



The End of the United States Naval Medical Research Unit-2 Project in Indonesia From a Cooperative Security Perspective

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Abstract

The presence of NAMRU-2 in Indonesia has created pros and cons in the community. NAMRU-2, or Naval Medical Research Unit-2, is a United States military medical research unit that operates in various countries, including Indonesia—several pro and con arguments related to its presence in Indonesia in realizing cooperation security. This study aims to investigate NAMRU-2's role in fostering cooperative health security in Indonesia and examine why the government chose not to renew its cooperation between NAMRU-2 and Indonesia. This study used a qualitative research method with a descriptive approach. The data obtained in this study were obtained from literature studies and interviews. Then, the data validity process is carried out using data triangulation so that the data obtained can provide strong support for the research. The results show that NAMRU-2 in Indonesia does its job well in carrying out the mission of Military Operations Other than War in medical operations. NAMRU-2 successfully dealt with health threats in Indonesia. However, the cooperation of NAMRU-2 in Indonesia failed to realize the security of cooperation. With NAMRU-2 in Indonesia, there is still tension and a lack of trust in the United States government. In addition, the presence of NAMRU-2 made the Indonesian people feel unsafe. After the end of NAMRU-2 in Indonesia, Indonesia has not been independent regarding health security. In this regard, it can be concluded that the existence of NAMRU-2 in Indonesia cannot realize cooperative security because there are still tensions between Indonesia and the United States and the lack of trust of the Indonesian people in the United States. This is not in accordance with the definition of cooperative security.

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INTRODUCTION

The presence of the Naval Medical Research Unit-2 (NAMRU-2) in Indonesia did not begin as an initiative of the United States but rather in response to a request from the Indonesian government itself. A notable collaboration exists in the health sector, referred to as Cooperative Health Security, in which The United States has established a long-term strategy to enhance health security via bilateral partnerships. Governments across the globe, including the United States, are instrumental in tackling global health threats through the establishment of robust healthcare systems, the identification of diseases, and the management of health emergencies. The United States engages with nations via various global health programs and initiatives, including CDCS (Country Development Cooperation Strategy) and USAID (United States Agency International Development), emphasizing strengthening health security capacities worldwide. The United States is dedicated to working alongside diverse stakeholders to enhance both national and global capabilities in the fight against infectious and non-communicable diseases (Purwanto, 2008).

Health collaboration between Indonesia and the United States encompasses combating the COVID-19 epidemic, training healthcare personnel, facilitating research exchanges, developing health infrastructure, and preventing infectious and non-communicable diseases. NAMRU (Naval Medical Research Unit) is a prominent research facility with an extensive history in medical research (Purwanto, 2008). NAMRU-2 has functioned in several Southeast Asian nations, notably Indonesia. Founded in Indonesia in 1970 under a Memorandum of Understanding between the Indonesian government and the United States, NAMRU-2 was designed to facilitate research and prevention of lethal infectious illnesses in Indonesia. Nevertheless, the cooperation was discontinued in 2005 for several factors, such as Indonesia's dissatisfaction with the research results of NAMRU-2 and its dependency on the medical technology it provided.

Research by Hendrapati (2014) highlights the legal concept of "persona non grata" in the diplomatic context related to the NAMRU-2 case in Indonesia. Researchers and personnel at NAMRU-2, United States citizens, were given immunity and diplomatic privileges, including exemptions from taxes and duties, which were perceived as harmful to Indonesia. Research by Ear (2014) explained that it explores the challenges to efficient surveillance of infectious diseases in developing nations, including Cambodia and Indonesia. The paper highlights several aspects that are essential constraints in disease surveillance systems. These include inadequate staff management, a lack of compensation for animal loss, low salaries, and dependence on donors.

NAMRU-2 conducts disease surveillance and research in Southeast Asia, focusing on emerging infectious diseases. Their mission is early detection to prevent illness transmission via hospital-based research, epidemic investigations, and antimicrobial resistance monitoring. NAMRU-2 offers serological testing for Navy personnel deployed abroad, pointing out the necessity of addressing both technical and human factors in surveillance systems and the importance of technology transfer to enable resource-limited countries to manufacture their vaccines. Public sentiment on the NAMRU-2 project in Indonesia has both advantages and disadvantages. Many deviations in Health Cooperation between the United States and the Indonesian government are considered detrimental to Indonesia because of the diplomatic immunity of NAMRU-2 employees from The United States (Devita & Olivia, 2014).

