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COMPREHENSIVE APPROACH OF HOSPITAL ROLE IN MANAGING NON-COMMUNICABLE DISEASE

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ABSTRACT

Health problems classified as non-communicable diseases (NCDs) are those that cannot be spread from one person to another directly. With 41 million fatalities annually, or 71 percent of all deaths globally, these illnesses rank as the leading cause of death and disability worldwide. 15 million individuals between the ages of 30 and 69 die from non-communicable diseases (NCDs). The most common cause of NCD fatalities is cardiovascular disease, which is followed by cancer, respiratory conditions, and diabetes. Hospitals are crucial to the management of non-communicable diseases (NCDs) in a number of ways, including palliative care, treatment, screening, and detection. The purpose of this study is to examine hospitals' involvement in NCD management. The scoping review technique, a methodical approach and selection procedure, is employed in this study. The last ten years' worth of publications from national and international databases, including PubMed, Scopus, and Ebsco/Springer, are searched for literature sources. According to the study's findings, hospitals, as health service institutions, play a part in global health diplomacy (GHD), or a negotiated process of collective action for global health. This includes three types of diplomacy: informal diplomacy, which takes the form of interactions between international public health actors and their partners, such as officials from the host country, non-governmental organizations, private businesses, and the community, and core diplomacy, which takes the form of formal negotiations between countries. Multi-stakeholder diplomacy is defined as talks between countries and other actors that don't always result in agreement.

KEYWORDS *Non-comunicable disease, Hospital management, Hospital role*

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INTRODUCTION

Non-communicable diseases (NCDs) are illnesses that cannot be spread by direct contact. Chronic diseases, or NCDs, are brought on by unhealthy lifestyle choices including drinking alcohol, smoking, eating fast food, and engaging in low-intensity exercise. NCDs inherited from parents as well. A number of ailments are included in this category, including diabetes mellitus, heart disease, stroke, cancer, Parkinson's, osteoarthritis, osteoporosis, cataracts, Alzheimer's, and diabetes mellitus. While there are certain infectious diseases, such as parasitic disorders where the parasite's life cycle does not entail direct host-to-host transmission, most non-communicable diseases are either acute or chronic and are not contagious. Cardiovascular disease, chronic respiratory diseases, diabetes, and cancer account for seven of the top ten causes of death globally and are the main causes of sudden mortality from NCDs (Wang & Wang, 2020).

Non-communicable diseases are characterized by genetic, lifestyle, or environmental causes, rather than viruses or bacteria, and they result in long-term health problems that require long-term treatment and care, such as lifestyle changes or medications. These diseases are the number one cause of death and disability worldwide with 41 million lives lost each year, which is 71 percent of all deaths worldwide. 15 million people aged between 30 and 69 years die from non-communicable diseases, with cardiovascular disease being the leading cause of NCD death, followed by cancer, respiratory disease, and then diabetes. 71 percent or 36 million people died from non-communicable diseases in 2020. 80 percent of these deaths occurred in low-income countries. Then 35 percent of the diseases that emerged included heart disease, 12 percent cancer, 12 percent COPD, 6 percent diabetes, and 15 percent due to other diseases (WHO, 2021). This prompted the birth of a cross-country agreement on strategies for preventing NCDs worldwide. In developing countries, PTM has become a strategic issue and is included in the 2030 Sustainable Development Goals (SDGs) agenda, making it a development priority.

In Indonesia, infectious diseases and non-communicable diseases are a double burden on health midwives due to changes in disease patterns. The disease pattern changes due to changes in the environment, community behavior, demographic transition, technological developments, socio-cultural status, and social inequality (Naghavi et al., 2020). This double burden is supported by data on the increase in the number of NCD risk factors including blood sugar levels, blood pressure, obesity, unhealthy diet, lack of physical activity and exercise, and excessive cigarette and alcohol consumption. Based on data from the 2020 Riskesdas, NCDs are also related to hearing loss data. The national prevalence of hearing loss is 2.6 percent. Based on the results of the Rapid Assessment of Preventable Blindness RAAB study, the blindness rate of the Indonesian population aged 50 years and over is 1.7 to 4.4 percent. Of all sufferers, the prevalence of hearing loss nationally is 2.6% and the prevalence of hearing loss is 0.09%. Based on the results of the Rapid Assessment of Preventable Blindness (RAAB) study, the blindness rate in the population aged 50 years and over in Indonesia ranges from 1.7% to 4.4%, dominated by cataracts. Meanwhile, the 2020 Basic Health Survey (Riskudas)

