

Effectiveness Of National Health Insurance Policy Implementation On Access To Primary Health Care In Remote Areas

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ABSTRACT

This study aims to analyze and understand the themes and trends in the literature related to primary health care using bibliometric analysis techniques through VOSviewer. The main focus is to identify key issues such as access to primary health care services, chronic disease management, socioeconomic factors, and the use of technology in healthcare services. The findings indicate that universal access to effective health services requires an integration of social health determinants, adequate health workforce education, and technological innovation. These insights provide valuable guidance for policymakers and health practitioners to formulate more holistic and integrated strategies in improving the quality of primary health care services.

INTRODUCTION

Health is a fundamental aspect of sustainable human resource development, affecting the quality of life and productivity of individuals. In many developing countries, including Indonesia, equitable and effective distribution of health services remains a major challenge, especially in remote and isolated areas. These areas often experience limited access to primary health care facilities due to geographic factors, lack of infrastructure, and a lack of trained medical resources (Organization, 2018). This creates significant health disparities between people in remote areas and those in city centers or urban areas. The government has an important role in formulating and implementing policies that support increased access to health services in isolated areas. Various strategies and programs have been implemented, including increasing the number of village health posts, training of paraprofessional health workers, and the use of mobile health technology to reach people in remote locations (Jones et al., 2019). interventions in improving the quality and availability of primary health care services are still not fully documented systematically. Bibliometric studies provide a comprehensive method for analyzing scientific literature, allowing researchers to identify, visualize, and interpret big data from publications related to a specific topic. Using this approach, studies can explore research trends, relationships between concepts, and the dynamics of scientific collaboration and their impact on the development of knowledge in public health and health policy (Ellegaard & Wallin, 2015).

Despite progress in the implementation of health programs by the government, there is still a lack of information on the effectiveness of these interventions in improving access to and quality of primary health care services in remote areas. This limitation hampers policy improvements and more targeted program implementation, so it is important to conduct a comprehensive analysis of the existing literature to understand the impact of government interventions on access to primary health care services. This study aims to conduct a bibliometric analysis of the existing literature on government interventions in improving access to primary health care services in remote areas. Specifically, this research will identify key themes, research trends, and existing knowledge gaps, and provide recommendations for future research and policy improvements that can more effectively target and address health issues in remote areas.

RESEARCH METHODS

The method used in this study is bibliometric analysis, which involves the collection and evaluation of scientific publication data from the Scopus database. The inclusion criteria for the selected literature are articles that focus on government interventions in improving access to primary

health care in remote areas, published between 1973 and 2024. This analysis uses VOSviewer software for visualization and co-occurrence analysis of keywords, as well as for mapping and identifying research collaboration networks and thematic trends. This approach allows the identification of key research trends, relationships between concepts, and patterns of scientific collaboration, which can provide in-depth insights into the effectiveness and impact of government interventions in the context studied. Furthermore, the results of this analysis will be used to inform policy recommendations and future research directions related to improving access to primary health care in remote areas.

RESULTS

results of bibliometric analysis using VOSviewer, which maps the co-occurrence of keywords related to the topic of "primary health care access." In this visualization, each node represents a keyword or term that appears frequently in the analyzed literature, while the size of the node indicates the frequency of occurrence of the term. The color of the node reflects thematic groupings or clusters based on the interrelationships between the terms. For example, the terms "primary health care" and "health care access" have large red and green nodes, indicating high frequency and central position in the analyzed literature.