Many problems occur, such as inequality of access, discrimination, and lack of program efficiency (Budiono et al., 2022). The arrival of NAMRU-2 in Indonesia did not improve Indonesia's health security. Siti Fadilah Supari, Minister of Health of Indonesia,

stated that NAMRU-2 has not produced anything concrete for the Indonesian people. The introduction of NAMRU-2 in Indonesia did not enhance the nation's health security. Siti Fadilah Supari, the Minister of Health, stated that NAMRU-2 has not yielded any tangible benefits for the Indonesian populace. The viruses researched by NAMRU-2 at that period continue to evolve and mutate to the present day. Cooperation with NAMRU-2 ended in 2009, and Indonesia opted not to renew its cooperation with The United States Navy.

The urgency of this research lies in significant problems at NAMRU-2 in Indonesia, where the presence of NAMRU-2 is insufficient to handle security issues in Indonesia. In addition, there is a lack of trust in the Indonesian government in the presence of NAMRU-2 in Indonesia. In a previous research by Aziza (2013) entitled "The Indonesian Government's Decision to Refuse to Extend Cooperation with NAMRU-2," it was found that the diseases handled by NAMRU-2 could provide handling of the actions that needed to be taken against prevention and effective treatment. Furthermore, based on research by Devita & Olivia (2014) entitled "United States Interests in Maintaining the Naval Medical Research Unit Two (NAMRU 2) project" shows that NAMRU staff sent to Indonesia through the MoU with the contents of the agreement privileges in the form of diplomatic immunity, free from taxes and free inspection of luggage, and can conduct research without having to be suspected so that this causes suspicion that they are carrying out intelligence activities in Indonesia. However, those studies have not elaborated on the topic from the perspective of cooperative security. Therefore, this study aims to determine the role of NAMRU-2 in fostering health security cooperation in Indonesia and examine why the government chose not to extend cooperation between NAMRU-2 and Indonesia from the cooperative security perspective. It is hoped that this research can provide solutions to unresolved problems.

METHODS

The research method used in this study employs a qualitative approach to analyze phenomena holistically. Qualitative research design is a study approach whereby, based on what the subject of study feels from a holistic perspective, the researcher undertakes to find out how phenomena take place through depictions such as sentences and language that are real using all forms of scientific methods (Moleong, 2018).

The Naval Medical Research Unit-2 project in Indonesia focuses on cooperative security; this research uses a descriptive approach to gather further information about the initiative. Primary data are collected using purposive sampling, including direct interviews with relevant respondents. Additionally, secondary data is obtained from research papers, books, and related journals. To ensure data validity, the researcher applies data triangulation techniques. The data triangulation technique can help to confirm the data sources obtained (Miles et al., 2020). Data analysis is carried out using techniques such as data reduction, data presentation, and drawing conclusions aimed at presenting results systematically and meaningfully. Three techniques for analyzing qualitative data include data reduction, data presentation, and conclusion drawing. This procedure continues throughout the inquiry, even before data is collected (Miles et al., 2020).

Informants in this research are Navy Colonel (Medical) dr. Rudi Pandapotan Napitupulu, SP. B-KBT, the Head of the Fleet I Command Health Service at the Indonesian Navy Institution; and Siti Fadilah Supari, the former Minister of Health of the Republic of Indonesia. The informants of this research are expected to answer the relevance of research related to NAMRU-2 in undergoing cooperation in the field of security and

health with Indonesia and know the reasons why the Indonesian government should not continue this collaboration with NAMRU-2.

RESULT AND DISCUSSION

Cooperative Security

Cooperative security emerged as a concept applied in response to the challenges arising from international conflict and regional instability and gained international recognition towards the end of the Cold War (Mihalka, 2005). The idea of international relations in the first great debates between Liberalism and Realism describes war as a justification for a country's foreign policy. The concept of cooperative security aims to recognize that many European countries prioritize regional stability over planning and thwarting attacks. In addition, the main objective of cooperative security is basically to prevent the emergence of threats to national security (Rosy, 2020).

According to Mihalka (2005), "a process whereby countries with common interest work jointly through agreed mechanisms to reduce tensions and suspicion, resolve or mitigate disputes, build confidence, enhance economic development prospects, and maintain stability in their regions." So, Cooperative Security can be defined as a concept that encourages communication and consultation to create security, thus aiming to reduce tensions, foster confidence, enhance economic development opportunities, and maintain stability. Cooperative Security refers to regulating relations based on shared security values, where all parties have shared responsibilities as an international community. Richard Cohen conceptualizes the cooperative security model known as the "the Four Rings."

