

Bibliometric Analysis of the Role of Nurses in Addressing Urban and Rural Public Health Disparities

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ABSTRACT

This bibliometric analysis study explores the thematic and collaborative dynamics within the field of public health research, particularly focusing on the period from 2000 to 2024. Utilizing VOSviewer, we analyzed keyword occurrences and authorship data to identify central themes and the interconnections between researchers. The analysis reveals a strong emphasis on health disparities, with specific attention to access, quality, and policy issues. The emergence of COVID-19 as a significant research theme highlights the field's responsiveness to global health crises and its impact on existing inequalities. The study also maps out key contributors and their collaboration patterns, providing insights into the intellectual structure and potential gaps in the research community. Our findings emphasize the need for interdisciplinary approaches and greater collaboration to address the multifaceted challenges of global health disparities effectively.

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1. INTRODUCTION

Disparities in public health between urban and rural regions constitute a significant issue need comprehensive analysis and effective remedies. Nurses have a crucial role in the healthcare system, particularly in addressing these disparities. Nurses are at the forefront of healthcare provision and are essential in both preventive care and the management of chronic diseases, which frequently occur in various geographic locations. Research indicates that rural regions, namely, experience inadequate access to healthcare services, hence

intensifying health inequities relative to metropolitan centers [1]–[3].

The significance of nurses in addressing these disparities cannot be overstated. They not only provide direct patient care but also engage in community education and health promotion, which are vital for improving public health outcomes in underserved areas. However, the distribution of nursing resources often mirrors the broader inequalities in healthcare provision, with rural areas experiencing a shortage of healthcare professionals, including nurses [4], [5]. This uneven distribution contributes to poorer health outcomes in rural populations.

Bibliometric analysis provides a methodological approach to quantitatively review the extent and nature of research conducted on a specific topic. By analyzing research trends, major themes, and gaps in the literature, this method can offer valuable insights into the evolution of nurse-led interventions in public health and highlight areas needing further exploration [6]–[8]. This approach is particularly useful in the field of nursing and public health, where it is crucial to understand how research aligns with policy and practice needs.

Given the critical role of nurses and the potential insights from a bibliometric analysis, there is a compelling need to synthesize existing literature. This synthesis can help identify how nurses are being prepared to tackle health disparities and the types of interventions that are most effective in different settings. Such an analysis is particularly timely and significant given the ongoing global health challenges that disproportionately affect rural populations, further stressing the importance of targeted research and intervention strategies.

Despite the known disparities in health outcomes between urban and rural populations and the pivotal role of nurses in addressing these issues, there remains a substantial gap in synthesized knowledge regarding the scope and impact of nurse-led interventions across different geographic areas. Previous studies have often been limited in scope and have not comprehensively analyzed how the roles of nurses vary by demographic and geographic factors. Moreover, there is a lack of understanding of the thematic and methodological trends in the existing literature, which hampers the development of effective, evidence-based strategies tailored to the specific needs of urban and rural populations.

The purpose of this research is to provide a thorough bibliometric review of the current literature about the role of nurses in mitigating public health inequities in urban and rural settings. This study seeks to delineate the research environment, identify

dominant themes, examine temporal research trends, and underscore prospective areas for future inquiry. The research will furnish stakeholders, such as politicians, educators, and healthcare practitioners, with essential insights into optimizing nursing practices and treatments to effectively meet the health needs of urban and rural populations.

2. LITERATURE REVIEW

2.1 *Literature Review*

Nurses play a crucial role in mitigating the public health disparities that exist between urban and rural areas. The disparities in healthcare access and outcomes in these geographic regions have been widely studied in public health literature. According to the [9], rural populations are often underserved, leading to higher rates of mortality and chronic diseases when compared to urban populations. A key component of healthcare in rural areas is the availability of skilled professionals, especially nurses, who are often at the frontline of health service delivery.

Several studies have explored the importance of nursing interventions in addressing these disparities. A systematic review by [10] highlighted the critical role that community health nurses play in providing essential healthcare services to rural communities, where medical facilities are often scarce. Their research showed that nurse-led community health programs were effective in improving health literacy, managing chronic diseases, and reducing healthcare costs in rural areas.

Rural healthcare systems often rely heavily on nurses to fill gaps

created by the shortage of physicians. In many rural settings, nurse practitioners (NPs) take on extended roles that would traditionally be handled by doctors in urban settings. As noted by [11], nurse practitioners in rural areas are often tasked with responsibilities such as diagnosing illnesses, managing treatments, and performing minor procedures, demonstrating the versatility of the nursing role in these communities. Their study concluded that the expansion of nursing roles in rural areas can effectively bridge the healthcare delivery gap.