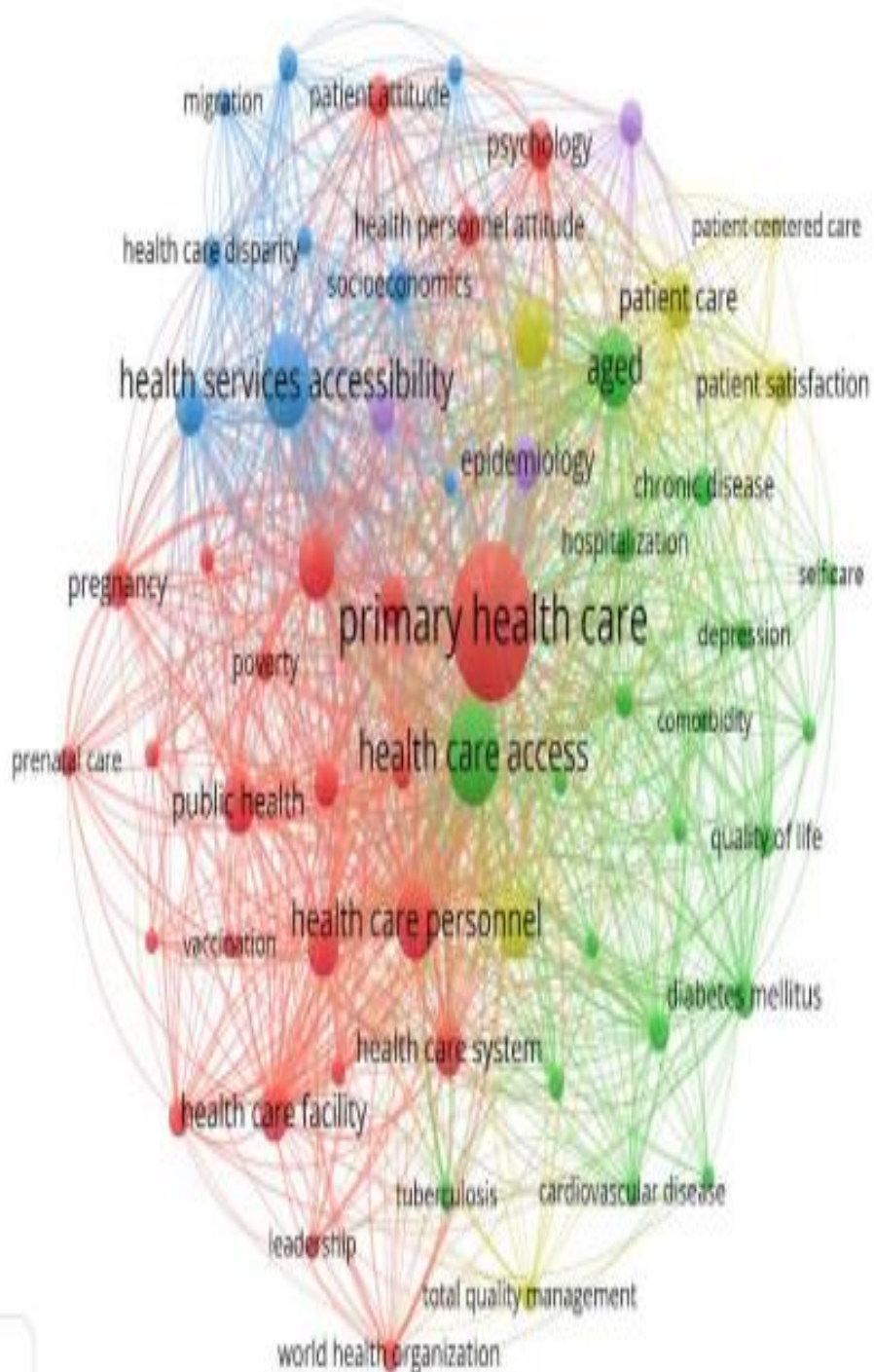
Different colors depict major clusters or themes present in the research related to primary health care access. The red cluster, for example, includes terms such as "public health," "health care personnel," and "health care facility." This cluster appears to focus on health infrastructure and personnel that play a key role in access to health care. The green cluster includes terms such as "health care access," "patient satisfaction," and "chronic disease," indicating a focus on aspects of health care accessibility and its impact on quality of life and chronic disease management. The blue cluster, which includes terms such as "health services accessibility," "health care disparity," and "migration," indicates a focus on disparities in health care access and socioeconomic factors that influence the availability of services, especially in remote areas or among vulnerable populations. This highlights the importance of understanding the social factors that influence inequities in health care access, which is a major challenge in many developing countries. This cluster highlights aspects related to structural and social barriers to accessing health care. This suggests that patient-centered care and improving patient experience are important aspects of primary health care access literature. The strong associations between these terms suggest that quality of care, patient satisfaction, and patient-centered care approaches are highly relevant in measuring the success of government interventions in improving access to health services. This visualization shows thematic changes and relationships between terms in primary health research from 2017 to 2020. In the visualization, the color gradient from blue to yellow shows the evolution of research focus from 2017 (blue) to 2020 (yellow). This allows for the observation of dynamic research trends and shifting priorities in the health issues studied.

