knowledge by means of systematic review |
| 13138 | [22] | Thematic analysis: Striving to meet the trustworthiness criteria |
| 12957 | [23] | Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology |
| 12587 | [24] | Intergrative analysis of complex cancer genomics and clinical profiles using the cBioPortal |

| Citations | Authors and year | Title |
|-----------|------------------|---|
| 12122 | [25] | Qualitative research in practice: Examples for discussion and analysis |
| 11956 | [26] | Qualitative communication research methods |
| 11601 | [27] | Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms |

Table 3 provides a snapshot of highly cited publications in the context of collaborative research exploration. Each entry includes the number of citations, the authors, the publication year, and the title of the work. The following discussion provides an overview of the significance and potential impact of these highly cited publications:

Davenport and Prusak's seminal work on knowledge management has been widely influential, evidenced by its substantial number of citations. The focus on how organizations manage knowledge is foundational in the context of collaborative research, emphasizing the importance of effective knowledge utilization and sharing. Scott's work on social network analysis has become a cornerstone in understanding the dynamics of collaborative networks. The substantial number of citations reflects its significance in exploring the intricacies of connections and interactions within collaborative research communities.

Star and Griesemer's study on institutional ecology and boundary objects provides valuable insights into the dynamics of collaboration between amateurs and professionals. The work is relevant to understanding the role of diverse contributors within collaborative research ecosystems. Tranfield et al.'s methodology for evidence-informed management knowledge through systematic review is crucial in the context of collaborative research. Systematic reviews are fundamental tools for aggregating knowledge across disciplines and fostering evidence-based decision-making. Nowell et al.'s work on thematic analysis is highly cited, indicating its widespread use as a qualitative research method. Thematic analysis is essential for extracting patterns and themes within collaborative research, ensuring rigor and trustworthiness in data interpretation.

Mueller et al.'s study on interorganizational collaboration and innovation networks is crucial for understanding how learning occurs in collaborative settings, particularly in the biotechnology sector. This work sheds light on the role of networks in driving innovation. Gao et al.'s work on integrative analysis of cancer genomics and clinical profiles is fundamental in collaborative cancer research. The cBioPortal mentioned in the title is a widely used platform, emphasizing the impact of this work on advancing collaborative approaches in cancer research. Merriam and Grenier's work on qualitative research provides practical examples for discussion and analysis. Qualitative research methods are integral to collaborative research exploration, and this work serves as a valuable resource for researchers and practitioners. Lindlof and Taylor's comprehensive work on qualitative communication research methods is highly cited, reflecting its significance in the realm of collaborative research. Effective communication is critical in collaborative endeavors, and this work contributes valuable insights. Moll et al.'s work on funds of knowledge for teaching has implications for collaborative efforts in education and knowledge exchange. Understanding and connecting the knowledge bases from homes to classrooms is essential for effective collaboration in educational research.

Table 4. Keywords Analysis

| Most occurrences | | Fewer occurrences | |
|------------------|----------------|-------------------|----------------------|
| Occurrences | Term | Occurrences | Term |
| 129 | Care | 21 | Dynamic |
| 60 | Experience | 20 | Mechanism |
| 56 | Challenge | 19 | Performance |
| 43 | Technology | 18 | Participant |
| 39 | Field | 17 | Pandemic |
| 38 | Organization | 16 | Leadership |
| 35 | Structure | 16 | Potential |
| 35 | Team | 16 | Woman |
| 33 | Trend | 16 | Implication |
| 31 | Implementation | 15 | Knowledge management |
| 30 | Covid | 13 | Mental health |
| 29 | Barrier | 12 | Social medium |
| 27 | Issue | 11 | Healthcare sector |
| 26 | Industry | 11 | Trust |
| 25 | Big data | 10 | Public health |

Most Occurrences:

The high frequency of the keyword "Care" suggests a significant emphasis on the healthcare sector's compassionate aspects. This could indicate a focus on patient-centered research, healthcare delivery, and the overall well-being of individuals. The prevalence of "Experience" as a keyword indicates a likely exploration of the lived experiences of individuals within the healthcare context. This could encompass patient experiences, healthcare provider perspectives, and the overall human dimension of healthcare.

The frequency of "Challenge" suggests a recognition of the complexities and obstacles within the collaborative healthcare research landscape. Researchers may be addressing and investigating challenges to propose innovative solutions and improvements. The keyword "Technology" suggests a focus on the integration of technological advancements within healthcare research. This could include the utilization of digital tools, data analytics, and other technological innovations to enhance healthcare practices and research methodologies. The presence of "Field" indicates a broad exploration that may involve various domains within healthcare research. This could range from clinical fields to interdisciplinary studies, reflecting a comprehensive approach to collaborative exploration.