In contrast, urban healthcare systems tend to have more resources and better access to specialists, but this does not eliminate the need for effective nursing interventions. In urban areas, nurses play a significant role in managing public health issues such as infectious disease outbreaks, homelessness, and mental health challenges. According to a study by [12], urban public health nurses often work in collaborative, multidisciplinary teams to address complex health challenges in densely populated areas. Their work is especially vital in providing care to marginalized communities, who may face barriers in accessing the broader healthcare system.

While nursing plays a crucial role in both rural and urban settings, the strategies and challenges faced by nurses in these environments are distinct. Nurses in rural areas often have to work independently with fewer resources, while urban nurses may deal with larger

populations and more diverse health issues. However, the common thread in both environments is the need for strong nursing leadership and support systems. As demonstrated by [13], investments in nursing education, policy support, and resource allocation are essential for empowering nurses to effectively tackle public health disparities.

Another aspect that has gained attention in the literature is the use of technology in nursing to bridge the gap between rural and urban healthcare delivery. Telehealth has emerged as a vital tool for nurses, especially during the COVID-19 pandemic, allowing them to provide care remotely to patients in underserved areas. A study by [14] found that telehealth initiatives led by nurses were effective in improving patient outcomes in rural areas by providing timely consultations and follow-ups without the need for travel.

In summary, existing literature highlights the pivotal role nurses play in addressing public health disparities in both rural and urban settings. However, there is a need for more comprehensive and data-driven analyses to map the evolution of nursing interventions and identify gaps in the current research landscape. This study, through a bibliometric analysis, seeks to fill this gap by providing a quantitative review of existing literature on nursing's role in mitigating urban and rural public health disparities.

2.2 Basic Theory

The theoretical foundation for understanding the role of nurses in addressing public health disparities stems from a combination of healthcare access theories, community health frameworks, and public health theories.

1. Access to Healthcare Theory

Access to healthcare is a central concept in public health research and is often defined by several dimensions, including availability, accessibility, accommodation, affordability, and acceptability [15]. In both rural and urban areas, these dimensions are influenced by various factors such as geographic location, socioeconomic status, and the availability of healthcare professionals. Nurses, as healthcare providers, are critical in improving access to healthcare, especially in underserved areas. Their ability to deliver services at the community level helps reduce barriers to healthcare access, particularly in rural areas where medical services are less available.

In rural settings, healthcare access is particularly challenging due to the scarcity of healthcare facilities and professionals. Nurses often serve as the primary healthcare providers in these communities, offering essential services such as preventive care, health education, and chronic disease management. By increasing the availability and accessibility of healthcare services, nurses help bridge the gap in healthcare delivery. In contrast, urban

nurses face challenges related to the accommodation and acceptability of healthcare services, particularly in underserved urban populations. Here, nurses play a crucial role in ensuring that healthcare services are culturally sensitive and responsive to the needs of diverse populations [16].

2. Community Health Nursing Framework

The Community Health Nursing Framework (CHNF) provides a theoretical basis for understanding how nurses deliver healthcare services within communities. This framework emphasizes the importance of community-based care, health promotion, and disease prevention as central components of nursing practice [17]. Nurses working in both rural and urban areas apply this framework to address the unique health needs of their communities.

In rural settings, the CHNF guides nurses in delivering healthcare services that are tailored to the specific health challenges faced by rural populations. These challenges include limited access to healthcare facilities, higher rates of chronic diseases, and socioeconomic barriers to health. Nurses apply community-based interventions such as health education programs, mobile clinics, and outreach services to address these challenges.

In urban areas, the CHNF is applied to address complex health issues such as infectious diseases, mental health, and substance abuse. Urban nurses often collaborate with other healthcare professionals and

community organizations to provide holistic care that addresses the social determinants of health. This framework allows nurses to engage with marginalized populations, providing care that is culturally appropriate and accessible.

3. Public Health Theories

Public health theories, such as the Social Determinants of Health (SDOH) and the Health Belief Model (HBM), provide additional context for understanding the role of nurses in addressing health disparities. The SDOH framework highlights the influence of social, economic, and environmental factors on health outcomes [18]. Nurses, as key actors in the public health system, are well-positioned to address these determinants through health promotion, education, and advocacy.

The Health Belief Model, on the other hand, emphasizes the role of individual beliefs and behaviors in health outcomes [19]. Nurses use this model to design interventions that encourage individuals to adopt healthier behaviors, such as seeking preventive care or adhering to treatment plans. In both urban and rural settings,

nurses leverage the HBM to promote health behavior changes that can reduce the prevalence of preventable diseases.

These theoretical frameworks provide a foundation for understanding the critical role nurses play in addressing public health disparities. By applying concepts from healthcare access theory, the Community Health Nursing Framework, and public health theories, nurses can effectively target the unique health needs of both urban and rural populations.