Terms such as "primary health care," "health care access," and "public health" remained central throughout the period, indicating a continued focus on accessibility and delivery of primary health care as a major focus in the research. The emphasis in 2017, represented in blue, shows key terms such as "health care facility" and "vaccination," indicating a strong focus on health infrastructure and preventive health interventions early in the period. In 2020, in yellow, there was an increase in the involvement of terms such as "patient satisfaction" and "quality of life." This reflects a shift towards understanding the experiences and outcomes that patients receive, perhaps in response to the need for improved quality of care and a more holistic approach to health care, highlighting the qualitative impact of health access on individuals' lives. Further analysis of the connection patterns between terms shows that the strong association between "primary health care" and terms such as "chronic disease," "depression," and "diabetes mellitus" becomes more pronounced towards the end of the period. This suggests an increased awareness and research focus on chronic diseases in the context of primary health care, perhaps driven by the increasing prevalence and burden of chronic diseases observed globally.

This visualization also highlights the importance of integrating mental health services into primary health care, as mental health is increasingly recognized as an essential component of general health that is inseparable from physical health. This visualization displays a heatmap of terms that frequently appear in the literature related to "primary health care." The intensity of the green color around each keyword indicates the frequency or relative importance of the term in the context of primary health care research. In the middle of the visualization, "primary health care" and "health care access" emerge as the main focus, marked in a lighter shade of green, indicating that these are the main topics discussed in the related research. Words such as "health care personnel," "public health,"

and "health care system" also stand out, indicating that these elements are important in discussions about primary health care. Other keywords such as "pregnancy," "vaccination," and "diabetes mellitus" are also shown, albeit in a darker shade of green, indicating lower frequency but still relevant in the context of the research. The wide distribution of topics such as "socioeconomics," "epidemiology," and "chronic disease" suggests that the primary health care literature covers a wide range of aspects that are not limited to the provision of health services, but also considers external factors that affect public health.

Figure 1 network visualization



Viewer

DISCUSSION

At the core of the visualization, the terms “primary health care” and “health care access” dominate, indicating that these two aspects are central to the discussion of primary health. This is in line with the principles espoused by the Alma-Ata Declaration that emphasizes the importance of universal access to primary health care as a key to achieving health for all (Organization, 2003). Widespread access and high quality of care in primary health care have been shown to be essential in preventing disease, managing chronic conditions, and improving the quality of life of populations. Studies by (Alkmim et al., 2012; Bradford et al., 2016) have shown that the integration of technology, such as telehealth, can improve this access, especially in remote and rural areas. Socioeconomic and Epidemiological Factors The analysis also shows the importance of socioeconomic and epidemiological factors in the context of primary health care.

Aspects such as “poverty,” “migration,” and “socioeconomics” are often associated with disparities in access to and quality of health care. Research in this context reflects that social determinants of health significantly influence health outcomes, and therefore need to be a focus in public health research and policy. Integration of health services with broader social and economic strategies may help address some of these challenges, as discussed by Bouis (2003) in the context of nutrient fortification Chronic Disease Management and Continuing Care Chronic diseases such as “diabetes mellitus,” “cardiovascular disease,” and “chronic disease” are also a focus in the literature. Chronic disease management is a particular challenge in primary health care systems, given the need for long-term care and a holistic approach that includes lifestyle changes and regular monitoring. Initiatives such as patient education and integrated care programs identified in Wakerman et al.’s (2019) study have shown effectiveness in reducing the burden of chronic disease and improving patients’ quality of life.

Health Care Personnel Education and Training. In line with the issues of accessibility and quality of care, the importance of “health care personnel” and “leadership” in research indicates that well-trained health workers and effective leadership are key factors in the success of primary health care. A study by Lehmann et al. (2008) highlighted the importance of attraction and retention strategies for health workers in remote areas as a critical aspect in strengthening the health system in these areas Technology and Innovation in Primary Health Care. The importance of technological innovation, reflected in the discussion of “telehealth” and “IoT,” shows great potential in transforming primary health care. These advances not only improve accessibility but also effectiveness in the diagnosis and management of diseases. As illustrated by the study by Sood & Mahajan (2017), the application of IoT-based sensors in health care management offers new opportunities for disease monitoring and timely interventions.

CONCLUSIONS AND RECOMMENDATIONS

The bibliometric analysis conducted shows that primary health is a highly complex and interdisciplinary topic, encompassing aspects ranging from access and disease management to socioeconomic influences and technology implementation. The depth and diversity of themes emerging in the literature emphasize the importance of an integrated approach to health policy planning and implementation. To achieve optimal health outcomes across populations, it is critical to develop and implement strategies that not only improve access to primary health services but also address social determinants of health, strengthen health workforce education and training systems, and leverage innovative technologies. This study thus offers valuable insights that can help policymakers, practitioners, and researchers design more effective interventions and more responsive policies for the future of primary health care.

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