stated that the prevalence of disability in the population aged 18 to 59 years was 22 percent (*Undang-Undang No.2 Tahun 1989 Tentang Sisitem Pendidikan Nasional*, n.d.).

Hospitals play an important role in the management of non-communicable diseases (NCDs) through various aspects, including detection, screening, treatment, and palliative care. Hospitals are responsible for providing specialized care and follow-up care for NCD patients, such as heart and blood vessel diseases, cancer, chronic respiratory diseases, and diabetes. They also collaborate with primary health care facilities to carry out early detection and treatment as soon as possible, thereby reducing the need for more expensive care in advanced health facilities and improving patient outcomes (Patidar et al., 2017). Investing in NCD management is urgent to achieve global targets, such as a 25 percent relative reduction in the risk of premature death by 2025 and a one-third reduction in all cases by 2030. Hospitals contribute to these targets by providing high-impact, essential NCD interventions, which can be delivered through a primary health care approach to strengthen early detection and timely treatment. Hospitals also play a role in addressing the socio-economic impacts of NCDs, which can threaten sustainable development and hinder poverty alleviation initiatives in low-income countries. By providing comprehensive services and promoting interventions to prevent and control NCDs, hospitals contribute to reducing the burden of these diseases on individuals and society (Ang et al., 2013).

In addition, hospitals collaborate with other sectors, such as finance, transportation, education, agriculture, planning, and others, to reduce the risks associated with NCDs and promote interventions to prevent and control them. This collaborative approach is essential to address the complex nature of NCDs and ensure that patients receive the best care. The purpose of this study is to analyze the role of hospitals in the management of non-communicable diseases.

The aim of this research is to enhance understanding of hospital role in non-communicable diseases (NCDs).

RESEARCH METHOD

This study uses the scoping review method, which is a systematic approach and selection process. Literature sources are searched from national and international databases such as PubMed, Scopus and Ebsco/Springer published in the last 10 years (2015-2024).

Tabel 1. *Search Statement*

Database	***Search Statement***
PubMed	*Non communicable chronic disease*" AND "*hospital role*" dan "*hospital task*" DAN "*Non-communicable*" **Limited**: 2015-2024, *Free Full Text, Randomized Control Trial, Cohort, Case Control*.
Scopus	*Non communicable chronic disease*" AND "*hospital role*" dan "*hospital task*" DAN "*Non-communicable*"

	Limited: 2015-2024, *Free Full Text, Randomized Control Trial, Cohort, Case Control*.
Ebsco/Springer	*Non communicable chronic disease*" AND "*hospital role*" dan "*hospital task*" DAN "*Non-communicable*" **Limited**: 2015-2024, *Free Full Text, Randomized Control Trial, Cohort, Case Control*.

The selection and organization of articles are carried out after searching the articles in the database using the Zotero bibliographic software. The articles are grouped into folders according to their database of origin. Then all articles are screened to remove the same articles. After that, the articles are filtered by checking the title and abstract comprehensively and whether the articles meet the inclusion and exclusion criteria. Articles that meet the inclusion criteria of this scoping review will be stored in a folder named 'appropriate', while articles that do not meet the objectives of this scoping review are stored in a folder named 'not appropriate'. Furthermore, the appropriate articles are read thoroughly and the article is reviewed. After the article review is carried out, the relevant articles are included in a folder named 'synthesis'. Each stage of the selection of this article was carried out by the author and one of the author's friends who carried out each step as the author did to avoid bias. The results of the search will be presented in full in the final report and in accordance with the Reporting Items for Systematic Reviews and Meta-Analysis Protocols (PRISMA-P) guidelines.