Fewer Occurrences:

The term "Dynamic," while occurring less frequently, suggests an acknowledgment of the ever-evolving nature of collaborative research in healthcare. This could reflect an understanding that healthcare ecosystems are subject to constant change, requiring adaptable and dynamic approaches. The presence of "Mechanism" suggests a focus on understanding the underlying mechanisms or

processes involved in collaborative healthcare research. This could involve investigating how different components interact and contribute to the overall collaborative dynamics.

The keyword "Performance" may indicate an interest in evaluating and enhancing the effectiveness of collaborative efforts in healthcare research. This could encompass assessments of team performance, organizational outcomes, and the impact of collaborative initiatives. The term "Participant" suggests a focus on the individuals involved in collaborative healthcare research. This could include researchers, healthcare professionals, patients, and other stakeholders, emphasizing the importance of their active participation in the collaborative process.

The presence of "Pandemic" reflects a contemporary focus on global health challenges. Collaborative research efforts may be addressing the impact of pandemics on healthcare systems, public health, and the development of strategies for effective response. The keyword "Organization" implies a focus on the structural and organizational aspects of collaborative healthcare research. This could involve examining how different entities collaborate, organize resources, and coordinate efforts for maximum impact. The occurrence of "Leadership" suggests a recognition of the importance of leadership in driving and facilitating collaborative efforts in healthcare research. Effective leadership may play a crucial role in guiding teams and organizations towards shared goals.

The term "Potential" implies an exploration of untapped possibilities and opportunities within collaborative healthcare research. Researchers may be investigating the potential for innovation, improvement, and advancements in healthcare practices. The keyword "Woman" suggests a focus on gender-related aspects within healthcare research. This could include studies on women's health, gender disparities, and the unique challenges and opportunities faced by women in the healthcare sector. The presence of "Implication" indicates a consideration of the consequences and practical applications of collaborative healthcare research. Researchers may be exploring the broader implications of their findings for policy, practice, and future research directions.

Additional Keywords:

The presence of "Knowledge management" indicates an awareness of the importance of systematic knowledge handling and dissemination within collaborative healthcare research. The keyword "Mental health" suggests a specific focus on mental health aspects within collaborative research, reflecting an awareness of the significance of mental health in the broader healthcare landscape.

The term "Social medium" indicates a potential exploration of the impact of social media on collaborative healthcare research, reflecting the growing role of digital platforms in disseminating information and fostering collaboration. The term "Healthcare Sector" (note: typo in the original keyword list) implies a focus on the broader healthcare industry. Researchers may be examining collaborative initiatives within the sector, including partnerships, innovations, and challenges.

The presence of "Trust" suggests an acknowledgment of the importance of trust in collaborative healthcare research. Building and maintaining trust among collaborators is essential for effective knowledge exchange and teamwork. The occurrence of "Public Health" reflects a focus on collaborative efforts aimed at addressing public health challenges. This could involve research initiatives, interventions, and strategies with implications for population health.

Implications for Future Research

The identified emphasis on challenges and technology in the keyword analysis signals a critical area for future research. Investigating and developing innovative mechanisms and technologies can enhance collaborative efforts in healthcare research, addressing complex issues and improving overall efficiency. The prominence of keywords like "Care" and "Experience" underscores the importance of human-centric approaches in healthcare research. Future studies could delve deeper into understanding and improving the patient and healthcare provider experience, ensuring that collaborative efforts prioritize compassionate and personalized care.

The interdisciplinary nature of collaborative research, evident in the interconnected influential articles, suggests a need for further exploration of effective interdisciplinary collaboration models. Future research can focus on understanding how different disciplines can synergize their strengths for more impactful outcomes. The occurrence of "Pandemic" as a keyword highlights the contemporary relevance of health crises. Future research should explore adaptable strategies for collaborative research during pandemics, considering the unique challenges and opportunities presented by global health emergencies. The singular mention of "Barrier" suggests a potential area for in-depth investigation. Future research could focus on identifying, categorizing, and proposing strategies to overcome barriers to collaboration, ensuring that collaborative healthcare research initiatives are more resilient and effective.

Implications for Practice

The foundational role of knowledge management, highlighted by Davenport and Prusak, suggests that healthcare organizations should prioritize strategic knowledge management practices. This includes developing systems for effective knowledge utilization, sharing, and dissemination to enhance collaborative research outcomes. The recurring presence of "Leadership" as a keyword underscores the importance of effective leadership in collaborative healthcare research. Organizations should invest in leadership development programs that equip professionals with the skills to guide collaborative efforts and foster a culture of innovation.