3. METHODS

This research employs a bibliometric analysis to systematically review and analyze existing literature on the role of nurses in addressing urban and rural public health disparities. Bibliometric analysis is a quantitative approach that allows for the evaluation of research output, trends, and the relationships between various research areas through citation and co-authorship patterns [20]. Data for this analysis were extracted from Google Scholar, focusing on articles published between 2000 and 2024 that examine nursing interventions in public health. The VOSviewer software was used to map co-occurrences of keywords and analyze citation networks, helping to identify major themes, research gaps, and influential studies in the field [21].

4. RESULTS AND DISCUSSION

4.1 Research Data Metrics

Table 1. Data Citation Metrics

Publication years	2000-2024
Citation years	24 (2000-2024)
Paper	1000
Citations	1034148
Cites/year	43089.50
Cites/paper	1034.15

Cites/author	458414.19
Papers/author	437.30
Author/paper	3.10
h-index	616
g-index	1000
hI,norm	349
hI,annual	14.54
hA-index	155
Papers with ACC	: 1,2,5,10,20:997,991,960,902,864

Source: Publish or Perish Output, 2024

Table 1 provides a comprehensive set of bibliometric metrics for a dataset spanning publications from the years 2000 to 2024. Over these 24 years, a total of 1,000 papers have accumulated an impressive 1,034,148 citations, averaging approximately 43,089 citations per year and 1,034 citations per paper. The high citations per author metric, at 458,414, along with an average of 437.3 papers per author, suggest a significant impact and productivity among the contributing authors, indicating extensive collaboration, as reflected by the average of 3.1 authors per paper. The dataset's robustness and influence in its field are further underscored by a high h-index of 616, indicating that 616 papers have been cited at least 616 times. The g-index is

even more remarkable at 1,000, suggesting that the top 1,000 papers have, collectively, received at least 1,000,000 citations. Other notable metrics include the normalized individual h-index (hI,norm) of 349 and an annual h-index (hI,annual) of 14.54, both of which reflect sustained and significant individual contributions over time. The hA-index stands at 155, emphasizing that the top-cited papers have consistently high citation counts. Finally, the distribution of papers with accumulated cited counts (ACC) at various thresholds shows that nearly all papers (997 out of 1,000) have been cited at least once, with a significant number maintaining high citation rates, evident in 864 papers having 20 or more citations.

Table 2. Top Cited Research

Citations	Authors and year	Title
28835	[22]	Nursing research: Generating and assessing evidence for nursing practice
23216	[23]	Nursing research: Principles and methods
12970	[24]	Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences
12523	[25]	The integrative review: updated methodology
10048	[26]v	Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019
8014	[27]	World health statistics 2010
6732	[28]	Adherence to long-term therapies: evidence for action
6536	[29]	Obesity in children and young people: a crisis in public health.
6479	[30]	Essentials of nursing research: Appraising evidence for nursing practice
6415	[31]	Contribution of primary care to health systems and health