Articles contained in the 'synthesis' folder have gone through an article quality assessment process using the Joanna Briggs Institute's quality assessment tools and for article mapping analysis using the VOSviewer bibliometric software. The Joanna Briggs Institute's quality assessment tool questions used in the article review vary depending on the research design used by each article being reviewed. Examples of Joanna Briggs Institute quality assessment tool questions are shown in the Appendix. The review process was carried out by the author and one of the author's friends. The results of the review are then presented in the form of an extraction. The use of the VOSviewer bibliometric software aims to map and group the keywords contained in each article.

RESULT AND DISCUSSION

The results of the search and selection of articles are presented in Figure 1. A total of 478 articles were obtained from the search results. Of these, 59 articles were duplicates. Of the remaining 419 articles, title and abstract screening was carried out which resulted in 410 articles being excluded. Of the remaining 9 articles, 4 articles did not meet the inclusion criteria. Of the remaining 5 articles, their eligibility was assessed, none were excluded. The methodological quality of the 5 articles was assessed, 2 articles were studies of the role of hospitals, 2 articles on non-communicable diseases and 1 article on literature review.

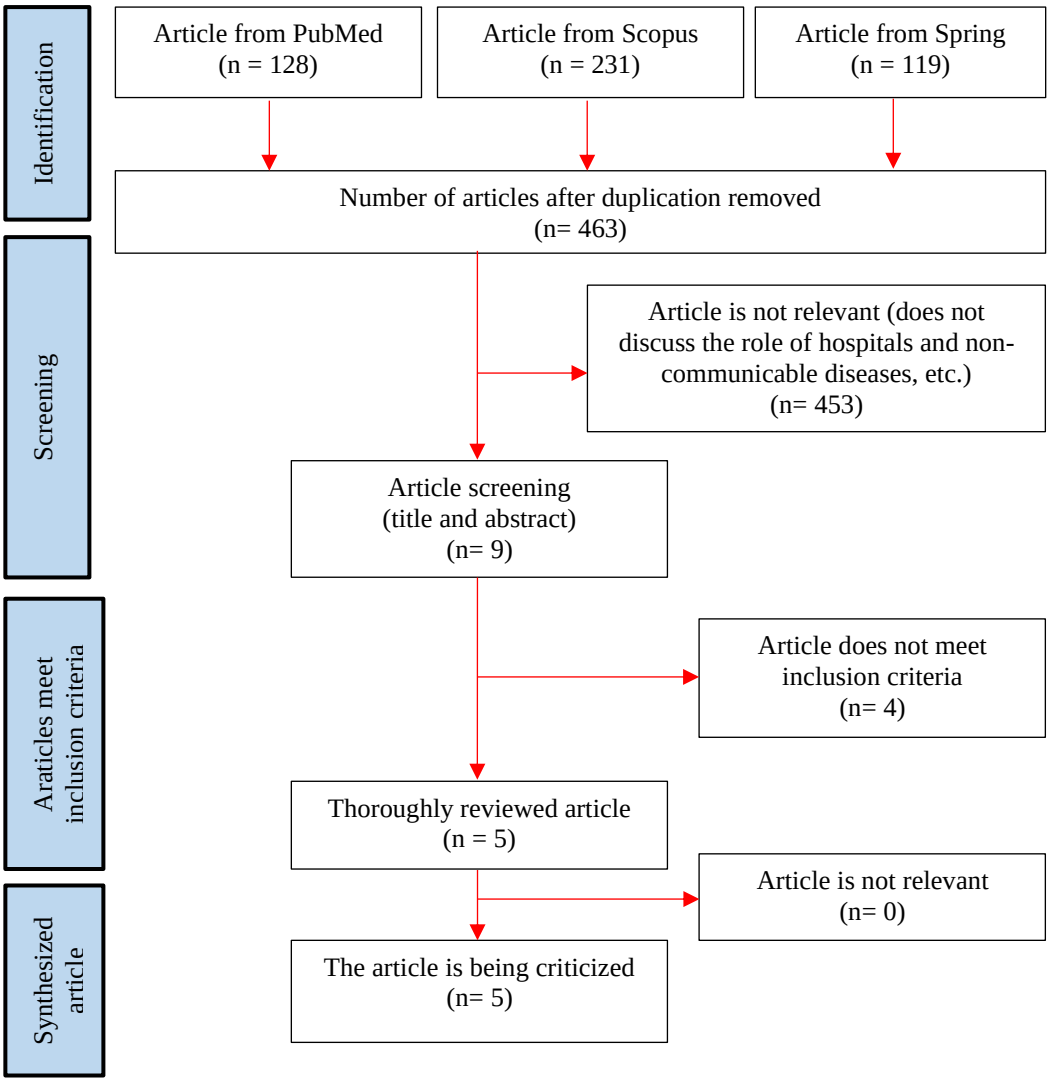

Figure 1. PRISMA Diagram

Hospitals are health service institutions that provide comprehensive individual health services that provide inpatient, outpatient, and emergency services. Comprehensive health services are health services that include promotive, preventive, curative, and rehabilitative services.