According to Mihalka (2005), cooperative security refers to a framework that unites a network of liberal democratic states into formal and informational alliances and institutions defined by a set of shared values and an open and functional economy. In this thinking, national security is associated with four rings of security rings, including (1) individual security, characterized by the promotion and protection of human rights in the context of broad boundaries and conditions; (2) maintaining overall peace and stability is the second circle, namely collective security; (3) mutual defense against external threats characterizes the third circle, namely collective defense; and (4) promoting stability, which can be actively interpreted as encouraging stability, using politics, information, economics, or the military. Using the "the Four Rings" model of thinking explained above, Richard Cohen explains how this concept can serve as a foundation for a peaceful future. To build peace and shared security, democratic states must be willing to work together and be able to expand their borders if necessary. This is what is needed by the cooperative security system.

Those explain how cooperative security is built and realized in collaboration. Cooperative security is established through mutual trust, open communication, and shared goals that address common challenges. It is achieved by fostering transparency, creating mechanisms for peaceful conflict resolution, and ensuring equitable benefits for all parties. Building cooperative security involves respecting each party's sovereignty while promoting interdependence, enhancing capacity-building efforts, and strengthening joint initiatives to achieve sustainable stability and long-term partnerships.

In the case study of NAMRU-2 in Indonesia, this agreement was initially agreed upon by both parties, with perceptions from each party. The reason the Indonesian government agreed to this cooperation was because the success of NAMRU-2 in treating these diseases was one of the strong reasons for the Indonesian government to continue

this cooperation. After all, NAMRU-2 provides the expertise and resources needed for research on tropical diseases that are common in Indonesia. Then, the United States government desires to enhance its national security interests in the Asian region through the NAMRU-2 medical facility in Jakarta, Indonesia. In addition, the United States needs virus samples in Indonesia to study in order to provide effective prevention against tropical diseases for its military personnel.

Establishment of Naval Medical Research Unit (NAMRU)

Naval Medical Research is vital to healthcare support for the United States Navy. Founded in 1850 by the United States Naval physician E.R. Congress obliged Squibb, via the Bureau of Medicine and Surgery (BUMED), to develop, produce, and test pharmaceuticals (Naval Medical Research Command, 2024). Research initiatives encompassed the mass standardization of ether and chloroform synthesis. In 1924, the Division of Medical War Planning of BUMED was established to analyze World War I, collect medical data, and devise plans for effective medical practices in future conflicts. The Naval Medical Research Unit No.2 (NAMRU-2) was founded in 1944 at the Rockefeller Institute in New York City, concentrating on tropical disease research. It broadened its activities to include branches in Guam, Taiwan, the Philippines, Ethiopia, Indonesia, Singapore, Vietnam, and Hawaii (Purwanto, 2008). Subsequent years saw the establishment of additional units such as NAMRU-1, NAMRU-3, NAMRU-4, and NAMRU-5 in diverse global locations, each focusing on certain domains of medical and dental research to enhance the health and preparedness of naval personnel. In 1998, the Naval Medical Research Institute (NMRI) ceased operations, transferring its responsibilities to the Naval Medical Research Center (NMRC). Numerous units under NMRC, such as NAMRU-1, NAMRU-4, and NAMRU-5, were eventually decommissioned (Naval Medical Research Command, 2024).

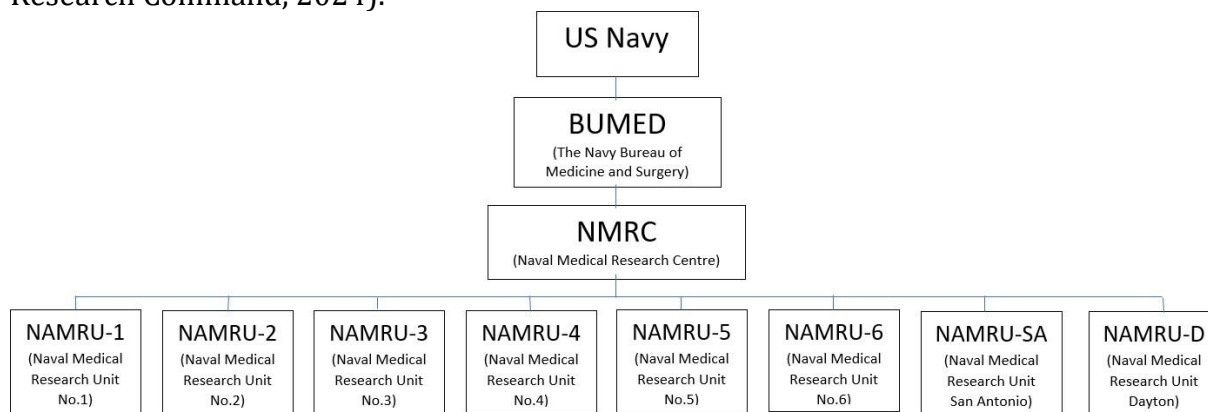


Figure 1. Organizational Structure of Naval Medical Research Unit (Naval Medical Research Command, 2024)