Source: Publish or Perish Output, 202

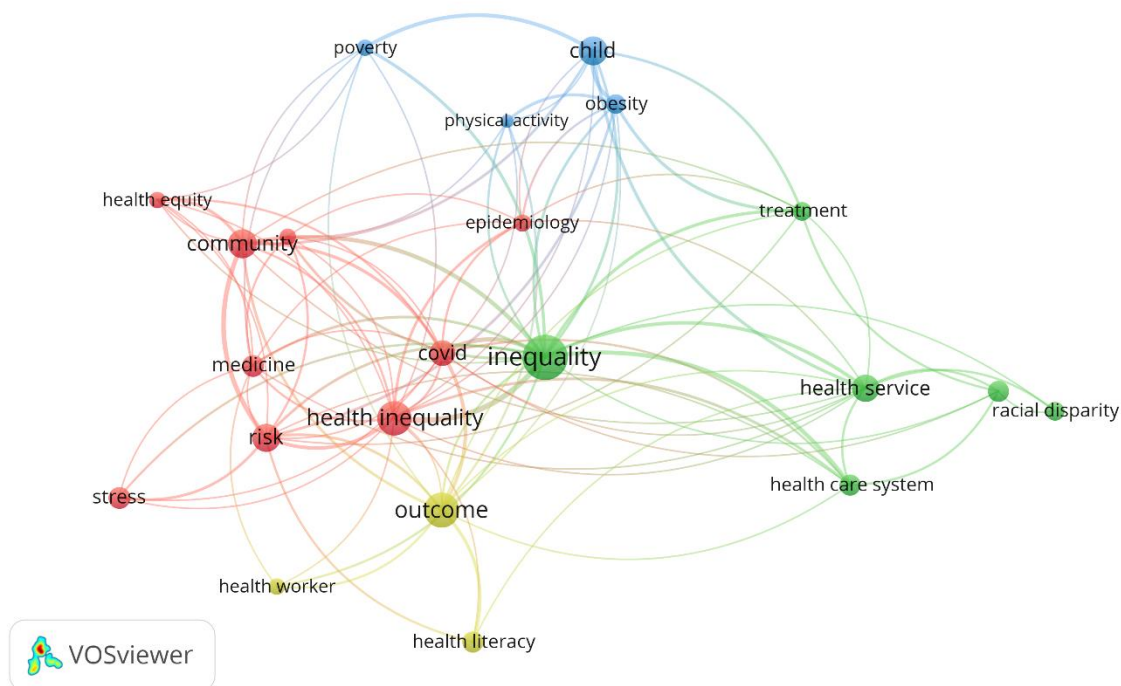


Figure 1. Network Visualization

Source: Data Analysis Result, 2024

This VOSviewer visualization maps the co-occurrence of keywords within a dataset focused on public health research, highlighting several interconnected themes and areas of focus. The visualization uses different colors to represent distinct clusters of related terms, and the thickness of the lines between keywords indicates the strength of the relationship, with thicker lines suggesting a stronger co-occurrence. The size of each node (circle) corresponds to the frequency of the keyword's appearance in the dataset, providing insight into the prominence of specific topics within the field.

The red cluster in the visualization prominently features keywords such as "health inequality," "risk," "medicine," "COVID," and "stress." This cluster likely represents research focusing on the health disparities and risks associated with socio-economic factors and pandemics like COVID-19. The connection between "medicine" and "health inequality" suggests a significant amount of research is devoted to examining how medical practices and interventions can address or exacerbate health inequalities, particularly in the context of global health

crises which may elevate stress and other risk factors.

The green cluster includes terms like "health service," "racial disparity," "health care system," and "treatment." This cluster seems to focus on the systemic aspects of healthcare, examining how services are delivered and the disparities that exist within those systems, especially racial disparities. The linkage between "health service" and "treatment" with "racial disparity" underscores the critical examination of how different demographics receive health care and the quality of that care, reflecting ongoing concerns about systemic biases in medical treatment and access.

The blue cluster, featuring "community," "health equity," "poverty," "child," and "obesity," points to research that integrates broader socio-economic and demographic factors impacting health equity. This cluster indicates a strong focus on community-level health outcomes and how factors like poverty and childhood obesity intersect with overall health equity. The inclusion of "physical activity" and its connection to "child" and "obesity" highlights a specific interest in preventive health

measures and lifestyle factors that influence health from a young age.

Overall, the visualization effectively encapsulates the complexity and multidimensionality of public health research. It visually demonstrates the interconnected nature of various health-related factors, from individual and community health to systemic

and global health issues, providing a snapshot of the current research landscape's focus areas. This tool facilitates a deeper understanding of how different themes are interrelated, guiding future research directions by identifying densely linked nodes and potential gaps in the literature.