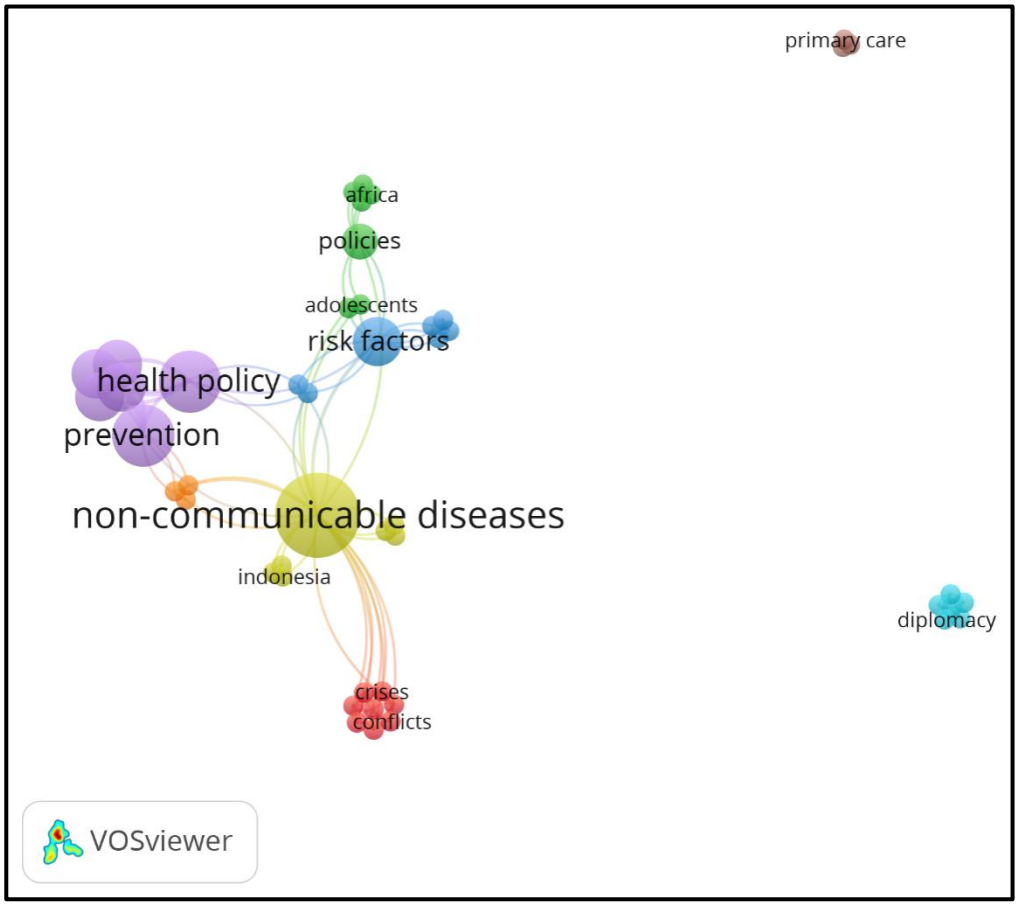

Figure 1. Matters Related to Hospitals

Matters related to the role of hospitals can be seen in Figure 1. Based on the analysis of VOSviewer, the role of hospitals is broadly related to health determinants, health equity, health policy, multisectors, non-communicable diseases and prevention. Therefore, hospitals must be able to provide their role optimally in improving public health and preventing the spread of disease.

Global Health Diplomacy (GHD) assign task to Hospital as health service institution to lead role NCDs management health in rule policy and governance (Fidler, 2018). This concept has received significant attention from key global health authorities including World Health Organization (WHO), ministry of health, ministry of foreign affairs, and academics. GHD has health foreign policy concern, GHD basically dived into three categories based on the interactions of actors around global public health issues, namely core diplomacy, bilateral policy agreement, multi-stakeholder diplomacy, and informal diplomacy. which is the interaction between international public health actors and their partners, including host country officials, non-governmental organizations, private companies, and communities. Core and multi-stakeholder diplomacy in global health requires the effective use of a complexes technical expertise, legal knowledge, and diplomatic skills (Katz et al., 2021).

In order to effectively address public health and foreign policy objectives, a global health strategy must identify and engage important actors and actors at all levels, coordinate action from a variety of partners and stakeholders, and act at all levels as practiced by health attaches (Brown et al., 2018). A political framework for bettering target population health and strengthening diplomatic ties between participating nations is provided by health diplomacy. Governments that provide health-related aid to nations with which they aim to forge closer diplomatic ties benefit from the development of more meaningful connections with their citizenry (Suleman et al., 2019). This can be accomplished in a number of ways, including by supplying public funds, guaranteeing the availability of necessary medications, making investments in medical facilities or equipment, and educating healthcare professionals. In order to battle specific diseases like HIV/AIDS, malaria, and tuberculosis, significant investments have been made in Southeast Asia, South America, and Sub-Saharan Africa. On the other hand, the burden of chronic illness in developing nations, as well as public health infrastructure, training, and education, have received very less support.