The Naval Medical Research Units (NAMRU-1, NAMRU-2, NAMRU-3, NAMRU-4, NAMRU-5, NAMRU-6, NAMRU-SA, and NAMRU-D) function under the supervision of the Naval Medical Research Center (NMRC), which does fundamental and applied biomedical research to address the requirements of the United States. Key areas of emphasis are infectious diseases, biodefense, military medicine, battlefield medicine, and spinal cord research. NMRC functions under the Bureau of Medicine and Surgery (BUMED), the principal office of The United States (Aziza, 2013). BUMED guarantees the health and preparedness of sailors, marines, their families, and retirees, both on land and at sea, under the direction of the Surgeon General of the Navy (Aziza, 2013).

NAMRU-2 in Indonesia

Since World War I, especially after World War II, the United States has changed its military policy by creating lines of defense far beyond its mainland. This policy aims to deny enemies access to United States territory by building military sites and increasing United States military presence in neighboring countries, including Panama, the Middle East, and the Asia-Pacific region (Purwanto, 2008). One result of this policy was the establishment of the Naval Medical Research Unit-2 (NAMRU-2) in Indonesia in 1968. NAMRU-2 operated as a military research institute led by the United States Navy in line with United States strategic interests in the Pacific region, where research on infectious diseases could assist in the development of global health policy and response to outbreaks (Devita & Olivia, 2014). The existence of NAMRU-2, a research unit belonging to the United States Navy, raises issues related to diplomatic immunity and the abuse of these rights by NAMRU-2 personnel. The Indonesian government issued *persona non grata* declarations against several members of NAMRU-2 in response to alleged law violations (Hendrapati, 2014).

NAMRU-2 functioned as a medical research center with high-level laboratory facilities in Jakarta, focusing primarily on parasitic, viral, enteric, and bacterial disease research. The laboratory facility is under the Indonesian National Health Research and Development Agency, which is part of the Indonesian Ministry of Health (Miller, 2001). In addition, NAMRU-2 was active in the research of newly emerging diseases in tropical regions such as Indonesia (Naval Medical Research Command, 2024). While NAMRU-2 had significantly contributed to medical research, its presence in Indonesia had not come without controversies. In 1998 and 1999, the Indonesian government tried to cancel cooperation with NAMRU-2, driven by the Defense Minister and the Indonesian National Armed Forces (TNI) Commander. The grounds for that move were concerns about sovereignty and national security, along with the requirement for transparency regarding activities carried out on Indonesian soil by any foreign agency. This debate peaked in the year 2000, when the Indonesian Minister of Foreign Affairs, Alwi Shihab, formally sent a cancellation letter for the 1970 MoU to The United States Ambassador to Indonesia (Purwanto, 2008).

Nevertheless, NAMRU-2 continued to operate with limited research until the end of 2009, when the Indonesian government officially closed NAMRU-2 and requested all personnel to leave Indonesia (detikNews, 2009). On the other hand, there are positive views regarding NAMRU-2's contributions to medical research and development in Indonesia. Local researchers involved in NAMRU-2 projects contend that this collaboration provided access to technology and resources that were difficult to obtain domestically while simultaneously promoting scientific partnerships between Indonesian and international scholars (Naval Medical Research Command, 2024). NAMRU-2 denotes a phase of military and medical cooperation between Indonesia and the United States, marked by political intricacies and contention. Although it substantially aided in preventing infectious illnesses in Indonesia, its presence prompted inquiries of sovereignty and openness related to foreign operations within the nation. The history of NAMRU-2 in Indonesia illustrates the intricacies of international relations concerning health and global security.