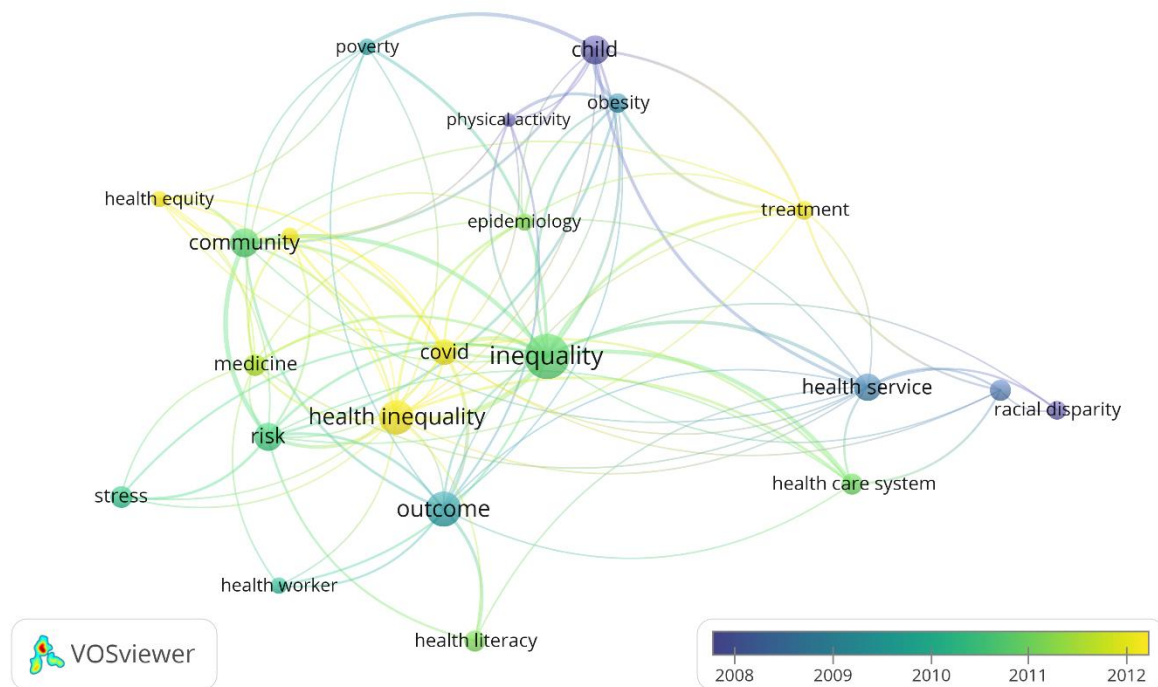


Figure 2. Overlay Visualization
Source: Data Analysis Result, 2024

This VOSviewer visualization provides a temporal analysis of keywords in public health research, focusing on the years 2008 to 2012. The visualization uses a color gradient from blue to yellow to illustrate the evolution of research focus over time, with blue indicating earlier years and yellow representing more recent years within the specified range. Each node, representing a keyword, varies in size based on its frequency in the literature, and the lines connecting the nodes indicate the strength of co-occurrence relationships between keywords, highlighting the interconnected nature of these topics.

The visualization reveals that earlier research (depicted in blue) was heavily concentrated around topics such as "health service" and "racial disparity." This suggests

that during the earlier years around 2008, there was significant scholarly focus on how health services were influenced by or contributing to racial disparities within healthcare systems. Over time, the research focus appears to shift towards topics linked in yellow such as "COVID" and "health inequality," indicating a more recent emphasis on emerging health crises and their impact on existing inequalities. This temporal shift may reflect the global health landscape's response to new challenges and the academic community's priority in addressing them.

Moreover, the central placement of keywords like "community," "health equity," and "medicine" and their connections across the time spectrum suggest that these have been consistent foundational themes

throughout the period studied. The continued focus on "community" and "health equity" across time highlights a sustained interest in addressing broader social determinants of health, while the emergent focus on "COVID" by the end of the period aligns with the global shift in public health priorities following the

pandemic's onset. Overall, this visualization not only maps the key thematic areas of research within public health over several years but also illustrates the dynamic nature of research interests as they adapt to changing global health contexts.

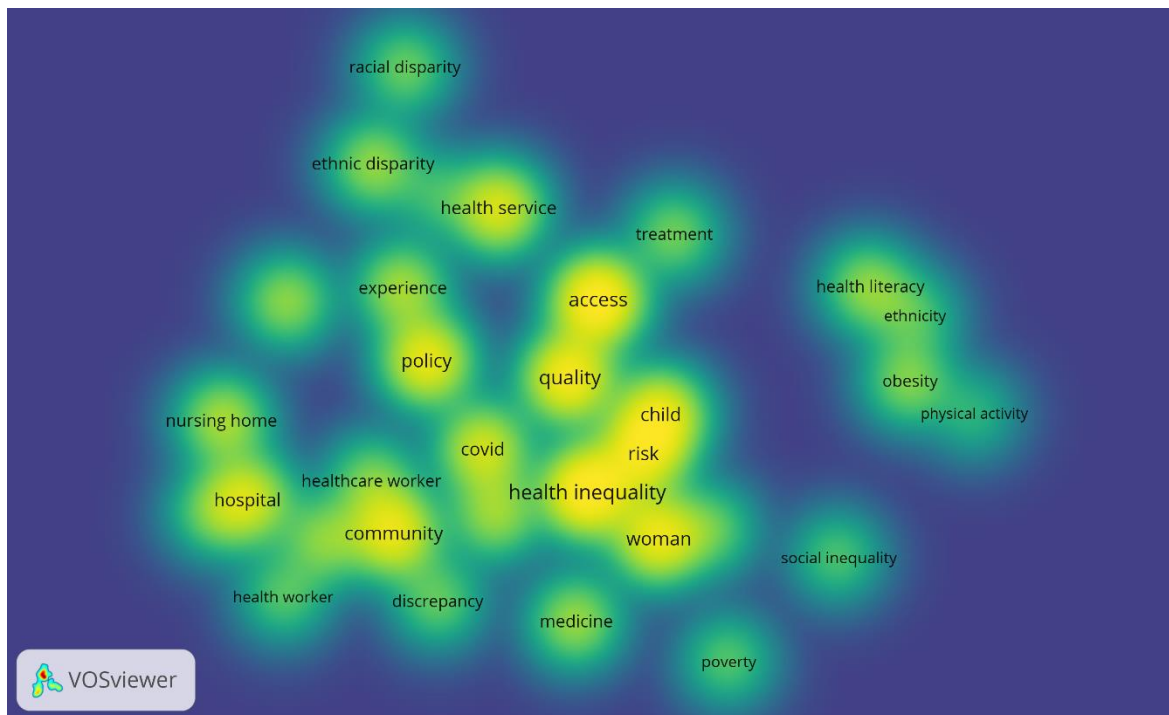


Figure 3. Density Visualization

Source: Data Analysis, 2024

This VOSviewer visualization illustrates the density of keyword occurrences and their relationships within the scope of health-related research, using a color gradient from blue to yellow to green. Blue represents areas with the highest concentration and focus of research, while green indicates less density. Central themes such as "health inequality," "medicine," and "access" appear prominently in blue, indicating these topics are heavily researched and central within the field. These keywords are surrounded by related concepts such as "risk," "quality," and "policy," suggesting that discussions around health inequalities often involve considerations of healthcare quality and the impact of health policies.