Non-communicable disease inflict 41 million people die which equivalent of all death globally. Evidences suggests that the increasing burden of NCDs happen in low- and middle-income countries (LMICs) (Naghavi et al., 2020). Eighty percent of NCD-related mortality and two thirds of NCD-related disability globally occur in poor nations. More precisely, NCDs mostly impact individuals in developing nations who are in their thirties, the most productive working age, and represent a severe risk to both economic growth and public health. The WHO Global Action Plan for NCD Prevention and Control 2013–2020, the UN High-Level Meeting on NCD Prevention and Control, the WHO Global NCD Monitoring Framework, and the acknowledgement of NCDs as a significant obstacle to sustainable development are just a few examples of the broad international support needed to prevent NCDs (Pearlman et al., 2021).

Although the support for NCD prevention and control is positive, multi-stakeholder collaboration models must be developed in order to address the global burden of NCDs due to the absence of international funding for these activities. One of the main issues facing health systems is the prevention and control of non-communicable diseases (NCDs). This issue necessitates political and technical solutions, such as global health diplomacy (GHD), which involves the involvement of numerous actors and stakeholders. Diplomatic discussions between state representatives are the first step in developing policy interventions for NCD prevention, control, and health (Mackey, 2020). The necessity for diplomats with an understanding of health concerns and the ability to negotiate effectively in a multinational foreign policy context is further highlighted by health risks, including those that affect national security, the security of the world's medication supply, and the growth of chronic noncommunicable diseases (NCDs). In order to address the multinational nature of this issue, coordinated strategies and diplomatic initiatives must be developed. This is due to the lack of attention given to NCDs by various sectors at the national and international levels, including the lack of funding for NCD research, prevention, and control by governments and non-governmental organizations (NGOs) (Blouin, 2022). Hospitals serve as a platform for global

health diplomacy, assisting public and private policy makers in their efforts to devise and carry out coordinated responses to global health issues (Fidler, 2018).