Indonesia and the United States Interests in the NAMRU-2 Project in Indonesia

Understanding and recognizing each party's interests in bilateral cooperation is crucial. As explained by Devita and Olivia (2014), every country has different, sometimes overlapping, interests, yet mutually beneficial agreements need to be reached to build

long-term collaboration. According to Devita and Olivia (2014), the presence of the Naval Medical Research Unit-2 (NAMRU-2) in Indonesia is an example of cooperation that is advantageous for Indonesia and the United States. By establishing institutions such as the World Health Organization (WHO) and the Naval Medical Research Unit (NAMRU), the United States, well recognized for its preeminence, improves its position in national and international health. NAMRU-2, one of Indonesia's research institutions, was established to advance diplomacy and the United States' medical research interests in the Central Pacific region, focusing on infectious diseases to protect Marines in tropical areas (Devita & Olivia, 2014). Characterized by its diversified culture, important geographical position, and substantial population, Indonesia encounters difficulties in addressing disease epidemics. NAMRU-2's presence aids Indonesia in augmenting health capacity, accessing cutting-edge research, and advancing health infrastructure. This partnership enhances public health in Indonesia while contributing to global initiatives aimed at controlling infectious diseases and advancing overall global health (Naval Medical Research Command, 2024).

NAMRU-2 Research Activities in Indonesia

In its operations in Indonesia, NAMRU-2 has conducted various research and activities focused on infectious diseases and public health. According to NAMRU-2 Researchers (Purwanto, 2008), research in malaria and other parasitic diseases includes the production of *P. vivax* sporozoites for vaccine development and providing microscopic and entomological training for malaria officers in Purworejo. This program also assisted in malaria vector surveys and the development of EWORS in the Health Office after the project concluded. Additionally, research on *P. falciparum* in vitro culture has been beneficial, laying the groundwork for vaccine development while providing specialized training to local staff (Lederman et al., 2002). The investigation of the effectiveness of falciparum malaria treatment with CQ+S/P+PQ not only provides scientific advantages for Indonesian researchers but also underscores the presence of Chloroquine resistance, which requires careful consideration of dosing (Jones et al., 1994).

NAMRU-2 has participated in pre-vaccination surveys for typhoid fever, cholera, and shigellosis in North Jakarta, thereby improving the competencies of local researchers (Purwanto, 2008). NAMRU-2 has conducted active surveillance of hantavirus in Serang and prospective studies on chikungunya and dengue hemorrhagic fever in Indonesia, thereby elevating the country's international standing through publications (Purwanto, 2008). Investigations into emerging infectious diseases have concentrated on risk assessments for Singapore Armed Forces personnel stationed in East Timor and Brunei Darussalam, alongside retrospective analyses of geographic disparities in hepatitis viruses, leptospirosis, and rickettsiosis in Laos, thereby elucidating the significance of leptospirosis surveillance in Southeast Asia (Laras et al., 2002).

NAMRU-2 has also investigated outbreaks of hepatitis B in Lampung, dengue fever in Merauke, and diphtheria in Kebumen, helping the Indonesian government identify causes and prepare responses (Purwanto, 2008). However, there are criticisms about Indonesia's dependency on the infrastructure and research dominated by NAMRU-2, sending specimens abroad, and publications are also often first-authored by NAMRU-2 authors, thus reducing the autonomy of local research (Purwanto, 2008).

Overall, the existence of NAMRU-2 has significantly contributed to enhancing Indonesia's research capability, specifically in infectious illnesses, and its access to medical technology and information. However, there is still a significant amount of work

to be done to enhance the national research infrastructure to protect Indonesia's autonomy and ensure its continued viability in the face of global health challenges.

Advantages and Disadvantages of the NAMRU-2 Project in Indonesia

The partnership between the National Health Research and Development Agency of Indonesia (Badan Litbangkes-Kemenkes RI) and NAMRU-2 in Indonesia has enhanced the capability and reactivity of health authorities to various health concerns, especially infectious diseases and outbreaks. For instance, Badan Litbangkes was able to confirm SARS cases in Indonesia in 2003 with the support of NAMRU-2 in virus genetic identification and the development of necessary diagnostic competencies to stop the spread of the disease (Suwandono et al., 2010). These capabilities continue to be instrumental in ongoing outbreak prevention and control efforts. NAMRU-2 has also actively supported malaria outbreak research in different regions of Indonesia, among others, in Kota Baru, Kepulauan Seribu, and Sukabumi, in cooperation with the Directorate General of Disease Prevention and Control-P2M and Public Health Laboratories of Indonesia. They have assisted not only in case detection and management but have also significantly contributed to developing disease control strategies at the field level (Purwanto, 2008). In addition, NAMRU-2 participated in the monitoring of H5N1 avian flu in eight provinces of Indonesia by using RT-PCR technology for rapid virus detection in its Bio Safety Level 3 laboratories, directly contributing to the containment of viruses (Suwandono et al., 2010).