The surrounding yellow and green areas show related but less dense terms such as "racial disparity," "ethnic disparity," "obesity," and "physical activity," highlighting their significant but less central role in the overall research landscape. The distribution of terms like "covid," "healthcare worker," and "hospital" near the center reflects the recent focus on healthcare systems and worker experiences, likely influenced by global health events such as the COVID-19 pandemic. This visualization effectively maps out the key focal areas within health research, showing how various health issues are interconnected and highlighting the broad spectrum of factors that influence public health discourse.

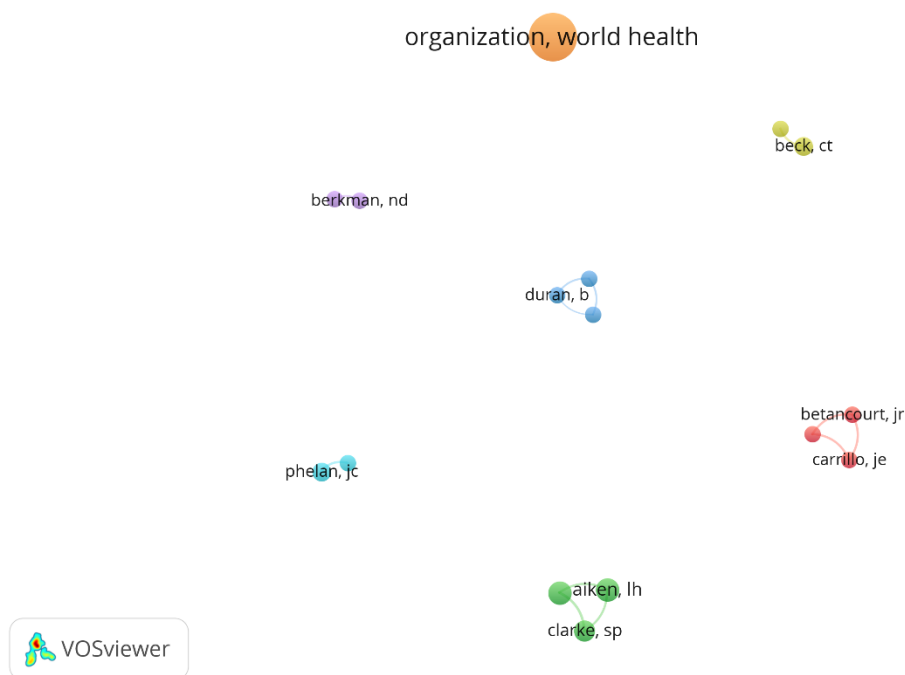


Figure 4. Author Collaboration Visualization

Source: Data Analysis, 2024

This VOSviewer visualization maps the key authors involved in research related to this field showcasing the connections and clustering among these scholars based on their research collaborations or thematic similarities. Each node represents an author, with node size indicating the volume or impact of their contributions in the field. The spatial arrangement and color-coded clusters suggest how these authors are grouped, possibly reflecting their research focus areas, collaborations, or academic affiliations. For example, the clustering of "Duran, B" and "Beck, CT" in blue might indicate a shared research focus or collaborative work, while "Phelan, JC" and others appear more isolated, suggesting their research themes might be distinct or less directly connected with the central cluster. The visualization helps identify influential researchers and the relationships between them, offering insights into the structure and dynamics of the scholarly network within world health organization studies.

Discussion

The analysis of keyword occurrences and author collaborations within the realm of public health and world health organization research offers significant insights into the thematic and structural dynamics of the field. By employing bibliometric visualizations, we can discern the evolving focus of research, identify key contributors, and understand the interconnections between various topics and scholars.

Thematic Insights from Keyword Analysis

The keyword density maps generated by VOSviewer reveal a robust focus on health disparities, with prominent terms like "health inequality," "racial disparity," and "medicine" forming the core of the research landscape. This central cluster is surrounded by interrelated themes such as "quality," "access," and "policy," which are crucial in understanding and addressing health inequalities. The prominence of "COVID" in recent years underscores the significant shift in public health research triggered by the pandemic, highlighting the field's responsiveness to global health crises. These

keywords not only reflect the primary concerns of health research but also illustrate a comprehensive network of related factors, such as "obesity," "physical activity," and "social inequality," which are essential in creating a holistic approach to health. The focus on "community" and "health equity" across the timelines indicates a sustained commitment to addressing broader social determinants of health. This thematic consistency suggests that while emergent issues like pandemics garner immediate attention, the foundational concerns of public health remain centered on equity and access.