This study evaluates the body of research on primary healthcare systems' preparedness for noncommunicable diseases (NCDs). The study's principal conclusions include the following: primary health care systems lack the necessary resources to effectively prevent and manage noncommunicable diseases (NCDs), and the extent of this need is not well known. From the standpoint of the provider, the preparedness of the health system was assessed, with a particular emphasis on the accessibility of resources and infrastructure (such as medications, basic amenities, MPK & T) as outlined in the WHO SARA methodology or the WHO PEN intervention. This could have limited the scope of the "systems thinking" approach, which is the fundamental philosophical framework that integrates different components and their interconnections and interdependencies to operate as a system. The "systems thinking" approach—the fundamental philosophical tenet that integrates diverse elements and their interactions and interrelationships to function as a system—may have become more limited as a result. A well-functioning and inclusive health system must take into account the people dimension, or service users, which is a factor that is glaringly absent when looking at health systems from this limited perspective. The broad adoption of the WHO health systems framework and its expanded use in individual research provides one justification for approaching health systems predominantly from a supply-side perspective. In recent years, the "building block" approach has become the most widely used health system methodology worldwide, bolstering the current trend of supply-side health system assessment. Therefore, further research is needed to fully understand the demand-side viewpoint of health system preparation for NCDs. Subsequent investigations may concentrate on the demand-side elements of health system preparedness, including community traits and related factors required to establish efficient and all-encompassing health systems in response to NCD outbreaks.

Countries with significant health systems have seen insufficient supply-side reactions to medications, technology, buildings, equipment, medical experts, health information, and leadership and management. Inadequate funding obtained via local and international routes and a lack of NCD-related policy goals are to blame for underdeveloped health systems (Allen, 2017). Hospital health care is primarily focused on diagnosis and treatment, particularly in terms of health system preparedness for severe NCDs. But there is still a lack of research and emphasis on readiness for health promotion and preventive interventions, palliative care, screening, risk factor identification, self-management, and health education. As a result, NCD prevention and control methods have a strong emphasis on primary and secondary NCD prevention (Mamudu et al., 2021). Key NCDs risk factors, such as tobacco use, salt consumption, physical inactivity, hazardous alcohol use, and poor diets, are the focus of preventive and health promotion initiatives. These initiatives highlight how these risk factors may be addressed at the primary health care level to improve NCD outcomes (Ezzati et al., 2020). When preventive and promotional services are sufficiently offered at the primary health care level, the potential of a well-prepared health system is fulfilled. Hospital-level health system

response to NCDs may not have reached its full potential due to a lack of a comprehensive prevention and management strategy. Developing a more comprehensive study of community traits and related variables could be necessary to create a health system that is more effective and adaptable to NCDs (Olmen et al., 2021).

CONCLUSION

Non-Communicable Diseases (NCDs) are the leading cause of global mortality, imposing a significant burden, particularly in low- and middle-income countries. Hospitals play a crucial role in managing NCDs through a comprehensive approach that includes health promotion, prevention, early detection, treatment, palliative care, and patient education. This study reveals that primary healthcare systems face resource and infrastructure limitations in effectively addressing NCDs.

Global Health Diplomacy (GHD) highlights the importance of multi-stakeholder collaboration in developing inclusive and sustainable health policies. Hospitals act as strategic platforms to strengthen health diplomacy through core, bilateral, and multi-stakeholder engagements. However, the lack of funding and attention to NCD prevention remains a major challenge requiring political and technical solutions.

This research emphasizes the need for systemic approaches that include demand-side dimensions, such as community characteristics and related factors, to build a more inclusive healthcare system. Hospitals must expand their focus beyond diagnosis and treatment to incorporate prevention, health promotion, and community education to mitigate NCD risks. Future research is necessary to integrate demand-side and supply-side perspectives into healthcare systems to enhance preparedness for comprehensive NCD management.

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