The presence of NAMRU-2 has made quick and thorough investigations of potential outbreaks possible with its advanced laboratory capability and strong international networks, says Edhie Sulaksono, a researcher at the Center for Infectious Disease Research and Development (Suwandono et al., 2010). There are, however, concerns that it creates a dependency on the facilities and infrastructure owned by NAMRU-2, decreasing the pressure to develop independent national research capacity in Indonesia, such as the much-needed Bio Safety Level-3 facilities. It has also been criticized for exporting specimens abroad and not participating in joint research development and coordination by Badan Litbangkes. This creates an imbalance in scientific publications, where few Indonesian researchers serve as primary authors in publications generated by NAMRU-2, thus potentially undermining local credibility in research findings (Putnam et al., 2007). Overall, NAMRU-2's presence in Indonesia has significantly enhanced research capacity and response to infectious diseases. However, existing challenges underscore the need to further develop independent national capabilities in facing global health challenges. Steps are necessary to increase local involvement and participation in research development, as well as strengthen the laboratory infrastructure needed to support sustainable research efforts in the future

Linkages between Indonesia and the United States on the NAMRU-2 Project

Diplomatic relations between the United States and the Indonesian government in the health sector first began in 1968. Indonesia experienced a worrying outbreak of plague (bubonic plague), yet lacked the human resources, technology, or sufficient funds to handle the situation effectively. At that time, the Minister of Health, Professor G.A Siwabessy, requested assistance from The United States through The United States Ambassador to Indonesia, F.J. Galbraith, who had close relations with the Indonesian government at the time (Aziza, 2013). The United States sent NAMRU-2, based in Taiwan, to help address the outbreak. In 1970, a Memorandum of Understanding (MoU) between the Indonesian government and the United States was signed, establishing official

cooperation regarding the presence of NAMRU-2 in Indonesia. Professor G.A Siwabessy signed this MoU on behalf of the Indonesian government and the United States Ambassador to Indonesia, F.J. Galbraith. NAMRU-2, a part of the United States Navy's Naval Medical Research Center, was tasked with conducting research on infectious diseases in tropical regions, particularly in Southeast Asia, aiming to reduce health impacts and enhance the United States military readiness through research on prevention and effective treatment of relevant diseases (Aziza, 2013).

Historically, infectious diseases have posed a serious threat to the United States military personnel, surpassing the dangers of combat itself. Examples include influenza, typhoid during World War I, malaria, and dengue fever during World War II, affecting military performance and readiness. NAMRU-2 was established to minimize these risks by focusing on epidemiology and research on infectious diseases, supporting military missions and humanitarian interests. NAMRU-2's establishment in Indonesia was significantly shaped by the nation's strategic location and geographic variety, fostering an optimal setting for medical research on tropical diseases. This relationship enhanced the United States' military readiness while offering Indonesia significant health support and laboratory infrastructure. It corresponded with initiatives to comprehend and tackle public health challenges impacting both nations (Nevgloski, 2018). Although its presence has yielded considerable advantages, there has been criticism concerning reliance on NAMRU-2 facilities, which may reduce the impetus to develop autonomous national research capabilities in Indonesia. This collaboration is essential for worldwide initiatives to address infectious diseases in tropical areas, perhaps resulting in enduring benefits for global public health (Aziza, 2013).

NAMRU-2 Cooperation in the Concept of Cooperative Security

In an essay depicting changes in the strategic environment and the complexity of threats to national defense from a modern-day global perspective, several critical aspects form the backbone. This is where changes in the strategic environment have hugely replaced the pattern of threats to national security. Now, threats include both conventional and non-military threats, such as global health threats, radical ideologies, and cyber threats. In this respect, such a shift in threats points out one from locally focused threats to global, from overt threats to the more covert, unpredictable ones. On the other hand, the complexity of these threats has been intertwined, showing an increasingly connected relationship between internal and external factors. For example, one country's social, economic, or political problems can influence regional or global stability. In such a context, the cooperation of all national security, defense, domestic security, intelligence, and non-governmental sectors becomes quite relevant.