Analysis of Author Contributions and Collaborations

The analysis of author nodes and their clustering provides insight into the collaborative nature and intellectual structure of the field. The mapping of authors such as Duran, B., and Beck, CT., in close proximity suggests potential collaborative networks or shared research interests. Meanwhile, the more isolated positioning of authors like Phelan, JC, could indicate unique or specialized research foci that, while integral, may not intersect frequently with the mainstream of world health research. This visualization also highlights the geographical or institutional aspects of research collaboration, where authors clustered together may represent specific research centers or academic institutions that are leading the discourse in certain areas of world health. The temporal dimension in the author analysis points to the evolution of leadership within the field, with newer researchers emerging in recent years, possibly in response to contemporary global health challenges.

Interdisciplinary and Global Implications

The intersection of various keywords around common themes such as "hospital," "healthcare worker," and "policy" reflects an inherently interdisciplinary approach in public health research. It underscores the necessity of integrating medical science with policy analysis, healthcare management, and

social sciences to effectively tackle complex health issues. This interdisciplinary nature is crucial for developing comprehensive strategies that are capable of addressing the multifaceted challenges of global health disparities. Furthermore, the global implications of these research themes are evident in the focus on both "racial" and "ethnic disparities," indicating that health equity is a worldwide concern transcending national boundaries. The consistent emphasis on "community" and "access" across different studies highlights the universal challenge of making health services inclusive and equitable, irrespective of geographic location.

Future Directions and Research Gaps

The bibliometric analysis indicates potential areas for future research, particularly in understanding how emerging health challenges like COVID-19 interact with long-standing issues of inequality and access. There is a noticeable gap in studies linking newer global health threats with traditional areas of health disparities, offering a fertile ground for future studies. Moreover, the apparent lack of dense collaborations among some of the key researchers suggests an opportunity to foster more interdisciplinary and cross-institutional partnerships. Enhancing collaboration can lead to more comprehensive studies that combine diverse methodologies and perspectives, enriching the field's capacity to address complex health issues.

5. CONCLUSION

The bibliometric analysis conducted in this study illuminates the evolving landscape of public health research, revealing significant thematic concentrations and the dynamics of scholarly collaborations. The focus on health disparities, particularly in relation to access, quality, and policy, underscores the persistent urgency and relevance of these issues within the global health context. The interplay between enduring health challenges and emergent issues like COVID-19 highlights the field's

adaptability and the critical need for continued interdisciplinary approaches to health research. Furthermore, the identification of key researchers and their networks provides insights into the intellectual structure of the field, indicating both robust collaborations and areas where increased interdisciplinary and cross-institutional partnerships could be beneficial.

Moving forward, the field must leverage these insights to enhance the integration of diverse research efforts and address the complex, multifaceted challenges of global health disparities. This study not only charts the current state of public health research but also sets the stage for future scholarly endeavors aimed at fostering more equitable health outcomes worldwide.