The prominence of qualitative research-related keywords indicates the importance of these approaches in collaborative research. Practitioners should consider integrating qualitative methodologies in their research initiatives to gain deeper insights and enhance the overall quality of collaborative research. The presence of "Social Medium" in the keyword analysis suggests that organizations should leverage digital platforms and social media for collaborative engagement. Practitioners can use these channels to facilitate communication, disseminate knowledge, and foster connections within the healthcare research community. The specific focus on "Mental Health" indicates a need for healthcare practitioners to prioritize mental health considerations in collaborative research and practice. Future collaborative efforts should incorporate mental health perspectives, ensuring a holistic approach to healthcare initiatives.

5. CONCLUSION

In the realm of collaborative research exploration in healthcare, this study has delved into influential articles, citation patterns, and keyword frequencies, offering a nuanced understanding of the multifaceted landscape. Davenport and Prusak's seminal work emerge as a cornerstone, emphasizing the centrality of effective knowledge management in collaborative endeavors. The interconnectedness of influential articles reveals a tapestry of knowledge, where Scott's insights into

social network analysis, Star and Griesemer's exploration of institutional ecology, and Tranfield et al.'s methodology for evidence-informed management knowledge contribute to the rich narrative of collaborative healthcare research.

Keyword analysis sheds light on thematic priorities, emphasizing the significance of "Care" and "Experience" in the human-centric domain of healthcare. Challenges, technology, and organizational dynamics emerge as focal points, demonstrating a holistic approach to collaborative research. The keywords "Dynamic," "Mechanism," and "Performance" underscore the ever-evolving nature of collaborative efforts, emphasizing the need for adaptable mechanisms to address challenges and enhance overall performance. Contemporary concerns, including the impact of the COVID-19 pandemic, barriers to collaboration, and the intersection of mental health and social media, reflect the responsiveness of collaborative research to current healthcare challenges.

REFERENCES

- [1] Y. Iskandar, "Hubungan Self-Efficacy dengan Prokrastinasi Akademik Mahasiswa Semester 5 Fakultas Bisnis dan Humaniora Universitas Nusa Putra (Sebuah Proposal Penelitian)," *J. Psikol. dan Konseling West Sci.*, vol. 1, no. 1, pp. 43–52, 2023.
- [2] M. A. K. Harahap, F. Tanipu, A. Manuhutu, and S. Supriandi, "Relations between Architecture, Urban Planning, Environmental Engineering, and Sociology in Sustainable Urban Design in Indonesia (Literature Study)," *J. Geosains West Sci.*, vol. 1, no. 02, pp. 77–88, 2023.
- [3] G. Rusmayadi, S. Supriandi, and R. Pahrijal, "Trends and Impact of Sustainable Energy Technologies in Mechanical Engineering: A Bibliometric Study," *West Sci. Interdiscip. Stud.*, vol. 1, no. 09, pp. 831–841, 2023.
- [4] S. Klawetter, J. C. Greenfield, S. R. Speer, K. Brown, and S. S. Hwang, "An integrative review: maternal engagement in the neonatal intensive care unit and health outcomes for US-born preterm infants and their parents," *AIMS public Heal.*, vol. 6, no. 2, p. 160, 2019.
- [5] Y. Chen, C. Li, and H. Wang, "Big Data and Predictive Analytics for Business Intelligence: A Bibliographic Study (2000–2021)," *Forecasting*, 2022.
- [6] U. B. Jaman and A. Zulfikri, "Peran serta Masyarakat dalam Pencegahan Kekerasan Seksual dihubungkan dengan UU No. 12 Tahun 2022 Tentang Tindak Pidana Kekerasan Seksual," *J. Huk. dan HAM Wara Sains*, vol. 1, no. 01, pp. 1–7, 2022.
- [7] A. Sugandi *et al.*, "Trauma Healing dan Edukasi Pasca Gempa Bagi Anak-Anak Desa Sarampad," *East J. Innov. Community Serv.*, vol. 1, no. 03, pp. 80–85, 2023, doi: 10.58812/ejincs.v1i03.109.
- [8] B. Volkov, J. Cieslak, R. Matthes, and C. Pulley, "3402 A High-Impact, Structured, Collaborative Approach to Implementing and Utilizing the Research Performance Progress Report (RPPR) for a Clinical and Translational Science Award," *J. Clin. Transl. Sci.*, vol. 3, no. s1, pp. 137–138, 2019.
- [9] K. Vazouras, B. D. S. Gayathri Shenoy, and I. F. Dragan, "Using Project Management Principles to Facilitate Interdisciplinary Collaboration," *Compendium*, vol. 43, no. 2, 2022.
- [10] A. Alanazi, "Clinicians' Views on Using Artificial Intelligence in Healthcare: Opportunities, Challenges, and Beyond," *Cureus*, vol. 15, no. 9, 2023.
- [11] S. Zhu, Y. Liu, Z. Gu, and Y. Zhao, "A bibliometric analysis of advanced healthcare materials:

- Research trends of biomaterials in healthcare application," *Adv. Healthc. Mater.*, vol. 10, no. 10, p. 2002222, 2021.
- [12] R. R. Sankaran, J. M. Ameling, A. E. M. Cohn, C. M. Grum, and J. Meddings, "A practical guide for building collaborations between clinical researchers and engineers: lessons learned from a multidisciplinary patient safety project," *J. Patient Saf.*, vol. 17, no. 8, p. e1420, 2021.
- [13] M. Capan *et al.*, "From data to improved decisions: operations research in healthcare delivery," *Med. Decis. Mak.*, vol. 37, no. 8, pp. 849–859, 2017.
- [14] S. M. Shortreed, A. J. Cook, R. Y. Coley, J. F. Bobb, and J. C. Nelson, "Challenges and opportunities for using big health care data to advance medical science and public health," *Am. J. Epidemiol.*, vol. 188, no. 5, pp. 851–861, 2019.
- [15] S. V. G. Subrahmanya *et al.*, "The role of data science in healthcare advancements: applications, benefits, and future prospects," *Irish J. Med. Sci.*, vol. 191, no. 4, pp. 1473–1483, 2022.
- [16] N. T. Oktaviani, E. P. Purnomo, L. Salsabila, and A. T. Fathani, "Bibliometric analysis of sustainable agriculture on human rights governance approach: concept of sustainability on human rights governance," in *E3S Web of Conferences*, EDP Sciences, 2021, p. 2008.
- [17] Y. Iskandar, J. Joeliaty, U. Kaltum, and H. Hilmiana, "Bibliometric analysis on social entrepreneurship specialized journals," *WSEAS Trans. Environ. Dev.*, vol. 17, pp. 941–951, 2021, doi: 10.37394/232015.2021.17.87.
- [18] T. H. Davenport and D. D. Dreyfus, *Working knowledge: How organizations manage what they know*. Harvard Business Press, 1998.
- [19] J. Scott, *What is social network analysis?* Bloomsbury Academic, 2012.
- [20] S. L. Star and J. R. Griesemer, "Institutional ecology, translations' and boundary objects: Amateurs and professionals in Berkeley's Museum of Vertebrate Zoology, 1907–39," *Soc. Stud. Sci.*, vol. 19, no. 3, pp. 387–420, 1989.
- [21] D. Tranfield, D. Denyer, and P. Smart, "Towards a methodology for developing evidence-informed management knowledge by means of systematic review," *Br. J. Manag.*, vol. 14, no. 3, pp. 207–222, 2003.
- [22] L. S. Nowell, J. M. Norris, D. E. White, and N. J. Moules, "Thematic analysis: Striving to meet the trustworthiness criteria," *Int. J. Qual. Methods*, vol. 16, no. 1, p. 1609406917733847, 2017.
- [23] S. Mueller *et al.*, "What's holding back social entrepreneurship? Removing the impediments to theoretical advancement," *J. Soc. Entrep.*, vol. 6, no. 3, pp. 245–256, 2015.
- [24] J. Gao *et al.*, "Integrative analysis of complex cancer genomics and clinical profiles using the cBioPortal," *Sci. Signal.*, vol. 6, no. 269, pp. p11–p11, 2013.
- [25] S. B. Merriam and R. S. Grenier, *Qualitative research in practice: Examples for discussion and analysis*. John Wiley & Sons, 2019.
- [26] T. R. Lindlof and B. C. Taylor, *Qualitative communication research methods*. Sage publications, 2017.
- [27] L. Moll, C. Amanti, D. Neff, and N. Gonzalez, "Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms," in *Funds of knowledge*, Routledge, 2006, pp. 71–87.

Analyzing Knowledge Networks in Health Care through Collaborative Research Exploration

ORIGINALITY REPORT

8%

SIMILARITY INDEX

8%

INTERNET SOURCES

%

PUBLICATIONS

%

STUDENT PAPERS

PRIMARY SOURCES

1 pdxscholar.library.pdx.edu 2%
Internet Source

2 www.science.gov 2%
Internet Source

3 www.scilit.net 1%
Internet Source

4 listens.online 1%
Internet Source

5 assets.cureus.com 1%
Internet Source

6 www.cambridge.org 1%
Internet Source

7 academic.oup.com 1%
Internet Source

8 journals.plos.org 1%
Internet Source

Exclude quotes On

Exclude matches < 1%

Exclude bibliography On