A vivid example of such interaction is the cooperation between Indonesia and the United States concerning health threats. Indeed, in 1968, Indonesia suffered from a plague outbreak in Boyolali, for which it asked for United States assistance. This involved the deployment of the NAMRU-2 to Indonesia. Such deployment helped not only in the management of the outbreak but also in tightening up the bilateral relations between Indonesia and the United States in the health sector (Devita & Olivia, 2014). Such cooperation is based on strategic interests to protect both countries from health threats and cooperative security. This concept emphasizes the importance of international cooperation in reducing tensions, building trust, and maintaining regional stability. Through cooperation like NAMRU-2, both countries can enhance their capacities to respond to complex, cross-border health threats.

The analysis of cooperation like NAMRU-2 also reflects individual security aspects

within the concept of cooperative security. This includes joint efforts to protect individuals from health threats affecting national security. Protection and empowerment are key to achieving health security, focusing on prevention, early detection, and rapid response to health threats. From a case study of this cooperation, we can learn how countries' interactions in dealing with global threats, such as health issues, can serve as an example of broader international cooperation in building robust and sustainable national security in this era of globalization. The Indonesian experience of NAMRU-2 is an example of the intricacies of international relations within health and security.

Despite its contributions, NAMRU-2's presence as a United States Navy medical research unit was inseparable from its military identity. Military personnel typically enter other countries only during emergencies, but NAMRU-2 operated in Indonesia for 39 years, during which Indonesia was not always in a state of emergency. This led to perceptions among Indonesians that NAMRU-2 was a covert United States military operation. Consequently, the Indonesian public did not trust the presence of NAMRU-2. While the original MoU covered the first decade of cooperation, there was no renewal of the MoU at the end. Thus, it created legal uncertainty over the status of NAMRU-2 in Indonesia in subsequent years. Although negotiation efforts on the renewal of the MoU were pursued, a new agreement was not reached before the eventual departure of NAMRU-2 from Indonesia in 2009. The Indonesian government decided not to extend cooperation with NAMRU-2 due to several reasons. In addition to public distrust and growing controversies, there was an option for the further development of independence in medical and health studies without foreign interference, which could impact domestic policy. Overall, the NAMRU-2 project in Indonesia clearly demonstrates the challenges of managing international cooperation in internationally sensitive areas such as health and security. Whichever the goals were to improve health security and consolidate bilateral cooperation, its realization faced serious difficulties that led to the end of that cooperation.

NAMRU-2 in Keeping the Peace

It could generally be said that in every country, threats to its sovereignty and security might emanate from within or outside the country, dangerous to its territorial integrity and the lives of its people (Putranto et al., 2021). These threats are multifaceted: informational, technological, health-related, political, economic, sociological, and ideological. These are suddenly shifting from regional to global levels, which complicates predictability. In this area of multifaceted threats, Indonesia, as a sovereign state, has been committed to carrying out its endeavors toward the national ideals and goals laid down in the 1945 Constitution: protection of its people comprehensively, settling all forms of national violence and participating in the formation of a world system based on social justice and eternal peace. Regarding these diversified threats, Indonesia often resorts to international cooperation to strengthen the country's defense strategies. One such cooperation which Indonesia is going through is with the United States Naval Medical Research Unit-2 or NAMRU-2, which has been operating in Indonesia for 39 years to help deal with health threats like infectious diseases (Shalikashvili, 1995). Even though it was identified as a United States military unit, which raised some tensions and suspicions within Indonesian society, NAMRU-2 has worked with the Indonesian Ministry of Health on infectious diseases such as plague, leptospirosis, and cholera.

However, the presence of NAMRU-2 is not without controversy regarding transparency and its operational objectives in Indonesia. For instance, a lack of public reports about its activities has increased perceptions that its mission may not be that

transparent or that it may be working on some hidden agenda. Consequently, this has resulted in tensions between the Indonesian government and the United States, notwithstanding their formal cooperation. The Indonesian government is caught in the tough balancing act of benefiting from international cooperation in health and defending national sovereignty and public trust. Transparency and clarity in the operations of foreign institutions such as NAMRU-2 are prerequisites for wise management of these tensions. Essentially, Indonesia would have to devise ways to maximize the benefits of international cooperation without compromising its sovereignty and national interest.