REFERENCES

- [1] Z. Liu, "The inequality of healthcare between urban and rural areas in China in recent ten years," in *Addressing Global Challenges-Exploring Socio-Cultural Dynamics and Sustainable Solutions in a Changing World*, Routledge, 2025, pp. 142–148.
- [2] M. Dlamini and J. Mbonigaba, "Socio-Economic-Driven Disparities in Chronic Illness and Disability Among the South African Children: Exploring Variations Within the Urban and Rural Areas," *J. Dev. Areas*, vol. 58, no. 2, pp. 41–72, 2024.
- [3] J. Flavel, S. G. E. Kedzior, V. Isaac, D. Cameron, and F. Baum, "Regional health inequalities in Australia and social determinants of health: analysis of trends and distribution by remoteness," *Rural Remote Health*, vol. 24, no. 1, pp. 1–11, 2024.
- [4] A. Z. Pitoyo, L. Pujiati, I. Setyaningrum, N. Huzaimah, and J. H. Raule, "Addressing Healthcare Disparities through Community-Based Hospital Management Initiatives," *Glob. Int. J. Innov. Res.*, vol. 2, no. 5, pp. 984–992, 2024.
- [5] B. Rani, S. P. Srivastava, and S. Thakur, "Exploring the role of nursing in addressing social determinants of health," *Int. J. Community Med. Public Heal.*, vol. 10, no. 11, p. 4497, 2023.
- [6] A. A. Basli, "Nursing Research on Pressure Injury Prevention: Bibliometric Analysis," *Adv. Skin Wound Care*, vol. 37, no. 9, pp. 1–7, 2024.
- [7] A. D. Akgöz, "A bibliometric analysis of studies conducted over the last 10 years on cardiovascular disease risk identification and prevention in primary care," *Eur. Res. J.*, pp. 1–13.
- [8] R. D. V. Arora and M. Kaur, "Research Trend on Climate Change Mitigation and Resilience: Bibliometric Analysis for the Period 2011-2022," in *IOP Conference Series: Earth and Environmental Science*, IOP Publishing, 2023, p. 12083.
- [9] W. H. Organization, "COVID-19 global risk communication and community engagement strategy, December 2020-May 2021: interim guidance, 23 December 2020," World Health Organization, 2020.
- [10] J. G. Smith, K. H. Morin, and E. T. Lake, "Association of the nurse work environment with nurse incivility in hospitals," *J. Nurs. Manag.*, vol. 26, no. 2, pp. 219–226, 2018.
- [11] R. Newhouse *et al.*, "Study protocol testing toolkit versus usual care for implementation of screening, brief intervention, referral to treatment in hospitals: a phased cluster randomized approach," *Addict. Sci. Clin. Pract.*, vol. 13, pp. 1–10, 2018.
- [12] V. J. Lee, M. Ho, C. W. Kai, X. Aguilera, D. Heymann, and A. Wilder-Smith, "Epidemic preparedness in urban settings: new challenges and opportunities," *lancet Infect. Dis.*, vol. 20, no. 5, pp. 527–529, 2020.
- [13] K. C. Iheduru-Anderson, S. S. Moore, and F. Okoro, "The voice of Black academic nurse leaders in the United States: A qualitative study," *J. Prof. Nurs.*, vol. 39, pp. 84–95, 2022.
- [14] J. D. Brown, L. Hart, and P. Wludyka, "Improving practice readiness among nurse residents," *J. Contin. Educ. Nurs.*, vol. 53, no. 9, pp. 411–416, 2022.
- [15] R. Pechansky and J. W. Thomas, "The concept of access: definition and relationship to consumer satisfaction," *Med. Care*, vol. 19, no. 2, pp. 127–140, 1981.
- [16] K. K. Smith and J. H. Haggerty, "Exploitable ambiguities & the unruliness of natural resource dependence: Public infrastructure in North Dakota's Bakken shale formation," *J. Rural Stud.*, vol. 80, pp. 13–22, 2020.
- [17] M. Stanhope and J. Lancaster, *Foundations for Population Health in Community/Public Health Nursing-E-Book: Foundations for Population Health in Community/Public Health Nursing-E-Book*. Elsevier Health Sciences, 2021.
- [18] M. Marmot, "Health in an unequal world," *Lancet*, vol. 368, no. 9552, pp. 2081–2094, 2006.
- [19] I. M. Rosenstock, "Historical origins of the health belief model," *Heal. Belief Model Pers. Heal. Behav. B. Slack, Inc*, 1974.
- [20] I. Zupic and T. Čater, "Bibliometric methods in management and organization," *Organ. Res. methods*, vol. 18, no. 3, pp. 429–472, 2015.
- [21] N. J. van Eck and L. Waltman, "Software survey: VOSviewer, a computer program for bibliometric mapping," *Scientometrics*, vol. 84, no. 2, pp. 523–538, 2010, doi: 10.1007/s11192-009-0146-3.
- [22] D. F. Polit and C. T. Beck, *Nursing research: Generating and assessing evidence for nursing practice*. Lippincott Williams & Wilkins, 2008.
- [23] D. F. Polit and C. T. Beck, *Nursing research: Principles and methods*. Lippincott Williams & Wilkins, 2004.
- [24] A. Tashakkori, R. B. Johnson, and C. Teddlie, *Foundations of mixed methods research: Integrating quantitative and*

- qualitative approaches in the social and behavioral sciences*. Sage publications, 2020.
- [25] R. Whitemore and K. Knaf, "The integrative review: updated methodology," *J. Adv. Nurs.*, vol. 52, no. 5, pp. 546–553, 2005.
- [26] J. Lai *et al.*, "Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019," *JAMA Netw. open*, vol. 3, no. 3, pp. e203976–e203976, 2020.
- [27] W. H. Organization, *World health statistics 2010*. World Health Organization, 2010.
- [28] W. H. Organization, *Adherence to long-term therapies: evidence for action*. World Health Organization, 2003.
- [29] T. Lobstein, L. Baur, and R. Uauy, "Obesity in children and young people: a crisis in public health," *Obes. Rev.*, vol. 5, 2004.
- [30] D. Polit and C. Beck, *Essentials of nursing research: Appraising evidence for nursing practice*. Lippincott Williams & Wilkins, 2020.
- [31] B. Starfield, L. Shi, and J. Macinko, "Contribution of primary care to health systems and health," *milbank Q.*, vol. 83, no. 3, pp. 457–502, 2005.