Impact of NAMRU-2 Program Sustainability after its End in Indonesia

Since the Ministry of Health Decision No. 919/Menkes/X/2009 regarding the termination of the NAMRU-2 Agreement on October 16, 2009, the United States owned Naval Medical Research Unit-2 (NAMRU-2) has ceased operations in Indonesia. The departure of NAMRU-2 was intended to encourage Indonesia to develop its capacity and independence in medical and health research. The Bio-Safety Level-3 laboratory previously owned by NAMRU-2 has been transferred to the Research and Development Agency of the Ministry of Health of the Republic of Indonesia. The Early Warning Outbreak Response System (EWORS) managed by NAMRU-2 has also been discontinued, but the Early Warning Alert and Response System (EWARS) continued by the Indonesian Ministry of Health remains operational to detect and respond to increases in infectious disease cases in Indonesia (Dewi, 2020). These steps support Indonesia's efforts to enhance its self-reliance in the health system, although there is still a level of dependence on assistance and technology from other countries. Despite its contributions, NAMRU-2's presence as a United States Navy medical research unit cannot be separated from its military identity.

Indonesia often relies on aid and funding from donor countries and international organizations, especially in handling infectious diseases like COVID-19. For example, Japan's Official Development Assistance (ODA) has made significant contributions to human security in Indonesia during the COVID-19 pandemic (Tursina et al., 2023). Imports of medical technology, equipment, and pharmaceuticals from developed countries also remain a significant need for Indonesia due to limitations in domestic production and higher quality standards. Indonesia frequently adopts health policies from developed countries as references in regulating drugs and healthcare systems. Despite efforts to enhance self-reliance, Indonesia still faces significant challenges related to infectious diseases such as malaria, dengue fever, and tuberculosis, indicating that health resilience and self-sufficiency are far from optimal. In conclusion, while Indonesia strives for self-reliance in its health system by developing local human resources and healthcare infrastructure, dependence on foreign aid and technology remains a reality that needs to be addressed. These steps are expected to reduce such dependence while enhancing the sustainability of Indonesia's national health system.

CONCLUSION, RECOMMENDATIONS, AND LIMITATIONS

Indonesian Health Minister, Siti Fadilah Supari, decided not to renew the NAMRU-2 cooperation agreement. With the minister of health decision number 919/menkes/x/2009 terminating the 1970 NAMRU-2 agreement on October 16, 2009, NAMRU-2 officially ceased operations in Indonesia. Nonetheless, NAMRU-2 played a crucial role in improving Indonesia's health system by addressing infectious diseases such as malaria, cholera, plague, and leptospirosis, providing specialized training to local researchers, collaborating with Indonesian institutions and universities, and establishing

systems like the early warning alert and response system (Ewars), which continues to be developed by Indonesia's ministry of health. Despite its contributions, NAMRU-2's presence as a United States Navy medical research unit was inseparable from its military identity. Military personnel typically enter other countries only during emergencies, but NAMRU-2 operated in Indonesia for 39 years, during which Indonesia was not always in a state of emergency. This led to perceptions among Indonesians that NAMRU-2 was a covert United States military operation. The lack of publicly accessible reports on NAMRU-2's activities further reinforced the notion that its mission might not be entirely transparent or might have hidden agendas. The resulting tension and distrust toward The United States made Indonesians feel insecure about the unit's operations in their country, viewing NAMRU-2 as a sovereignty threat.

The Indonesian government decided not to extend the cooperation agreement due to concerns that NAMRU-2's presence could threaten national sovereignty, driven by public insecurity. Additionally, the government aimed to foster self-reliance in health resilience without NAMRU-2. Indonesia is expected to handle its health threats independently, improve human resources, and build a more self-sufficient health infrastructure. However, it still relies on foreign assistance and technology. In conclusion, NAMRU-2's presence in Indonesia failed to achieve cooperative security due to persistent tensions between Indonesia and The United States and the lack of public trust in NAMRU-2's presence made Indonesians feel unsafe, contradicting the idea of cooperative security, which requires established cooperation channels to reduce hostility and tension, resolve disputes peacefully, foster trust, enhance economic growth opportunities, and maintain regional stability. Thus, Indonesia chose not to renew the NAMRU-2 cooperation agreement in Indonesia.

Indonesia should aim for self-reliance in health resilience in the future, reducing dependence on foreign aid and technology. Efforts should be made to improve human resource quality, enhance the production of high-quality medical equipment and technology, and maximize existing health programs through collaboration with local and international health institutions. Increasing budget allocation for the overall health system, including health infrastructure, medical facilities, and human resources, is crucial. Adequate funding can support intensive training and education for healthcare workers, ensuring their distribution across Indonesia and enhancing health infrastructure nationwide. Indonesia can utilize previous NAMRU-2 research to address tropical infectious diseases to improve diagnostic methods and increase public access to quality healthcare. Further development of existing research or new studies tailored to current health threats in Indonesia can be pursued.

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